



2017-2018
GENERAL
CATALOG



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2550 US Hwy 70 SE • Hickory, North Carolina 28602
General Catalog • Volume 46 • Number 1 • 2017-2018

Main Campus Telephone Number: 828-327-7000 • College Website: www.cvcc.edu

The *Catawba Valley Community College 2017-2018 General Catalog* (hereby referred to as the “*Catalog*”) is the official source of the College’s academic programs and courses. The *Catalog* should be used as a guide, in conjunction with an academic advisor, in planning a program of study and in meeting requirements for graduation.

The requirements specified in this *Catalog* apply to students who commence their studies at Catawba Valley Community College during the 2017-2018 academic year and who remain in continuous enrollment at the institution until they graduate.

The catalog of record is the catalog that is current at the time a student enrolls at CVCC in his/her program of study. If a student changes his/her program of study, then the catalog of record becomes the catalog that is current at the time of that program change. To graduate under a program of study, a student must meet the requirements of his/her catalog of record or any catalog in effect within the next five years as long as the student has been continuously enrolled. A break in enrollment occurs when a student is not enrolled for two consecutive semesters (i.e. fall and spring or spring and fall). Students are not required to be enrolled during the summer semesters to maintain continuous enrollment. If a student breaks enrollment, the catalog of record will become the catalog that is current at the time of reentry. From that point of reentry, the rule of continuous enrollment will apply. The Chief Student Services Officer or designee has the authority to choose a catalog within a five-year period of continuous enrollment that best suits the student’s needs for his/her particular program of study at the time of graduation. Exceptions to this policy must be approved by Chief Academic Officer.

See additional Requirements for Graduation located in the Academic and Instructional Standards section of the *Catalog*.

Although course offerings and academic requirements at Catawba Valley Community College are continually under examination and revision, the *Catalog* is updated only once per year. This annual revision procedure helps ensure that users of the *Catalog* will not find unexpected changes during their academic planning processes.

Catawba Valley Community College publishes this catalog for the purpose of providing students and other interested persons with information about the College and its programs. The provisions of the catalog are not to be regarded as an irrevocable contract between students and Catawba Valley Community College. The College reserves the right to change any provisions, policies, requirements, or schedules at any time or to add or withdraw course or program offerings. Every effort will be made to minimize the inconvenience such changes might create for students. Revisions are available on the CVCC website at www.cvcc.edu.

Since opening its doors to students in 1960, Catawba Valley Community College has existed as an “open-door” institution to persons of both sexes and all racial and ethnic groups. This admissions policy has been followed in all other spheres of student life ranging from activities to placement. Similarly, Catawba Valley Community College has made all personnel decisions including hiring, compensation, benefits and promotion on a nondiscriminatory basis.

The Board of Trustees of Catawba Valley Community College does hereby reaffirm this past stance by making a formal commitment to provide equal opportunity for employees and students. Catawba Valley Community College does not discriminate on the basis of race, color, national origin, sex/gender identity, religion, creed, age, disability, veteran or active military status, genetic characteristics, or any other category protected by law under Title VII and/or Title IX. We recognize this obligation to be a moral as well as legal responsibility because of its intrinsic worth in a country in which all should have an equal chance to let their ability guide their life choices.

An Equal Opportunity/Affirmative Action Institution

Accreditations

Catawba Valley Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award certificates, diplomas, and associate degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, or call 404-679-4500 for questions about the accreditation of Catawba Valley Community College.

Catawba Valley Community College is Approved for Veteran Enrollment by North Carolina State Approving Agency (NCSAA) for Veterans Education. To contact: NCSAA, 120 Penmarc Drive, Suite 103, Raleigh, North Carolina 27603-2434, (919) 733-7535.

Catawba Valley Community College is also a member of the North Carolina Community College System; American Association of Community Colleges; Southern Association of Colleges and Schools Commission on Colleges; League for Innovation; North Carolina Citizens for Business and Industry; and Charlotte Regional Workforce Development Partnership.

The Associate Degree Nursing Program is accredited by the Accreditation Commission for Education in Nursing, Inc. (www.acenursing.org): Associate Degree Nursing Program and Approved by North Carolina State Board of Nursing. To contact: Accreditation Commission for Education in Nursing, Inc., 3343 Peachtree Road NE, Suite 850, Atlanta, GA, 30326, (404) 975-5000.

The Automotive Systems Technology Program is accredited by the National Automotive Technician Education Foundation (NATEF www.natef.org). To contact: NATEF, 1503 Edwards Ferry Rd., NE, Suite 401, Leesburg, VA 20176, (703) 669-6650.

The Computer-Integrated Machining Program is a Member of the Haas Technical Education Center Network (www.htecnetwork.org).

The Cosmetology Program is accredited by the NC State Board of Cosmetic Arts (www.nccosmeticarts.com). To contact: NC State Board of Cosmetic Arts, 1207 Front Street Suite 110 Raleigh, NC 27609, (919) 733-4117.

The Dental Hygiene Program is accredited by the Commission on Dental Accreditation (www.ada.org) and has been granted the accreditation status of "approval without reporting requirements." The Commission is a specialized accrediting body recognized by the United States Department of Education. To contact: Commission on Dental Accreditation, 211 East Chicago Avenue, Chicago, IL 60611, (312) 440-4653.

The Early Childhood Education Program is accredited by the National Association for the Education of Young Children (NAEYC www.naeyc.org). To contact: NAEYC, 1313 L Street, NW, Suite 500, Washington, DC 20005, (202) 232-8777.

The Electroneurodiagnostic Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) in collaboration with the Committee on Accreditation for Neurodiagnostic Technology (CoA-NDT www.coa-ndt.org).

The Emergency Medical Science 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 Educational Programs for the Emergency Medical Services Professions (CoAEMSP www.coaemsp.org). To contact: Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, FL, 33756, 727-210-2350. To contact: CoAEMSP, 8301 Lakeview Parkway Suite 111-312, Rowlett, TX 75088; 214-703-8992, fax 214-703-8992.

The Fire Protection Technology Program is accredited by the International Fire Service Accreditation Congress (IFSAC) and recognized as a Fire and Emergency Services Higher Education (FESHE) Associate degree program by the National Fire Academy (www.usfa.fema.gov). To contact: IFSAC, 1812 Tyler Avenue, Stillwater, OK, 74078, (405) 744-8303, www.ifsac.org. To contact: FESHE, 16825 South Seton Ave, Emmitsburg, MD 21727, (301) 447-1000.

The Health Information Technology Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIM www.cahiim.org). To contact: CAHIIM, 233 N. Michigan Ave, 21st Floor, Chicago, IL 60601-5800, (313) 233-1100.

The Learning Assistance Center Peer Tutoring Program certified Level 1, Level 2, and Level 3 Advanced Certified Tutor by the College Reading and Learning Association (CRLA www.crla.net) International Tutor Program. To contact: 7044 S. 13th Street, Oak Creek, WI 53154, (414) 908-4961.

The Polysomnography Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) in collaboration with the Committee on Accreditation for Polysomnography (CoA-PSG www.coapsg.org).

The Radiography Program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT www.jrcert.org). To contact: JRCERT, 20 North Wacker Drive, Suite 2850 Chicago, IL 60606-3182, (312) 704-5300.

The Respiratory Therapy Program is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com). To contact: Commission on Accreditation for Respiratory Care, 1248 Harwood Road, Bedford, Texas 76021-4244, (817) 283-2835.

The Surgical Technology Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA www.arcstsa.org). To contact: CAAHEP, 25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763. To contact: ARC/STSA, 6 W. Dry Creek Circle, Suite #110, Littleton, CO 80120.

The Welding Technology Program is an Educational Institution Member designated by the American Welding Society (www.aws.org).



We began serving the Catawba Valley in 1960 as the Catawba County Industrial Education Center. Today, Catawba Valley Community College continues to evolve with campus expansion and off-campus centers such as the Alexander Center for Education, Manufacturing Solutions Center, and the Corporate Development Center.

The one core value on our campuses that remains consistent in today's global economy is our passion and commitment to improve the lives of the people we serve.

Our college graduates are prepared for the workforce, and our college transfer students are ready for their next step to a four-year college or university. Students here are invited to join clubs, be involved in student or sport activities, and while in the classroom learn critical thinking skills, medical procedures, or study a foreign language.

CVCC graduates approximately 1100 students each year in curriculum degrees and general education development diplomas. Our efforts to provide the best educational experience for our students is evident in the college's 95% student satisfaction rating.

Our students set the bar each year, winning local, state, and national competitions every year. Those who transfer have very high success rates at four-year institutions and are valued by employers in the unifiour region, the state, and the country.

All of this is made possible by our employees through their dedication to the classroom, and our students. Each person here contributes to the success of CVCC!

It is an honor to serve as President of Catawba Valley Community College. We welcome you to our college and the opportunity to assist you in achieving your goals and dreams the "Valley Way."

Dr. Garrett D. Hinshaw, President

2017-2018 Institutional Calendar

Fall Semester 2017

Faculty/Staff Professional Development Activities (No Curriculum Classes)	August 10
Curriculum Instructional Work Days	August 10-11, October 11
*Fall Curriculum Semester Begins	August 14
Institutional Holiday	September 4
Fall Fling/Student Appreciation Day	September 13
Constitution Day Activities	September 13
Mid-Semester Break for Curriculum Students	October 9-11
Last Day to Withdraw from Curriculum Classes without Academic Penalty	60% Date of Class
Break for Curriculum Students (No Curriculum Classes)	November 10
Institutional Holiday	November 10
Flip Day (Curriculum Classes operating on a Friday schedule)	November 21
Break for Curriculum Students	November 22-25
Institutional Holidays	November 23-24
Spring Registration	November/December
*Fall Curriculum Semester Ends	December 13
*Snow Make Up Days (If Necessary Due to Inclement Weather)	December 14, 15
Institutional Holidays	December 25-29

* While many classes begin during the first week of the semester, there are also classes which begin later in the semester. Also, some classes do end before the last week of the semester. Please refer to the fall semester curriculum class schedule for specific class start and end dates.

Spring Semester 2018

Institutional Holiday	January 1
CVCC Open	January 2-3
Faculty/Staff Professional Development Activities (No Curriculum Classes)	January 4
Curriculum Instructional Work Days	January 4-5; February 28
*Spring Curriculum Semester Begins	January 8
Institutional Holiday	January 15
Flip Day (Curriculum Classes operating a Friday schedule)	February 27
Curriculum Student Break	February 28-March 2
Last Day to Withdraw from Curriculum Classes without Academic Penalty	60% Date of Class
Institutional Holiday	March 30
Mid-Semester Break for Curriculum Students	March 30-April 4
* Snow Makeup Days (If Necessary Due to Inclement Weather)	April 3, 4; February 28
Summer Registration Activities	April
Spring Fling/Student Appreciation Day	April 11
Awards Day	May 1
*Spring Curriculum Semester Ends	May 9
Commencement Activities	May 11, 12

* While many classes begin during the first week of the semester, there are also classes which begin later in the semester. Also, some classes do end before the last week of the semester. Please refer to the spring semester curriculum class schedule for specific class start and end dates.

Summer Semester 2018

Institutional Holiday	May 28
*Summer Curriculum Semester Begins	May 29
Last Day to Withdraw from Curriculum Classes without Academic Penalty	60% Date of Class
Adult Secondary Credentials Recognition Ceremony	June 15
Flip Day (Curriculum Classes operating a Thursday scehdule)	July 3
Break for Curriculum Students	July 4, 5
Institutional Holiday	July 4, 5
Fall Registration Activities	July/August
*Summer Curriculum Semester Ends	August 8

*While many classes begin during the first week of the semester, there are also classes which begin later in the semester. Also, some classes do end before the last week of the semester. Please refer to the summer semester curriculum class schedule for specific class start and end dates.

Note: Please check the CVCC website (www.cvcc.edu) for calendar and registration updates.

General Information

Mission Statement

Catawba Valley Community College is an innovative, comprehensive community college that fosters and promotes a multitude of learning experiences, enabling and empowering its students, faculty, staff, and stakeholders to identify and to serve higher purposes in their lives and in their communities.

College Core Values

1. Student Success
2. Excellence in Teaching and Lifelong Learning
3. Economic and Workforce Development
4. Quality Stakeholder Engagement
5. Global Perspectives
6. Embracing Diversity
7. Integrity and Ethics

Vision Statement

The vision of Catawba Valley Community College is to be validated and recognized in the achievement of its mission as the statewide, regional, and national standard of excellence for programs, services, and facilities.

History

Through the concerted efforts of concerned and united Catawba County citizens and North Carolina educational leaders, on April 3, 1958, Catawba Valley Community College was established by the North Carolina Department of Public Instruction as the ninth school of its kind in the state. Construction of the original facilities began in 1959. The 40,000 square foot building costing approximately \$500,000 was completed in August 1960. An initial enrollment of seventy-seven (77) students began classes in September of the same year. From 1960 to 1963, the College operated under the jurisdiction of the Catawba County Board of Education. During this time the College was known as the Catawba County Industrial Education Center.

In July 1963 the General Assembly of North Carolina enacted into law G.S. 115A which provided for the establishment of the present North Carolina System of Community Colleges. On January 9, 1964, Catawba Valley Technical Institute was among the original seven institutes chartered by the Department. At that time, CVTI established its own Board of Trustees and began operation as a member of the Department of Community Colleges. Thus, it was in August 1964, that the College awarded its first Associate Degree in Applied Science.

It was during the transition from an Industrial Education Center to Technical Institute that great strides began in expanding educational programs, increasing student enrollment, developing quality instruction, adding facilities, and increasing community acceptance and service. On September 1, 1979, the name of the institution was changed to Catawba Valley Technical College by the Trustees and commissioners of Catawba County. On December 1, 1987, the State Board of Community Colleges officially approved CVTC to become Catawba Valley Community College and the College Transfer program was approved.

The addition of the CVCC Alexander Center for Education was approved by the State Board in November 2000, and again we expanded programs and services to better serve our community. We have moved the Alexander Center twice to meet community needs. The most recent move was into a facility purchased by the Alexander County Commissioners. In addition to the 15,000 sq. foot facility on 4.72 acres located at 345 Industrial Boulevard in Taylorsville, the Alexander County Commissioners have purchased a second facility adjacent to the original purchase, and in October 2016, we expanded the Alexander Center for Education to include an Alexander Technologies Center, which offers skills programs in furniture and welding.

Today (January 2017), the campus now covers approximately 162 acres and includes 16 buildings for an approximate 650,000 sq. feet of floor space. In addition, there is a CVCC Newton Cosmetology Center located in Newton, the CVCC Corporate Development Center located on U.S. Highway 70, and the Catawba Valley Furniture Academy also located on U. S. Highway 70. The college is excited to be in the process of building a new 80,000 sq. ft. facility at the back of main campus. The CVCC Workforce Solutions Complex is expected to be complete in June of 2018 allowing expanded technology programming.

Catawba Valley Community college will celebrate its 60th anniversary in 2018. The faculty and staff have touched the lives of hundreds of thousands and still today, we are about empowering people to achieve their dreams. During this time span, we have had only three presidents; founding president Robert Paap who retired in 1987, Dr. Cuyler A. Dunbar served from 1987 through 2006. The current president is Dr. Garrett D. Hinshaw who came on board August 1, 2006. Catawba Valley Community College continues as a publicly supported coeducational institution.

Location

Catawba Valley Community College is located in Hickory on U.S. Highways 70 and 321-B, in Catawba County, North Carolina. Situated in the heart of the Piedmont some 1,175 feet above sea level, CVCC is easily accessible over Interstate 40, Highways 321, 70, 16 and 127. It is within seven miles of a commercial airport and approximately 50 miles from metropolitan Charlotte.

The campus covers approximately 162 acres and includes 17 buildings for an approximate total of 600,000 square feet of floor space. In addition, there is the CVCC East Campus, the Corporate Development Center, the Manufacturing Solutions Center, and the Cosmetology Center at the CVCC Newton Center in downtown Newton. The Alexander Center for Education, a 15,000 square foot building situated on 4.72 acres at 345 Industrial Boulevard in Taylorsville, was purchased by Alexander County in 2000 as an off-site center, which opened for classes March 28, 2003. The facilities consist of modern brick buildings. Included is a 30,000 volume library for the use of both students and public, a student center and food service area for leisure relaxation and entertainment, and numerous classrooms and laboratories.

CVCC Policies and Procedures

CVCC policies and procedures regarding students are available for reference on the CVCC website (www.cvcc.edu) under the About Us Link. Following are the direct links, CVCC Policies - http://www.cvcc.edu/About_Us/Policies/ and CVCC Procedures - http://www.cvcc.edu/About_Us/Procedures/. These web pages include, but are not limited to, information regarding admissions, course grading, student conduct, student due process, privacy of students, visitors on campus, sexual offense/assault protocol, campus safety and security, and reporting a crime. Printed copies of a policy/policies, or procedure/procedures are available upon request to Student Services.

Transfer of CVCC Credits to Other Colleges

Technical, vocational, and certificate programs of study at Catawba Valley Community College have been established primarily to prepare individuals for employment upon completion of studies. The College Transfer program has been developed at CVCC to provide opportunities for students to transfer two years of academic credit to senior colleges and universities. Numerous differences exist in the transfer policies of senior institutions. Therefore, details regarding a specific institution should be obtained from the senior institution to which transfer is being considered.

Air Force ROTC Program

To prepare themselves to serve as commissioned officers in the Air Force, students in college transfer programs to pursue a bachelor's degree may participate in the Air Force Reserve Officer Training Corps (ROTC) offered by the UNC-Charlotte Department of Aerospace Studies. Information is available in Student Services or on the UNCC webpage at the following address: <http://afrotc.uncc.edu/>.

Appalachian Center at Hickory

The Appalachian Center in Hickory is an educational consortium of colleges and universities that offer community college students and other adults opportunities to finish their bachelors degrees from one of the participating colleges and universities. Graduate degrees are also available. A wide variety of degree programs are offered with flexible part-time and full-time schedules and face-to-face and on-line formats to meet the needs of adult learners with busy schedules, families, and work commitments. For more information on degree programs available through the Appalachian State University Center in Hickory, call 828-327-7000, ext. 4424.

Alexander Early College High School

Alexander Early College opened its doors in August 2016. Designated a Cooperative Innovative High School, it serves the residents of Alexander County. An application only, selective-enrollment high school, their rigorous, Honors level curriculum is student-centered and emphasizes problem solving, collaboration and college-level reading, writing and mathematical skills. Student have the ability to earn a high school diploma and have access to an Associate in Arts or Associate in Science degree (or other transferrable credits) on a four or five year plan. Alexander Early College seeks students who are First Generation College (no parent with a Bachelor's Degree), have documented financial hardship, and are from a single parent household, or those seeking a non-traditional high school environment. The School models the national school reform model designed through research from the Bill and Melinda Gates Foundation, Jobs for the Future, the NC Dept. of Public Instruction and NC Community College System. The goal of Alexander Early College is to build lifelong learners who provide further growth to their community by their academic and personal achievements.

Challenger Early College High School

Challenger Early College High School is a non-traditional, application-only, selective enrollment Cooperative Innovative High School which began in 2005. At least 80% of its students must qualify for enrollment based on first-generation college (neither parent has a Bachelor's degree), be economically disadvantaged according to federal guidelines, live in a single-parent household, and English is their second language. Students must reside in the Catawba County. All high school classes are taught at Honors level, with CVCC courses beginning in the freshmen year. Graduates earn a Future Ready Core Diploma with the required UNC System university admissions courses and have access to earn either an Associate in Arts or Associate in Science degree from CVCC. Supported by the NC Dept. of Public Instruction, NC Community College System and the Catawba Valley Education Consortium, the school is designed around research, and follows the national early college model by offering students a personalized environment, powerful teaching and learning in classrooms and a pervasive ready-for-college culture that provides opportunities for life in the 21st century. Challenger Early College consistently ranks among one of the top high schools in North Carolina based on academic achievement and standardized testing criteria.

Education Matters

Education Matters is an initiative of Catawba Valley Community College, developed by the college president, local business and government leaders, and school administrators to increase the value of education and educational attainment in Alexander County and Catawba County.

The purpose of this initiative is to build partnerships with our school systems, community college, four-year college institutions, local government, and business and industry to provide a comprehensive community-based approach to intergrade education and career awareness in our schools. The intent is to help students understand the importance of their courses as they work towards high school graduation, plus the postsecondary education and training necessary to secure employment in our community.

In January 2017, we reached the **10,000th** student in the Extreme Stem Tour events for eighth graders in our community. The tours promote an awareness among the students about what the college is like, introduces them to programs that they may be interested in for the future, and introduces them to several local businesses that partner with the college in the endeavor.

North Carolina Community College System's Performance Measures for Student Success

In 1993, the State Board of Community Colleges began monitoring performance data on specific measures to ensure public accountability for programs and services. In 1998, the General Assembly directed the State Board to review past performance measures and define standards to ensure programs and services offered by community colleges in North Carolina were of sufficient quality. (North Carolina Community College System, 2012 Critical Success Factors Report, July 2012).

Through the 2012 reporting year, the annual NCCCS Critical Success Factors Report was the means by which the community college system reported on performance measures referred to as Critical Success Factors. In February 1999, the North Carolina State Board of Community Colleges originally adopted twelve (12) performance measures to ensure that programs and services offered by community colleges were of sufficient quality.

During the 2010-2011 reporting year, the number of measures was dropped to seven (7). These performance standards focused primarily on student success and served as the System's major public accountability tool.

Beginning in 2013, the North Carolina Community College system adopted the Performance Measures for Student Success. Today, performance funding is based on seven distinct measures.

Catawba Valley Community College 2016 Performance Measures for Student Success North Carolina Community College System (NCCCS)

2016 NCCCS Performance Measure for Student Success	2016 NCCCS System Excellence Level and System Baseline	2016 NCCCS Average College Percentage	2016 CVCC Measure
Basic Skills Progress	Excellence Level = 68.3% Baseline = 34.5%	56.1%	50.5%
Credit English Success	Excellence Level = 55.9% Baseline = 23.8%	46.9%	64.5%
Credit Math Success	Excellence Level = 32.5% Baseline = 10.1%	26.9%	30.3%
First Year Progression	Excellence Level = 75.0% Baseline = 54.1%	68.4%	74.4%
Curriculum Completion Rate	Excellence Level = 51.9% Baseline = 35.9%	44.1%	47.1%
Licensure Passing Rate	Excellence Level = 90.9% Baseline = 69.9%	82.3%	84.0%
Transfer Performance	Excellence Level = 87.6% Baseline = 65.1%	82.7%	88.3%

For further explanations and information, please visit the NCCCS NC Community Colleges Creating Success: 2016 Performance Measures for Student Success report webpage at http://www.ncccommunitycolleges.edu/sites/default/files/data-warehouse/2016_performance_measures_report_-_20160816_final.pdf#overlay-context=analytics/state-and-federal-performance-measures.

Notice of Non-discrimination

Catawba Valley Community College does not discriminate on the basis of race, color, national origin, sex/gender identity, religion, creed, age, disability, veteran or active military status, genetic characteristics, or any other category protected by law under Title VII and/or Title IX.

Dean of the School of Student Access, Development, and Success
2550 U.S. Highway 70 SE
Hickory, NC 28602-8302
Telephone – 828-327-7000

Director of Human Resources
2550 U.S. Highway 70 SE
Hickory, NC 28602-8302
Telephone – 828-327-7000

Admissions

General Admission to CVCC

CVCC follows "open door" admissions policies as established by the North Carolina Community College System. Admission is open to all applicants who are legal residents of the United States and who are either high school graduates or are at least 18 years of age. Minors are admitted under provisions and rules established by the State Board of Community Colleges.

View (PDF) document -1D SBCCC 400.2 (a) Admissions to Colleges at » State Board of Community College (SBCCC)

A person is classified as a student when admission requirements are met and registration for class has occurred that cause

1. tuition and fees to be paid (or encumbered by waiver, financial aid, third party payment, etc.) and
2. the person enters and attends the class(es).

A person continues to be a student by attending class and making progress toward completion of the course objectives.

A person is no longer a student in a particular class when s/he is no longer attending the class in accordance with the attendance expectations of the class and/or is graded with a WP or a WF. Should this occur in all classes during a particular semester, the person is no longer a student for that semester at the point in time when the last transaction has occurred.

A person is a visitor when not a student. Students are entitled to due process. Visitors are not afforded due process.

The specific processes for general admission to CVCC include

1. Select a Program of Study. Career planning assistance is available in Career Services.
2. Complete the online CVCC Application for Admission.
3. Attend a Starting Points Information Session in person or view online.
4. Complete the online Free Application for Federal Student Aid (FAFSA).
5. Request an official high school/adult secondary credential transcript be sent to CVCC Records. Applicants may choose to deliver official transcripts in sealed envelopes to the Records Department.
6. Request all official college transcript(s) be sent to CVCC Records. Applicants may choose to deliver official transcripts in sealed envelopes to the Records Department.
7. Within a week of Application submission, visit the Admissions Office in the Student Services building on the main campus to complete the enrollment process. A photo ID is necessary to complete the enrollment process.

Additional information on general admission to CVCC may be found at » How to Enroll (<http://www.cvcc.edu/Admissions/how-to-enroll.cfm>)

Questions about this process are to be directed to the Chief Student Services Officer or designee.

International Students

CVCC is authorized by the U.S. Department of Naturalization and Immigration to admit international students with a valid F-1 Visa or valid Permanent Resident Card. International students must complete additional admission procedures by published deadlines.

1. The specific processes for International Students to be admitted to CVCC include
2. Complete the online CVCC Application for Admission.
3. Complete all financial statements as outlined on the CVCC website at <http://www.cvcc.edu/international-students>.
4. Request translation and evaluation of high school/adult secondary credential transcripts by any agency associated with NACES be sent to CVCC Records. Applicants may choose to deliver official transcripts in sealed envelopes to the Records Department. See Academic Credit.
5. Provide a photograph.
6. Submit verification of home country address.
7. Submit an official TOEFL (Test of English as a Foreign Language) test score less than five (5) years old.
8. Submit a VISA clearance form if transferring from another United States institution of higher learning.

Additional information on general admission to CVCC may be found at <http://www.cvcc.edu/international-students>.

Questions about this process are to be directed to the Chief Student Services Officer or designee.

High School Students

Session Law 2011-145, the Appropriations Act of 2011, authorized the State Board of Education and the State Board of Community Colleges to establish the Career and College Promise program, effective January 1, 2012. Qualified North Carolina high school students are admitted to CVCC through this Act.

Career and College Promise

Career and College Promise provides seamless dual enrollment educational opportunities for eligible North Carolina high school students in order to accelerate completion of college certificates, diplomas, and associate degrees that lead to college transfer or provide entry-level job skills. North Carolina community colleges may offer the following Career and College Promise pathways aligned with the K-12 curriculum and career and college ready standards adopted by the State Board of Education:

1. A College Transfer Pathway (CTP) leading to a minimum of 30 hours of college transfer credit;
2. A Career and Technical Education Pathway (CTE) leading to a certificate, diploma or degree;
3. A Cooperative Innovative High School Pathway approved under Part 9 of Article 16 of Chapter 115C of the General Statutes.

Information on admission to Career and College Promise pathway opportunities may be found at <http://www.cvcc.edu/ccp>.

Questions about this process are to be directed to the Chief Student Services Officer or designee.

Challenger Early College High School

Challenger ECHS is a non-traditional, selective enrollment, application only Cooperative Innovative High School serving the residents of Catawba County. The School accepts freshmen only and enrollment is limited to 400 students in grades 9-12. All high school courses are taught at Honors Level and College classes begin in the freshmen year. Applications are invited from students who may benefit from a non-traditional school setting; at least 80% of students must meet one or more of the following criteria:

1. First generation college (neither parent has earned a Bachelor's degree)
2. Documented financial hardship according to federal guidelines
3. Single-parent household
4. English is their second language
5. No discipline or attendance issues
6. Be academically qualified (middle 60% or better based on middle school grades, EOG, EOC or other standardized testing).

Challenger students earn a Future Ready Core High School Diploma and have access to earn either an Associate in Arts or Associate in Science degree in four years. Application packets are available in January each year at <http://www.catawbashschools.net/challenger> and are due by mid-February. Notification of acceptance is in March. Questions about the Challenger program may be directed to the Challenger office or CVCC Director of Early College Programs.

Alexander Early College High School

Alexander Early College began in August 2016 and is a non-traditional, selective enrollment, application only Cooperative Innovative High Schools serving residents of Alexander County. Entry is for freshmen only. All high school courses are taught at an Honors level and College classes begin in 9th grade. Students have the ability to earn a high school diploma and have access to earn credits for an Associate in Arts or Associate in Science degree (or other transferrable credits) in four or five years. Applications are accepted from students who meet one or more of the following criteria or desire a non-traditional high school setting:

1. First generation college (neither parent has earned a Bachelor's degree)
2. Documented financial hardship according to federal guidelines
3. Single-parent household
4. English is their second language
5. No discipline or attendance issues
6. Be academically qualified (middle 60% or better based on middle school grades, EOG, EOC or other standardized testing).

Application packets are available in January each year at <https://www.alexander.k12.nc.us/Domain/1208>. Questions about the Alexander Early College program may be directed to their office or CVCC Director of Early College Programs.

Undocumented Immigrants

CVCC may admit undocumented immigrants under the following conditions as specified in 1D SBCCC 400.2(b) Admission to Colleges at » State Board of Community College Code (<http://www.nccommunitycolleges.edu/sbcccode>)

For the purposes of this Section, "undocumented immigrant" means any immigrant who is not lawfully present in the United States. Community colleges shall admit undocumented immigrants under the following conditions:

1. Community colleges shall admit an undocumented immigrant only if he or she attended and graduated from a United States public high school, private high school, or home school that operates in compliance with State or local law;
2. When determining who is an undocumented immigrant, community colleges shall use federal immigration classifications;
3. Undocumented immigrants admitted under Subparagraph (b)(1) of this Rule must comply with all federal and state laws concerning financial aid;
4. An undocumented immigrant admitted under Subparagraph (b)(1) of this Rule shall not be considered a North Carolina resident for tuition purposes. All undocumented immigrants admitted under Subparagraph (b)(1) of this Rule must be charged out of state tuition whether or not they reside in North Carolina;
5. When considering whether to admit an undocumented immigrant into a specific program of study, community colleges shall take into account that federal law prohibits states from granting professional licenses to undocumented immigrants; and
6. Students lawfully present in the United States shall have priority over any undocumented immigrant in any class or program of study when capacity limitations exist.

Note: An Adult Secondary Credential (also referred to as a General Education Diploma, General Equivalency Diploma, or Graduate Equivalency Degree) does not satisfy condition (1) above.

Undocumented immigrants follow these specific processes for general admission to CVCC:

1. Select a Program of Study. Career planning assistance is available in Career Services.
2. Complete the online CVCC Application for Admission.
3. Attend a Starting Points Information Session in person or view online.
4. Request an official high school transcript be sent to CVCC Records. Applicants may choose to deliver official transcripts in sealed envelopes to the Records Department.
5. Request all official college transcript(s) be sent to CVCC Records. Applicants may choose to deliver official transcripts in sealed envelopes to the Records Department.
6. Within a week of Application submission, visit the Admissions Office in the Student Services building on the main campus to complete the enrollment process. A photo ID is necessary to complete the enrollment process. DACA documents, if applicable, should also be submitted at the time of admission.

Under current state code, undocumented immigrants do not qualify for federal and state financial aid or for in state residency for tuition purposes. Students lawfully present in the United States shall have priority over any undocumented immigrant in a class or program of study when capacity limitations exist.

Questions about this process are to be directed to the Chief Student Services Officer or designee. More information is available at <http://www.cvcc.edu/Admissions/how-to-enroll.cfm>.

Safety Exceptions

CVCC may refuse admission to any applicant in accordance with the following conditions as specified in State Board of Community Colleges Code 23SBCCC 02C.301(e) and (f) entitled "Admission to Colleges"

View (PDF) document - 1D SBCCC 400.2 (e) Admissions to Colleges at » State Board of Community College (SBCCC)

CVCC may refuse admission to an applicant when there is an articulable, imminent, and significant safety threat to the applicant or other individuals. If CVCC refuses admission on the basis of a safety threat, the following shall be documented:

1. Detailed facts supporting the rationale for denying admission;
2. The time period within which the refusal to admit shall be applicable and the supporting rationale for the designated time period; and
3. The conditions upon which the applicant that is refused would be eligible to be admitted.

An applicant denied admission on the basis of a safety threat may appeal (within 15 days) the denial to the Executive Board of the CVCC Safety and Security Committee (It will not be a full Safety and Security Committee) by submitting a written request for appeal to the Office of the President. The Committee shall promptly conduct a review/hearing of the appeal, providing results to the applicant within 15 days. Such review/hearing will have the following procedural safeguards for the applicant and for CVCC:

- The opportunity to confront and cross-examine witnesses;
- The opportunity to present arguments and evidence orally, as well as in writing;
- The right to retain an attorney (the other party shall be informed of intent);
- The maintenance of a complete record of the hearing (although tape recordings may not occur without knowledge and consent of all parties); and
- A recommendation resting solely on the rules and evidence advanced at the hearing.

The Executive Board's decision regarding an admissions appeal shall be determined by majority vote and is final.

Admission to Curriculum Programs of Study

Admission to CVCC does not guarantee admission to the curriculum program of study desired by the applicant. A student must satisfy the admissions requirements for his/her program of study. Applicants will be admitted to programs as admissions requirements are completed except for programs with limited enrollment (discussed further below). Applicants may be admitted to certain programs on a provisional basis until all admissions requirements are completed. The Chief Student Services Officer or designee will maintain appropriate documentation of the specific admissions requirements for each curriculum program and will provide appropriate communication of those admissions requirements.

Completion of high school or equivalent (Adult Secondary Credential Program) is required for admission to all associate degree and diploma programs and certain certificate programs. If completion of high school or equivalent is a requirement for the intended program, applicants must provide official transcripts (from high school or Adult Secondary Credential program) evidencing completion.

Limited Enrollment Programs

Enrollment in certain programs is limited, and admission is competitive. The admissions committee for each limited enrollment program will select the most academically qualified applicants.

Healthcare Programs

Applicants to healthcare programs must first complete general admissions requirements to CVCC as stated in Procedure 3.2 or on the CVCC website at » How to Enroll. Next applicants will complete additional admission requirements and submit a Minimum Admission Requirement (MAR) document for the healthcare program of interest. This information is posted on the CVCC website at <http://www.cvcc.edu/Admissions/how-to-enroll.cfm>.

Please note that certain healthcare programs require completion of educational experiences in clinical/lab settings. These clinical/lab settings may require students to undergo criminal background checks and/or drug screenings at the student's expense. Some facilities may also require additional vaccinations and/or health examinations. Acceptance in a specific healthcare program is contingent upon receipt of the appropriate medical/mental health forms which documents an applicant's satisfactory fitness for the program.

Students lawfully present in the United States shall have priority over any undocumented immigrant in a class or program of study when capacity limitations exist.

Early Childhood Education Program

Applicants for the Early Childhood Education Program must first complete general admissions requirements to CVCC as stated in Procedure 3.2 or on the CVCC website at » How to Enroll. In addition to the general admissions requirements, applicants for the Early Childhood Education program must complete other procedures. CVCC's Early Childhood Education program requires completion of educational experiences in childcare facilities and/or public school settings. These settings require students to undergo criminal background checks and/or health assessments. If a student is excluded from an educational setting as a result of one of these requirements, the student may be asked to withdraw from the program. Some settings may also require additional vaccinations and/or health examinations. Completion of CVCC's Early Childhood Education program may be contingent upon receipt of a CVCC medical form documenting that the applicant possesses satisfactory physical and mental health. Facilities for providing health care services are not available on campus.

Basic Law Enforcement Training Program (BLET)

Applicants for the Basic Law Enforcement Training (BLET) certificate must first complete general admissions requirements to CVCC as stated in Procedure 3.2 or on the CVCC website at » How to Enroll. In addition to the general admissions requirements, BLET applicants must complete additional requirements posted on the CVCC website at <http://www.cvcc.edu/Admissions/how-to-enroll.cfm>.

Special Credit Program

Applicants who wish to enroll without pursuing a degree, diploma or certificate are classified as Special Credit students. Applicants must first complete the online CVCC Application for Admission. Students may complete the enrollment process in person by visiting the Admissions Office in the Student Services building on the main campus. Special Credit students may also complete the admissions process from a distance. Specific details are available at Distance. A photo ID is necessary to complete the enrollment process.

Special Credit students must meet course prerequisites by either placement testing or by providing unofficial transcripts from a regionally-accredited college/university showing courses with a grade of "C-" or better.

Special credit students are not eligible for federal/state financial aid or Veterans' benefits.

Admission to Distance Education Courses

The State Authorization Coordinator is charged with ensuring compliance with any state authorization requirements for CVCC through the following steps:

- Act as the clearinghouse to assist academic units that offer online/distance education courses or programs to students residing in other states to obtain authorization in those states as necessary.
- Monitor and maintain information related to other states' post-secondary authorization requirements.
- Maintain point of contact information for each state's authorization agency/agencies and correspond with points of contact as necessary.
- Track enrollment of students from other states in CVCC courses delivered by online/distance delivery and to notify Deans and the Chief Academic Officer of these enrollments. (Note: Some states require authorization for faculty residing in the state.)
- If a student from an unauthorized state is discovered found enrolled in an online/distance course(s), that student will be promptly withdrawn from the course.
- Monitor new programs and courses in which students residing in other states might enroll to determine if the program/course meets an exemption status or if authorization must be obtained from a state or states when a need for authorization is determined. If an out-of-state student from a state that is not exempted or not authorized to offer online courses is found currently enrolled in an online course, that student may be withdrawn from that course at any time and asked to register for a seated or hybrid section of the course at the student's expense.
- Complete the authorization process for the required state or states.
- Establish and monitor renewal cycles for states from which authorization has been obtained.

- Provide website updates to the college webmaster on how to file a complaint with accrediting agencies and relevant state approval authorities that USDOE requires to be available to students on the CVCC website.
- Maintain CVCC presence in the SREB Electronic Campus as appropriate.
- Keep current concerning federal revisions of state authorization regulations and of progress of adoption of the national reciprocity agreement, SARA.
- The academic program/department from which the need for authorization arises will be responsible for implementing a teach out plan and complete substantive change notifications if necessary (such as if a decision is made to no longer offer an entire program distance, etc.)
- Processing payment (if necessary) of fees required for state authorization in any state from which the need for authorization arose.

Catawba Valley Community College is not authorized to provide distance education courses outside of North Carolina, unless state authorization has been granted from the state in which the applicant resides. State Authorization requires colleges to seek and secure authorization to offer instruction in that state. Compliance with individual state requirements is now part of the Higher Education Opportunity Act of 2008, Amended 2010.

Admission of applicants residing outside of North Carolina to an online degree, diploma, certificate program, or individual online courses offered by Catawba Valley Community College is dependent on the college's ability to secure authorization from the applicant's state of residence. A list of states in which Catawba Valley Community College is currently authorized to offer distance education courses is maintained on the institution's website: http://www.cvcc.edu/Distance_Education/Not_a_NC-Resident.cfm.

The State Authorization Coordinator will be the single point of contact to coordinate, assist, and secure authorization from states that require educational institutions to be legally authorized in their state prior to offering online/distance education programs/courses to students residing in that state.

The Educational Technology department will maintain information needed to determine eligibility in states and to complete authorization requests as necessary. The Educational Technology department will maintain a database of out-of-state students enrolled in Catawba Valley Community College distance learning programs/courses and of instructors living out of state.

Please note that state authorization does not affect the cost of attending college at CVCC. Tuition requirements, including those for out-of-state students, still apply.

Fees, Scholarships, and Financial Aid

CVCC charges tuition in accordance with policies established by the North Carolina Community College System. Tuition rates are subject to change. Certain fees have been established in accordance with guidelines and ranges established by the North Carolina Community College System. Fees are subject to change. Due dates for tuition and fees are established by the Chief Financial Officer or designee. Students will forfeit their seat in a class if they fail to pay the applicable tuition/fees by the established due date.

Tuition

(Subject to change depending on action of General Assembly.)

Tuition per Semester:

North Carolina Residents

16 hrs. or more.....	\$1,216.00
15 hrs. or less (per semester hr.).....	\$76.00

Out-of-State Residents

16 hrs. or more.....	\$4,288.00
15 hrs. or less (per semester hr.).....	\$268.00

Determinations of **North Carolina Residency** for tuition purposes are processed by the NC Residency Determination Service (RDS).

All students, parents, faculty, staff and constituents of the North Carolina Community College System should refer to www.ncresidency.org for details regarding the North Carolina Residency Determination Service, processes and required residency guidelines for tuition purposes.

Tuition for students enrolling in Occupational Extension courses vary per course. However, fees may be established for self-supporting seminars and courses according to the schedule below in which more than normal expenses to the College are incurred. Such charges may cover the cost of instructional materials and/or textbooks required in such classes.

Continuing Education Occupational Extension (per course)

0-24 hours.....	\$70.00
25-50 hours.....	\$125.00
50+ hours.....	\$180.00

Fees and Insurance

Student Activity Fee.....	\$35.00
(Curriculum Students per semester)	
Student Accident Insurance (per semester).....	\$1.25
Computer Use and Technology Fee	
(Curriculum Students per semester).....	\$25.00
Campus Access and Security Fee.....	\$15.00
(Curriculum Students per semester)	
Computer Use and Technology Fee.....	\$5.00
(Continuing Education Students per designated technology-related course)	
Graduation Fee.....	\$25.00
Certificate Fee.....	\$10.00
Liability/Malpractice.....	\$27.50
(Nursing, Surgical Technology, Respiratory Therapy, EMS, Dental Hygiene, Polysomnography, Radiography, and Electroneurodiagnostic Students)	
Liability/Malpractice (CNA and Phlebotomy Students).....	\$14.50
Service Charge for Returned Checks.....	\$25.00
Lab Fees.....	Varies
Replacement Fee for Library/ID Card.....	\$10.00
Transcript Fee.....	\$5.00

- To view a copy of CVCC's Student Accident Insurance Brochure visit:
http://www.cvcc.edu/Services/Business_Office/student-accident-insurance.cfm.

Accident insurance must be purchased by students registering for curriculum classes. The premium must be paid at the time of registration at the beginning of each semester.

Students enrolled in certain health programs/courses are required to purchase liability/malpractice insurance. The premium for this insurance is paid once annually through the business office.

Certain fees have been approved for testing services. These include fees for TEAS test, NCDAP retest, test proctoring, or other special circumstances.

Fee Waivers

In compliance with North Carolina Statutes and regulations of the North Carolina Community College System, tuition and fees may be waived under the following circumstances: No extension registration fee shall be charged of individuals enrolling in special extension training programs for emergency telecommunication personnel, fire department personnel, volunteer rescue and life saving personnel, local law enforcement officers, or members of auxiliaries of such groups, providing the individual is a member of the group for which training is being provided.

High School students taking college credit classes through the Career and College Promise program, as well as Challenger and Alexander Early College High School students, are exempt from applicable tuition for fall and spring semesters. Applicable fees will be charged.

Other Expenses

The cost of books, supplies, and equipment varies from one program of study to another.

Collection Notice

The College reserves the right to use all means necessary to collect any outstanding balances. This may include but is not limited to the use of NC Set-off Debt.

Other Actions Regarding Past Due Accounts

All previously incurred expenses and accounts, including library and payments made to Nelnet (a third party payment plan provider) for tuition, generally must be fully paid before a student may re-enter at the beginning of any semester and before transcript, diploma, or certificate will be furnished.

Refunds

Curriculum Classes

The College follows the refund policies established by the North Carolina Community College System. A copy of the current refund policies may be obtained from the Business Office. Specific guidelines and processes to ensure compliance with these policies shall be established by the Chief Financial Officer or designee. The following are specific guidelines which have been established in accordance with these policies. Refunds for less than \$5.00 will not be made.

A full (100 %) tuition refund shall be made if the student officially withdraws prior to the start date of the class. Example – If the start date of the class as indicated on the student's schedule is September 1, the student must withdraw from that class on or before August 31 to receive a full (100%) tuition refund.

A 75% tuition refund shall be made if the student withdraws on or before the census date of the class. The census date for a class is the 10% point of the class.

No tuition refund shall be made if the student withdraws from a class after the census date of that class. The census date for a class is the 10% point of the class.

The student fees, accident insurance premium, and some program specific fees (i.e., mal-practice insurance fees, processing fees, etc.) are not refundable unless the student officially withdraws prior to the start of his/her classes, a student's class is cancelled, or the College determines an institutional error has occurred.

Continuing Education Classes

This policy includes occupational extension classes. A full refund will be given if the student officially withdraws from class prior to the first class meeting. Allow a minimum of two (2) weeks for processing of refund requests. Refunds for less than \$5.00 will not be made. After the class begins, a 75% refund of registration only will be made if the student officially withdraws from the class prior to or on the 10% point of scheduled hours. The student fees, accident insurance premium, and some program specific fees (i.e., mal-practice insurance fees, processing fees, etc.) are not refundable unless the student officially withdraws prior to the start of his/her classes, a student's class is cancelled, or the College determines an institutional error has occurred.

Financial Aid

Students who enroll are encouraged to submit the Free Application for Federal Student Aid (FAFSA) available at www.fafsa.gov. The student's financial need is determined through an analysis of FAFSA application and is granted on an annual basis. Financial assistance for educational expenses may be available in the form of grants, scholarships, loans, or work programs.

Student financial aid programs require that the student: (a) demonstrate financial need, except for some loan programs, (b) provide an official high school transcript or High School Equivalency diploma (such as GED), (c) be enrolled as a regular student working toward a degree, diploma, or certificate in an eligible program, (d) be a U.S. Citizen or eligible noncitizen, (e) have a valid Social Security Number, (f) make satisfactory academic progress, and (g) register with the Selective Service, if required.

I. Federal Aid Programs

Federal Pell Grant

This grant is a source of federal student aid which provides eligible students with financial assistance to help defray the cost of postsecondary education. Student eligibility is primarily based on financial need.

Federal Supplemental Educational Opportunity Grant

This is a federal grant which is a "supplement" to the Pell Grant for students demonstrating the greatest financial need.

Federal Work Study

This federal program provides jobs at the College for students who have financial need.

VA Educational Benefits

Students desiring to use VA Educational benefits should contact Student Services for CVCC program information and admissions requirements. Students must be accepted in a VA approved program of study and meet all institutional and VA requirements before certification can be made to the Veterans Administration. For additional information regarding benefits, eligibility, policies, and procedures, please refer to the Veterans Affairs section. (See Veterans Affairs)

Direct Loan Program

1. **Subsidized Loan.** This type of loan is awarded on the basis of financial need. The federal government pays the interest on the loan ("subsidizes" the loan) until repayment begins and during authorized periods of deferment.
2. **Unsubsidized Loan.** This type of loan is not awarded on the basis of need. Interest will be charged from the time the loan is disbursed until it is paid in full.
3. **Plus Loan.** This type of loan is for the parent of a student who qualifies as a dependent student. The parent does not have to demonstrate "need" but must not have an adverse credit history.

II. State Supported Aid Programs

North Carolina Community College Grant

This is a need based grant established by the NC Legislature to provide funds to help meet the educational costs of NC residents attending community colleges. To apply, the student must complete the Free Application for Federal Student Aid (FAFSA). Eligibility is based on the student being a NC resident, enrolled at least half time in an eligible curriculum program, maintaining satisfactory progress, meeting the Pell Grant eligibility requirements, and demonstrating financial need. Possible recipients are selected by the College Foundation of North Carolina, with each community college certifying that the student meets all eligibility requirements.

North Carolina Education Lottery Scholarship

The Education Lottery Scholarship was created by the 2005 General Assembly to provide financial assistance to needy North Carolina residents. To apply, the student must complete the FAFSA. Eligibility is based on the student being a NC resident, enrolled at least half time in an eligible curriculum program, maintaining satisfactory progress, meeting the Federal Pell Grant requirements, and demonstrating financial need. Possible recipients are selected by College Foundation of North Carolina, with each community college certifying that the student meets all eligibility requirements.

State Employee Credit Union Foundation Scholarship

The SECU Foundation established this two year scholarship program to assist North Carolina Community College students achieve academic success. Preference will be given to students whose parents or guardians and family members are public sector employees who live and work in North Carolina. To apply, students must have completed the FAFSA. In addition, the student must be full time, a U.S. citizen, have demonstrated leadership and excellence of character, and maintain a 2.5 or higher GPA. Scholarship amounts are \$2,500 per year. Recipients are selected by the Office of Scholarships and Financial Aid. Information for the scholarship is available through the Office of Scholarships and Financial Aid.

Veterans' Children Scholarship

Children of certain veterans who were either killed in action, disabled while in the armed forces, a prisoner of war or missing in action for a certain period of time may be entitled to financial aid from the North Carolina Division of Veterans Affairs to attend CVCC. Students may apply through the local N.C. Division of Veterans Affairs Office.

Vocational Rehabilitation Aid

By action of the United States Congress, any physically, mentally, or emotionally disabled student may be eligible for financial aid and for scholarship assistance. If a prospective student has any of these limitations, the nearest office of the North Carolina Department of Vocational Rehabilitation should be contacted. If the student prefers, the Office of Scholarships and Financial Aid may be contacted.

Other Aid

In addition to the above programs, various companies and civic organizations provide scholarships to deserving students.

III. Satisfactory Academic Progress Standards for Financial Aid

Satisfactory Academic Progress (SAP) is a set of standards for financial aid progress to insure that all students receiving federal (Title IV) or state aid are making progress toward completion of a degree. The policy requires the measurement of satisfactory academic progress to include all periods of enrollment at the institution, including those periods for which the student did not receive any financial aid.

New federal regulations effective July 1, 2011, affect Satisfactory Academic Progress policies and procedures. The rules limit the length of time that students not making progress can continue to receive Title IV aid and require a more structured, comprehensive, and consistent approach to the development and implementation of institutional financial aid satisfactory academic progress policies.

Purpose, Procedures, Monitoring, Warning & Suspension, Appeals

Purpose

Institutions of higher education are required by federal regulations to establish minimum standards of Satisfactory Academic Progress (SAP) for students receiving financial aid. It is the expectation that students are to achieve minimum levels of progress toward completion of a degree. The progress is measured both qualitatively and quantitatively. The maximum timeframe for an academic program is divided into increments to ensure that the student is making sufficient progress toward completion of the degree. The institution will determine at the end of each increment (semester) if the student has completed a minimum of percentage of work toward completion of the degree. All semesters and credit hours attempted at the institution will calculate in this determination, regardless of whether or not the student has received financial aid in the past. The SAP Policy will apply to all students applying for or receiving federal or state aid.

The student is responsible for understanding the SAP Policy and for being in compliance. The student is also responsible for understanding the consequences for noncompliance. All financial aid recipients are required to meet the SAP guidelines established by Catawba Valley Community College (CVCC) and financial aid standards of progress, pursuant to Federal regulations.

Procedures

To be eligible for financial aid, students must meet the following minimum guidelines:

Qualitative Standard - Maintain a minimum cumulative GPA of 2.00 each semester as computed by Financial Aid's standards – this may be different than your transcript GPA. Developmental courses are not included in the semester GPA or cumulative GPA.

Quantitative Standard - Complete 67% of all credit hours attempted from the beginning date of enrollment at the college. Developmental course hours are included in this measurement. Cumulative credit hours attempted will include all hours for which the student was enrolled as of the census date of the class (10% point of the class). Credit hours otherwise marked as forgiven under the previous Academic Forgiveness Policy are included in hours attempted and hours completed if appropriate based on the grades received. Transfer credit hours that are accepted toward the student's educational program will count as both attempted and completed hours.

Maximum Time Frame - Complete the program of study within the maximum timeframe. Federal regulations specify that the timeframe may not exceed 150% of the published length of the program as measured in credit hours. (If the academic program length is 60 hours the maximum timeframe for the program cannot exceed 90 credit hours attempted). Credit hours for developmental courses required by placement testing will be excluded (up to 30 credit hours) from the 150% calculation of hours. Transfer credits accepted from other schools that apply toward the student's program of study are included in the maximum timeframe.

Monitoring

The Office of Scholarships and Financial Aid will monitor satisfactory academic progress for all students receiving or applying for federal or state aid to ensure that they are making progress toward program completion. The progress for all students receiving federal or state aid will be reviewed at the end of each semester. Students will be notified by email regarding the status. Failure to receive notification will not change the student's status. Not enrolling for one or more terms does not change the student's status.

Cumulative Credit Hours Attempted - Cumulative credit hours attempted are defined as all credit hours attempted at CVCC, and all credit hours transferred from other institutions. Attempted credits include courses with grades of A, B, C, D, F, or P (pass), WP (withdraw passing), WF (withdraw failing), I (incomplete), or R (repeat).

Repeated Courses - will be counted as hours attempted, hours completed, and also toward maximum credits allowable for each type of program for financial aid. Only one repetition of a previously passed course may be

counted in the enrollment status. A course that has not been passed may count in the enrollment status until the course has been successfully completed.

Cumulative Credit Hours Completed - Credit hours successfully completed are defined as grades of A, B, C, D or P. Credit hours with a grade of F, WP, WF, I, or R do not count as successfully completed credit hours.

Audited Courses - Credit hours taken for a grade of "audit" do not apply toward a degree program. The grade of "audit" is not included in determining status for financial aid and does not count in the calculation of satisfactory academic progress.

Incomplete Grades - Courses with grades of "I" (Incomplete) will be considered as credit hours attempted and not completed. Students who have made arrangements with the instructor to complete required course work are not required to re-register for the same class during a subsequent semester to complete the work. If the "incomplete" grade resulted in a student being placed on financial aid probation or suspension, once completed, the student must notify the Office of Scholarships and Financial Aid to have their progress reevaluated.

Cumulative Grade Point Average - The minimum cumulative GPA for graduation at CVCC is 2.00. The student receiving financial aid must meet the minimum standard of the school.

Course Withdrawals - Any student who withdraws from a class, either officially or unofficially should know how the withdrawal could affect the eligibility for financial aid as determined by the SAP Policy. A withdrawal will count as attempted, but not completed credit hours. A grade of WP will affect the quantitative measure, but not the qualitative measure, as it will not count in the GPA calculation. A grade of WF will affect both the quantitative and qualitative measure, as it will count in the GPA. Financial Aid recipients should discuss the consequences of withdrawing from a class with the Office of Scholarships and Financial Aid before doing so.

Developmental Courses - Federal regulations allow financial aid recipients to take a maximum of 30 credit hours of developmental coursework. Developmental courses are included in the calculation in the quantitative measure (hours attempted versus completed). The grade received for the developmental class, however, is not included in the GPA. To remain in good standing, students enrolled in developmental courses must receive grades of P.

Transfer Students - All transfer credit hours granted to the student will be included in the measurement of maximum timeframe. Transfer credit hours that are accepted toward the student's educational program will count as both attempted and completed hours.

Program of Study - Students who change their program of study without graduating from a program will assume the timeframe of the new program of study and all hours previously attempted will count toward the maximum timeframe of the new program of study. Frequent changing of programs without graduating could result in the loss of federal or state eligibility. If a student graduates from a program of study and desires to pursue another program, the student will assume the maximum timeframe of the new program less any attempted hours related to courses not required in the program previously completed. It is always in the best interest of the student to contact the Office of Scholarships and Financial Aid before changing programs of study. A student is allowed to receive financial aid for the completion of only two academic programs.

Two Programs of Study - Students who choose two programs of study (pursue multiple programs at the same time) will assume the maximum timeframe of only one academic program.

Summer Session - Credit hours attempted and earned during the summer session are included in the calculation of Satisfactory Academic Progress. Full-time status is the same for summer session as it is for the fall and spring semesters (12 credit hours).

Enrollment Status - Full time (12 credit hours or more), 3/4 time (9-11 credit hours), 1/2 time (6-8 credit hours), less than 1/2 time (less than 6 credit hours)

Warning and Suspension

Warning - If a student does not have a 2.0 cumulative grade point average (GPA) AND pass at least 67% of the credit hours on a cumulative basis, the student is placed on WARNING for the next term attended. A student will be granted only one term to regain satisfactory academic progress. Financial aid may be received during this WARNING term.

For students in clock hour programs, the review of progress will be done at the point the scheduled clock hours for that payment period are successfully

completed. In order for the student to be eligible for the next payment period, the student must have successfully completed both the clock hours and the weeks of instructional time for the required period.

Suspension - At the end of the WARNING period, students whose term completion rate and GPA do not meet SAP requirements (67% completion of all hours attempted and a 2.0 cumulative GPA) will be on SUSPENSION. Students who are suspended will no longer be eligible to receive financial aid. At this time, the student must pay for college expenses each semester until the SAP requirements are met or submit an Appeal if documentation can be provided to indicate extenuating circumstances that impacted academic performance.

Maximum Time Frame - If a student begins his/her academic career in a longer program (i.e. an associate or diploma program) and then changes to a shorter program (i.e. certificate program), he/she may automatically be put on MAXIMUM TIME FRAME. For example, a student completes 35 credit hours under an associate's program that requires 60 credit hours to complete. The student changes to an 18 credit hour certificate program. Under the associate program, 150% is 90 credit hours, but 150% for an 18 hour certificate is 27 credit hours (18 x 150%). Because the student has already completed 35 credit hours and the maximum time frame for the certificate program is only 27, the student has exceeded the 150% time frame. Once a student reaches the 150% limit, his/her SAP status will update to MAXIMUM TIME FRAME and the student will no longer be eligible for state or federal financial aid.

Probation on Appeal - When a student has been reinstated by an approved appeal by the SAP Committee, the student will be placed on PROBATION ON APPEAL and assigned an Academic Plan. The student can receive financial aid for the term he/she is on probation. If the student does not meet the probationary requirements, he/she will be placed on SUSPENSION for the next enrolled semester.

Appeals

A student may appeal the Suspension of financial aid by obtaining a **Satisfactory Progress Appeal Form** online at www.cvcc.edu. Students must submit in writing along with supporting documentation, a) the extenuating circumstances and how it directly contributed towards the student's inability to meet satisfactory academic progress and b) what has changed his/her situation that will allow him/her to make satisfactory academic progress at the next evaluation. Please note that simply experiencing an extenuating circumstance does not guarantee an exception to the SAP regulations. **ONLY ONE APPEAL PER ACADEMIC YEAR WILL BE CONSIDERED.**

Federal regulations give some examples where allowances might be made for mitigating circumstances. Mitigating circumstances are defined as (1) death of an immediate relative (spouse, parent/legal guardian, brother/sister, child) of the student, (2) an injury or extended illness or hospitalization of the student (documented by a doctor) or immediate family member, (documented by a doctor and documentation to show the student was required to provide care for the family member) (3) other special circumstances such as involuntary call to active military duty, unanticipated/serious medical or psychological difficulty causing undue hardship to the student and beyond reasonable control of the student. The extenuating circumstances must have occurred during the term you received failing grades and/or withdrew from classes.

Circumstances related to the typical adjustment to college life, such as voluntary pause, lapse or termination of employment, pregnancy/childbirth, taking too many classes, working while attending school, financial issues related to paying bills, childcare issues, incarceration resulting from a guilty verdict and car maintenance/travel to and from campus are not considered extenuating circumstances. Chronic conditions such as (but not limited to) diabetes, migraines, asthma, hypertension, previously diagnosed learning, physical or psychological disabilities and other similar conditions are expected to be managed by the student appropriately for him/her to meet SAP requirements.

An Appeal cannot be based on the student's lack of knowledge regarding the policy or simply the need for financial aid. A student may not submit an appeal because he/she does not agree with the final decision of the SAP Committee. An Appeal based solely on financial and/or emotional needs without sufficient explanation and documentation will not be approved. Appeals submitted without proper documentation will be **DENIED and incomplete forms will not be reviewed.**

Other than when an appeal is granted for unusual or mitigating circumstances, a student can reestablish eligibility only by taking action that brings the student into compliance with the qualitative and quantitative components of the SAP requirements including the maximum timeframe. Neither paying out-of-pocket for one's classes, nor sitting out for a semester is sufficient by itself to reestablish eligibility.

Students who wish to appeal the 150% timeframe rule are required to complete the **Satisfactory Academic Progress Appeal Form** and have an

academic advisor complete the **Satisfactory Academic Progress Academic Plan Form** to determine how many courses remain toward graduation. The advisor must provide the student with an educational plan that will allow the student to complete the degree. **The student must successfully complete 100% of everything attempted from that point forward to complete the degree (no withdrawals, no incompletes, and no grades lower than a C) and must earn a minimum term-based GPA of 2.50.** If the student fails in these requirements, the aid will be suspended. **ONLY ONE APPEAL PER ACADEMIC YEAR WILL BE CONSIDERED.**

The Satisfactory Academic Progress Appeal and Academic Plan Forms, along with all supporting documentation, **MUST** be submitted to the Office of Scholarships and Financial Aid **BEFORE the FIRST DAY OF CLASS for the enrolled semester.** The SAP Committee will review submitted appeals and will determine if justifiable evidence or extenuating circumstances exist and if the student may receive financial aid for a specified probationary term. All decisions are made on a case by case basis. The SAP Committee may have up to 14 days to make a determination and the decision will be final. The U.S. Department of Education dictates much of the financial aid appeal process and may differ from other colleges/universities financial aid processes. The student will be notified by email of the decision.

Students on financial aid SUSPENSION who are seeking to regain eligibility for financial aid through the Appeal process will remain ineligible for assistance until the Appeal process is completed and a decision has been made. **Students on SUSPENSION CANNOT depend on financial aid to pay for costs of tuition, books, and other fees, and should be prepared to pay from their own resources pending the outcome of their financial aid Appeal.**

If an Appeal is approved, the student will be placed on PROBATION ON APPEAL. The student must meet with the Advising Center to create an Academic Plan. The Academic Plan must be submitted to the Office of Scholarships and Financial Aid and must be completed accordingly. **ALL changes to the Academic Plan MUST be approved by the Advising Center.**

The PROBATION ON APPEAL status will hold the student to a higher term-based standard for SAP evaluation. **PROBATION ON APPEAL students MUST earn a minimum term-based GPA of 2.50 (or equivalent if course is repeated) AND complete 100% of hours attempted for the term.** Those meeting the standard will continue in this status until they regain full satisfactory SAP status (67% completion and 2.0 cumulative GPA). Failure to meet the PROBATION ON APPEAL conditions will result in SUSPENSION of aid.

If your Appeal is denied, you will be asked to attend at your own expense and earn the deficiency either in the hours, GPA or both (you cannot make up a deficiency if your appeal was due to exceeding the maximum timeframe to earn a degree). If you did not maintain SAP due to a deficiency in credit hours, you may take the credit hours at another institution as long as CVCC accepts the transfer hours. After you complete this semester (or semesters), you must submit an appeal form to the Office of Scholarships and Financial Aid so your progress can be reevaluated.

Each student will be notified by email when placed on probation or suspension. If the student takes the necessary action that brings the student into compliance with the qualitative and quantitative components of the SAP requirements, the Federal Pell Grant and other types of financial assistance (depending on availability of funds) are reinstated at the beginning of the next term of attendance, if otherwise eligible. Whether approved by the SAP Committee or approved after one semester of satisfactory progress, the student's status upon reinstatement will be satisfactory.

IV. Local Scholarships and Financial Aid

CVCC Foundation Scholarships

The Catawba Valley Community College Foundation, Inc., is a nonprofit organization that provides the community a vehicle through which investments may be made in the education of CVCC students through scholarship funds. These scholarship funds provide an opportunity for each student to compete for funds to pay for his/her education. Scholarships are provided through tax-deductible gifts from individuals, businesses, community organizations, and CVCC alumni. All CVCC students are invited to submit a scholarship application. One scholarship application initiates the application/eligibility process for all Foundation scholarships. When the CVCC student application is activated, an invitation to apply for a CVCC Foundation Scholarship is sent via the email address or home address found on the application. The CVCC Foundation Scholarship selection is a continuous process. Each student is encouraged to return the scholarship application as soon as possible for access to the scholarship process.

Student Life

Services for Students

Academic Advising

Each curriculum student enrolled in a degree, diploma or certificate program will have access to academic advising through an assigned advisor or through the Advising Center. This determination is made during the Admission interview and will be communicated to the student as appropriate for the program of study. The purpose of academic advising is to assist the student with planning a course schedule, registration, program sequence and completion, academic probation, graduation review, and general academic advising.

Advising Center

Academic Advising is provided on a regular daily schedule by trained professional staff in the Advising Center in the Student Services Building. All new students are required to meet with Advising Center staff for academic advising and planning for their first registration. At this first meeting staff will assist students with program requirements, course planning, long range goals, explain various college processes, and answer any questions. Students can also complete the registration process with Advising Staff during the periods of registration. Other services provided include class schedule adjustments, academic probation advising, and program completion and graduation progress.

Students can make appointments for advising during registration periods, but drop-in service is also available.

Alumni Affairs

The CVCC Alumni Association was founded in 2014 to connect, enrich, and serve a growing body of alumni. The Association celebrates the achievements of CVCC alumni and the opportunities that community college education provides. It also seeks to give alumni opportunities to give back to students, the college, and the community it serves. Individuals who finished a degree, certificate, diploma, or earned job skills through CVCC are invited to join. For more information, visit www.cvcc.edu/alumni, or contact Mary Reynolds, Alumni Affairs Director, alumni@cvcc.edu.

Business Operating Hours

The CVCC Normal Business Hours of Operation are 8:00 AM – 5:00 PM Monday – Friday and closed Saturday and Sunday. The CVCC campus buildings are open to students 7:00 AM Monday – Friday except for scheduled events. The CVCC Campus is closed 10:30 PM – 6:00 AM Monday – Thursday and closes at 5:00 PM on Friday. The Campus will close on Institutional Holidays.

Career Counseling

Individual career counseling is available to all students who are interested in discussing their career interests, choice of program, and career goals. Career assessments and career reference information are used to assist students in examining their interests, values, and skills to explore career options. Assessments available include: Self Directed Search, Myers-Briggs Personality Type Indicator, Focus 2, and CFNC Planning Tools.

Challenged Materials

CVCC supports the position of the American Library Association on the subject of censorship. The right of the librarian and faculty to select books and other materials representing all sides of controversial issues must be safeguarded by the college.

College Store

The College operates a well-stocked, walk-in, self-service college store, where most required books, supplies, and tools are available. In addition, other items of student interest may be purchased. While operating primarily for the students, the College Store is open to the general public and is located in the Student Center.

Counseling

CVCC does not offer mental health/personal counseling services. Admission staff members are available to assist students with academic or vocational issues. Also, the CVCC Career Center may offer career/vocational assistance to students. If at any point an admissions representative determines a student's ability to benefit from campus services is limited, the staff member will recommend appropriate resources and suggest alternatives to the student.

CVCC Alert

The CVCC Alert App can be downloaded at the Apple Store or Google Play. The app is provided by the Office of Safety, Security and Health, so that you may be provided with timely information and warnings to help keep you safe in the event of an emergency on or near campus. Should you have questions about CVCC Alert please contact the Office of Safety, Security and Health.

CVCC Foundation, Inc.

The Catawba Valley Community College Foundation, Inc., is a non-profit organization with the mission to foster and promote growth, progress, and the general welfare of Catawba Valley Community College. It is the vehicle through which the community may invest in education.

CVCC GO App

The CVCC Go app is a student oriented mobile application for iOS and Android that allows users to view campus information like: maps, important phone numbers, or even take a virtual tour! Current students can login to see final grades, register for classes, and even pay for classes through the app.

Electronic Mail Services

CVCC creates a college e-mail address for students when the online application is entered into the CVCC database. This e-mail address is communicated to the student during the Admission interview visit in the Student Services office. **Students are expected to read the CVCC email daily.** The College shares critical information regarding financial aid, academic issues, grades, registration, campus safety alerts, and general news through e-mail. It is the preferred method of communication with students to ensure timeliness of information, safety, and security. It is the student's responsibility to learn how to login and read CVCC e-mail and follow specialized requests from various campus departments.

CVCC e-mail is a technology resource. Users are subject to all other policies regarding CVCC technology resources. Students may expect reasonable access to CVCC e-mail. However, access cannot be guaranteed to be available at all times or in all circumstances.

CVCC e-mail may be accessed for routine management or maintenance purposes.

CVCC e-mail users must accurately identify themselves in their electronic correspondence.

Users may be required to manage their CVCC e-mail storage space due to the limitations of storage resources.

CVCC e-mail accounts established for students may be terminated at the end of the enrollment period.

Electronic Signature

Catawba Valley Community College (CVCC) recognizes an electronic signature as a valid signature from faculty, staff, and students. An electronic signature is defined as any electronic process signifying an approval to terms, and/or ensuring the integrity of the document, presented in electronic format.

Students use electronic signatures to register, check financial aid awards, pay student bills, obtain unofficial transcripts, update contact information, log into campus computers, complete forms, submission of class work, tests, etc.

Faculty and staff use electronic signatures for submitting grades, viewing personal payroll data, logging into campus computers, accessing protected data through the administrative computing system and custom web applications provided by the college, etc.

An electronic signature is considered valid when the following is met:

Condition: Campus Network Username and Password

- Institution provides student or employee with a unique username
- Student or employee sets his or her own password
- Student or employee logs into the campus network and secure site using both the username and the password

It is the responsibility and obligation of each individual to keep their PIN and/or their password private so others cannot use their credentials.

Once logged in, the student or employee is responsible for any information they provide, update, or remove. CVCC will take steps to ensure both the PIN and password are protected and kept confidential. Furthermore, users are responsible for logging out of all systems and exercising the necessary precautions when using publicly accessible computers.

This policy is in addition to all applicable federal and state statutes, policies, guidelines, and standards.

Financial Assistance

Consistent with the open door admissions policy, it is the intent of the college administration that no person be denied the opportunity to pursue financial assistance. Therefore, scholarship and financial assistance information is available during the enrollment process. The Office of Scholarships and Financial Aid is available to assist students and potential students in planning for the financial support of their education.

Food Services

Located in the Student Center, the Compass Group provides fresh food choices on a daily basis in a cafeteria-style snack bar. Many food items are made daily on-site. Commitments to students include:

- Sourcing fresh yogurt & milk that is free of artificial growth hormones.
- Purchasing poultry produced without the routine use of human antibiotics.
- Buying local products to support American family farms.
- Promoting Certified Humane cage-free eggs™.
- Featuring social and ecological certified coffee.
- Serving seafood that comes from sustainable sources.
- Offering packaging made from renewable resources.
- Implementing waste reduction practices to minimize environmental impact.
- Providing a large variety of healthful options and educational tools encouraging our customer to make healthier choices.

Vending choices are also available in all campus buildings.

Health Services/Information

There is no formal healthcare program/clinic available for students. The Student Government Association (SGA) includes various health-related activities/information in annual program planning. These programs may be offered in collaboration with other CVCC Departments and/or community agencies. These may include programs on substance abuse, HIV, wellness, nutrition, stress, anxiety, and/or other vital healthcare topics. These activities are posted on the MyCVCC Portal Calendar.

Any students, faculty, or staff health-related emergencies are referred to area healthcare providers/agencies. CVCC has developed procedures designed to protect all student and employees in the workplace from exposure to blood borne pathogens. A copy of these procedures is on file in the Human Resources Office.

Helpdesk

Students may get technology help for CVCC services by accessing the CVCC Helpdesk by calling 828-327-7000, ext. 4444.

Hours of Classes

Students may attend Catawba Valley Community College on either a full-time or part-time basis. Day classes are normally scheduled between 8:00 a.m. and 5:00 p.m., Monday through Friday. Evening classes are normally scheduled between 5:00 p.m. and 10:00 p.m., Monday through Thursday. Some classes are also scheduled on weekends, Friday evening and Saturday daytime.

Housing

Catawba Valley Community College primarily serves students within commuting distance of the campus. CVCC has no dormitory or housing facilities.

Inclement Weather Closings

Catawba Valley Community College will cancel classes only when the weather is considered too hazardous for safe travel to and from the college. The decision will be made as soon as possible by the President or designee, in order to inform students and staff. An official announcement stating that classes are delayed or the College is closed will be made by the automated attendant (updated college closing information option), on the telephone system 828-327-7000, CVCC's web page (www.cvcc.edu), or by CVCC's text alert option.

Intercollegiate Athletics

The CVCC mascot is the Red Hawk. CVCC is authorized to operate an intercollegiate athletic program and is a member in good standing with the National Junior College Athletic Association (NJCAA). All teams at CVCC are members of the National Junior College Athletic Association, Region 10, which includes two-year colleges in Virginia, South Carolina and North Carolina. Within this region, CVCC competes in the Division II Carolinas-Virginia Conference.

CVCC teams include Women's Volleyball, Men's and Women's Basketball, and Men's Baseball.

Job Placement

CVCC shall make job placement services available to students and alumni. CVCC also partners with other agencies in the local NCWorks Career Center to provide these services. Students have access to jobs listed by employers who call the Career Center for assistance. The office has listings for full-time, part-time and temporary jobs. Current students, former students, and graduates of curriculum programs are eligible for placement services. Services include job preparation (job search, resume writing, applications, interviewing, etc.) job fairs, workshops, and on-campus interviews.

Learning Assistance Center

The Learning Assistance Center is an academic support center offering walk-in tutorial assistance to Catawba Valley Community College students who are experiencing academic difficulties or wanting to improve their academic performance. Individual assistance is available in all levels of mathematics, writing, and study skills. Computer-assisted instruction, video instruction and Internet access are also available.

Library

The Library is open to all CVCC students, CVCC employees, and to the general public.

The Library is located on the second floor of the Cuyler A. Dunbar Building. Its primary function is to support instruction and provide necessary resources to the students in each of the curricula areas. The Library has a capacity of 201 persons with a collection of 30,000 volumes. Eight individual study rooms and two group study rooms are available for use.

Library patrons are subject to all library fees and fines (e.g. for damage or loss of materials and equipment, library card replacement).

The confidentiality of library user records shall be maintained in accordance with the General Statutes of NC, Chapter 125-19 and all other regulatory requirements.

Lost and Found

The College Switchboard, located on the first floor of the Student Services Bldg., serves as the central location for items that have been found on campus. Do not leave items unattended on campus. It is a good idea to mark your name on all items you bring to campus.

MyCVCC Portal

The MyCVCC portal facilitates communication among Catawba Valley Community College employees and students. Beyond meeting the complex needs of CVCC employees and students to communicate, it encourages engagement within our community with access to register for classes, email, Blackboard, as well as paying for classes.

New Student Orientation

New Student Orientation is required of all new students and is offered in an online format. This orientation introduces individuals to information about how to navigate on campus, explore career options, and register for upcoming courses. Students will also be instructed on how to access online classes, student accounts, grade information, and payment options. New Student Orientation is available at <http://www.cvcc.edu/Admissions/Advising/new-student-orientation.cfm>.

Office of Multicultural Affairs

The Office of Multicultural Affairs is located on the first floor of the Cuyler A. Dunbar building. Its function is for all students, staff, and faculty to embrace and value diversity. This office promotes a creative climate offering a series of Multicultural Days on CVCC's campuses for a positive educational experience for all students.

Office of Safety, Security, and Health of the College

The Office of Safety Security and Health is located on the first floor of the Cuyler A. Dunbar Building. The function of this office is to provide a safe working and learning environment for all students, staff and visitors to our campus. Should there be a safety or security concern please contact the Office of Safety, Security and Health.

Parking Hang Tags

Applications for parking hang tags may be picked up from the Office of Safety, Security and Health. These hang tags enable the Office of Safety, Security and Health to locate you in the event that there is an issue with your vehicle while you are on campus.

Placement Testing Services

Students applying for degree, diploma, and certificate programs may be required to complete placement testing to provide evidence of appropriate skills so that courses may be selected to maximize the student's opportunity for success. Placement testing is not required for admission to the College, but may be required to satisfy certain program of study requirements. Appropriate skills may be evidenced by one of the following:

- Sufficient scores on the NCDAP and/or OPAC tests taken at a North Carolina Community College within 5 years of entry to CVCC;
- Sufficient scores on the ACT or SAT tests taken within 5 years of entry to CVCC;
- Meeting the requirements for Multiple Measures for Placement for those students who graduate from a North Carolina high school in the year 2012 or later.

NCDAP and OPAC testing is available by appointment in the CVCC Testing Center. Appointments may be made when the student meets with Admission staff to activate his/her application. There is no fee for this first-time placement testing. NCDAP and OPAC scores are valid for 5 years. More specific information can be found at http://www.cvcc.edu/Services/Testing_Center/index.cfm.

Re-testing Procedure

Generally, re-testing on NC DAP is not considered to be productive. However, re-testing may occur if one of the following conditions is met:

1. NC DAP scores are older than 5 years and have expired. There is no fee to re-test if test scores have expired.
2. The original test score is believed to be invalid due to illness, interruption, or other problems during test administration as determined by the Testing Center staff. Should any of these issues occur, the student must alert the Testing Center staff about the issue upon completion of the placement test and before exiting from the Testing Center. Testing Center staff will discuss the issue with the student and assist the student to schedule a re-test if appropriate. Testing Center staff will determine whether the student must pay a re-testing fee.
3. The student completes an intervention/remediation to provide appropriate skill development for the student. The student must discuss this option with the appropriate Department Head (Mathematics or English/Developmental Studies) and re-testing will be approved by the Department Head if appropriate. The student will be charged a \$10.00 fee to re-test in Mathematics and a \$10.00 fee to re-test in Reading/English.

4. The Department Head for Mathematics or English/Developmental Studies determines that the student may benefit from a re-test. The Department Head will discuss options with the student to determine the best course of action. The student will be charged a \$10.00 fee to re-test in Mathematics and a \$10.00 fee to re-test in Reading/English.
5. Testing Center staff are not authorized to grant re-testing except in the case of #2 listed above.

Students who are approved to re-test will receive a form from the appropriate Department Head that indicates the specific NC DAP re-test. The student will take this form to the Business Office and pay the required fee(s). The Business Office will give the student a receipt. The student will take both the re-test Form and the receipt to the Testing Center to schedule a re-test appointment.

Requests for re-testing are directed to:

http://www.cvcc.edu/Services/Testing_Center/index.cfm.

Program for Students with Disabilities

A program of services is provided for students with disabilities. Individuals with disabilities (as defined in the Americans with Disabilities Act of 1990 and the ADA Amended Act 2008) wishing to make a request for reasonable accommodation or wishing to file a complaint of alleged discrimination on the basis of disability should contact the CVCC Program for Students with Disabilities Office. It is the student's responsibility to request these services. Current documentation of the disability by an appropriate professional may be required. All information is kept confidential. Students will be required to sign a release of information form before any special contact is made to arrange accommodations. Please request accommodations at least three (3) weeks before class as some accommodations take time to arrange. If it is less than this, we will accommodate to the extent we feasibly can. You may request accommodations at accommodations@cvcc.edu. You may also contact the Counselor for students with Disabilities in the Learning Assistance Center, CAD 157.

Single Point of Contact (SPOC) for Homeless and Unaccompanied Youth

In accordance with the McKinney-Vento Homeless Assistance Act, services are provided to help smooth the transition to college for unaccompanied students who are experiencing homelessness. The Single Point of Contact (SPOC) helps to create an awareness on campus of homeless students, expedite the process of determining eligibility for independent student status for the FAFSA, and supports school access and success by facilitating campus discussions to develop a system of support for homeless and unaccompanied youth, and linking youth with campus resources and community assistance. The CVCC SPOC can be reached at Student Services at 828-327-7000 ext. 4216 or by mail at 2550 Hwy. 70 SE, Hickory, NC 28602.

Special Programs

Students needing assistance with childcare funding or other supportive services such as temporary funding of tuition, books, supplies or transportation should contact the Director for Special Programs in the Learning Assistance Center (LAC). Each year special grant applications are made, and there may be funds for financial assistance. Applications are available in the Learning Assistance Center (LAC) and Student Services and are distributed to the "most in need" as long as funds last. "Most in need" is determined by information submitted on the Free Application for Federal Student Aid (FAFSA).

Student Activities

CVCC encourages student co-curricular activities and student organizations that promote student growth, except for campus organizations commonly referred to as social fraternities and/or sororities. Organizations and activities shall be open to all students regardless of race, color, religion, national origin or ethnicity, sex/gender identity, creed, age, disability, veteran or active military status, genetic characteristics, or any other category protected by law under Title VII and/or Title IX. Procedures for organizing student activities and for establishing student organizations shall be established by the Chief Student Services Officer or designee. On-campus fund-raising activities and other on-campus solicitation activities by students and/or student groups must be approved in accordance with guidelines established by the President's Executive Council.

The College encourages participation in student organizations and activities. Programs sponsored include Fall and Spring Flings; Interclub Council; "Have a Dog with the Big Dawg;" N4C SGA conferences; co-curricular activities; NJCAA women's volleyball, men's and women's basketball, men's baseball and much more! The links provided below give access to these and other related topics.

- **Student Life** http://www.cvcc.edu/Student_Life/index.cfm
- **Clubs and Organizations:** http://www.cvcc.edu/Student_Life/Clubs-Organizations.cfm
- **Community Connections:** http://www.cvcc.edu/Student_Life/Community-Connections.cfm
- **Fitness Center:** http://www.cvcc.edu/Student_Life/Fitness-Center.cfm
- **Student Government:** http://www.cvcc.edu/Student_Life/Student-Government.cfm
- **Student Leadership Academy:** http://www.cvcc.edu/Student_Life/Student-Leadership-Academy.cfm

Student Center

The Student Center, a place to meet and eat, is one of the focal points of campus social life. A cafeteria-style snack bar, dining area, outdoor patio, and television help fill leisure moments and relieve study pressures. The Student Center is also available to provide a relatively quiet but relaxed atmosphere in which students may constructively use time for academic preparation.

Behavior Expectations for the Student Center as Approved by Student Government Association (SGA)

1. Respect the rights of others to study and learn.
2. Vulgar language, shouting across the room, horseplay, loud music or engaging other users in unwanted interactions are examples of disruptive behaviors that will not be tolerated in the Student Center. Students come to school for an education. No one has the right to interfere with the education of others.
3. Use courteous and polite behavior at all times.
4. Respect the authority of all faculty and staff to enforce these guidelines.
5. Pick up your trash when you leave the Student Center.
6. Sagging or unbelted pants are prohibited.
7. Students may not rearrange the furniture. Leave the tables, chairs and couches as they are arranged.

Student Clubs

CVCC encourages student co-curricular activities and student organizations that promote student growth. Organizations and activities shall be open to all students regardless of race, color, national origin, sex/gender identity, religion, creed, age, disability, veteran or active military status, genetic characteristics, or any other category protected by law under Title VII and/or Title IX. of race, color, national origin, sex/gender, religion, creed, age, or disability.

Students are encouraged to participate in student organizations to promote student growth and to enhance the classroom learning environment. A variety of available clubs is listed below:

- **Accounting Club** designed to assist students in becoming better informed about the accounting profession and introduce them to the opportunities available in the private and public sectors. Advisor: Christy Lefevers, clefevers@cvcc.edu, 327-7000 ext. 4308.
- **American Chemical Society's Student Affiliate Society** of CVCC gives chemical science students practice in professional areas, including preparing and presenting technical material before chemical professionals. Advisor: Kim Browning, kbrowning@cvcc.edu, 327-7000 ext. 4536.
- **Association of Respiratory Therapy Students** promotes professionalism in respiratory care students. Members are involved in promoting healthy lifestyles and providing assistance at an asthma camp for children. Advisor: Cathy Bitsche, cbitsche@cvcc.edu, 327-7000 ext. 4391 and Advisor: Jason Elder, jelder@cvcc.edu, ext. 4083.

- **Automotive Systems Technology Club** includes all automotive systems technology students. Members tour assembly plants, go to races, and volunteer with many campus events. Advisor: Charles Farnsworth, cfarnsworth@cvcc.edu, 327-7000 ext. 4326.
- **Biology Club** members promote community service, service learning, and outdoor recreation. Activities include wetlands restoration, biodiversity surveys, and waterfall hikes. Advisor: Emily Whiteley, ewhiteley@cvcc.edu, 327-7000 ext. 4361.
- **Business Leaders of Tomorrow** provides out-of-the-classroom learning and experience to office administration, business, accounting and entrepreneurship students. Opportunities abound to build business and community relationships. Members are often able to attend conferences, seminars, and participate in educational trips. Advisor: Brenda DeLee, bdelee@cvcc.edu, 327-7000 ext. 4673.
- **CKI (Circle K, affiliated with Kiwanis International)** is the largest collegiate community service, leadership development, and friendship organization in the world. Members work on campus and community service projects throughout the year. Advisor: Elizabeth Braun, ebraun@cvcc.edu, 327-7000 ext. 4007.
- **Collegiate Music Educators Club** helps students become aware of employment in music education and performance. Members are exposed to professional learning opportunities in music and receive material about continuing music education at four-year institutions. Advisor: Caroline Simyon, csimyon@cvcc.edu, 327-7000 ext. 4305.
- **Communications Club** promotes critical thinking across the disciplines and engages people in the art of communication. This includes debate, interpreting and deriving meaning from nonverbal communication, improving interpersonal communication and relationships, training for job interviews, resume and cover letter writing, and intercultural communications. Students will have speaking competitions and showcases each semester. Advisor: Jason Earnhardt, jeearnhardt@cvcc.edu, 327-7000 ext. 4078.
- **Computer Information Systems Security Club** keeps members current on the latest security issues and fixes, promotes the CVCC information security program to high schools and in the community, and provides a scholarship for a student in the curriculum program. Advisor: Rick Barnes, rbarnes@cvcc.edu, 327-7000 ext. 4312.
- **Cosmetology Club (The Cutting Edge)** fosters the development of skills necessary to become successful cosmetologists. Members have a variety of activities and field trips. Advisor: Tammy Muller, tmuller@cvcc.edu, 327-7000 ext. 4108.
- **Criminal Justice Club** designed to give students in the Criminal Justice and Latent Evidence program the opportunity for open exchange of ideas and knowledge pertaining to issues in the criminal justice field. Advisor: Sherry Herman, sherman@cvcc.edu, 327-7000 ext. 4050.
- **CVANS** gives nursing students an opportunity to complete service projects in the community. Advisor: Robin Caldwell, rcaldwell@cvcc.edu, 327-7000 ext. 4299; Pam Pinkerton, ppinkerton@cvcc.edu, ext. 4825.
- **CVCC Campus Crusade for Christ (CRU)** is an international organization that seeks to develop tomorrow's leaders by embracing the purpose, love and forgiveness that God offers them in a relationship with Jesus Christ. Advisor: Amanda Crouse, acrouse@cvcc.edu, 327-7000 ext. 4365.
- **CVCC HMT/MOA** works to networks with local practice administrators and business managers. They also tour and learn about career opportunities and participate in healthcare service events. Club members will be active on campus and host a variety of speaker forums. Advisors: Kim Ford, kford@cvcc.edu, 327-7000, ext. 4267, and Laura Richard, lrichard@cvcc.edu, ext. 4523.
- **CVCC Lesbian, Gay, Bi-sexual, Transgender (LGBT) and Allies Club** is open to all students. The purpose is to create a "safe zone" where all students can find help and support while promoting school spirit and equality. Advisor: Brian Bergman, bbergman@cvcc.edu, 327-7000 ext. 4720.

- **Early Childhood Club** encourages students working in or seeking careers in the Early Childhood field. Advisor: Aden Cranford, acranford@cvcc.edu, 327-7000 ext. 4575.
- **Electroneurodiagnostic Club** members help market the END professions. Fundraising activities throughout the year mean club members can attend statewide seminars and workshops. Advisor: Sarah Hoffman Shelton, shoffman@cvcc.edu, 327-7000 ext. 4517.
- **Emerging Entrepreneur Club** fosters the use of entrepreneurial thinking and helps develop the skills necessary to become successful business owners or managers. Members have a variety of activities during the school year, including speakers' forums, field trips and special projects. Advisor: Gary Muller, gmuller@cvcc.edu, 327-7000 ext. 4672.
- **Engineering and Technology Club** provides experiential learning opportunities for students and encourages collaboration among students from various engineering and technical disciplines. Advisor: Jim Thomas, jdthomas@cvcc.edu, 327-7000, ext. 4202.
- **Epsilon Sigma Pi-EMS Club** encourages awareness, concern, and interest in the emergency medical care profession. The society shall promote services and fellowship through community improvement and awareness. Advisor: Paul Badgley, pbadgely@cvcc.edu, 327-7000 ext. 4331.
- **Geology Club** provides students with access to field trips and research opportunities in geology and environmental science. Volunteering, community service and stewardship are all practiced by the club. Advisor: Ron Teseneer, rteseneer@cvcc.edu, 327-7000 ext. 4534.
- **Health Information Technology Club** encourages HIT students to network with area Health Information Management professionals, mentor HIT students and provides a forum for student questions and concerns. Advisor: Debby Cook, dcook@cvcc.edu, ext. 327-7000 ext. 4342.
- **HOSA Health Occupation Student Association** is designed to generate awareness of health care professions and the delivery of quality health care. Advisor: Tanya Clanton, tclanton@cvcc.edu, 327-7000 ext. 4347.
- **Machining Club** promotes student leadership development, supports student activities on campus, supports our local community, has fun outside the classroom and gets others excited about the area of machining. Advisor: John Witlock, jwitlock@cvcc.edu, 327-7000 ext. 4561.
- **Minority Males on the Move** encourages minority males to attend and graduate from CVCC. Members explore employment opportunities and seek to prepare minority males with the right college courses. Advisor: Ron Carson, rcarson@cvcc.edu, 327-7000 ext. 4571.
- **Phi Theta Kappa** is an international honor society that recognizes and encourages scholarship, leadership, service and fellowship. Membership invitations are extended to students who excel academically and in their service. Members participate in campus and community projects. Advisor: Tonya Stephens, tstephens@cvcc.edu, 327-7000 ext. 4109.
- **Polysomnography Club** members are often found participating in community events promoting improved health care and good sleep hygiene. They actively promote the Polysomnography program throughout the area to ensure a continued pipeline of quality applicants. Advisor: Sarah Hoffman Shelton, shoffman@cvcc.edu, 327-7000 ext. 4517.
- **Radiography Club** promotes communication among radiography students. Members attend a conference each year where they network with radiography professionals. Advisor: Robin Cornett, rcornett@cvcc.edu, 327-7000 ext. 4074.
- **Rotaract** (affiliated with Rotary International) is a service club that gives members an opportunity to work on campus and community projects. Advisors: Teresa Biggs, tbiggs@cvcc.edu, 327-7000 ext. 4288; Steve Hunt, shunt@cvcc.edu, 327-7000 ext. 4570; Mary Beth Sjaardema, msjaardema@cvcc.edu, ext. 4282.
- **Skills USA** unites students in industrial, technical, health occupations and vocational trades. Club members acquire leadership skills, learn about and promote high professional standards and share in establishing career goals. Advisor: Gary Muller, gmuller@cvcc.edu, 327-7000 ext. 4672.
- **Student American Dental Hygiene Association** gives dental hygiene students a chance to volunteer for and participate in community events. Guest speakers regularly present lively topics. Club members attend statewide scientific meetings. Advisors: Crystal Adams, cadams@cvcc.edu, ext. 4158 and Lisa Campbell, lcampbell@cvcc.edu, ext. 4157.
- **Student Government Association (SGA)** sponsors activities open to all currently enrolled curriculum students. SGA activities promote cultural, social, physical, and academic growth. Programs sponsored include Fall and Spring Fling, N4C SGA conferences, co-curricular activities, and much more! Advisors: Bo Glenn, bglenn@cvcc.edu, 327-7000 ext. 4388; Debby Cook, dcook@cvcc.edu, ext. 4342; Mary Reynolds, mreynolds@cvcc.edu, 327-7000 ext. 4387.
- **Student Photographic Society** is a chapter of the national group sponsored by Professional Photographers of America. The club is involved in loads of campus and community events photographing and displaying their works. Advisor: Clayton Joe Young, jyoung@cvcc.edu, 327-7000 ext. 4467.
- **Students Striving for Success Club** works to support the educational and vocational efforts of all students attending CVCC. They support academic advising and encourage all students to graduate. Service learning and college transfer initiatives are promoted. Advisor: Steve Hunt, shunt@cvcc.edu, 327-7000 ext. 4573, Ron Carson, rcarson@cvcc.edu, ext. 4571.
- **Student Veteran's Organization** fosters support of Veterans and their dependants as well as current service members attending CVCC. Advisor: Ellen Gibbs, egibbs@cvcc.edu, 327-7000 ext. 4205.
- **Surgical Technology Club** members participate in campus blood drives, walk-in community walk-a-thons, and raise funds for surgical technology "extras," like a very special pinning ceremony. Advisor: Kimberly Holman, kholman@cvcc.edu, 327-7000 ext. 4332.
- **Write Stuff Club** promotes writing and writing workshops, sharing writings, entering writing contests and participating in writing challenges. Advisor: Polly Watson, pwatson@cvcc.edu, 327-7000 ext. 4209.
- **Theater Arts Club** gives all students a chance to be involved in theatrical events like dramatic readings, one-act plays, and storytelling. Follow on Facebook: <http://www.facebook.com/cvcctheatreartsclub>. Advisor: Kim Stinson, kstinson@cvcc.edu, 327-7000 ext. 4406.

Student Development

Student Services provides entry, support, and transition services to curriculum students. A definitive program of services is offered to assist students in satisfactorily selecting, entering, progressing within, and completing a program of study. In addition, students are provided with numerous opportunities for personal development and social growth through a variety of planned activities.

Student Government Association (SGA)

Each curriculum student enrolled at CVCC is automatically a member of the Student Government Association (SGA). SGA is intended to be a vehicle through which students have input into CVCC decisions and into the general welfare of students. The goals of this organization are to encourage student-faculty cooperation; provide democratic action in school activities; coordinate student activities; and maintain high standards for the school by upholding high personal standards of conduct. The SGA President is a nonvoting member of the Board of Trustees.

A student's experience at Catawba Valley Community College does not begin and end in the classroom. Various activities, opportunities, and functions of a social and professional nature are offered by Student Government in order to provide a well-rounded campus atmosphere.

Student Resource Guide 2017-18

College policies and procedures are applicable to all students enrolled at CVCC, whether full-time, part-time, auditing, special credit, non-credit, or Career & College Promise. Information contained in this document is subject to change without notice. CVCC is an equal opportunity/affirmative action institution. The 2017-18 Student Resource Guide is found at http://www.cvcc.edu/Student_Life/Student_Resources/index.cfm on the CVCC website. The Student Resource Guide is a quick guide to CVCC Policies, Procedures, and other information that may be useful to students.

Technology Resources

Technology resources include, but are not necessarily limited to, computers, software, networks, internet access, telephones, voice mail, printers, scanners, copiers, and electronic (e-mail) services provided by CVCC. Technology resources also include CVCC web pages, social media sites sponsored by CVCC, and other online resources provided or sponsored by CVCC. This policy applies to all users of technology resources provided by CVCC. Compliance is critical to the security and integrity of technology resources and is mandatory.

CVCC is committed to moving students, faculty, and staff forward in an ever-changing technology rich learning environment. As part of this plan, CVCC will allow students and employees to bring their own mobile devices (BYOMD) during the teaching and learning day.

Use of technology resources shall be in compliance with local, state, and federal law. Use of technology resources shall comply with any contractual or professional obligations of CVCC. All users are responsible for using technology resources in an efficient, responsible, considerate, ethical, and lawful manner. Any information distributed by a user must accurately identify the creator, distributor, and recipient of that information.

Access to technology resources is a privilege rather than a right. Access may be withdrawn from those who use it inappropriately or irresponsibly. Users who violate any of the technology resource policies may be subject to disciplinary action and/or legal action.

Technology resources are to be used to fulfill CVCC's mission. Acceptable uses by faculty and staff include:

- Use to complete the official work of the CVCC (including instruction and administration);
- Use directly related to academic research activities approved by CVCC;
- Use directly related to service on behalf of CVCC;
- Use directly related to professional development activities approved by CVCC; or
- Very limited non-commercial personal use as long as that use does not interfere with the work of the CVCC and does not create additional cost for CVCC.

Acceptable uses by students include:

- Use directly related to classes in which the student is officially enrolled;
- Use directly related to service activities approved by the College; or
- Very limited non-commercial personal use as long as that use does not interfere with the work of the CVCC and does not create additional cost for CVCC.

Technology resources may not be used for any purpose which is illegal, immoral, unethical, dishonest, damaging to the reputation of CVCC, inconsistent with the mission of CVCC, or which may subject CVCC to liability. Unacceptable uses of technology resources include, but are not limited to, the following:

- Harassment;
- Libel or slander;
- Fraud or misrepresentation;
- Destruction of or damage to equipment, software, or data belonging to the College or to others;
- Disruption or unauthorized monitoring of electronic communications;
- Unauthorized access of electronically stored information;
- Infringement of copyrights, trademarks, or the rights of others;
- Use of the CVCC logo without prior approval from the Director of Community Relations for the CVCC;

- Violation of computer system security;
- Unauthorized use of computer accounts, access codes (including passwords), or network identification numbers (including e-mail accounts) assigned to others;
- Unauthorized access to the CVCC's information systems, Internet or other networked computers;
- Use of computer communications resources in ways that disrupt or impede the computing activities of others;
- Use of technology resources for commercial business purposes unrelated to CVCC, for personal profit, or for solicitation of resources for non-CVCC sponsored activities;
- Academic dishonesty;
- Violation of software license agreements;
- Violation of network usage policies and regulations;
- Violation of privacy;
- Posting, sending, or intentionally accessing pornographic, sexually explicit, or offensive material;
- Posting, sending, or intentionally accessing material that is contrary to the mission of CVCC;
- Intentional distribution of computer viruses, trojan horses, timebombs, worms, or other rogue programming; or
- Use of electronic mail (e-mail) for chain letters, pyramid schemes, unsolicited mass mailings (spamming).

All installations, modifications, and/or repairs of technology resources must be authorized by the Executive Officer of Technology Services Chief Operations Officer or designees. Unauthorized resources are subject to seizure by CVCC. The usage of CVCC technology resources may be monitored as authorized by the Executive Officer of Technology Services Chief Operations Officer or designee. CVCC personnel or designees will generally not access the content of user files except as follows: a. The user gives prior consent; b. CVCC needs to ensure the security or operating performance of its systems or networks; c. There is reasonable concern that a violation of CVCC policy or law has occurred; d. CVCC is complying with a valid subpoena or search warrant issued by a court of competent jurisdiction; or e. Other reasons as determined necessary by the President. Therefore, CVCC does not guarantee privacy regarding the use of its technology resources. Any questions as to the appropriate use of technology resources should be directed to the Executive Officer of Technology Services Chief Operations Officer.

The President or designee shall establish guidelines and procedures for the use of social media sites sponsored by CVCC.

CVCC supports the appropriate use of BYOMD devices in accordance with section 4.18 of the CVCC Policies.

Devices

Devices include, but are not limited to, smart phones, tablets, and other wireless communication devices.

Device Support

The owner is responsible for the support and maintenance of their device. The Offices of Information Technology and Information Services may provide consultation on the type of smart-phone equipment to purchase, especially as it relates to applications that enable email and calendar support, but it is not responsible for ensuring (nor can it guarantee) compatibility between all makes and models of phones and CVCC systems. Most Internet capable devices will be able to access CVCC's web-based platforms.

If you wish to purchase a smart-phone with "native" support for synchronizing with the CVCC's email system, ask your service provider for options that support "over-the-air" connectivity to Microsoft Exchange and Google Apps. Examples include the Apple iPhone, most Android-based smart-phones, and Windows-based smart-phones. Please note that CVCC does not operate a Blackberry Enterprise Server and cannot guarantee compatibility between Blackberry devices and CVCC's information systems.

Information is provided to mobile device owners for the purposes of supporting themselves or providing the carrier with necessary information to setup accounts linking a mobile device to a CVCC user's account via CVCC's Webpage. IT Staff may not be able to give any additional information beyond that which is published.

Disclaimer

CVCC is not responsible for any data charges that might be incurred while using any CVCC electronic services. This includes CVCC Web Applications, the MyCVCC Portal or the CVCC Go Application.

Conduct and Misuse

Users shall be responsible for any unauthorized and/or inappropriate access to college information that occurs from the misuse, loss or theft of mobile devices. If a user's mobile device is configured to synchronize with email or other CVCC resources, the CVCC Technical Support HelpDesk (Ext. 4444) shall be notified if the device is lost or stolen so unauthorized and/or inappropriate access can be minimized.

Transportation

Students are requested to be especially alert and careful in entering and leaving the school grounds. The maximum on-campus speed is 10 miles per hour. Employees, students, and visitors are expected to park in designated parking spaces only. Handicapped parking spaces are designated and are regulated by NC General Statutes. Vehicles parked in areas not designated for parking may be ticketed and/or towed at vehicle owner expense. CVCC will not be responsible for vehicles damaged while parked on the school premises, during towage, or while being stored.

In order to maintain open fire lanes and clear roadways in case of emergency, the Board of Trustees of CVCC has established parking regulations. Student and visitor parking shall be in the lots so designated. Students, faculty and staff parking will be unreserved and will require a parking hang tag which will be issued during registration.

Tutoring

Students who are making grades of 80 or below or who are retaking a class are eligible for free tutorial help. Students interested in either using the Learning Assistance Center or receiving a tutor should contact the Learning Assistance Center for additional information.

Veterans Affairs

Special needs and information about policies and procedures for veteran students and dependents using VA benefits are provided by the Veteran Certifying Official in Student Services, and the local county VA offices. Students desiring to use VA Educational benefits should come to Student Services for CVCC program information and admissions requirements. Students must be accepted in a VA approved program of study and meet all institutional and VA requirements before certification can be made to the Veterans Administration. The specific application for benefits can be made on line at www.gibill.va.gov. Additional information regarding benefits, eligibility, policies, and procedures may be obtained from these offices.

VA students are responsible for the payment of all tuition, fees, and books at registration. VA payments are made directly to the student after classes have begun, and may take sixty days or more for initial enrollment.

V.A. benefits will reimburse only for courses required in one specific program of study.

The Veteran Certifying Officials in Student Services are responsible for (1) maintaining the appropriate records regarding veteran enrollment and progress within an educational program, and (2) notifying the Veterans Administration of any change affecting the recipient's enrollment status. Students receiving VA benefits must immediately notify the VA representative in Student Services of any change in their status to include dropping or adding classes, program changes, or new names and addresses. CVCC Student Services representatives are **not** employees of the Veterans Administration and are not responsible for VA policies, rules, or public laws which determine eligibility or payments. This includes, but is not limited to, the requirement that only required classes which specifically meet a graduation requirement for the approved program can be certified to the VA for the payment of benefits. Failure to comply with requests for documentation from the VA Certifying official(s) at CVCC may result in processing delays for benefits. Students using VA benefits must comply with all college satisfactory academic process guidelines and remain in good academic standing to continue receiving benefits. For additional information see the VA web page at: http://www.cvcc.edu/Admissions/Admission_Type/veterans-benefits.cfm.

Work Based Learning (WBL)

The work-based learning studies shall be integrated with the credit/curriculum programs of studies under the supervision of the Chief Academic Officer or designee. Operation of the program shall be in accordance with the policies and procedures stipulated by the North Carolina Community College System.

Work Based Learning (WBL) is a curriculum (credit) course that can provide on-the-job work experience for students enrolled in eligible programs. Students work in jobs related to their program of study and receive course credit for the learning that takes place on the job. Not all programs have WBL as an option and there are requirements that students must meet prior to enrolling in a WBL course. WBL options for eligible programs are listed in each program of study. Interested students may contact the Career Center at 828-327-7000, ext. 4812, or their advisor.

Military veterans may participate in the work-based learning program if otherwise eligible. Educational benefits (G. I. Bill) will be paid by the Veterans Administration for work-based learning courses if all requirements are met.

Writing Center

Learning Skills Specialists are available in the Writing Center located in the Cuyler A. Dunbar Building, Room 234, to assist students with sentence structure, paragraph development, grammar problems, and organization. Computers are available for student use for composing or revising papers. The resources for research are conveniently located nearby in the library. Also, the Writing Center offers an online writing assistance program called E-Help for distance learners. This service provides students the opportunity to submit written assignments for review by an online tutor Monday through Friday.

Student Code of Conduct

Policy 1.1: Compliance with CVCC Policies

Students and employees of Catawba Valley Community College (CVCC) are expected to comply with all CVCC policies. Failure to comply may result in disciplinary action. CVCC Policies will be published in appropriate documents and formats, and will be made available to students, faculty, staff, and administration.

Policy 3.18: Student Conduct

Policy 3.18: Student Code of Conduct applies to all student behavior issues other than issues covered by Policy 3.18.2: Title IX Violations: Sexual Violence, Sexual or Gender-based Harassment, and Other Sexual Misconduct.

Catawba Valley Community College (CVCC) students are expected to conduct themselves in accordance with the values of the Valley Way:

- Student Success
- Accountability
- Inclusivity
- Lifelong Learning
- Respect
- Integrity
- Teamwork

At CVCC, these values inform accepted standards of scholarship and conduct. All CVCC students and staff, regardless of the location or delivery method of their services and classes, have the right to a safe, peaceful, and honest educational environment. Therefore, when in the judgment of CVCC college personnel, a student's conduct disrupts or threatens to disrupt the College community, appropriate disciplinary action will be taken to restore and protect the safety, peace, and integrity of the community.

The purpose of the Student Code of Conduct is not to restrict student freedom, but to protect the rights of all students in their academic pursuits. All College employees have the authority to take immediate actions and begin disciplinary proceedings for violations of the Student Code of Conduct.

As stated in Policy 1.1: Compliance with CVCC Policies, CVCC students are expected to comply with all CVCC policies. Failure to comply may result in disciplinary action. Students are prohibited from engaging in any conduct which materially and adversely affects the educational process, including, but not limited to, the following:

1. Interruption or in any manner interfering with normal CVCC operations. Examples of violations to normal CVCC operations include, but are not limited to, the following:
 1. Disruption or obstruction of teaching, research, administration, disciplinary proceedings, or other on- or off-campus college-authorized activities;
 2. Mental or physical abuse of any person on College premises or at College-sponsored or College-supervised functions, including verbal or physical actions which threaten or endanger the health or safety of any such persons or which promote hatred or racial prejudice;
 3. Participating in conduct that disturbs peace and order of the College. This includes, but is not limited to, yelling, screaming, or talking in an unnecessary or unreasonably loud voice, or using any device which produces loud and/or disruptive noises.
 4. The use of defamatory speech or like expressive behavior; or the use of any speech or behavior implying a physical threat or likely to provoke violence or retaliation in person or via electronic means;
 5. Violation of state or College regulations regarding the operation and parking of motor vehicles. See Policy 4.9: Parking Policy at http://www.cvcc.edu/About_Us/Policies/CVCC-Operations.cfm#4.9;
 6. Fiscal irresponsibility, such as failure to pay College charges, fees, defaulted payments, levied fines, failure to repay college-funded loans, or fraudulent financial transactions with the College;
 7. Forgery, altering, or misusing College documents, records, or instruments of identification with intent to deceive;
 8. Tampering with a fire alarm or other safety equipment belonging to the College, except with reasonable belief in the need for such alarm or equipment;

9. Gambling on the College campus or at College-sponsored functions off-campus;
10. Participation in gatherings or demonstrations that interfere with another's ability to freely access College facilities or property. Students shall not disrupt or interfere with the College's educational processes or College functions. Students shall comply with any instruction of a College employee to leave the scene of a disruptive gathering or demonstration;
11. Violating the terms of any disciplinary sanction or any College regulation during the period of disciplinary sanction;
12. Trespassing, including unauthorized entry or presence on the property of the College or in a College facility or any portion thereof to which entry or presence has been restricted; unauthorized presence in a College facility during closed hours;
13. Violation of any College policy, prohibited behavior, local, state, or federal criminal law on College premises adversely affecting the College community's pursuit of its proper educational purposes.
14. Failure to comply with instructions of College officials acting in performance of their duties.
2. Destruction, damage, or misuse of CVCC equipment, facilities, or property. This includes, but is not limited to, the acceptable use of technology. See Policy 4.18: Technology Resources (Acceptable Use).
3. Physical abuse of another person in the CVCC community;
4. Attempted or actual theft of, misuse of, or intentional damage to College property; or theft of or damage to property of a member of the College community or a campus visitor on college premises or at college functions;
5. Participation in hazing-defined as an act which endangers the mental or physical health or safety of a student, or which destroys or removes public or private property, for the purpose of initiation, admission into, affiliation with or as a condition for continued membership in a group or organization. The express implied consent of the victim in not a defense. Apathy or acquiescence in the presence of hazing are not neutral acts; they are a violation of this rule.
6. Plagiarism and other forms of academic cheating. See Policy 2.16: Academic Honesty.
7. Discriminatory harassment in the educational context refers to verbal or physical conduct of a similar nature directed at a student, which has the purpose or effect of unreasonably interfering with one's freedom by creating an intimidating, hostile, humiliating, or sexually (see Policy 3.18.2) offensive academic environment.

The following is a partial list of unwelcome, unwanted behavior, which when based upon one's race, color, religion, national origin or ethnicity, sex/gender identity (see Policy 3.18.2), religion, creed, age, disability (see Policy 3.7), veteran or active military status, genetic characteristics, or any other category protected by law under Title VII and/or Title IX may be considered discriminatory harassment:

- Verbal or physical conduct that denigrates or shows hostility or aversion toward an individual or group;
 - Epithets, slurs, negative stereotyping, or threatening, intimidating, or hostile acts;
 - Written or graphic material that denigrates or shows hostility or aversion toward an individual or group, including the display of objects, pictures, posters, cartoons, websites, and any form of electronic communication.
8. Violation of CVCC policies including those regarding the use and/or possession of
 1. firearms or other weapons as described in Policy 4.10: Firearms/Weapons Possession;
 2. alcoholic beverages as described in Policy 4.11: Alcoholic Beverages;
 3. illegal drugs or controlled substances as described in Policy 4.12: Illegal Drugs/Controlled Substances;
 4. and/or tobacco products as described in Policy 4.13: Tobacco Products;
 9. Making a threat to the safety of the CVCC community; or
 10. Commission of any other action which, in the opinion of the administration or faculty, may be contrary to the best interest of the CVCC community.

Policy 3.18.1: Student Behavior Sanctions Policy outlines the sanctions that may be imposed on a student who violates Policy 3.18: Student Code of Conduct.

Policy 3.18.1 Student Behavior Sanctions

Policy 3.18.1 applies to student behavior sanctions that may be imposed for violations of Policy 3.18: Student Code of Conduct. Violations of Policy 3.18.2: Title IX Violations: Sexual Violence, Sexual Harassment, and Other Sexual Misconduct are governed by that policy and handled under Procedure 3.18.2: Reporting and Response to Title IX Violations: Sexual Violence, Sexual or Gender-based Harassment, and Other Sexual Misconduct.

Student behavior sanctions are designed to educate students, guide future decision-making and deter further inappropriate behavior. Students found in violation of the Student Code of Conduct will be challenged to evaluate their behavior and reflect on their actions and the effects on the campus community. The following behavior sanctions are examples of those that may be imposed for violation of the Student Code of Conduct.

Any faculty or staff may use his/her discretion to give a sanction of Warning, General Probation, or Interim (Emergency) Suspension to any student in violation of the Student Code of Conduct and who is disrupting the educational process.

1. **Warning:** A written communication which gives official notice to the student that a violation of the Student Code of Conduct has occurred and that any subsequent violation of the Student Code of Conduct will carry heavier penalties because of this prior infraction.
2. **General Probation:** An individual may be placed on General Probation when involved in a minor disciplinary offense. General Probation has two (2) important implications: the individual is given a chance to show capability and willingness to observe the Student Code of Conduct without further penalty, and if the student errs again, further action will be taken.
3. **Interim (Emergency) Suspension:** Exclusion from class and/or other privileges or activities for conduct that poses a threat to the health or well-being of any member of the academic community or activities of the College as set forth in the notice, until a final decision has been made concerning the alleged violation.

Faculty will submit the "Warning, General Probation, Interim (Emergency) Suspension Form" to their immediate supervisor to document this behavior sanction. This Form is found online or in the Office of the Dean of Access, Development, and Success.

1. Faculty have the authority to impose the Loss of Academic Credit or Grade Sanction in accordance with Policy 2.16: Academic Honesty Policy.
2. **Loss of Academic Credit or Grade:** Imposed as a result of violating Policy 2.16: Academic Honesty. Sanctions may include the requirement to redo the assignment, loss of credit for the assignment, or loss of credit for the class.
3. The President, Vice Presidents, and the Dean of the School of Access, Development, and Success (ADS) have the authority to impose the following sanctions.
4. **Restrictive Probation:** Restrictive Probation results in loss of good standing and becomes a matter of record. Restrictive conditions may limit activity in the College community. Generally, the student will not be eligible for initiation into any local or national organization, and may not receive any College award or other honorary recognition. The student may not occupy a position of leadership or responsibility with any College or student organization, publications, or activity.
5. **Suspension:** Exclusion from class(es), and/or all privileges or activities of the College for a specific period of time. This sanction is reserved for those offenses warranting discipline more severe than probation, or for repeated misconduct. Students who receive this sanction must get specific written permission from the Dean of ADS before returning to campus. This sanction shall be recorded on the student transcript in accordance with the State Board of Community Colleges Code 1D SBCCC 400.2 (d).
6. **Restitution:** Paying for damaging, misusing, destroying, or losing property belonging to the College, College personnel, or students.
7. **Withholding transcript, diploma, or right to register or participate in commencement ceremonies:** Imposed when financial obligations are not met. (Student will not be allowed to register until all financial obligations are met.)
8. **Campus Service:** Assigning a specific campus service project and number of contact work hours to be completed for a designated department on the College campus.
9. **Group Probation:** This is given to a College club or other organized group for a specific period of time. If group violations are repeated during the term of the sanction, the charter may be revoked or activities restricted.

10. **Group Restriction:** Removing College recognition during the semester in which the violation occurred or for a longer period (usually not more than one additional semester). While under restriction, the group may not seek or add members, hold or sponsor events in the College community, or engage in other activities as specified.
11. **Group Charter Revocation:** Removal of College recognition for a group, club, society, or other organizations for a minimum of two years. Re-charter after that time must be approved by the College President. Permanent expulsion of a student from CVCC must be authorized by the President.
12. **Expulsion:** Permanently dismissing a student from campus. Expulsion is the most severe disciplinary sanction and must be authorized by the College President. The student loses his/her student status and may not return to campus unless authorized by the College President. Expelled students are liable for all tuition and fees. This sanction shall be recorded on the student transcript in accordance with the State Board of Community Colleges Code 1D SBCCC 400.2 (d).

Suspensions and expulsions for disciplinary reasons shall be recorded in the student's permanent record and on the transcript in accordance with the State Board of Community Colleges Code 1D SBCCC 400.2 (d).

Students are entitled to appeal any disciplinary action in accordance with CVCC's Policy 3.19: Student Due Process.

Procedure 3.18.1: Student Behavior Sanctions

Students who violate Policy 3.18: Student Code of Conduct at Catawba Valley Community College (CVCC) are subject to the disciplinary sanctions of the College. If the student's behavior violates both the law and College regulations, the College may take disciplinary action independent of that taken by legal authorities. Any student, faculty, or staff may file charges against any student or student organization for violations of Policy 3.18: Student Code of Conduct.

1. Charges/Notification

1. Complete the Student Conduct Violation Report, or a printed form may be obtained in the Office of the Dean of the School of Access, Development, and Success (ADS) in the Student Services Building.
2. Submit the completed Student Conduct Violation Report to the Office of the Dean of the School of ADS within two (2) working days of the incident. This report shall contain the following information:
 1. Name of the student(s) being charged
 2. The alleged specific violation(s) of the Code of Conduct
 3. The time, place, and date of the violation
 4. Names of any person(s) directly involved and/or witness(es) to the alleged violation
 5. Any action taken that relates to the alleged violation
 6. Desired solutions to the violation

3. The Dean of the School of ADS will notify the student(s) of the charge(s) in writing within two (2) working days of receipt of the Student Conduct Violation Report. Notification will be via CVCC student email, certified mail to the address in the student database, or in person.

Notification will include the following:

1. Name of the student(s) being charged
 2. The alleged specific violation(s) of the Code of Conduct
 3. The time, place, and date of the violation
 4. Names of any person(s) directly involved and/or witness(es) to the alleged violation
 5. Any action taken that relates to the alleged violation
4. The student(s) may meet with the Dean of the School of ADS and/or provide a written statement regarding the alleged violation within two (2) working days after receiving notification of the charge(s). If no communication is made with the Dean of the School of ADS within the time limit, the sanction decision will be based on information available. Any request for a reasonable extension must be made to the Dean of the School of ADS in writing. If an extension is granted, the time frame for the Investigation/Decision will be adjusted accordingly.

2. Investigation and Decision

Within five (5) working days after the notification to the student(s) about the alleged violation, the Dean of the School of ADS will complete an investigation of the charge(s). The investigation may include interviewing witnesses, reviewing written statements, consulting other College officials, and other appropriate methods to make an informed decision. The decision may be to:

1. Drop the charge(s)
2. Impose a disciplinary sanction consistent with those listed in Policy 3.18.1: Student Behavior Sanctions
3. Refer the student to a College office or community agency for services.

1. Sanction

Within two (2) working days after the decision has been made, the Dean of the School of ADS will notify the student(s) with the decision about the behavior sanction along with instructions to appeal the decision (Procedure 3.19: Student Due Process) in writing. Notification will be via CVCC student email, certified mail to the address in the student database, or in person.

2. Appeals

Any student who disagrees with the decision of the disciplinary sanction may appeal this decision according to Policy 3.19: Student Due Process.

Student Advocate: Upon the student's request, the Director of Admission or designee will assist the student with the steps required to follow the process, including providing the CVCC Student Grievance Form and the Student Grievance Committee Review Form.

Policy 3.18.2 Title IX Violations

"Title IX Violations" is the term that will be used to include "sexual violence, sexual or gender-based harassment, and other sexual misconduct" throughout Policy 3.18.2.

Policy 3.18.2 applies exclusively to Title IX Violations allegations. All other forms of harassment and/or discrimination are handled under Policy 3.18: Student Code of Conduct.

Catawba Valley Community College (CVCC) is committed to the maintenance of an environment that is supportive of its primary educational mission and free from Title IX Violations. CVCC intends to comply with Title IX of the Education Amendments of 1972, 20 U.S.C. § 1681 *et seq.*, and its implementing regulations, 34 C.F.R. Part 106. CVCC will not tolerate acts of Title IX Harassment in any of its forms, including, but not limited to, sexual or gender-based harassment, rape, sexual assault, other forcible and non-forcible sex offenses, domestic or dating violence, or stalking, and supports this policy for students, faculty, and staff. All actions taken to investigate and resolve complaints through this process will be conducted in a manner that preserves confidentiality to the greatest extent possible under the circumstances, without compromising the thoroughness of the investigation. Further, CVCC sponsors prevention, intervention and education programs specifically addressing Title IX Violations offenses in compliance with Title IX legislation. CVCC does not intend for this policy to infringe upon any First Amendment or academic freedom protections available to members of the CVCC community.

Information and awareness programs are offered at various times through a variety of events throughout the year. CVCC recognizes the importance of assisting individuals who are victims of Title IX Violations and helping them to regain a sense of personal control over their lives and decisions.

Procedure 3.18.2 Reporting and Response to Title IX Violations: Sexual Violence, Sexual or Gender-based Harassment, and Other Sexual Misconduct is the procedure to be used for reporting of and responding to Title IX Violations and is available on the CVCC website, in Student Services, and in the Human Resources Office.

Inquiries concerning Title IX compliance should be referred to the Title IX Coordinator, who is charged with the oversight of all Title IX claims. The CVCC President has the authority to designate the Title IX Coordinator and Deputy Title IX Coordinators, and to change them as needed. Their specific identities and contact information are posted prominently on the CVCC website.

Definition of Sexual or Gender-based Harassment

Sexual harassment is a form of sex discrimination and refers to direct or implied requests for sexual favors by one who has the power or authority to influence a student's academic record or to compromise one's full and unfettered participation in the CVCC community, academically, and otherwise.

Gender-based harassment may involve acts of verbal, nonverbal, or physical aggression, intimidation, or hostility based on sex or sex-stereotyping, even if those acts do not involve conduct of a sexual nature and includes any other conduct that has the purpose or effect of unreasonably interfering with one's freedom by creating an intimidating, hostile, humiliating, or sexually offensive academic environment.

While in some cases individuals may make sexual comments or jokes or personal advances without intending harm, such actions can be unwanted, threatening, and perceived as harassment. Stopping sexual or gender-based harassment in its many forms requires an increased awareness by everyone at the College of the impact that such actions may have on others. The following is a partial list of unwelcome, unwanted behavior, which may be considered sexual or gender-based harassment:

- Unwelcome sexual advances or propositions – whether they involve physical touching or not;
- Written or verbal sexual epithets, jokes, or references to sexual conduct, gossip regarding one's sex life;
- Written or verbal abuse of a sexual nature, use of sexually degrading, or vulgar words to describe an individual;
- Leering, whistling, brushing against another's body, sexual gestures;
- The display of sexually suggestive objects, pictures, posters, cartoons, websites, and any form of electronic communication;
- Comments about an individual's body or appearance, or regarding one's sex life, experience, sexual prowess, or sexual deficiencies;
- Asking questions about sexual conduct or probing into one's sex life or relationships; and
- Harassment consistently targeted at only one sex, even if the content of the verbal abuse is not of a sexual nature.

Definitions of Sexual Violence and Other Sexual Misconduct

- Intimate Partner Violence (IPV): the overarching term used to address any form of domestic or dating violence.
- Stalking: engaging in a course of conduct directed at a specific person that would cause a reasonable person to: (a) fear for his or her safety or the safety of others; or (b) suffer substantial emotional distress.
- Sexual Violence: any non-consensual sexual contact including penetration.
- Victim/Survivor: the person who has experienced IPV, stalking, and/or sexual violence
- Alleged Perpetrator: an individual who the victim/survivor identifies as having perpetrated IPV, stalking, or sexual violence.
- Reporting Party: a victim/survivor who has notified CVCC that sexual misconduct/violence has occurred.
- Responding Party: the individual who the reporting party identifies as having perpetrated sexual misconduct/violence
- Consent: explicit approval to engage in sexual activity demonstrated by clear actions or words. This decision must be made freely and actively by all participants. Non-verbal communication, silence, passivity, or lack of active resistance does not imply consent. In addition, previous participation in sexual activity does not indicate current consent to participate and consent to one form of sexual activity does not imply consent to other forms of sexual activity.
- Dating Violence: violence committed by a person (a) who is or has been in a social relationship of a romantic or intimate nature with the victim; and (b) where the existence of such a relationship shall be determined based on: (i) the length of the relationship; (ii) the type of relationship; and (iii) the frequency of interaction between the persons involved in the relationship.
- Domestic Violence: felony or misdemeanor crimes of violence committed by a current or former spouse of the victim, by a person with whom the victim shares a child in common, by a person who is cohabitating with or has cohabitated with the victim as a spouse, by a

person similarly situated to a spouse of the victim under the domestic or family violence laws of the jurisdiction or by any other person against an adult or youth who is protected from the person's acts under the domestic or family violence laws of the jurisdiction.

- **Forcible Sex Offenses:** any sexual act directed against another person, forcibly and/or against that person's will; or not forcibly or against the person's will where the victim is incapable of giving consent.
 - **Forcible Rape:** the carnal knowledge of a person, forcibly and/or against that person's will; or not forcibly or against the person's will where the victim is incapable of giving consent because of temporary or permanent mental or physical incapacity (or because of youth).
 - **Forcible Sodomy:** oral or anal sexual intercourse with another person, forcibly and/or against that person's will; or not forcibly against that person's will where the victim is incapable of giving consent because of youth or because of temporary or permanent mental or physical incapacity.
 - **Sexual Assault with an Object:** the use of an object or instrument to unlawfully penetrate, however slightly, the genital or anal opening of the body of another person, forcibly and/or against that person's will; or not forcibly or against the person's will where the victim is incapable of giving consent because of youth or because of temporary or permanent mental or physical incapacity.
 - **Forcible Fondling:** the touching of the private body parts of another person for the purpose of sexual gratification, forcibly and/or against that person's will; or not forcibly or against the person's will where the victim is incapable of giving consent because of youth or because of temporary or permanent mental incapacity.
- **Non-Forcible Sex Offenses:** unlawful, non-forcible sexual intercourse.
 - **Incest:** non-forcible sexual intercourse between persons who are related to each other within the degrees wherein marriage is prohibited by law.
 - **Statutory Rape:** non-forcible sexual intercourse with a person who is under the statutory age of consent.

Unprofessional Relationships; Consensual Relationships

It is a serious breach of professional ethics for faculty or other employees to initiate or acquiesce in a sexual relationship with a student who is under the personal supervision of the faculty or other employee. Therefore, CVCC prohibits consensual sexual relationships between faculty or other employees and a student enrolled in a course taught by the faculty or whose work, academic or otherwise, is supervised by the faculty or employee. This applies even when both parties appear to have consented to the relationship.

A faculty member or employee who currently has, or has previously had, a consensual sexual relationship with a student should not enter into, or should immediately disengage from, a supervisory relationship with that person. The burden to disengage from the supervisory relationship falls equally on both parties; however, CVCC will take all reasonable available measures, based on the circumstances, to arrange for alternate methods of instruction or supervision for the student. In most cases, this will be accomplished by having the faculty or employee disclose to the immediate supervisor the nature of the relationship.

In accordance with NC General Statutes § 14-27.7(b), criminal charges can result when faculty or other employees engage in sexual relationships with minors.

Victim/Survivor/Reporting Party Rights

- To have all incidents and medical records kept confidential;
- To be treated without prejudice based upon race, color, religion, national origin or ethnicity, sex/gender identity, religion, creed, age, disability, veteran or active military status, genetic characteristics, or any other category protected by law under Title VII and/or Title IX;
- To receive private and confidential examination/treatment for personal injuries, sexually transmittable disease, and pregnancy;

- To be considered as credible as a person reporting any other crime;
- To be made aware of the options available through the College and the judicial system;
- To receive emotional and psychological support and advocacy;
- To, or not to, notify and seek assistance from law enforcement and campus authorities;
- To prosecute or not to prosecute;
- To receive current information on community and campus resources;
- To answer only those questions relevant to the crime;
- To freedom from harassment;
- To have judicial no-contact, restraining, and protective orders complied with in accordance with court directives.

Accommodations may include but are not limited to the following:

1. Feasible class schedule adjustment (without academic or financial penalty) as necessary to minimize the potential for contact with the alleged perpetrator or those associated with the alleged perpetrator;
2. Arranging for the Reporting Party to have extra time to complete or re-take a class or withdraw from a class without an academic or financial penalty;
3. Academic Support Services.

Standards for Investigation

In addition to the due process procedures outlined in Procedure 3.18.2: Reporting and Response to Title IX Violations: Sexual Violence, Sexual or Gender-based Harassment, and Other Sexual Misconduct, the following "Standards for Investigation" shall be followed in regards to Title IX Violations.

1. The complaint will be decided using a preponderance of evidence standard, i.e., it's more likely than not that Title IX Violations occurred.
2. The reporting party and responding party will be entitled to the same opportunities to have others present during an institutional disciplinary proceeding, including the opportunity to be accompanied to any related meeting or proceeding by an advisor of their choice.
3. The reporting party and responding party will be notified in writing of the outcome of the complaint simultaneously.

Confidentiality

Adhering to confidentiality is extremely important at CVCC. CVCC will take all necessary steps to protect the identity of the reporting party. There may be some incidents or information that cannot be kept confidential. The staff of CVCC will notify the reporting party when information cannot be kept confidential.

If the reporting party requests confidentiality and decides not to file charges in a Title IX Violations case, an anonymous report of the incident must be made in order to comply with the Clery Act (campus crime reporting).

Counselors are available via third party community agencies to talk to the Reporting Party in confidence.

Protection against Retaliation

Retaliation is a very serious violation of Policy 3.18.2: Title IX Violations: Sexual Violence, Sexual or Gender-based Harassment, and Other Sexual Misconduct and should be reported immediately to the Title IX Coordinator. Retaliation, whether by the alleged wrongdoer or other individuals, can take any of many forms. Retaliation is defined as any materially adverse action that might well have dissuaded a reasonable person from making or supporting a complaint of Title IX Violations. A complaint's actual or perceived lack of merit does not excuse retaliatory conduct.

Retaliation against any individual for reporting Title IX Violations or against one who participates in an investigation will not be tolerated. In responding to reports of retaliation, the College will conduct a prompt, thorough and impartial investigation and will take appropriate remedial measures.

False Accusation

CVCC recognizes that the question of whether a particular course of conduct constitutes Title IX Violations requires a factual determination. The College also recognizes that false accusations can have serious effects on innocent persons. If, after investigation, it is clear that a person who has accused another of Title IX Violations maliciously or recklessly made a false accusation, the accuser will be subject to appropriate disciplinary action, up to and including expulsion. In such an event, the College will also take appropriate action to restore the reputation of the accused.

» See Procedure 3.18.2: Reporting and Response to Title IX Violations: Sexual Violence, Sexual or Gender-based Harassment, and Other Sexual Misconduct to report an act of Title IX Violations.

Procedure 3.18.2: Title IX Violations: Reporting and Response to Sexual Violence, Sexual or Gender-based Harassment and Other Sexual Misconduct

"Title IX Violations" is the term that will be used to include "sexual violence, sexual or gender-based harassment, and other sexual misconduct" throughout Procedure 3.18.2.

Procedure 3.18.2 applies exclusively to Title IX Violations allegations. All other forms of harassment and/or discrimination are handled under Policy 3.18: Student Code of Conduct.

Students and/or employees are encouraged to report Title IX Violations in any of its forms, including, but not limited to, sexual or gender-based harassment, rape, sexual assault, other forcible and non-forcible sex offenses, domestic or dating violence, or stalking, and CVCC supports this procedure for students and employees in compliance with Title IX legislation.

Definitions:

- Victim/Survivor: the person who has experienced Title IX Violations
- Alleged Perpetrator: an individual who the victim/survivor identifies as having perpetrated Title IX Violations
- Reporting Party: a victim/survivor who has notified CVCC that Title IX Violations have occurred.
- Responding Party: the individual who the reporting party identifies as having perpetrated Title IX Violations

Guidelines for Students:

Students who believe they have been victims of Title IX Violations that involve **sexual assault** should do the following as soon as possible in order to ensure the preservation of evidence:

- Go to a safe place.
- Do not shower or bathe.
- Do not urinate, if possible.
- Do not eat, drink, smoke or brush your teeth if oral contact took place.
- Do not destroy or wash the clothes you were wearing. If you change, place your clothes in a paper bag.
- Contact Campus Security, local law enforcement (Catawba County Sheriff's Department, Catawba Police Department, Claremont Police Department, Hickory Police Department, Maiden Police Department, Longview Police Department, Newton Police Department, Alexander County Sheriff's Department, or Taylorsville Police Department) or the Title IX Coordinator. The filing of a report does not obligate the victim/Reporting Party to pursue charges, but does make filing of charges easier at a later date.
- Seek medical treatment immediately (preferably within 72 hours).

Guidelines for Faculty/Staff:

College employees will observe the following guidelines when responding to a report of Title IX Violations:

- Assess the Reporting Party's well-being, render aid, and express concern and assurance.
- Notify the Title IX Coordinator and/or the Director of Campus Safety and Security.
- Do not question the Reporting Party about the details of the incident; other trained personnel will do this.
- Make sure the Reporting Party is in a secure place.

Be aware of the following:

- Do not touch, move or collect any evidence unless that evidence may be lost if you do not. If you have to collect evidence, record the following information:
 1. Item seized,
 2. Time seized, and
 3. Location seized.
- If evidence is given to you, record the following information:
 1. The person's name, address, telephone number and date of birth,
 2. The item given to you,
 3. The time and location where the person seized the item,
 4. The time you received the item, and
 5. Document chain of custody of the evidence.
- Encourage the Reporting Party to seek medical treatment (preferably within 72 hrs.)
- Assist law enforcement or medical personnel responding to the incident as needed.

Reporting Title IX Violations:

1. Victims/Reporting Party(ies) of Title IX Violations are encouraged to file a report with campus security and/or local law enforcement. The filing of a report does not obligate the Reporting Party to pursue charges, but does make the filing of charges easier at a later date.
2. Any person who believes that he or she is being, or has been subjected to, Title IX Violations is encouraged to file a report of the alleged Title IX Violations promptly with the Title IX Coordinator, a Deputy Title IX Coordinator, a Responsible Employee, or any CVCC employee.
 - The Title IX Coordinator is designated by the CVCC President to be the Dean of the School of Access, Development, and Success (ADS).
 - CVCC has designated Responsible Employees to be the Vice-presidents, Deans, Department Heads, and Directors. All employees have the duty to report incidents of Title IX Violations to the Title IX Coordinator.
 - The CVCC President has the authority to designate the Title IX Coordinator and Deputy Title IX Coordinators, and to change them as needed. Their specific identities and contact information are posted prominently on the CVCC website.
3. If the Reporting Party does not wish to pursue action with the College or the judicial system, the Reporting Party may make an anonymous report. With the Reporting Party's permission, the College can file a report on the details of the incident without revealing the Reporting Party's identity. This type of anonymous report helps to ensure the future safety of the Reporting Party and others. With such information, the College can keep accurate records about the number of incidents involving students, determine where there is a pattern of assaults with regard to a particular location, method, or assailant, and alert the campus community to potential danger.

Investigation Procedures:

The College's complaint procedure provides for an immediate, thorough and objective investigation of the sexual misconduct/violence.

Standards for Investigation

The following "Standards for Investigation" shall be followed in regards to allegations of Title IX Violations.

1. The complaint will be decided using a preponderance of evidence standard, i.e., it's more likely than not that Title IX Violations occurred.
2. The Reporting Party and the Responding Party will be entitled to the same opportunities to have others present during an institutional disciplinary hearing, including the opportunity to be accompanied to any related meeting or proceeding by an advisor of their choice.
3. The Reporting Party and the Responding Party will be notified in writing of the outcome of the complaint simultaneously.
4. Every effort will be made to resolve the complaint in no more than 60 days. This timeline may be adjusted due to factors beyond the control of the college or at the mutual consent of the Reporting Party and the Responding Party.

1. Complaint: When making a complaint of Title IX Violations, the Reporting Party should be prepared to provide the following information to the Title IX Coordinator:
 - Name of the student who is (was) being victimized,
 - The name of the person(s) committing the Title IX Violations,
 - The specific nature of the Title IX Violations and/or
 - Whether the Reporting Party has previously reported such Title IX Violations, and if so, when and to whom

2. Charges/Notification

The Title IX Coordinator will notify the alleged perpetrator (Responding Party) of the charge(s) via CVCC student email, certified mail to the address in the student database, or in person.

Notification will include the following:

1. Name of the student(s) being charged-the Responding Party,
2. The name of the person(s) committing the Title IX Violations,
3. The specific nature of the Title IX Violations and/or
- Whether the Reporting Party has previously reported such Title IX Violations, and if so, when and to whom.

3. Investigation/Decision

As part of the investigation and in compliance with Title IX the College will determine:

- whether or not the Title IX Violations occurred; and
- if the Title IX Harassment conduct occurred, what actions the school will take to end the Title IX Violations.

Four things must occur during the campus investigation:

1. The Title IX Violations must stop immediately.
2. The hostile environment must be eliminated.
3. Recurrence must be prevented.
4. Remedies must be provided.

The investigation may include

- Interviewing the Reporting Party: The Reporting Party might be interviewed once or more than once depending on the need to ask follow-up questions after collecting additional evidence.
- Interviewing the Responding Party (Parties) who is (are) perceived to have committed the alleged Title IX Violations.
- Interviewing witnesses identified by either the Reporting or Responding Party.
- Collecting and reviewing evidence which might corroborate either the Reporting or Responding Party's recollection of the incident. This might include, but is not limited to, written statements, text messages, emails, social media posts, phone records, letters, voicemails, pictures, medical records, court records, 911 calls, and off-campus law enforcement records.
- Consulting other College officials.
- Other appropriate methods to facilitate making an informed decision about the complaint.

All actions taken to investigate and resolve complaints through this process will be conducted in a manner that preserves confidentiality to the greatest extent possible under the circumstances, without compromising the thoroughness of the investigation.

The investigation will be completed and a determination made to either dismiss the charges, attempt an informal resolution, or to initiate a disciplinary hearing. Both the Reporting Party and the Responding Party will be notified in writing simultaneously about the outcome of the investigation.

1. Disciplinary Hearing/Sanctions

- The President shall appoint one of the Vice-presidents of the College to serve as the Chair of the Disciplinary Hearing.
- The three (3) members of the Disciplinary Hearing Committee shall be selected from the Responsible Employees of the College (excluding the Vice-presidents) and shall not have any previous involvement with the investigation. The Title IX Coordinator shall be in attendance to provide information about the evidence from the investigation.

Procedural Responsibilities for the Disciplinary Hearing Chair

The Disciplinary Hearing Chair shall schedule a Disciplinary Hearing by the Committee within five (5) working days following the written notification to the Reporting Party and the Responding Party. The Chair shall inform both Parties with the following information:

- Restatement of the Title IX Violations charge(s)
- Notice of the day, time, and location of the meeting
- Statement of the Reporting Party's and the Responding Party's basic procedural rights

Procedural Rights for the Reporting Party and the Responding Party include the following:

- The right to counsel. The role of the person acting as counsel is solely to advise the student. The counsel shall not address the Committee nor examine or cross-examine any persons. If the counsel is an attorney, the Committee Chair must be informed to allow the College attorney to be present.
- The right to produce witnesses on one's behalf.
- The right to present evidence.

Procedural Conduct of the Disciplinary Hearing:

- The Disciplinary Hearing shall be confidential and shall be closed to all persons except the following:
 - The Reporting Party and the Responding Party, who shall be interviewed separately;
 - Counsel (if any); and/or
 - Witnesses who shall
 - Give testimony singularly and in the absence of other witnesses.
 - Leave the Disciplinary Hearing room immediately upon the completion of the testimony.
- The Disciplinary Hearing will be recorded by the College in an audio format.
- Recordings will become the property of the College, and access to them will be determined by the Committee Chair. All recordings will be filed in the Office of the President.
- Upon completion of a Disciplinary Hearing, the Committee shall meet in executive session to make a finding based on the preponderance of the evidence (i.e., more likely than not) as to whether the Responding Party is responsible for violating Policy 3.18.2 Title IX Violations: Sexual Violence, Sexual or Gender-based Harassment, and Other Sexual Misconduct to decide the

appropriate discipline for the Responding Party. Committee decisions shall be determined by a majority vote of the Committee members. The Committee may use any of the behavior sanctions available in Policy 3.18.1: Student Behavior Sanctions.

- Decisions made by the Committee shall be provided simultaneously in writing to the Reporting Party and to the Responding Party by the Committee Chair within two (2) working days following the completion of the Disciplinary Hearing. The notice shall include:
 - The outcome of the Disciplinary Hearing which includes the alleged violation(s) of Policy 3.18.2 Title IX Violations: Sexual Violence, Sexual or Gender-based Harassment, and Other Sexual Misconduct, the findings, the sanctions, and the rationale for the action,
 - The procedure and grounds for either Party to appeal the results of the Disciplinary Hearing,
 - The date when the results of the Disciplinary Hearing become final, and
 - Any changes to the results of the Disciplinary Hearing that occur prior to the time that such results become final.
- Appeals may only be based on allegations that either the Reporting Party or the Responding Party was denied some guaranteed substantive or procedural right or due to new evidence. Parties may not appeal a Disciplinary Hearing proceeding result simply because they do not agree with the outcome. All appeals must be filed within 5 days of receiving the written notification from the Chair of the Disciplinary Hearing with the Office of the CVCC President or his designee.
- Copies of the written decision shall be provided to the Dean of the School of ADS and to the Office of the President.

Student Advocate: Upon the student's request, the Director of Admission or designee will assist the student with the steps required to follow Procedure 3.18.2.

Resources for Victims of Title IX Violations: Sexual Violence, Sexual or Gender-based Harassment, and Other Sexual Misconduct

List of Phone Numbers for Emergency Use	
Organization	Phone Number
Emergency	911
CVCC Campus Emergency	711
Campus Security	828-327-7000 ext. 4610
Dean of Student Services	828-327-7000 ext. 4143
Student Services	828-327-7000 ext. 4216
Rape Crisis Center--Catawba County	828-322-6011; www.rapecrisiscenter.com
Rape Crisis Center-- Alexander County	828-635-8881
Catawba County Sheriff's Department	828-465-8301
Catawba Police Department	828-241-4888
Claremont Police Department	828-466-7265
Hickory Police Department	828-328-5551
Hickory Police Department, Victim's Services	828-261-2642
Longview Police Department	828-327-2343
Maiden Police Department	828-428-5005
Newton Police Department	828-465-7430
Alexander County Sheriff's Department	828-632-4658
Taylorsville Police Department	828-632-2218
Catawba Valley Medical Center Emergency	828-326-3850
Frye Regional Medical Center Emergency	828-345-5625
Victim's Compensation Fund	1-800-826-6200
NC SAVAN (Statewide Automated Victim Assistance & Notification)	1-877-627-2826; www.ncsavan.org
RAINN (Rape, Abuse & Incest National Network)	1-800-656-HOPE; www.rainn.org
NC Coalition Against Sexual Assault	1-919-871-1015; www.nccasa.org
NC Coalition Against Domestic Violence	1-800-232-9124; www.nccadv.org

Because of the traumatic nature of sexual misconduct/violence, Reporting Parties are encouraged to seek immediate counseling. The Rape Crisis Center provides counseling and group services free of charge. Student Services will assist victims with any academic concerns or change in class schedule requests that are feasible.

Student Due Process 3.19

Each person is afforded an opportunity to appeal what is perceived to be unfair treatment when classified as a student (See 3: Student Services-Student Definition) at Catawba Valley Community College (CVCC). The intent of the Due Process Policy is to ensure a fair and just resolution of any issue at the lowest possible level. Violations of Policy 3.18: Student Code of Conduct will be heard through Due Process procedures.

Student Advocate:

Upon the student's request, the Director of Admission or designee will assist the student with the steps required to follow the process, including providing the CVCC Student Grievance Form and the Student Grievance Committee Review Form.

Procedure 3.19: Student Due Process

Students who have a grievance with Catawba Valley Community College (CVCC) may have their grievance reviewed in accordance with Policy 3.19: Student Due Process. A grievance for purposes of this policy is

- a grievance regarding a final course grade received;
- a grievance regarding a disciplinary action imposed; or
- a grievance of other unjust treatment.

Grievances concerning Policy 3.18.2: Title IX Harassment: Sexual Violence, Sexual or Gender-based Harassment, and Other Sexual Misconduct are addressed by using Procedure 3.18.2: Reporting and Resolving Title IX Harassment: Sexual Violence, Sexual or Gender-based Harassment, and Other Sexual Misconduct.

The "event date" for purposes of this policy is as follows:

- for a grievance regarding a final course grade received, the date on which the grade was mailed to the student, made available to the student through an online portal or other electronic means, or otherwise made available to the student;
- for a grievance regarding disciplinary action imposed, the date on which written notice of the disciplinary action was mailed or otherwise provided to the student; or
- for a grievance of other unjust treatment, the date on which the alleged unjust treatment occurred.

Steps that students must take to have their grievance reviewed are listed below. The student is not required in any step to confront alone the person he/she claims is responsible for the unjust or discriminatory treatment

Student Advocate: Upon the student's request, the Director of Admission or designee will assist the student with the steps required to follow the process, including providing the CVCC Student Grievance Form and the Student Grievance Committee Review Form.

It is expected that all parties will adhere as strictly as possible to the time lines outlined in the steps below. However, there may be occasions when the time lines cannot be upheld as outlined. In the rare occurrence that a time line must be extended, agreement must be reached by all parties concerned. Extensions must be approved by the Executive Vice President of the College or by his/her designee. If no extension has been granted and if the college employee does not meet the processing time line, the grievance will be forwarded to the next level supervisor for action. If no extension has been granted and if the student does not meet the processing time line, the process will be terminated and the grievance cannot be resubmitted.

Student vs. Student Grievance

A student vs. student grievance may occur about alleged unjust treatment of one student(s) to another student(s).

Step 1: Student Resolution

The aggrieved student(s) should submit the completed "Student Grievance Form about Another Student" to the CVCC Student Advocate or designee within ten (10) college business days of the "event date" of the incident. The CVCC Student Advocate or designee will facilitate and attend a meeting with the aggrieved student and the student where the alleged grievance event originated within five (5) college business days of the receipt of this form. An attempt will be made to resolve the matter equitably and informally at this level.

Step 2: Dean Resolution

If the grievance is not resolved at the informal meeting in Step 1, the student(s) may initiate a Dean Resolution review by completing the student part of the Student Grievance Form and submitting it to the Dean of the School of Access, Development, and Success (ADS) within five (5) college business days of the conclusion of the Step 1 meeting. The Dean of the School of ADS will conduct an investigation into the alleged charge(s). The investigation may include interviewing the aggrieved student(s), interviewing the student(s) who is (are) perceived to have committed the alleged problem, interviewing witnesses, reviewing written statements, consulting other College officials, and other appropriate methods to make an informed decision. The Dean of ADS will respond in writing to the aggrieved student(s) and to the student(s) who allegedly caused the problem within five (5) working days of receipt of the Student Grievance Form with the decision. The Dean will also complete the Dean's part of the Student Grievance Form and submit it to the Office of the President at the same time.

Step 3: Student Grievance Committee Resolution

If the grievance is not resolved at the Dean Resolution in Step 2, the student(s) may initiate a Student Grievance Committee review by completing the student part of the Student Grievance Committee Review Form and submitting it to the Office of the President within five (5) college business days of the receipt of the Step 2 written decision.

Following receipt of a Student Grievance Committee Review Form, a Student Grievance Committee ("the Committee") shall be selected. The Committee membership (5 voting members and a non-voting chair) shall be as follows and shall not include any members who have had any involvement in the grievance to date:

- Committee Chair (a non-voting member): A Vice President selected by the President
- Two (2) voting representatives selected by the Committee Chair from a group of nine (9) faculty or non-credit professional staff representatives (3 from each academic school) appointed by the President
- One (1) voting representative selected by the Committee Chair from a group of two (2) Student Services counselors or admissions representatives appointed by the President
- Two (2) voting student representatives selected by the Committee Chair from the group of five (5) current SGA officers

Student vs. Faculty or Staff Grievance

Step 1: Student Resolution

The aggrieved student(s) should submit the completed "Student Grievance Form about Faculty or Staff" to the Supervisor of the Faculty or Staff within ten (10) college business days of the "event Date" of the incident. The Supervisor will facilitate and attend a meeting with the aggrieved student and the Faculty or Staff where the alleged grievance event originated within five (5) college business days of the receipt of this form. An attempt will be made to resolve the matter equitably and informally at this level.

Step 2: Supervisor Resolution

If the grievance is not resolved at the informal meeting in Step 1, the student may initiate a Supervisor Resolution review by completing the student part of the Student Grievance Form and submitting it to the Dean of the faculty or staff involved in Step 1 within five (5) college business days of the conclusion of the Step 1 meeting. The Dean will respond in writing to the student within five (5) college business days of receipt of the Student Grievance Form. The Dean will also complete the supervisor part of the Student Grievance Form and submit it to the Office of the President at the same time.

Step 3: Student Grievance Committee Resolution

If the grievance is not resolved at the Supervisor Resolution in Step 2, the student may initiate a Student Grievance Committee review by completing the student part of the Student Grievance Committee Review Form and submitting it to the Office of the President within five (5) college business days of the receipt of the Step 2 written decision.

Following receipt of a Student Grievance Committee Review Form, a Student Grievance Committee ("the Committee") shall be selected. The Committee membership (5 voting members and a non-voting chair) shall be as follows and shall not include any members who have had any involvement in the grievance to date:

- Committee Chair (a non-voting member): A Vice President selected by the President
- Two (2) voting representatives selected by the Committee Chair from a group of nine (9) faculty or non-credit professional staff representatives (3 from each academic school) appointed by the President
- One (1) voting representative selected by the Committee Chair from a group of two (2) Student Services counselors or admissions representatives appointed by the President
- Two (2) voting student representatives selected by the Committee Chair from the group of five (5) current SGA officers

Student Group vs. Student/Faculty/Staff Grievance

Step 1: Student Resolution

The Student Group should submit the completed "Student Group Grievance Form" to the CVCC Student Advocate or designee within ten (10) college business days of the "event date" of the incident. The CVCC Student Advocate or designee will facilitate and attend a meeting with the "Student Group and the student(s), faculty, and/or staff where the alleged grievance event originated within five (5) college business days of the receipt of this form. An attempt will be made to resolve the matter equitably and informally at this level.

*The Student Group, in collaboration with the Advisor/Supervisor for the group, will select at most three (3) members in good standing to represent the grievance for the group. The group Advisor/Supervisor may be included in any meeting with others to resolve the grievance. If the grievance is about a faculty or staff member, the supervisor of the faculty or staff member may be present.

Step 2: Dean/Supervisor Resolution

If the grievance is not resolved at the informal meeting in Step 1 and the grievance is against a student(s), the group may initiate a Dean Resolution review by completing the student part of the Student Grievance Form and submitting it to the Dean of the School of ADS within five (5) college business days of the conclusion of the Step 1 meeting. The Dean of the School of ADS will conduct an investigation into the alleged charge(s). The investigation may include interviewing the aggrieved student(s), interviewing the student(s) who is (are) perceived to have committed the alleged problem, interviewing witnesses, reviewing written statements, consulting with other College officials, and other appropriate methods to make an informed decision. The Dean of ADS will respond in writing to the aggrieved student(s) and to the student(s) who allegedly caused the problem within five (5) college business days of receipt of the Student Grievance Form with the decision. The Dean will also complete the Dean's part of the Student Grievance Form and submit it to the Office of the President at the same time.

If the grievance is not resolved at the informal meeting in Step 1 and if the grievance is against a faculty or staff, the group may initiate a Supervisor Resolution review by completing the student part of the Student Grievance Form and submitting it to the Dean of the faculty or staff involved in Step 1 within five (5) college business days of the conclusion of the Step 1 meeting. The Dean will respond in writing to the student within five (5) college business days of receipt of the Student Grievance Form. The Dean will also complete the supervisor part of the Student Grievance Form and submit it to the Office of the President at the same time.

Step 3: Student Grievance Committee Resolution

If the grievance is not resolved at the Dean/Supervisor Resolution in Step 2, the group may initiate a Student Grievance Committee review by completing the student part of the Student Grievance Committee Review Form and submitting it to the Office of the President within five (5) college business days of the receipt of the Step 2 written decision.

Following receipt of a Student Grievance Committee Review Form, a Student Grievance Committee ("the Committee") shall be selected. The Committee membership (5 voting members and a non-voting chair) shall be as follows and shall not include any members who have had any involvement in the grievance to date:

- Committee Chair (a non-voting member): A Vice President selected by the President
- Two (2) voting representatives selected by the Committee Chair from a group of nine (9) faculty or non-credit professional staff representatives (3 from each academic school) appointed by the President

- One (1) voting representative selected by the Committee Chair from a group of two (2) Student Services counselors or admissions representatives appointed by the President
- Two (2) voting student representatives selected by the Committee Chair from the group of five (5) current SGA officers

Procedural Responsibilities for the Committee Chair

The Committee Chair shall schedule a Review/Hearing by the Committee within five (5) working days following the receipt of the Student Grievance Committee Review Form by the Office of the President. The Chair shall inform the student with the following information:

- Restatement of the charge(s).
- Notice of the day, time, and location of the meeting.
- Statement of the student's basic procedural rights.

Procedural Rights for the Student include the following:

- The right to counsel. The role of the person acting as counsel is solely to advise the student. The counsel shall not address the Committee nor examine or cross-examine any persons. If the counsel is an attorney, the Committee Chair must be informed to allow the College attorney to be present.
- The right to produce witnesses on one's behalf.
- The right to present evidence.

Procedural Conduct of the Student Grievance Committee Review/Hearing:

- The Committee Review/Hearing shall be confidential and shall be closed to all persons except the following:
- The student;
- Counsel (if any); and/or
- Witnesses who shall
- Give testimony singularly and in the absence of other witnesses.
- Leave the Review/Hearing room immediately upon the completion of the testimony.
- The Review/Hearing will be recorded by the College in an audio format.
- Recordings will become the property of the College, and access to them will be determined by the Committee Chair. All recordings will be filed in the Office of the President.
- Upon completion of a Review/Hearing, the Committee shall meet in executive session to decide if the student has been treated unjustly, and if so, must recommend corrective action. Committee decisions shall be determined by a majority vote of the Committee members and are final. Decisions made by the Committee shall be provided in writing to the student by the Committee Chair within two (2) college business days following the completion of the Review/Hearing. Copies of the written decision shall be provided to the Dean of the School of ADS, to the Office of the President, and to the CVCC employees involved in Steps 1 and 2 of the grievance process. The decision rendered by the Committee will be the final decision of the institution, and all due process opportunities will be exhausted.

The following exception applies if the CVCC employee who is allegedly responsible for the unjust treatment is a Dean: In Step 2, the supervisor shall be the Executive Vice President.

The following exception applies if the CVCC employee who is allegedly responsible for the unjust treatment is a Vice President: In Step 2, the supervisor shall be another Vice President appointed by the President. In Step 3, the Committee Chair shall be the CVCC President.

The following exception applies if the CVCC employee who is allegedly responsible for the unjust treatment is the CVCC President: In Step 2, the supervisor shall be the Chair of the Board of Trustees. In Step 3, the Committee Chair shall be the Chair of the Board of Trustees.

Policy 2.16: Academic Honesty

Students at CVCC are expected to be honest in all academic pursuits, whether class, lab, shop, or clinical. Acts of academic dishonesty are considered unethical and subject to behavior sanctions. Examples of academic dishonesty include, but are not limited to, the following:

1. Sharing information about the content of quizzes, exams, classroom/lab/shop/clinical assignments (scheduled or make-up) without approval of the instructor. Sharing includes, but is not limited to, unauthorized copying, collaboration, or use of notes, books, or other materials when preparing for or completing examinations or other academic assignments (scheduled or make-up);
2. Buying, selling, or otherwise obtaining a copy of a quiz, exam, project, term paper, or like document, without approval of the faculty member;
3. Plagiarism, which is defined as the intentional representation of another person's work, words, thoughts, or ideas (from any source) as one's own;
4. Failing to follow approved test taking procedures by performing such acts as the following:
 1. Looking on another student's test;
 2. Use of unauthorized notes; (written, electronic, or otherwise);
 3. Changing answers after exam is scored; and
 4. Verbal, non-verbal, or electronic communication with another student during an exam.

Additionally, students have an obligation to report any acts of academic dishonesty to the relevant faculty member or appropriate campus authority when reasonable grounds exist for such a report. Students also have a responsibility to cooperate in the investigation of any alleged acts of academic dishonesty. Failure to report acts of academic dishonesty could result in a behavior sanction as outlined in Policy 3.18: Student Code of Conduct.

Faculty members are authorized by Policy 3.18.1: Student Behavior Sanctions to impose Loss of Credit or a Grade Sanction for acts of academic dishonesty relative to classes under their supervision.

Procedure 2.16: Academic Honesty

Faculty are authorized to impose the Loss of Academic Credit or a Grade Sanction for acts of academic dishonesty relative to classes under their supervision in accordance with Policy 2.16: Academic Honesty Policy. Faculty should follow the procedure below:

1. The faculty member should complete the "Warning, General Probation, Interim (Emergency) Suspension Form" found in the Forms section on the CVCC Portal. The completed form should be forwarded to the faculty member's immediate supervisor. The supervisor may forward a copy of this form to the Chief Student Services Officer.
2. As stated in Policy 3.18.1: Student Behavior Sanctions, the student may be allowed to redo the assignment, may lose credit for the assignment, or may lose credit for the class. In the event the act of academic dishonesty is serious enough to warrant further disciplinary action, the faculty member should complete the "Student Conduct Violation Form" found in the Forms section on the CVCC Portal and follow the directions listed on the form.

Policy 4.11: Alcoholic Beverages

The possession, sale, distribution, and/or use of alcohol on CVCC campuses/sites are prohibited. The CVCC Safety and Security Office enforces federal, state, and local laws regulating the possession, use, sale, and distribution of alcohol. North Carolina law makes it unlawful to sell, furnish, or provide alcohol to a person under the age of 21. North Carolina law also makes the possession or use of alcohol by anyone under the age of 21 illegal. Violators are subject to criminal prosecution. Legal sanctions may include fines and/or imprisonment. Student violators are subject to disciplinary action under provisions of the Student Conduct Policy. CVCC employees are subject to disciplinary action under personnel disciplinary policies.

Policy 4.4: Animals On Campus

Animals are not permitted on campus, with the exception of service animals.

Policy 4.4: Children on Campus

For the purposes of this policy, a child is defined as any youth under the age of 16 who is not officially registered in a CVCC class or Challenger High School class.

Children accompanying employees, students, or visitors of CVCC must be under the constant supervision of a responsible adult while on CVCC property, or on the site of any approved off-campus class or other CVCC event. Employees of CVCC have assigned duties and cannot take supervisory responsibility for any unattended children of employees, students, or visitors. Children should not be unattended in any CVCC facility at any time.

CVCC assumes no responsibility or liability for children, or for any accidents or injuries to children.

Students, faculty, and staff are expected to arrange for their personal childcare away from the work site. An employee must have the approval of his/her supervisor to bring a child to the workplace during working hours due to an emergency situation at home. Sick children should not be brought to campus.

Children accompanying employees, students, or visitors are not permitted in classes, labs, or other learning environments.

Persons receiving CVCC services may be refused service if accompanied by a child who will be unattended during the time the patron is receiving services, or if accompanied by a child who is disruptive to CVCC operations. CVCC personnel are not expected to provide supervision of such children.

If children are left unattended, CVCC may notify law enforcement personnel and/or the Department of Social Services.

Policy 4.14: Communicable Diseases

Employees, employees of contractors or contracted services, and students who are infected with a communicable disease or who have a reasonable basis for believing they might be infected have the responsibility of reporting the infection to the personnel officer (in the case of employees and employees of contractors) or to the Dean of the School of Access, Development, and Success (in the case of students). All such information reported shall remain confidential. Only persons with a need to know will be informed.

The college will support a program of educating and informing employees and students about communicable diseases, warning signs, and protective measures through publications, seminars, and other appropriate means.

Procedure 4.14: Communicable Diseases

Persons who know, or have a reasonable basis for believing, that they are infected with a communicable disease have an ethical and legal obligation to conduct themselves in accordance with such knowledge, to protect themselves and others. Faculty and staff are urged to report information to the personnel officer and students are urged to report this information to the dean of student services.

All information shall remain confidential. Only persons with a need to know will be informed, and only with the direct knowledge of the employee or student.

1. Persons infected with a communicable disease shall not be excluded from enrollment or employment, or restricted in their access to Catawba Valley Community College's services or facilities, unless medically based judgments in individual cases establish that exclusion or restriction is necessary to assure the protection and welfare of the individual or other members of the college community.
2. The assessment of an employee or employees of a contractor or contracted service with a suspected communicable disease and the final determination of that employee's ability to remain on the job shall be made by the president, after consultation with the vice president of academic and student affairs, director of human resources, and based on recommendations from the local health authorities. If an employee or employee of a contractor or contracted service is found to have a communicable disease, the president may prohibit attendance or participating in work at the

college until a letter or certificate is obtained from one or more licensed physicians and/or public health officials stating that the attendance of the employee or employee of a contractor or contracted service no longer constitutes a health risk to other employees and students at the college.

3. The assessment of a student with a suspected communicable disease and the final determination of that student's ability to remain in college shall be made by the Dean of the School of Access, Development, and Success or designee, based upon recommendations from local health authorities. If a student is found to have a communicable disease, the Dean of the School of Access, Development, and Success or designee may prohibit attendance at the college until a letter or certificate is obtained from one or more licensed physicians and/or public health officials stating that the attendance of the student no longer constitutes a health risk to employees and other students at the college.
4. Education about communicable diseases is contained in the CVCC Hazard Communication Program which includes Blood Borne Pathogens information. This is required training for all CVCC employees and is located on the CVCC Human Resources web page and in written form in the H.R. office.

Policy 4.20: Copyright

As an institute of higher education, Catawba Valley Community College supports an environment which fosters inquiry through the creation and dissemination of knowledge. All CVCC employees and students shall comply with the » U.S. Copyright Law.

Fair Use Guidelines

In compliance with Title 17, college employees and students are permitted to copy and disseminate copyrighted work if it meets the following factors as outlined in U.S. Copyright Law, Title 17 § 107:

1. The purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;"
 - Note: In general, nonprofit or educational uses of copyrighted works are protected under the fair use policy. However, simply because a work is being used within an educational setting does not automatically deem it to be fair use.
2. "The nature of the copyrighted work;"
 - Note: Fair use is more apt to be applied to informational work (including facts) rather than creative works (fictional works, plays, or art).
3. "The amount and substantiality of the portion used in relation to the copyrighted work as a whole; and"
 - Note: As the percentage use of a copyrighted work increases, the likelihood that the use will be considered fair use decreases.
4. "The effect of the use upon the potential market for or value of the copyrighted work."
 - Note: The dissemination of copyrighted works must not infringe upon the copyright owner's right to proprietary benefits.

In accordance with U.S. Copyright Law, Title 17, college employees and students are bound by this policy and federal law to seek the approval of the copyright owner prior to reproducing, displaying, disseminating, performing, or digitally transmitting any copyrighted work, unless exempt by fair use law.

Face-to-Face Instruction

In accordance with U.S. Copyright Law, Title 17, §110(1), college faculty and students (within a traditional classroom setting) are permitted to perform (movies, plays, music, etc.) and to display (art, images, photographs, text, etc.) from legally made (non-pirated) sources.

On-line Teaching

Due to the ubiquitous nature of the online teaching environment, there are three options to using copyrighted material in an online environment legally:

1. The information that is being posted on-line complies with the U.S. Copyright Law, Title 17, §110(2).
2. the use of the copyrighted material qualifies as fair use, and
3. the user has obtained permission from the copyright owner.

Computer Software

Except for open source software, it is illegal to copy any computer software without purchasing the rights to that software.

Policy 4.10: Firearms

Except for law enforcement officers duly authorized to carry a firearm and/or weapon, the possession of a firearm and/or other weapon on any CVCC campus/site is illegal under North Carolina law and is prohibited except as follows:

Under a provision effective October 1, 2013 enacted by the North Carolina General Assembly, a firearm is permissible on a CVCC campus/site only under the following limited circumstances:

1. The firearm is a handgun; AND
2. The individual has a valid concealed handgun permit or is exempt from the law requiring a permit; AND
3. The handgun remains in either: a closed compartment or container within the individual with the permit's locked vehicle; or a locked container securely affixed to the individual with the permit's locked vehicle; AND
4. The vehicle is only unlocked when the individual with the permit is entering or exiting the vehicle; AND
5. The firearm remains in the closed compartment at all times.

Policy 4.4: Free Speech, Public Assembly, and Distribution/Petitioning

Consistent with its educational mission, CVCC encourages the free exchange of ideas on campus, while assuring that other important CVCC interests and activities are not infringed upon or disrupted. CVCC recognizes the value of providing students, faculty, staff and others the opportunity to assemble and communicate with one another, as well as to distribute informative printed material to members of the CVCC community. CVCC is committed to protecting First Amendment rights of individuals and supports reasonable opportunity for people to distribute printed materials and to engage in other forms of expression and assembly on campus (collectively termed "expression activities" for purposes of this policy). CVCC will not make decisions or take action based on the content of expressive activities on campus. Except with respect to commercial expression, and expression constituting obscenity, defamation, fighting words, or incitements to violence or other lawless action which are reasonably likely to produce such lawless action imminently, which the Supreme Court has held constitute content which can be prescribed. However, the President shall establish restrictions, unrelated to the content of noncommercial expression, on the time, place and manner of use of CVCC facilities for expression activities so that other important CVCC interests and activities are not infringed upon or disrupted. Such restrictions shall be published as part of the procedures for obtaining authorization to use CVCC facilities for expression activities. All persons engaging in expression activities must observe such restrictions. Failure to comply with established restrictions may result in sanctions including, but not limited to, charges of trespass and forfeit of the right to use CVCC facilities for further expression activities.

Unlawful conduct is not permitted. Unlawful conduct is conduct that is prohibited by Federal, State, or local law or regulation, or that violates one or more rights of a person or entity under the common law of North Carolina.

In order to provide opportunity for access to multiple and diverse persons/groups, the President (or designee) may establish procedures and/or guidelines to regulate use by a single person/group.

Individuals have the right to dissent to the expression activities of another. However, such right to dissent shall not interfere with the authorized expression activities of another and need not occupy the same forum at the same time.

Use of public address systems or amplified sound is not permitted.

Duly authorized persons/groups may distribute printed materials by hand within designated areas on the condition that such material is for informational (not commercial) purposes. Such persons/groups shall be responsible for any clean-up costs associated with the distribution of such materials. Printed materials may not be distributed through CVCC's internal mail system.

Persons/groups utilizing CVCC facilities must comply with CVCC Policy 6.2 (Use of CVCC Facilities, Approval, Fees, Appropriate Use).

CVCC reserves the right to immediately terminate any expression activities otherwise permitted by this policy if in the judgment of CVCC officials, continuation of such activities will result in: (a) danger to participants or others; (b) unlawful conduct by participants or others; or (c) interference with disruption or disturbance of the CVCC's educational mission, operations, business, or functions.

Procedures for Obtaining Authorization to Use CVCC Facilities for Non-Commercial Expression Activities

These procedures have been established in accordance with the CVCC Policy titled Free Speech, Public Assembly, and Distribution/Petitioning.

Authorization for Expression Activities must be obtained from the Chief of Staff (the office of Safety/Security). The Chief of Staff shall document such authorization on a Non-Commercial Expression Activities Authorization Form ("Form") and provide such Form to person(s) authorized. Persons engaging in Expression Activities must have such Form available for verification upon request by CVCC Officials or law enforcement officers.

A written request for authorization must be received by the Vice President sufficiently in advance of the requested activities to permit appropriate planning on the part of CVCC. Such planning at a minimum would include an assessment of the impact on normal CVCC operations and previously scheduled activities, the need for additional security, and the availability of locations requested for the expression activities. The length of time required for such planning by CVCC will vary depending on the complexity of the expression activities requested, the number of persons involved, the number of locations involved, and the potential for such activities to create a disruptive and/or dangerous environment. Such request must include the following information.

- Date(s) and times for Expression Activities
- Person or persons to be engaging in Expression Activities
- A brief description of the subject matter of the intended expression for the sole purpose of identifying any parties who request an authorization for use of the CVCC facilities for dissenting Expression Activities and appropriately planning for any potential interaction among multiple groups engaged in Expression Activities and a statement that the Expression Activities are not intended to include any commercial expression or any expression constituting obscenity, defamation, fighting words, or incitements to violence or other lawless action which are reasonable likely to produce such lawless action imminently, which the Supreme Court has held constitute content which can be prescribed.
- A statement agreeing to comply with the CVCC Policy titled Free Speech, Public Assembly, and Distribution/Petitioning (Policy 4.4)

The President has established the following restrictions regarding Expression Activities.

1. Expression Activities may only be conducted in locations that will not disrupt the normal operations of CVCC or activities previously scheduled by CVCC.
2. Expression Activities may not be conducted at times when CVCC is closed. These closed times at a minimum would normally include 10 p.m. to 7 a.m. Monday through Saturday, all day on Sundays, and days identified in the CVCC institutional calendar as institutional holidays.

If in CVCC's planning for requested expression activities it is determined that additional security or other resources will be needed, then authorization may be contingent upon those requesting agreeing to bear the costs incurred for those additional resources.

Policy 4.12: Illegal Drugs

The possession, sale, manufacture, or distribution of controlled substances on CVCC campuses/sites is prohibited. The CVCC Safety and Security Office enforces federal, state, and local laws making the possession, use, sale, and distribution of controlled substances illegal. Violators are subject to criminal prosecution. Legal sanctions may include fines and/or imprisonment. Student violators are subject to disciplinary action under provisions of the Student Conduct Policy. CVCC employees are subject to disciplinary action under the personnel disciplinary policies.

Policy 4.21: Intellectual Property Rights and Students

CVCC owns all rights to its logo, seal, and other related materials.

CVCC retains the right to use student work produced as a part of class assignments for non-profit educational purposes.

Policy 4.9: Parking

Employees, students, and visitors are expected to park in designated parking spaces only. Handicapped parking spaces are designated and are regulated by NC General Statutes. Vehicles parked in areas not designated for parking may be ticketed and/or towed at vehicle owner expense. CVCC will not be responsible for vehicles damaged while parked on the school premises, during towage, or while being stored.

Policy 4.4: Solicitation

For purposes of this policy, solicitation is an oral or written request/notice for, or effort to achieve, a contribution, a donation, or a sale/purchase of goods or services on any property owned, leased, or under the jurisdiction of CVCC.

Solicitation for commercial (for profit) purposes that is not a routine and necessary part of CVCC's normal operations, activities, or functions is restricted as to time, place, and manner and must be approved in accordance with procedures established by the President (or designee). Such solicitation may not utilize state property. Such solicitation must not interfere or disrupt the normal operating and learning environment at CVCC. Fees for use of building or grounds space may be assessed. Specifically prohibited is the distribution of printed solicitation material on parked vehicles and on CVCC bulletin boards.

CVCC students and employees may utilize certain bulletin boards designated by the President (or designee) to advertise the sale of used personal items. The President (or designee) shall establish procedures and guidelines for such usage.

Solicitation for charitable, community service, not-for-profit, or civic purposes must be approved in accordance with procedures and guidelines established by the President (or designee). Such solicitation must not interfere or disrupt the normal operating and learning environment at CVCC.

Policy 4.13: Tobacco Products

The use of tobacco products (including cigarettes, e-cigarettes, cigars, pipes, smokeless tobacco) is prohibited on all CVCC campuses (including CVCC buildings, grounds, and parking lots). The prohibition applies to all individuals including staff, students, employees, visitors, patrons, vendors, and/or their agents. (effective August 1, 2009)

Policy 4.15: Self-Administered Prescription Medicines

CVCC personnel and students who are diabetic or who have other health problems may be required to self-administer insulin or other medications while on campus. In this process, materials may be generated that are contaminated with blood and body fluid. Improper disposal of this waste can place employees and students at risk of contracting blood borne diseases.

All employees and students who self-administer prescription medications are required to keep all used and/or contaminated materials in their possession while on campus and transport these materials to their home or other locations for proper disposal. Individuals who fail to follow these procedures will be subject to appropriate disciplinary action.

Policy 4.4: Visitors on Campus

Visitors are defined as anyone other than CVCC personnel, officially enrolled students, members of the Board of Trustees, and members of the CVCC Foundation Board.

Visitors are permitted (and welcomed) on CVCC property for participation in or attendance at CVCC sponsored or approved activities/events and for use of the CVCC library facility. Visitors may be granted permission to visit a class(es) on a limited basis for a specific purpose. These visits must be authorized in advance of the class according to Class Visit Procedures.

Employers wishing to recruit on campus must coordinate their visit with the Director of Career Services or the Director of the Alexander Center for Education.

Media representatives are encouraged to inquire with the Public Information Officer prior to interviewing, photographing or videotaping employees or students on the various CVCC campuses. See also CVCC policy 4.2 (Authorized Spokesperson).

Visitors must comply with all other CVCC policies including the CVCC policy on free speech, public assembly, distribution/petitioning, and the CVCC policy on solicitation.

Visitors may be required to provide personal identification to CVCC officials or campus security. Visitors who do not comply with requests for identification, or who interfere with the normal operations, functions, or learning environment of CVCC, will be asked to leave. Individuals who refuse to leave will be considered trespassing and will be subject to arrest. CVCC shall not be held responsible for accidents or injuries to visitors who are in violation of CVCC policies.

Academic and Instructional Standards

Academic Standards

Degrees, Diplomas, and Certificates

Catawba Valley Community College awards the Associate in Applied Science Degree (A.A.S.) upon the successful completion of a two-year program of study in the School of Academics, Education, and Fine Arts; the School of Business, Industry, and Technology; and the School of Health and Public Services.

The Associate in Arts, Associate in Engineering, Associate in Fine Arts, and Associate in Science Degrees are awarded graduates of college transfer curricula.

The College also awards the Associate in General Education and General Occupational Technology degrees.

Upon completion of an industrial program of study one or more years in length, CVCC awards a Diploma in the major area of training.

Program Certificates are awarded in curricula where the curriculum provides for skill-training subjects only. Certificates of course completion are also awarded for non-credit short courses and special programs.

High School Equivalency Diplomas are awarded by the North Carolina Department of Community Colleges to individuals who make satisfactory scores on the General Educational Development (GED), HiSet, Tasc, or the Adult High School Diploma.

Classification/Enrollment Status

CVCC considers 12 credit hours to be a full time load for a curriculum student in the fall and spring semesters. CVCC considers 9 credit hours to be a full time load for a curriculum student in the summer semester. See below for policy regarding classification for financial aid.

CVCC follows guidelines established by the State of North Carolina for purposes of classification as a full time student for tuition payment. These guidelines can be found in 1G SBCCC 100.1 of the State Board of Community College Code at » State Board of Community Colleges Code (SBCC Code).

CVCC follows guidelines/regulations established by the appropriate federal and state agencies for purposes of determining classification of students as full time or part time for federal financial aid (determined by the US Department of Education found at » Federal Student Aid), state financial aid (determined by the State of North Carolina and found at » College Foundation of N.C.), and veteran's benefits (determined by the US Department of Veterans Affairs found at » U.S. Department of Veterans Affairs).

A freshman is any student who has earned fewer than 32 semester credit hours. A sophomore is any student who has earned 32 or more semester credit hours.

Advising and Registration

Career Counseling

Individual career counseling is available to all students and prospective students who are interested in discussing their career interests, choice of program/training, and career goals. Career assessments and career information are used to assist students in examining their interests, values, and skills to explore career options. Career counseling sessions are by appointment and can be scheduled by contacting the CVCC Career Center. For more detailed information, please visit the **Career Services Center**.

Placement Testing Services

CVCC utilizes a placement testing program to assess certain academic competencies including, but not necessarily limited to, reading, writing, mathematics, and computer literacy. Test results are used by academic advisors to place students in appropriate courses and thereby maximize their opportunities for success. Placement test scores are not a requirement for general admission to CVCC, but may be a factor in the admission decision for certain programs and/or the determination of course requisite competencies. A placement test may not be retaken except as authorized under guidelines established by the Chief Academic Officer.

CVCC uses the NC DAP placement test battery and every student is provided the opportunity to complete placement testing as one of the requirements to be admitted to CVCC. There is no fee for this first-time placement testing. Placement test scores using NC DAP are valid for 5 years.

Re-testing Procedure

Re-testing may occur if one of the following conditions is met:

1. NC DAP scores are older than 5 years and have expired. There is no fee to re-test if test scores have expired.
2. The original test score is believed to be invalid due to illness, interruption, or other problems during test administration as determined by the Testing Center staff. Should any of these issues occur, the student must alert the Testing Center staff about the issue as soon as it occurs during the testing session. Testing Center staff will attempt to correct the issue during the testing session to allow the student to continue with testing.
3. If initial NC DAP test scores are not sufficient to grant equivalencies, students may re-test after a 10-day waiting period. A 30-day waiting period will then be required for any subsequent re-tests. Students will be assessed a \$10.00 re-testing fee to re-test in mathematics and a \$10.00 re-testing fee to re-test in English/reading. These fees will apply to all re-tests. Students should contact the Testing Center to schedule a re-test.
4. Any exceptions to the guidelines 1-3 above should be discussed with the Department Head for Mathematics or English (or their designees) for appropriate options. Students who are approved to re-test will receive a form from the appropriate Department Head (or designee) that indicates the specific NC DAP re-test. The student will take this form to the Business Office and pay the required fee(s). The Business Office will issue a receipt to the student. The student will take both the re-test form and the receipt to the Testing Center to schedule a re-testing appointment.

Academic Advising Services

Academic Advising is provided on a regular daily schedule by trained professional staff in the Advising Center in the Student Services Building. All new students are required to meet with Advising Center staff for academic advising and planning for their first registration. At this first meeting staff will assist students with program requirements, course planning, long range goals, explain various college processes, and answer any questions. Students can also complete the registration process with Advising Staff during the periods of registration. Other services provided include class schedule adjustments, academic probation advising, and program completion and graduation progress.

Students can make appointments for advising during registration periods, but drop-in service is also available.

Registration

The Chief Student Services Officer or designee is responsible for establishing and communicating the dates, times, locations, and processes for registration in curriculum courses.

Registration activities occur for each fall, spring, and summer semester. Students must have been admitted to CVCC, be enrolled in an active curriculum program of study, must have met all financial obligations to CVCC, and have no holds on their accounts to participate in registration.

Current students (those who have been enrolled in curriculum courses during the previous three semesters) will have priority registration dates and times according to their earned hours of credit. Current students will be advised of their specific priority date and time via their secure CVCC-issued email and/or through the CVCC Portal, but they will also be able to register throughout the registration period either online or by appointment in the Advising Center.

New and returning students (those who have not been enrolled in curriculum courses during the previous three semesters) will be able to register after the priority period for Current Students.

Registration in certain courses may be restricted to students meeting certain criteria established by the North Carolina Community College System or the CVCC Chief Academic Officer.

Registration is generally not permitted in a class on or after the start date of the class unless the registration is a course section switch. Approval for registration in a class on or after the start date of the class must be based on extenuating circumstances and be educationally sound as determined by the Chief Academic Officer or designees.

Registration activities for curriculum classes can be found at » Registration

Course Load

Unless required by suggested curriculum sequence, students are strongly encouraged not to enroll for more than 18 credit hours per semester. Students who desire to enroll for more than 18 credit hours per semester should meet with the Chief Student Services Officer or designee prior to enrolling for classes.

Course Information

Course Prerequisites and Co-requisites

CVCC and each student are responsible for ensuring that prerequisite and co-requisite requirements have been satisfied.

If requisite competencies are not documented in the student's CVCC transcript but are evidenced by completion of academic experiences at other regionally-accredited institutions or completion of certain testing administered by other institutions, then satisfaction of the requisite shall be documented in the student's record on the student database following processes specified by the Chief Student Services Officer or designee.

If requisite competencies are not documented in the student's CVCC transcript and are not evidenced by academic experiences completed elsewhere as outlined above, the Dean of the School that houses the course may authorize enrollment in the course if the requisite competencies are evidenced by other life experiences such as work experience or industry recognized certifications. Such authorization shall be documented in the student's record on the student database following processes specified by the Chief Student Services Officer or designee.

1. For requisite competencies evidenced by completion of academic experiences at other regionally accredited institutions:

Students must submit all official transcripts from other regionally accredited institutions to complete the Admissions process. It is the student's responsibility to request all official transcripts and it is preferred that transcripts be mailed directly to the Student Records Office from the institution(s) attended or submitted electronically through a third party vendor directly to the Student Records Office. Official sealed transcripts may also be submitted at the Student Records Office. Official transcripts will be evaluated and credit appropriate to the student's program of study will be documented in the student's academic record. The student will be notified about any credit awarded through the secure CVCC-issued student email account.

Student access to transcripts received from other educational institutions is limited to visual access. CVCC does not provide students with file copies or photocopies of transcripts received from other educational institutions.

2. For requisite competencies evidenced by completion of certain testing administered by other institutions:

Copies of test scores that originate from another institution must be obtained from the originating institution and mailed directly to the Student Records Office. It is the student's responsibility to request test scores.

Student access to test scores received from other educational institutions is limited to visual access. CVCC does not provide students with file copies or photocopies of test scores received from other educational institutions.

3. For requisite competencies not evidenced by completions of academic experiences at other regionally accredited institutions or by completion of certain testing administered by other institutions:

Experiences such as work experience, an earned industry-recognized credential, etc. may allow consideration for documentation of requisite competencies. The student should contact the Dean of the School that offers the course to determine any requisite competencies that these experiences may satisfy. Students may request the name of the appropriate Dean at the Student Records Office.

Waiver of Developmental Courses

Developmental courses may be waived by meeting one of the following requirements:

- Achieving eligible scores by completing placement testing with NCCCS-approved testing instrument(s);
- Meeting Multiple Measures qualifications according to NCCCS policy found at <http://www.ncccommunitycolleges.edu/student-services/multiple-measures> ;
- Completing appropriate developmental coursework with a grade of P or C- or better at another regionally-accredited institution; or
- Completing a college-level course at another regionally-accredited institution with a grade of C- or better that is equivalent to a course listed in the NCCCS Combined Course Library that has the appropriate developmental requisite.

Placement test scores will be entered into the student's record by CVCC staff when the student takes placement tests at CVCC. Students who test with NCCCS-approved placement tests should request that their test scores be sent to CVCC Student Records.

Multiple Measures placement: A recent high school graduate (within the last 5 years) who achieves an unweighted GPA of 2.60 or higher and enrolls in the appropriate 4th math benchmark course will be exempted from diagnostic placement testing and will be considered "college-ready" for gateway math and English courses. Developmental courses will be waived.

Students must submit all official transcripts from other regionally accredited institutions to complete the Admissions process. It is the student's responsibility to request all official transcripts and it is preferred that transcripts be mailed directly to the Student Records Office from the institution(s) attended or submitted electronically through a third party vendor directly to the Student Records Office. Official sealed transcripts may also be submitted at the Student Records Office. Official transcripts will be evaluated and credit appropriate to the student's program of study will be documented in the student's academic record. This evaluation includes the appropriate awarding of credit or waiver(s) for developmental courses. The student will be notified about any credit awarded through the secure CVCC-issued student email account.

Student access to transcripts received from other educational institutions is limited to visual access. CVCC does not provide students with file copies or photocopies of transcripts received from other educational institutions.

Academic Credit

The Chief Academic Officer or designee will ensure appropriate procedures and guidelines exist for the granting and recording of academic credit.

CVCC shall award credit for all curriculum courses completed at CVCC with a final grade of D or higher.

Additionally, credit may be awarded as a result of the following processes. Credits awarded through these processes shall not exceed sixty-five percent (65%) of the total credit hours required for graduation in a student's program of study.

- a. CVCC will review official transcripts for possible transfer credit for any course(s) completed at a regionally-accredited institution that is (1) relevant to the student's program of study, (2) evidences competencies that are equivalent to those required for successful completion of the equivalent CVCC course, and (3) when the course was completed with a final grade of "C-minus" or higher.

CVCC will not accept or evaluate transfer credit that was earned on the quarter system unless the regionally-accredited institution is currently operating on the quarter system. CVCC will not allow transfer credit earned on the quarter system to be used as a sufficient pre-requisite to gain entrance into a higher level course. Students may petition for credit of these courses to be granted through a credit by exam assessment with the appropriate Department Head or Director. (See section D). Any exceptions to this procedure must be approved by the Chief Student Services Officer or designee.

Students must submit all official transcripts from other regionally accredited institutions to complete the Admissions process. It is the student's responsibility to request all official transcripts and it is preferred that transcripts be mailed directly to the Student Records Office from the institution(s) attended or submitted electronically through a third party vendor directly to the Student Records Office. Official sealed transcripts may also be submitted at the Student Records Office. Official transcripts will be evaluated and credit appropriate to the student's program of study will be documented in the student's academic record.

For any course(s) not in CVCC's approved program of study, Student Records will review the NCCCS Combined Course Library (CCL), General Education Matrix, and CAA Approved Transfer Course List to determine if the course(s) are eligible for transfer. If eligible, Student Records will seek approval from the appropriate Dean to transfer the course(s). This transcript evaluation includes the appropriate awarding of waiver(s) for developmental courses.

The student will be notified about any credit awarded through the secure CVCC-issued student email account.

Student access to transcripts received from other educational institutions is limited to visual access. CVCC does not provide students with file copies or photocopies of transcripts received from other educational institutions.

- b. CVCC will grant transfer credit for a course completed at a foreign (outside the United States) institution provided that the coursework is (1) relevant to the student's program of study, (2) the competencies required for successful completion are at least equivalent to those required for successful completion of the equivalent CVCC course, and (3) the course was completed with a final grade of "C-minus" or higher. The Chief Academic Officer or designees will determine relevance to the program of study and equivalence of competencies. Students desiring transfer credit must submit transcripts that have been evaluated by a current member of NACES (National Association of Credential Evaluation Services) at www.naces.org. (The name the student is currently using should appear on the transcript as well as the date of birth.) The evaluating agency for post-secondary transcripts (college/university) must send the evaluation report directly to CVCC's Student Records Office. Student copies of evaluations will not be accepted.

Students who have attended foreign schools at the secondary level (high school) and/or post-secondary level (college/university) must submit transcripts according to the following two steps:

Step 1: The foreign transcript must be written in or translated into the English language. Translated transcripts must be literal (word for word) and the translator must sign the translated copy and include contact information. The name the student is currently using and the date of birth should appear on the transcript.

Step 2: If the translator in Step 1 is not a current member of the National Association of Credential Evaluation Services (NACES) (www.naces.org) that also provides evaluations services, then the translated transcript must be evaluated by a member of NACES. Foreign secondary level transcripts must indicate US high school equivalency. Foreign post-secondary transcripts must indicate potential transfer credit.

(Please note that the student will likely incur a fee for translation and/or evaluation services with NACES members. The amount of time it takes to translate and/or evaluate transcripts varies by NACES member.)

- c. CVCC participates in the awarding of community college articulated credit for high school Career and Technical Education courses.
- d. Students enrolled in degree, diploma, or certificate programs and special students may petition for credit by exam. To be eligible for credit by exam, the student must provide evidence of prior education and/or experience which would likely have provided skills, knowledge, and/or abilities similar to those provided in the CVCC course. The Dean for the school in which the course is housed will determine the credit to be allowed, if any. Credit will be based upon the minimum attainment of a grade of "B" on oral, written, and/or manipulative tests and the credit hours indicated for the appropriate course in the current catalog.
- e. Students may earn credit by successfully completing (score of 3 or better) Advanced Placement (AP) exams sponsored by the College Entrance Examination Board and/or by successfully completing (scores per ACE guide) College Level Examination Program (CLEP) exams.

Transfer credits, credits granted based on advanced placement assessments, and credits earned by successful completion of AP/CLEP exams may be used to satisfy program of study requirements but will not be included in the calculation of semester or cumulative grade point averages (GPAs).

Transfer credits, credits granted based on advanced placement assessments, and credits earned by successful completion of AP/CLEP exams may not be used to obtain VA educational benefits or federal financial aid.

Tuition and/or charges may apply for certain non-credit course assessments.

Auditing a Course

Students may attempt a course as an audit student one time. Students may not audit a class for which they have received credit unless justified by a clear benefit connected to a current program of study at CVCC. A change from an auditing status to a credit status (or vice versa) on or after the start date of the class must be approved by the instructor of the class and the Chief Student Services Officer or designee.

Students wishing to audit a course must satisfy all requisite requirements for the course just as do students taking a course for credit. These requirements include complying with class attendance policies, completing assignments, and participating in class activities. Students who audit a course are not required to take examinations unless specified by the academic department.

Students who audit a course will not receive a grade (other than AU) or credit for the course. Credit will not be granted under credit by exam procedures after enrolling in a course as an audit student. Tuition and fees for auditing a course are the same as those for enrolling in a course for credit.

Students should be aware that audited credit hours do not qualify for federal financial aid, VA education benefits, and certain other grants and/or scholarships.

Students who wish to audit a course should make the request at the time of registration in the Advising Center or send an email to advising@cvcc.edu from the student's secure CVCC-issued email account.

The request to change course status from Credit to Audit or from Audit to Credit after the course begins must be approved by the faculty member of the course and the Chief Student Services Officer or designee. This request must be made prior to testing and/or project submission in the course.

Course Attendance Expectations

Catawba Valley Community College does not have a college-wide institutional attendance policy. However, best practices indicate that successful course completion is correlated to attendance. Therefore, each academic school may have an attendance expectation. Each faculty member is required to

communicate attendance expectations to his/her students. These attendance expectations should be included in the course document and faculty members' syllabi for each course.

Faculty members are required to maintain and submit accurate attendance and/or membership reports for their classes in accordance with 1G SBCCC 200.93 and according to instructions provided by the Chief Student Services Officer or designee. Attendance and/or membership records shall comply with all federal and state guidelines related to the disbursement of financial aid and Veterans' benefits. Procedures to ensure the recording and reporting of attendance and/or membership in accordance with the above policies shall be monitored by the Chief Financial Officer.

If an unplanned and/or unexpected event causes a faculty member to be late to class, every effort should be made to communicate the arrival time to the students in the class.

Religious Observance Absences

Students shall be permitted excused absences from all classes two days per academic year for religious observances as recognized by the faith of a student. Students shall be provided reasonable opportunity to make up any tests or other work missed due to an excused absence for a religious observance. Specific procedures that students must follow to obtain authorization for an excused absence for a religious observance shall be established by the Chief Academic Officer. These procedures shall, at a minimum, require the student to submit a written request for the absence sufficiently in advance to permit the faculty member and student to develop a sound plan for making up any missed class work. All students must plan absences from a class so that their total absences, including any absences authorized in accordance with this policy, do not violate the attendance expectations specified by the faculty member, a certifying board, or an accrediting agency. For purposes of this policy, an academic year begins on the first day of the fall semester and ends on the last day of the summer semester in the following calendar year.

Withdrawals

Faculty do not have the responsibility to withdraw students from their classes. This is a student responsibility.

Students are encouraged to complete each class for which they register to advance toward program completion. CVCC provides various resources to assist students with successful class completion. These resources are listed in the Portal under Student Resources.

However, it may become necessary in some cases for students to withdraw from a class.

On or before the 60% point of a class:

- Students may initiate the withdrawal process in the Advising Center on campus or by sending an email to advising@cvcc.edu from their secure CVCC-issued email account. An advisor will assist the student with the process.
- This process is time sensitive and must be completed on or before the 60% point of the class.
- A complete listing of the 60% point of all classes can be accessed at **Semester Schedules** on the CVCC website.
- A grade of WP (Withdrew Passing) will be earned.
- A grade of WP will not affect the student's GPA in a negative manner.
- A grade of WP will affect the student's completion rate. Program completion will be delayed and financial aid may be impacted in a negative manner.

After the 60% point of a class:

- Students will not be allowed to withdraw from a class after the 60% point of the class.
- All student work will continue to be graded through the end of the semester, and students will earn the appropriate grade of A, B, C, D, F, or in some instances, I.

Extenuating Circumstances beyond the Student's Control:

- Occasionally extenuating circumstances beyond the student's control may occur that prevent the student from successfully completing the class and the 60% point of the class has already occurred. Should one

of these extenuating circumstances occur, the student should consult the appropriate faculty member(s) and submit the "Request for Withdrawal After the 60% Point of the Class."

- Appropriate documentation must be submitted.
- The "Request for Withdrawal After the 60% Point of the Class" form can be found in the Portal under Forms.
- If the "Request for Withdrawal After the 60% Point of the Class" is approved, the grade will be WP.

Curriculum Course Repeat Policy

A student may attempt a course a maximum of two times. A course is considered attempted when any one of the following grades is recorded on the student's transcript: A, B, C, D, F, WP, WF, AU, CS, P, or R. The highest grade received will be used in the computation of the student's grade point average. An academic program may have a more restrictive policy regarding the number of permissible attempts to fulfill a program requirement. Students should be aware that satisfactory academic progress requirements exist for students applying for or receiving financial aid and that repeated attempts of a course may have an undesirable effect on these satisfactory progress measures. Exception to the 2-attempt maximum may be granted if the student has not completed the course with a grade of A, B, C, or P and if the student provides documented evidence of extenuating circumstances, academic intervention which increases the likelihood of success in the course, or three-year break in enrollment. Petition for exceptions should be directed to the Chief Student Services Officer or designee.

Students may request the opportunity to repeat a course that has been attempted more than two (2) times in the office of the Director of the Advising Center. This request must be made during a period of curriculum registration.

Academic Sanctions and Due Process

When a student's cumulative grade point average is based upon 12 or more credit hours and is less than a 2.0, the student shall be placed on academic probation. The Chief Student Services Officer or designee shall be responsible for notifying the student and for establishing procedures to ensure the student receives academic counseling. Certain programs may establish additional academic progress requirements and impose sanctions for failure to meet those requirements. The Chief Academic Officer shall ensure any additional academic requirements and potential sanctions for failure to meet those requirements are communicated to students in those programs.

Student academic progress is monitored each semester and the GPA will be calculated when all requirements have been completed and verified for the semester. Each student who has earned a GPA eligible for Academic Probation will be notified by the Student Records Office through the student's secure CVCC-issued email account. This notification email will direct the student to visit the Advising Center by a specific date to receive academic counseling designed to improve academic performance. The Academic Probation notation will be recorded in the database and will prevent the student from future registration until s/he has met with an Advisor in the Advising Center. Depending on the actual GPA and subsequent academic progress, it is possible for a student to be on Academic Probation for multiple semesters. The student will repeat this process until the earned GPA is 2.0 or higher and the student is no longer eligible for Academic Probation.

Graduation Information

Requirements for Graduation

The student is responsible for applying officially to Student Services for his/her degree, diploma or certificate according to guidelines established by the Chief Student Services Officer. Students who apply for graduation and then fail to graduate must reapply.

The student is responsible for determining and fulfilling all requirements for the program of study from which s/he expects to graduate. Minimum credit hours and the required courses for each program have been established and are listed in the Program Listings section of the CVCC General Catalog. A minimum graduation requirement of all curriculum programs is a cumulative grade point average of 2.00 or a program grade point average of 2.00. Certain programs may have additional requirements. Students should consult the Advising Center for information on program and graduation requirements.

The catalog of record is the catalog that is current at the time a student enrolls at CVCC in his/her program of study. If a student changes his/her program of study, then the catalog of record becomes the catalog that is current at the time of that program change. To graduate under a program of study, a student must meet the requirements of his/her catalog of record or any catalog in effect within the next five years as long as the student has been continuously enrolled. A break in enrollment occurs when a student is not enrolled for two consecutive semesters (i.e. fall and spring or spring and fall). Students are not required to be enrolled during the summer semesters to maintain continuous enrollment. If a student breaks enrollment, the catalog of record will become the catalog that is current at the time of reentry. From that point of reentry, the rule of continuous enrollment will apply. The Chief Student Services Officer or designee has the authority to choose a catalog within a five-year period of continuous enrollment that best suits the student's needs for his/her particular program of study at the time of graduation. Exceptions to this policy must be approved by Chief Academic Officer.

To be eligible for graduation, the student must fulfill all financial obligations to the College.

Graduates are required to complete an exit survey prior to receipt of their diploma or certificate.

The student is responsible for officially applying for his/her degree, diploma, or certificate. A student can apply for and graduate from a program at the conclusion of the semester in which all requirements have been met.

1. CVCC will attempt to graduate the student by our approved program of study first.
2. If the student does not meet CVCC's approved program of study, Student Records will seek approval from the appropriate Dean to consider graduation by the approved state standard.
3. The Associate in General Education and General Occupational Technology degrees are reserved for students who have completed appropriate coursework and credit hours, but who do not have met all the requirements and/or have enough hours for any of the AA, AS, AE, or AAS programs at CVCC.

Residence Requirement

Students graduating from CVCC must enroll in and complete at CVCC a minimum of thirty-five percent (35%) of the semester hours required for their program of study (credits granted through transfer credit and advanced placement credit processes may not be used to satisfy this requirement). The final fifteen (15) credit hours of study prior to graduation must be completed at CVCC unless special permission is obtained from the Chief Student Services Officer or designee.

As a Servicemembers Opportunity College (SOC) institution, CVCC recognizes the following for active-duty service-members: An SOC institution limits academic residency requirements for active-duty service-members to no more than 25 percent (25%) of the undergraduate degree program; recognizes all credit course work offered by the institution as applicable in satisfying academic residency requirements; and allows service-members to satisfy academic residency requirements with courses taken from the institution at any time during their program of study, specifically avoiding any "final year" or "final semester" residency requirement, subject to stated requirements in specific course areas such as majors.

Last Fifteen (15) Credit Hours Requirement

CVCC requires that students complete the last 15 hours of coursework at CVCC unless a waiver is requested and approved. Students should work with the Advising Center for assistance with this requirement, including obtaining a copy of the Waiver Form. This requirement will be checked by Admissions Staff when the student begins the graduation application process.

Commencement Ceremony

The college celebrates the achievement of graduation once an academic year at a Commencement Ceremony in the spring semester. Students who have completed requirements within the academic year cycle (Fall, Spring, Summer) are encouraged to participate in the Commencement Ceremony. Students begin the graduation application process with Admissions Staff in Student Services. Specific priority deadlines have been established and are published on the Student Records web page under Graduation.

Graduating with Honors or High Honors

Honors/High Honors Designation for Graduation

Students graduating from a degree or diploma program of study with a final cumulative GPA greater than or equal to 3.50 and less than 3.80 will receive recognition in their permanent student record as graduating with "Honors." This calculation is performed when all program requirements are complete and grades are verified. The "Honors" distinction will be denoted on the official transcript and on the diploma.

Students graduating from a degree or diploma program of study with a final cumulative GPA greater than or equal to 3.80 will receive recognition in their permanent student record as graduating with "High Honors." This calculation is performed when all program requirements are complete and grades are verified. The "High Honors" distinction will be denoted on the official transcript and on the diploma.

Honors/High Honors Designation for Commencement Program

Cumulative grade point averages (GPA) will be determined at the conclusion of each fall semester for the purpose of recognition in the Commencement Program produced for the CVCC Commencement Ceremony that is held in the spring semester. The Student Records Office will calculate this GPA for students who submit the Graduation Application by the required priority deadline. This GPA may be different than the GPA calculated at the conclusion of the program of study.

Questions should be directed to the Student Records Office.

Graduate Guarantee

Catawba Valley Community College offers a graduate guarantee that covers all students who have earned associate degrees at CVCC. Catawba Valley Community College guarantees that associate degree graduates will function productively in the areas of critical thinking, problem-solving, and communication, and also makes the degree-specific guarantees as outlined below.

Graduate Guarantee - College Transfer Degrees

CVCC guarantees that its Associate in Arts, Associate in Science, Associate in Engineering and Associate in Fine Arts graduates will be able to transfer courses taken to fulfill the requirements for a bachelor's degree to four-year universities as provided in the North Carolina Comprehensive Articulation Agreement and the North Carolina Independent Colleges Articulation Agreement.

Graduate Guarantee - Career Degrees

CVCC guarantees that its Associate in Applied Sciences graduates are proficient in the areas of knowledge and basic skills covered by their educational programs. If a graduate is found deficient by an employer, the student will be retrained with no tuition charged to the employer or student. The Graduate Guarantee consists of the following

1. The graduate must be employed full-time in an area directly related to the graduate's area of study within 12 months of graduation.
2. Should the employer deem that a CVCC graduate is lacking in an entry-level skill, the employer must certify the deficiency in writing to the Director of Education Matters in Catawba Valley within 90 days of the graduate's initial employment. The employer's entry-level expectations must be consistent with those skills and competencies routinely taught in the CVCC program from which the student graduated.
3. A written educational plan for retraining will be developed and approved by the employer, graduate, department head, and dean.
4. The educational plan will limit retraining to 12 tuition-free semester hours directly related to the identified skill deficiency.
5. All retraining must be regularly-scheduled courses on CVCC's normal class schedule.
6. Retraining specified by the educational plan will be provided with no tuition charged to the employer or student. Books, fees, uniforms, insurance, supplies, and other items are the responsibility of the student or employer.
7. All retraining must be completed within 12 months from the time the educational plan is approved.
8. Courses may be repeated only once under the terms of this graduate guarantee.
9. This guarantee does not imply that a graduate will pass any third-party or governmental licensing, certification, or qualifying exam, and failure to pass such an exam does not qualify a graduate to retrain under the terms of this guarantee.
10. Employers who wish to make claims under the terms of this guarantee should contact the Director of Education Matters in Catawba Valley.
11. This graduate guarantee is effective for students who begin their course work in Fall of 2012 and does not apply retroactively to prior graduates.
12. The exclusive remedy under this guarantee is as provided above and is intended solely as a statement of educational commitment to graduates and employers. It is not intended to create any specific legal rights or causes of action.

Student Records and Transcripts

Privacy of Students (FERPA)

CVCC protects the privacy of students in accordance with the Family Educational Rights and Privacy Act (FERPA) of 1974 (the "Act"), as amended, enacted as section 444 of the General Education Provisions Act. A copy of the Federal Regulations setting out the requirements for the protection of the privacy of students under the act is available at Federal FERPA Regulations (see Title 34 - Education, Subtitle A, Part 99), or in Student Services.

Under this Act, students have the right to:

- Inspect and review their education records;
- Seek amendment of their education records that they believe to be inaccurate, misleading, or otherwise in violation of their privacy rights;
- Consent to disclosures of personally identifiable information contained in their record, except to the extent that the Act (and in particular section 99.31) authorizes disclosure without consent; or
- File with the U.S. Department of Education a complaint under Sections 99.63 and 99.64 concerning alleged failures by the College to comply with the requirements of the Act.

A student may exercise the right to inspect and review his/her education record by making written request to the Director of Student Records.

A student may request amendment(s) to his/her record under section 99.20 of the Act by contacting the Director of Student Records. The Director of Student Records will attempt to resolve the issue. If the student is not satisfied with the resolution offered by the Director of Student Records, then the student may commence formal student due process procedures according to Policy 3.19: Student Due Process.

Education Records

Education records are records that are directly related to a student and that are maintained by an educational institution. These records contain both directory information and personally identifiable information about the student. The information may be recorded in any way, including, but not limited to, handwriting, print, computer media, videotape, audiotape, film, microfilm, microfiche, and email. Some examples of education records are grades, transcripts, class rosters, student course schedules, student financial information, student discipline files, health records, and disabilities education act records.

In accordance with 34 CFR 99.31 of FERPA CVCC does disclose education records to CVCC officials, including faculty and/or staff, who are determined to have a legitimate educational interest. Faculty/staff are considered to have a legitimate educational interest if they might reasonably need to access information to academically advise a student or assist the student in a transaction with CVCC. All full-time faculty/staff have access to the student database through their secure user name and login.

Directory Information

Directory Information is information contained in a student's education record that would not generally be considered harmful or an invasion of privacy if disclosed. In accordance with 34 CFR 99.3 (a) of FERPA, each institution is required to define its directory items.

At CVCC, the following information is defined to be directory information:

- Name
- Student identification number
- Photograph
- Major field of study
- Participation in officially recognized activities and sports
- Weight and height of members of athletic teams
- Date(s) of attendance
- Enrollment status (full-time, part-time, or not enrolled)
- Degrees, honors, and awards received
- Class level (Freshman or Sophomore)
- Most recent previous educational agency or institution attended

Post-secondary institutions are required by the Solomon Amendment to comply with requests for directory information about students enrolled in programs of study at the college. CVCC provides the following directory information to comply with the Solomon Amendment.

- Name
- Address
- Institutionally assigned email address
- Telephone numbers
- Major field of study
- Class level (Freshman or Sophomore)
- Date of birth

In accordance with 34 CFR 99.37(d) of FERPA, the institution is NOT required to release directory information-it is at the discretion of the institution. It is not CVCC's practice to release directory information to third parties except for those that CVCC deems to have a legitimate educational interest in the information or who provide a service on behalf of CVCC.

Process to Opt Out

Notice is made each semester to inform students that they may opt out of having their directory information made available by submitting a completed "Request to Withhold Directory Information Form" found on the CVCC Portal under Forms. Requests will be processed in a timely manner as they are received and shall be effective at the date/time of processing. A request to withhold directory information is in effect permanently, even if the student is no longer enrolled at CVCC, and can only be removed by the student in writing by submitting a completed "Request to Release Directory Information Form" found on the CVCC Portal under Forms.

Students should be aware that a request to withhold directory information results in the following:

- Student name/address is excluded from printed/electronic material such as media releases for honors/high honors announcements or awards/scholarships received, commencement programs, awards programs, etc.
- Enrollment and degree-awarded inquiries from third parties, such as potential employers, insurance companies, and others will neither receive a confirmation of enrollment nor graduation.
- No information will be released to any person(s) on the telephone or via email.
- No information will be included in sports information programs.
- Personal information changes must be made only by the student in person at Student Records with a valid, government-issued photo ID.
- It is important to note that a student's request for confidentiality does not permit the student to be anonymous in class (including an online class) nor to impede or be excluded from class communication.

It is important to note that a student's request for confidentiality does not permit the student to be anonymous in class (including an online class) nor to impede or be excluded from class communication.

Personally Identifiable Information

Personally identifiable information is information that directly identifies the student or information that a reasonable person in the school community would use to identify the student with reasonable certainty. This information could be requested by a person who CVCC reasonably believes knows the identity of the student to whom the education record relates. Under the Act, disclosure of personally identifiable information can be disclosed if CVCC obtains the signature of the student on a document specifically identifying the information to be disclosed, the reason for the disclosure, and the parties to whom the disclosure will be made. Oral consent for disclosure does not meet FERPA requirements.

In accordance with 34 CFR 99.31(8) of FERPA CVCC may not disclose personally identifiable information to the parents of an "eligible student" without the written consent of the student unless the disclosure is to parents of a dependent student as defined in section 152 of the Internal Revenue Code of 1986. An "eligible student" means a student who is 18 years of age or is attending an institution of postsecondary education. Parents must provide appropriate tax return information documenting the dependent status of the student before disclosure will be made without his/her written consent. Policy 3.17 is applicable for all students, regardless of the mode of instructional delivery for the courses in which the students are enrolled.

In accordance with 34 CFR 99.31 of FERPA, CVCC is also allowed to disclose personally identifiable information from the education record of a student without consent when the disclosure is made to one of the following:

- School officials with legitimate educational interest
- Other postsecondary institutions to which the student seeks to or intends to enroll or is already enrolled for purposes related to the enrollment or transfer
- Specified officials for audit or evaluation purposes
- Appropriate parties in connection with financial aid to a student
- State and/or local officials or authorities to whom this information is specifically allowed to be reported or disclosed
- Organizations conducting certain studies for or on behalf of CVCC
- Accrediting organizations to carry out their accrediting functions
- To comply with a judicial order or lawfully issued subpoena
- Appropriate officials in cases of health and safety emergencies
- The parent of a student who is not an eligible student or to the student
- Disclosure in connection with a disciplinary proceeding
- The final results of the disciplinary proceeding conducted to the victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense
- Disclosure to a parent of a student regarding the student's violation of any Federal, State, or local law or any rule or policy of CVCC governing the use or possession of alcohol or a controlled substance
- Disclosure concerning sex offenders and other individuals required to register under section 170101 of the Violent Crime Control and Law Enforcement Act of 1994

FERPA protection of personally identifiable information in a student's education record ends at the time of death.

Copies of Academic Records

CVCC will provide students with official copies of their CVCC transcript and/or results of placement testing and other testing administered by CVCC Testing Services. Proof of identity is required to obtain an official transcript and/or test score report. There is a fee for an official copy of the CVCC transcript.

For an official copy of the CVCC transcript, the process is detailed on the Student Records page at » Transcript Request

For an official copy of test scores that have been taken at CVCC, the process is detailed on the Testing Center page at » Request Test Scores

Student access to transcripts received from other educational institutions is limited to visual access. CVCC does not provide students with file copies or photocopies of transcripts and/or test reports received from other institutions.

Students have access to unofficial copies of their CVCC transcript at their secure Student Self Service account on the CVCC Portal.

Student Record Retention

CVCC maintains student records in accordance with North Carolina General Statutes 121-5(c) and 132-8. The CVCC Records Retention and Disposition Schedule was developed by CVCC Administration and has been approved by the State Archives of North Carolina and the North Carolina Community College System.

Any officially submitted document that supports information posted on the student's transcript will be scanned into the secure CVCC database and retained in support of the transcript.

Grading System

The measure of a student's overall academic performance for curriculum courses attempted at CVCC and with a course number greater than or equal to 100 shall be a per credit hour grade point average (GPA) based on a 4.0 scale. A student shall receive 4 grade points per credit hour for excellent performance (letter grade A), 3 grade points per credit hour for above average performance (letter grade B), 2 grade points per hour for average performance (letter grade C), 1 grade point per hour for below average performance (letter grade D), and 0 grade points per hour for failing performance (letter grade F or WF).

Valid grades for developmental courses (courses with a course number less than 100) are P (indicates satisfactory completion), R (unsatisfactory completion-student must retake the course), and WP (indicates withdrew passing). Developmental courses shall be included in the computation of attempted credits and earned credits but shall be excluded from all GPA computations.

The Administrative Instructional Council (AIC) shall establish the numerical averages (numerical scale) to be used to assign the letter grades specified above. Such numerical averages shall be used by all curriculum instructors when assigning letter grades.

When a student is unable to meet the attendance expectations of the course as defined by the faculty member's syllabus, the student may exercise the option to withdraw officially from the class. If such action occurs before the census date of the class, no grade shall be recorded. If such action occurs on or after the class census date and on or before the 60% point of the class, the student's grade shall be WP (Withdrew Passing.) If such action occurs after the 60% point of the class with a course number greater than or equal to 100, the student's grade shall be a WF (Withdrew Failing) unless the instructor authorizes a WP based upon appropriate circumstances. If such action occurs after the 60% point of a class with a course number less than 100 (a developmental course), the grade shall be a WP (Withdrew Passing). A grade of I (Incomplete) may be temporarily recorded if, in the judgment of the faculty member of the class, extenuating circumstances exist. A grade of I must be replaced with the final course grade by the end of the subsequent semester unless additional time (not to exceed an additional semester) is granted by the Chief Academic Officer.

The Chief Student Services Officer or designee shall ensure that the grade system and the processes used for record-keeping purposes comply with the above policy.

Valid grades other than those discussed above may appear on transcripts due to enrollment activity recorded under previous grading systems at the College. Previous grading systems are available on the CVCC website at Grading Procedure.

Table 1 provides the numerical scale established by the Administrative Instructional Council (AIC) for the determination of the final letter grade in a course beginning with Fall 2014 semester. Beginning Fall 2014 semester, developmental reading and English courses are combined and revised with DRE prefixes.

All courses with a prefix lower than 100 are graded with a P(Passed) or R(Re-enroll). This includes all DRE, all DMA, CTS 080, and OST 080 courses.

Table 1: Grading Scale Effective Beginning Fall 2014 Semester			
Final Letter Grade	Numerical Average	Grade Points Earned Per Credit Hour	Other Comments
A	90 - 100	4.0	Excellent Not a valid grade for Developmental Courses
B	80 - 89	3.0	Above Average Not a valid grade for Developmental Courses
C	70 - 79	2.0	Average Not a valid grade for Developmental Courses
D	60 - 69	1.0	Below Average Not a valid grade for Developmental Courses
F	Below 60	0.0	Failed Not a valid grade for Developmental Courses
WF	Below 60	0.0	Withdrew Failing Not a valid grade for Developmental Courses
P	80 -100	Not applicable	Passed Valid grade for all Developmental Courses (All DMA, All DRE, CTS 080, OST 080)
R	Below 80	Not applicable	Re-enroll Valid grade for all Developmental Courses (All DMA, All DRE, CTS 080, OST 080)
WP	Not applicable	Not applicable	Withdrew Passing Valid grade for all Courses
AU	Not applicable	Not applicable	Audit Valid grade for all Courses

How To Calculate GPA

The measure of a student's overall academic performance at the college shall be a grade point average (GPA) based on a 4.0 scale. **The computation of GPA includes only those courses completed at CVCC numbered 100 or higher and for which a grade of A, B, C, D, F, or WF is received.** (See also Repeat Policy).

The GPA may be calculated in the following manner:

1. Determine Total Hours Attempted. (Hours attempted are equal to the number of credit hours assigned to a course as shown on your CVCC transcript.)
2. Determine Total Grade Points Earned. The grade point value for a course is multiplied by the number of attempted credit hours for the course.

For Example: A grade of "A" is earned in ENG 111. A grade of "A" carries a value of 4 credit hours.

ENG 111 is a 3 credit hour course: $4 \times 3 = 12$.

In this example, 12 grade points were earned for ENG 111.

3. Divide the Total Grade Points Earned by the Total Hours attempted to determine Cumulative GPA.

Example:

Course Hours Attempted Grade Earned Grade Points Earned

BIO 168: 4 credit hours and student earned an A: $4 \times 4 = 16$

ART 111: 3 credit hours and student earned a C: $3 \times 2 = 6$

ACA 111: 1 credit hour and student earned a B: $1 \times 3 = 3$

Total Grade Points Earned = 25

Total Hours Attempted = 8

GPA = 25 divided by 8 = 3.125

Grades and Grade Changes

A student's final grade for a course is determined by the faculty member for the course and submitted to Student Records. Student Records is responsible for making the grade available to the student through a web/internet portal or some other means. Subsequent changes to a grade submitted by a faculty member generally must be authorized by the same faculty member, by the Chief Academic Officer in extenuating circumstances, or by the Chief Academic Officer upon recommendation by a Student Grievance Committee.

A student who has a grievance regarding a final course grade may have his/her grievance reviewed in accordance with Policy 3.19: Student Due Process.

Semester Honors or High Honors

At the conclusion of the fall and spring semesters, the Chief Academic Officer shall recognize those students who meet the following requirements for semester honors and high honors.

- Semester honors: students who complete 6 or more credit hours (included in the computation of GPA) during the completed semester while earning a semester GPA greater than or equal to 3.50 and less than 3.80 on a 4.0 scale.
- Semester high honors: students who complete 6 or more credit hours (included in the computation of GPA) during the completed semester while earning a semester GPA greater than or equal to 3.80 on a 4.0 scale.

The Student Records Office will determine the eligibility of each student to be awarded Honors or High Honors at the conclusion of each fall and spring semester. Eligibility will be determined when all requirements for the semester have been processed and verified.

Once the list of Honors and High Honors students has been determined, the Student Records Office will make the list available to the Chief Academic Officer. Each honored student will receive a congratulatory letter through his or her secure CVCC-issued email. The lists will also be published through local media outlets.

Instructional Standards

Academic Freedom

Catawba Valley Community College is committed to the provision of and protection of academic freedom. The college seeks to foster an academic learning environment that allows for the advancement of knowledge and critical thinking on the part of faculty, staff, and students through ethical teaching and research practices. Faculty, staff, and students are expected to use reasonable judgment as they exercise their academic freedom.

The college and its instructional personnel share a unique employer/employee relationship. The relationship must be both mutually beneficial and protective; moreover, the relationship between employee and employer must equally benefit and protect students and trainees. As an employer, the college reserves specific employer rights, as established by state and federal law and the North Carolina Community College System. Such rights include the following:

1. The right to determine initial employment, employment status, continued employment, and dismissal processes for institutional positions;
2. The right to determine appropriate descriptions and academic content of programs and courses (as dictated by the North Carolina Community College System);
3. The right to assign section numbers, delivery formats, scheduling, and supplemental materials (including textbooks and other required tools and/or equipment) to instructional personnel;
4. The right to determine which students may be registered for specific courses and trainings;
5. The right to develop class specifications, to assign titles and salary ranges, and to require specific employment responsibilities (including committee membership and certain restrictions on secondary external employment) for each position of employment; and
6. The right to make administrative decisions that reflect, in the judgment of upper administrative personnel, the best interest in the college's continued operation.

In regard to the concept of Academic Freedom, the institution accepts and promotes the 1940 Statement of Principles on Academic Freedom published by the American Association of University Professors:

1. Teachers are entitled to full freedom in research and in the publication of the results, subject to the adequate performance of their other academic duties; but research for pecuniary return should be based upon an understanding with the authorities of the institution.
2. Teachers are entitled to freedom in the classroom in discussing their subject, but they should be careful not to introduce into their teaching controversial matter which has no relation to their subject. . . . [see AAUP 1970 Interpretive Comments #2 and #3 contained in Endnotes #4 and #5].
3. College and university teachers are citizens, members of a learned profession, and officers of an educational institution. When they speak or write as citizens, they should be free from institutional censorship or discipline, but their special position in the community imposes special obligations. As scholars and educational officers, they should remember that the public may judge their profession and their institution by their utterances. Hence they should at all times be accurate, should exercise appropriate restraint, should show respect for the opinions of others, and should make every effort to indicate that they are not speaking for the institution.

(<http://www.aaup.org/file/principles-academic-freedom-tenure.pdf>)

Internal Audits

The Chief Academic Officer shall ensure that internal audits are conducted in accordance with North Carolina Community College System guidelines and that the results of those audits reported to the Board of Trustees.

Course Attendance Expectations

Catawba Valley Community College does not have a college-wide institutional attendance policy. However, best practices indicate that successful course completion is correlated to attendance. Therefore, each academic school may have an attendance expectation. Each faculty member is required to communicate attendance expectations to his/her students. These attendance expectations should be included in the course document and faculty members' syllabi for each course.

Faculty members are required to maintain and submit accurate attendance and/or membership reports for their classes in accordance with 1G SBCCC 200.93 and according to instructions provided by the Chief Student Services Officer or designee. Attendance and/or membership records shall comply with all federal and state guidelines related to the disbursement of financial aid and Veterans' benefits. Procedures to ensure the recording and reporting of attendance and/or membership in accordance with the above policies shall be monitored by the Chief Financial Officer.

If an unplanned and/or unexpected event causes a faculty member to be late to class, every effort should be made to communicate the arrival time to the students in the class.

Religious Observance Absences

Students shall be permitted excused absences from all classes two days per academic year for religious observances as recognized by the faith of a student. Students shall be provided reasonable opportunity to make up any tests or other work missed due to an excused absence for a religious observance. Specific procedures that students must follow to obtain authorization for an excused absence for a religious observance shall be established by the Chief Academic Officer. These procedures shall, at a minimum, require the student to submit a written request for the absence sufficiently in advance to permit the faculty member and student to develop a sound plan for making up any missed class work. All students must plan absences from a class so that their total absences, including any absences authorized in accordance with this policy, do not violate the attendance expectations specified by the faculty member, a certifying board, or an accrediting agency. For purposes of this policy, an academic year begins on the first day of the fall semester and ends on the last day of the summer semester in the following calendar year.

Withdrawals

Faculty do not have the responsibility to withdraw students from their classes. This is a student responsibility.

Students are encouraged to complete each class for which they register to advance toward program completion. CVCC provides various resources to assist students with successful class completion. These resources are listed in the Portal under Student Resources.

However, it may become necessary in some cases for students to withdraw from a class.

On or before the 60% point of a class:

- Students may initiate the withdrawal process in the Advising Center on campus or by sending an email to advising@cvcc.edu from their secure CVCC-issued email account. An advisor will assist the student with the process.
- This process is time sensitive and must be completed on or before the 60% point of the class.
- A complete listing of the 60% point of all classes can be accessed at **Semester Schedules** on the CVCC website.
- A grade of WP (Withdrew Passing) will be earned.
- A grade of WP will not affect the student's GPA in a negative manner.
- A grade of WP will affect the student's completion rate. Program completion will be delayed and financial aid may be impacted in a negative manner.

After the 60% point of a class:

- Students will not be allowed to withdraw from a class after the 60% point of the class.
- All student work will continue to be graded through the end of the semester, and students will earn the appropriate grade of A, B, C, D, F, or in some instances, I.

Extenuating Circumstances beyond the Student's Control:

- Occasionally extenuating circumstances beyond the student's control may occur that prevent the student from successfully completing the class and the 60% point of the class has already occurred. Should one of these extenuating circumstances occur, the student should consult the appropriate faculty member(s) and submit the "Request for Withdrawal After the 60% Point of the Class."
- Appropriate documentation must be submitted.
- The "Request for Withdrawal After the 60% Point of the Class" form can be found in the Portal under Forms.
- If the "Request for Withdrawal After the 60% Point of the Class" is approved, the grade will be WP.

Course Documents and Faculty Syllabi

At the beginning of each course, faculty members will provide students with two sources of information concerning each curriculum course – a course document and a faculty syllabus. These documents are defined below.

Course documents provide general course information that changes little from semester to semester. For instance, the course document will give the course title, course description, and number of hours specified for the lecture, for laboratory, for clinical, and for total semester credit hours – all information mandated by the State Board of Community Colleges. In addition, prerequisites and co-requisites are given as well as the student learning outcomes. Other information that varies little from semester to semester includes the course grading policy, attendance expectations, disability statement, religious observance statement, the academic honest policy, and the CVCC emergency procedures.

The course document provides essential information about each course and communicates basic course information with consistency and accuracy. Course documents are housed on a server and maintained by the Educational Technology Department.

A link to the appropriate course document is automatically loaded into the Blackboard account for each individual course. Thus, students constantly have access to critical information about the course.

The **Faculty Syllabus** for a course may contain some or all of the information listed in the Course Document. However, the faculty syllabus differs from the course document in that it lists those components of the course that change frequently such as the course calendar with assignment due dates and the required textbook(s).

The faculty syllabus outlines course requirements and assignments in greater detail than does the Course Document. While individual faculty members will approach their teaching responsibilities with differing techniques, all faculty must guide student learning to reach the same student learning outcomes published in both the course document and the faculty syllabus. Working with their administrative assistants, department heads and directors will maintain an archive of each faculty member's course syllabi.

Course documents and faculty syllabi shall be maintained in accordance with the procedures established by the Chief Academic Officer.

Off Campus Instructional Activities

Field trips and other off campus instructional activities must be planned well in advance and approved in accordance with procedures established by the Chief Academic Officer.

Extra-curricular activities engage students and enrich their lives. The entire community takes pride when our athletic teams win championships, when our students travel and learn in distant places, and when our students excel in state, regional, and national competitions. To maintain academic progress and to provide extensive extra-curricular opportunities for students, the following guidelines have been established.

Guidelines for Club Advisers, Coaches, Faculty, and Other Extra-Curricular Leaders

- To the degree possible, extra-curricular events such as ballgames, field trips, and concerts should be scheduled when the least possible amount of instructional time will be missed.
- When scheduling athletic competitions, coaches should be aware that requiring student athletes to miss class may cause the student to encounter greater difficulty in passing the class. Effort should be exercised to honor attendance expectations.
- Coaches should publish the schedule of athletic competitions to the entire college community as well as the team membership roster. These may be found on the CVCC Athletics web site.
» Athletics
- When scheduling extra-curricular events such as a field trip or an academic competition that conflict with class attendance, the extra-curricular faculty/staff person should email to faculty a description of the upcoming off-campus activity along with a list of student names involved one week in advance of the planned activity. The communication about the activity should clearly indicate the date(s) and times that students involved will be away from campus.
- At least one week in advance of the date of the off-campus event, the CVCC faculty/staff person responsible for the event will send the Chief Student Services Officer and the CVCC Business Office the Waiver of Liability and Hold Harmless Agreement form for each student involved which contains the following information: student name, CVCC identification number, and an emergency contact phone number for the student. The waiver form signed by each student will indicate that: 1) the student is attending the field trip voluntarily and at his/her own risk, and 2) Catawba Valley Community College is not liable for accident, injury, or unexpected misfortune. Students participating in CVCC athletic events will submit the Waiver of Liability and Hold Harmless Agreement to the CVCC Athletic Director and the CVCC Business Office. These forms will be held for a minimum of three years. Note: The Waiver Form may be found on the "J Drive" under "Forms" and then under "Hold Harmless." When the activity requires a travel authorization, a copy of the Waiver of Liability and Holds Harmless Agreement shall be sent to the Business Office.
- Faculty who plan a field trip need to have an alternative assignment for students whose personal circumstances (job, child care, etc.) make it impossible for the student to participate in the field trip experience.
- Club advisers, coaches, and other extra-curricular leaders will give a copy of the "Guidelines for Students Involved in Extra Curricular Activities" to all students involved in the activity well in advance of the event.

Guidelines for Faculty of Students Involved in Extra-Curricular Activities

- Faculty members should maintain the same academic rigor for students involved in extra-curricular activities as with students who are not involved.
- Faculty members should maintain the same attendance expectations for students involved in extra-curricular activities as with students who are not involved in such events. At CVCC, there are no "excused" absences. A student is present for class instruction or a student is not present.
- Faculty members should support the excellent learning opportunities that occur outside the formal classroom setting. Therefore, faculty members are encouraged to avoid classroom policies that discourage extra-curricular activities such as "No make-up work is allowed" or "Missed tests may not be made up." Instead, faculty members are asked to work in partnership with students to support learning outside the classroom. As an institution, we can never discuss the art of teaching and learning too excessively. **As professionals, we have the power to rethink classroom management policies – balancing student needs with curriculum and faculty needs.**
- To the degree possible, any student officially representing the school in an academic, cultural, or athletic event should be allowed to make up work missed while officially representing the college.** For instance, in some cases, assignments or tests may be turned in early, prior to the event or turned in late, after the event. A student should not be penalized for representing the college in an official capacity; however, it is the student's responsibility to be proactive to inform the faculty member of extra-curricular events that conflict with class attendance and to make arrangements with the faculty member for making up missed work.

5. Suggested methods for faculty to allow students to make-up missed work include:

- Allow students to turn in assignments early, prior to the absence.
- Allow students to turn in assignments late.
- Allow students to complete alternative assignments if the original assignment would be compromised by early or late submission.
- Encourage students to establish a study partner – a classmate who will share class notes and other information when an absence occurs.
- Encourage students to form study groups and to secure a tutor

Guidelines for Students Involved in Extra-Curricular Activities

1. Students involved in officially-sanctioned extra-curricular activities such as field trips, athletic competitions, educational travel, and academic competitions should understand that these extra-curricular activities are secondary to the major goal of completing a course of study and graduating with a degree.
2. Students should clearly understand that at Catawba Valley Community College, there are no excused absences. College students are either present in class to receive instruction, or they are not present. Therefore, absences related to extra-curricular activities should be considered as part of the attendance expectations for each course.
3. Students who must miss classes to participate in school-sanctioned activities are responsible for discussing the absences and work that will be missed in advance of the absence with each faculty member involved. The burden for getting permission to make-up missed work and then for making up that work falls entirely upon the student.
4. Students involved in extra-curricular activities should respectfully approach faculty members during their office hours to inquire about educationally sound ways to cope with missed classes well in advance of the absence. The solution reached will vary from faculty member to faculty member and from discipline to discipline.
5. Students who have to miss classes to participate in extra-curricular activities should understand that important material will be missed with every absence. Many class activities such as lectures, demonstrations, and class discussions are impossible to "make up." Therefore, class attendance is of highest priority.

Food and Drink in the Classroom

The allowance of food and/or drink in classrooms, the Library, and Learning Assistance Center is a decision to be made by class instructors or appropriate supervisors. If allowed, drinks must be in closed containers. If the instructor allows food or drink in the classroom, the room must be left clean for the next instructor. Food and/or drink shall not be permitted in laboratories or classrooms if such permission presents a safety concern or might result in damage to college equipment.

Classroom Safety

Faculty shall promote a safe class environment and shall establish appropriate safety guidelines and procedures for their classes.

» Emergency Response and Evacuation Procedures (this document is posted throughout the campus.)

Equipment and Furniture

Employees, students, and visitors are expected to use CVCC equipment and furniture properly, carefully, and safely. Improper or unsafe use of equipment should be reported to an appropriate CVCC administrator. Any damage to or loss of equipment should be reported to the Chief Financial Officer or designee.

Laboratories containing expensive equipment should be locked at all times when an instructor or other designated CVCC representative is not present.

Cancellation of Classes

Class cancellations must be approved in accordance with guidelines established by the Chief Academic Officer.

Adverse Weather (campus closings)

The College President or designee will make a decision concerning changes in schedules during all adverse weather conditions. Every effort will be made to make decisions prior to 6:00am for daytime operations and by 4:00pm for evening operations. When the decision is made to "Close", no students, faculty, or staff will be required to report except for essential personnel as determined by the college President.

When a late opening is announced due to weather, all classes and activities scheduled prior to the announced opening time are cancelled. Faculty, staff and students are not expected to arrive on campus until the published opening time. The class schedule resumes at the published opening time. If a class or activity for that day includes time before and after the published opening time, then that class or activity should begin at the published opening time. For example, in a situation where a late opening is announced at 10:00 a.m. on a Friday:

- A class scheduled to begin at 9 a.m. and end at 9:50 a.m. on Friday would not meet.
- A class scheduled to begin at 9 a.m. and end at 10:20 a.m. on Friday would meet for 20 minutes (10 to 10:20 a.m.).
- A class scheduled to begin at 10 a.m. and end at 10:50 a.m. would meet for the regularly scheduled 50 minutes.

In some situations, short term continuing education classes may be cancelled completely in a late opening. Consult your instructor to find out whether this applies.

Academic Honesty

Students at CVCC are expected to be honest in all academic pursuits, whether class, lab, shop, or clinical. Acts of academic dishonesty are considered unethical and subject to behavior sanctions. Examples of academic dishonesty include, but are not limited to, the following:

1. Sharing information about the content of quizzes, exams, classroom/lab/shop/clinical assignments (scheduled or make-up) without approval of the instructor. Sharing includes, but is not limited to, unauthorized copying, collaboration, or use of notes, books, or other materials when preparing for or completing examinations or other academic assignments (scheduled or make-up);
2. Buying, selling, or otherwise obtaining a copy of a quiz, exam, project, term paper, or like document, without approval of the instructor;
3. Plagiarism, which is defined as the intentional representation of another person's work, words, thoughts, or ideas (from any source) as one's own;
4. Failing to follow approved test taking procedures by performing such acts as the following:
 1. Looking on another student's test;
 2. Use of unauthorized notes; written, electronic, or otherwise;
 3. Changing answers after exam is scored; and
 4. Verbal, non-verbal, or electronic communication with another student during an exam.

Additionally, students have an obligation to report any acts of academic dishonesty to the relevant faculty member or appropriate campus authority when reasonable grounds exist for such a report. Students also have a responsibility to cooperate in the investigation of any alleged acts of academic dishonesty. Failure to report acts of academic dishonesty could result in a behavior sanction as outlined in Policy 3.18: Student Code of Conduct.

Faculty are authorized to impose the Loss of Academic Credit or a Grade Sanction for acts of academic dishonesty relative to classes under their supervision in accordance with Policy 2.16: Academic Honesty Policy. Faculty should follow the procedure below:

1. The faculty member should complete the "Warning, General Probation, Interim (Emergency) Suspension Form" found in the Forms section on the CVCC Portal. The completed form should be forwarded to the faculty member's immediate supervisor. The supervisor may forward a copy of this form to the Chief Student Services Officer.
2. As stated in Policy 3.18.1: Student Behavior Sanctions, the student may be allowed to redo the assignment, may lose credit for the assignment, or may lose credit for the class. In the event the act of academic dishonesty is serious enough to warrant further disciplinary action, the faculty member should complete the "Student Conduct Violation Form" found in the Forms section on the CVCC Portal and follow the directions listed on the form.

Work-based Learning

The work-based learning studies shall be integrated with the credit/curriculum programs of studies under the supervision of the Chief Academic Officer or designee. Operation of the program shall be in accordance with the policies and procedures stipulated by the North Carolina Community College System.

Military veterans may participate in the work-based learning program if otherwise eligible. Educational benefits (G. I. Bill) will be paid by the Veterans Administration for work-based learning courses if all requirements are met.

Continuing Education

General Information

An important function of the College is to provide quality courses of continuing education for adults. The development of these courses is based upon community needs and interests.

Continuing Education provides life-long learning experiences that will help adults fulfill occupational, social and personal needs. It allows adults to achieve their fullest potential and effectiveness in a rapidly changing world of increasing knowledge, skill and understanding. Courses offered are helpful in achieving occupational goals, as well as increasing the quality of life. The diversity of these programs ranges from basic reading and writing skills to vocational and technical upgrading to cultural and personal enrichment.

CVCC also offers specialized services to the business, corporate, and industrial community.

Admission

Admission to classes in the division is open to individuals 18 years of age or older. Individuals less than 18 years old who are high school graduates or whose high school class has graduated may also enroll in continuing education courses. High school juniors and seniors, sixteen years of age and older, may enroll with permission from high school officials. See general college admissions requirements for further details.

Attendance

Students are expected to attend class regularly. Individual attendance records are maintained and retained. Students must meet attendance requirements to receive recognition for the course. Some classes are offered in accordance with state guidelines which may require stricter attendance policies.

This policy also applies to continuing education courses for which CEUs or certifications are issued. Minimum attendance requirements are communicated to students. Failure to meet these requirements will result in a grade of U (unsatisfactory). Make-up of missed class time is not guaranteed but may be permitted, within a specified timeline, in documented emergency situations with approval of the faculty, program director, and within state auditing guidelines.

Class Locations

While a number of classes are held on CVCC East and Main campuses, as well as the Alexander Center for Education in Taylorsville, others are conducted at various locations in surrounding communities or within a particular business or industry throughout the area served by CVCC.

Class Schedule

Classes are scheduled continuously throughout each semester. Special business seminars and industrial courses may be scheduled to begin at any time period appropriate to a company and CVCC. For specific announcements of course offerings, registration dates, and locations, check the website: <http://www.cvcc.edu/CCE/schedules.cfm>.

Continuing Education Units (C.E.U.)

The Southern Association of Colleges and Schools, of which CVCC is an accredited member, has recommended that the Continuing Education Unit (C.E.U.) be used as the basic instrument of measurement for a student's participation in an institution's offering of non-credit classes, courses, and programs. The C.E.U. is a unit measure. One C.E.U. is defined as ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction. Continuing Education Units may be offered for CVCC courses that are applicable to professional certification or license renewal.

Course Completion

Certificates are given for the satisfactory completion. Requests for enrollment verification or course transcript should be directed to the Continuing Education Business Office located at the East Campus.

Fees

Occupational Extension course fees are on a graduated scale as outlined in the fee schedule on page 14. Other Self-Supporting course fees vary. Fees may be waived in compliance with North Carolina Statutes, as specified under fee waivers. There are no registration fees for enrollees in Basic Skills Education. Other costs in continuing education classes may include textbooks, equipment, tools, or other specific fees.

Intellectual Property Rights

Ownership Of Materials

The College retains the right to use student work produced as a part of class assignments for non-profit educational purposes.

Minimum Enrollment Required

Normally, a course may be offered when a minimum of 10-15 persons enroll for the subject. The College reserves the right to cancel any course when an insufficient number of people register.

To Enroll

Individuals interested in enrolling must register and prepay by mail, telephone, fax, or visiting the CVCC East Campus or Alexander Center for Education. Applicants are registered on a first-come, first-served basis.

Continuing Education (Program Offerings/Centers)

Health & Public Service Innovation Center

Occupational Extension Courses

The College offers many vocational, technical, and business courses. The primary objectives of these courses are to (1) provide adults additional skills and/or knowledge applicable to the present occupation; (2) provide training for occupations in which skill and knowledge requirements are undergoing transition due to technological advances in equipment, materials, and machines; and (3) provide area businesses and industries assistance in meeting manpower needs through other specialized courses.

Occupational upgrading courses are available in each of the following areas:

BUSINESS courses are available to a wide variety of business organizations, administration, management, sales, and secretarial occupations.

COMPUTER courses are also available in popular software applications currently used by local employers. Courses are also available to prepare students to take certification exams in networking such as PC Repair A+.

FIRE, RESCUE, & EMS training is offered for members of municipal, volunteer, industrial fire brigades, and rescue squads. EMT courses are available to the public. Entrance tests are required for certain courses.

Healthcare Training

Healthcare Occupation programs have been established for persons seeking initial or additional training in the medical field. All level courses from entry level to para-professional to professional are offered. Entrance tests are required for certain classes.

- Some programs require criminal background checks and/or drug testing.

Healthcare course offerings include CNA, Phlebotomy, Medical Front Office, Medication Aid, Healthcare Activities director, EKG, and Pharmacy Tech.

LAW ENFORCEMENT courses have been designed for law enforcement personnel in cooperation with training departments of agencies.

Additional information regarding occupational upgrading courses may be obtained by contacting the Continuing Education Office at the CVCC East Campus.

Learning & Personal Enrichment Innovation Center

Basic Skills Education Programs

Basic Skills Education covers the four main program areas: Adult Basic Skills, Compensatory Education, English as a Second Language, and Adult Secondary Credentials. Basic Skills Education is an instructional program designed to assist adults 16 years of age or older who need academic remediation. Emphasis is placed on assisting the adult in obtaining a higher education level.

Classes are organized and designed to assist individual student's efforts of reaching a level where individualized study is possible. As the student gains competency in subject areas, a greater scope of subjects is introduced. Each person receives assistance in selecting the correct level from which to begin his/her studies.

After gaining competency in subject areas, the adult will be encouraged to enroll in the Adult Secondary Credential Program. This includes the Adult High School Diploma and High School Equivalency such as GED. Currently, Basic Skills Education classes are available on campus and at various locations throughout Catawba and Alexander counties. Additional information may be obtained by contacting the Basic Skills office at 828-327-7000, ext. 4353.

Math Sense

Math Sense is a six-week intensive basic skills review for students whose placement tests indicate this is the appropriate math level in which to begin their curriculum studies. Topics include operations with whole numbers, decimals, and fractions; data analysis and measurement; statistics and probability; basic geometry; order of operations; and a very brief introduction to algebraic expressions and integers. Contact the Basic Skills Office for registration information 828-327-7000, ext. 4353.

English Foundations

English Foundations is an eight-week intensive basic skills review for students whose placement tests indicate this is the appropriate reading and writing level at which to begin their curriculum studies. Topics include vocabulary review, comprehension development, grammar review, basic sentence and paragraph construction, and the writing process. Contact the Basic Skills Office for registration information 828-327-000, ext. 4353.

Adult Basic Education (ABE)

The Adult Basic Education program teaches basic skills to help adults survive in an adult world. Instruction is designed to assist individuals with learning to read, improving reading skills, math, and writing skills. Classes are available both on campus and at a number of off-campus locations for all program areas. Please call the Basic Skills Office for further information at 828-327-7000, ext. 4353.

Compensatory Education (CED)

Instruction designed for adults who have intellectual disabilities or who have suffered a brain injury. These classes assist students in learning basic functional and literacy skills as a means to improve their level of daily independent living. Classes are available at both the East Campus 828-327-7000, ext. 4268, and the Alexander Center for Education 828-632-8221, ext. 304.

English As A Second Language (ESL)

English as a Second Language is a program of instruction designed for adults with limited English skills. Information covered throughout the course will include survival language, health and safety information, dealing with cultural differences, occupational language, U.S. history and legal information, and citizenship requirements. Emphasis is placed on conversational skills. Additional information may be obtained by contacting the Basic Skills Office at 828-327-7000, extension 4353. Classes are offered on and off campus.

Adult Secondary Credential Program

The Adult Secondary Credential Program allows students two options to complete a secondary credential: the Adult High School Diploma Program or the High School Equivalency Program (such as GED).

Adult High School Diploma classes offer students the opportunity to earn a high school diploma sanctioned by the Board of Education of Catawba and Alexander Counties. Students are given full credit for any units they have completed in high school. Classes are free. Please contact the Basic Skills Office at 828-327-7000, ext. 4353 for more information.

The High School Equivalency Program (HSE), (such as GED) focuses on the areas of mathematics, literature, writing, social studies, and science. Catawba Valley Community College offers classes in a variety of locations and online. **Classes are free; however there is a cost for the HSE exam.** Please contact the Basic Skills Office at 828-327-7000, ext. 4353, if you are in need of financial assistance for the HSE exam fee and would like to apply for a scholarship.

Personal Enrichment Programs

These programs are offered to individuals 16 years of age and older. These are short-term courses for self-improvement, cultural enrichment, and academic achievement. The program is intended to meet the growing needs and interests of the community. The purpose is to give an individual a chance to pursue special interests and to fill his/her leisure time with worthwhile educational projects. Some of these include conversational foreign languages, economics, government, consumer education, cake decorating, sign language, guitar, needlepoint, quilting, landscaping, dancing and personal development. Normally, a course may be offered when a minimum of 10-15 individuals indicate interest. Additional information regarding these classes may be obtained by contacting the Continuing Education Office at 828-327-7037.

Workforce Development Innovation Center

Catawba Valley Furniture Academy

Catawba Valley Furniture Academy is an industry-driven training program designed by local furniture manufacturers that prepares students for skilled positions in high demand. The Catawba Valley Furniture Academy covers furniture fundamentals, pattern making, manual cutting, automated cutting, sewing, introduction to upholstery, spring up, inside upholstery, and outside upholstery. This program provides career path exploration and assessment, plant tours, and career previews. The CVCC Furniture Academy is in partnership with Century Furniture, Lee Industries, Lexington Home Brands, Sherrill Furniture, and Vanguard Furniture. To find out more about the program, register for the class, and learn about scholarship opportunities, please contact us at 828-327-7000 ext. 4294 or kswright@cvcc.edu

Computrain

CVCC's Corporate Computer Training Center provides professional development courses in the most current versions of software applications used by area businesses. These short, one-day, six-hour-per-day courses are designed for employees who need to become more productive in the shortest time possible with practical hands-on experience in a Windows and LAN environment. COMPUTRAIN will also design short courses to meet a company's specific personal computer application needs, to be held on CVCC's campuses or at a company's computer lab. For more information, contact the Director of COMPUTRAIN at 828-327-7000, Ext. 4330 or e-mail sblake@cvcc.edu.

Corporate Development Center

The Corporate Development Center at CVCC was designed to meet the needs of business, industry, entrepreneurs, and job seekers. Its mission is to help individuals and businesses attain profitability/prosperity in a global economy. The Center works collaboratively with the Manufacturing Solutions Center. The Center includes the Small Business Center, Advanced Manufacturing Labs, flexible corporate training rooms, a computer lab, and a teleconferencing meeting room. Courses/Training offered at the Center include Mechatronics/Robotics, SolidWorks, Lean/ISO, Professional in Human Resources/PHR, Senior Professional in Human Resources/SPHR Certifications, Project Management Certification, Certified Production Technician, Certified Logistics Technician, Six Sigma Green & Black Belt, and the Catawba Valley Furniture Academy. For more information, call 828-327-7000, ext. 4294. Or visit the Workforce Development Innovation Center website: http://www.cvcc.edu/CCE/Workforce_Development/index.cfm.

Customized Training

The Customized Training Program supports the economic development efforts of North Carolina by providing education and training services to ensure the presence of a well-trained workforce for new and existing business and industry to remain productive and profitable within the State. This Customized Training assistance supports full-time production and direct customer service positions created in the State of North Carolina, thereby enhancing the growth potential of companies located in the state while simultaneously preparing North Carolina's workforce with the skills essential to successful employment in emerging industries. Call 828-327-7000, ext. 4294.

Human Resources Development

The Human Resources Development Program (HRD) is designed to provide skill assessment services, employability skills training, and career development counseling to unemployed and underemployed adults. The courses shall address six core components as follows: assessment of an individual's assets and limitations, positive self-concept, employability skills, communication skills, problem-solving skills, and an awareness of the impact on information technology in the workplace. Students enrolling in HRD classes may be eligible for a fee waiver if they meet any of the following criteria: unemployed, received notice of lay-off, working and eligible for Federal Earned Income Tax Credit (EITC), or working and earning at or below 200% of federal poverty guidelines. For information about the HRD program call 828-327-7000, ext. 4370 or 4522. Or visit the HRD website: http://www.cvcc.edu/CCE/Workforce_Development/HRD/index.cfm.

MANAGEMENT AND SUPERVISORY DEVELOPMENT courses are offered to improve supervisory and management techniques for experienced as well as beginning personnel.

Manufacturing Solutions Center

The mission of the Manufacturing Solutions Center (MSC) is to help US Manufacturer's increase sales, improve quality and improve efficiency to create or retain jobs. This is accomplished by

- enhancing and improving products through research and development.
- assisting in creating prototypes for new, innovative offerings.
- analyzing new materials to enhance structure and programs.
- testing products for reliable content and quality.
- training personnel for lean manufacturing processes and supply chain efficiencies.
- providing a forum for rollout of new 21st century technologies.
- providing hands-on guidance for international marketing and sales and military procurement.
- industry advocacy.

PROFESSIONAL DEVELOPMENT FOR EDUCATORS courses are offered to assist teachers in meeting recertification requirements.

Small Business Center

The Small Business Center (SBC) is dedicated to increasing the success rate of all businesses in Alexander and Catawba counties. The Small Business Center offers Start-It seminars for budding entrepreneurs, as well as Grow-It seminars for more seasoned business owners. Seminar topics range from feasibility to product/service analysis to marketing, operations, management, and business finances. For help with business planning, the SBC director is available by appointment for one-on-one, confidential counseling. The SBC also maintains a resource library of print and electronic media for use in exploring business ownership. In keeping with its economic development mission, many services are delivered in conjunction with chambers of commerce, economic development offices, local business and merchant associations. The SBC also works closely with CVCC career instructors to help students learn how to start and operate a business once they have mastered the subject matter of their trade. To register for a seminar, contact the SBC Support Team at dsawyer@cvcc.edu or call 828-327-7000, extension 4117. For a counseling appointment, contact the SBC Director at jneville@cvcc.edu or call 828-327-7000, extension 4102. Funded annually by grant with tax dollars, the SBC is one of 58 centers comprising the North Carolina Community College Small Business Center Network (SBCN).

Programs 2017-2018

The following pages list alphabetically by discipline area the curriculum programs to be offered by Catawba Valley Community College during the 2017-2018 academic year. Programs in addition to those shown are being planned and may be implemented prior to or during the year. Catawba Valley Community College reserves the right to delete or change programs and courses as may be required; however, this general catalog represents the most accurate information available concerning the CVCC curriculum at the time of its publication.

How to use the Listings

Each curriculum offered for credit is listed along with course numbers, titles, and semester hours of credit required for graduation. A complete course syllabus for each credit course is on file in the offices of the respective department heads and is available for review by interested persons.

Program Sequences

Program Sequences are suggestions only. The College retains the right to alter Program Sequences as it deems necessary.

COLLEGE TRANSFER

Associate in Arts (A10100)

The Associate in Arts degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use.

The Comprehensive Articulation Agreement (CAA) and the Independent Comprehensive Articulation Agreement (ICAA) enables North Carolina community college graduates of two-year associate in arts programs who are admitted to constituent institutions of The University of North Carolina and to Signatory Institutions of North Carolina Independent Colleges and Universities to transfer with junior status.

Community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.0 on a 4.0 scale in order to transfer with a junior status. Courses may also transfer through bilateral agreements between institutions.

General Education Courses (Total of 45 SHC):

UNIVERSAL GENERAL EDUCATION TRANSFER COMPONENT (UGETC)

Students will select the first 31-32 hours of the 45-hour General Education Requirement from the classes listed below. All of these courses are classified by the Comprehensive Articulation Agreement as Universal General Education Transfer Component courses (UGETC), and they will transfer to UNC institutions for equivalency credit.

English Composition (6 SHC):

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3

Humanities/Fine Arts/Communications (9 SHC):

Select three (3) courses below from at least two (2) different disciplines:

Communications:

- COM 231 - Public Speaking Credit Hours: 3

Humanities/Fine Arts:

- ART 111 - Art Appreciation Credit Hours: 3
- ART 114 - Art History Survey I Credit Hours: 3
- ART 115 - Art History Survey II Credit Hours: 3
- ENG 231 - American Literature I Credit Hours: 3
- ENG 232 - American Literature II Credit Hours: 3
- ENG 241 - British Literature I Credit Hours: 3
- ENG 242 - British Literature II Credit Hours: 3
- MUS 110 - Music Appreciation Credit Hours: 3
- MUS 112 - Introduction to Jazz Credit Hours: 3
- PHI 215 - Philosophical Issues Credit Hours: 3
- PHI 240 - Introduction to Ethics Credit Hours: 3

Social/Behavioral Sciences (9 SHC):

Select three (3) courses below from at least two (2) different disciplines:

- ECO 251 - Prin of Microeconomics Credit Hours: 3
- ECO 252 - Prin of Macroeconomics Credit Hours: 3
- HIS 111 - World Civilizations I Credit Hours: 3
- HIS 112 - World Civilizations II Credit Hours: 3
- HIS 131 - American History I Credit Hours: 3
- HIS 132 - American History II Credit Hours: 3
- POL 120 - American Government Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3
- SOC 210 - Introduction to Sociology Credit Hours: 3

Mathematics (3/4 SHC):

Select one (1) course from the following:

- MAT 143 - Quantitative Literacy Credit Hours: 3
- MAT 152 - Statistical Methods I Credit Hours: 4
- MAT 171 - Precalculus Algebra Credit Hours: 4

Natural/Physical Sciences (4 SHC):

Select one (1) course or (1) course and lab that equal four (4) SHC from the following course(s):

- AST 151 - General Astronomy I Credit Hours: 3
AND
- AST 151A - General Astronomy I Lab Credit Hours: 1
- BIO 111 - General Biology I Credit Hours: 4
- CHM 151 - General Chemistry I Credit Hours: 4
- GEL 111 - Introductory Geology Credit Hours: 4
- PHY 110 - Conceptual Physics Credit Hours: 3
AND
- PHY 110A - Conceptual Physics Lab Credit Hours: 1

Additional General Education Hours (13/14 SHC):

An additional 13-14 SHC of courses should be selected from one of the following lists:

- from the UGETC courses the student did not select for the first 31-32 hours of General Education requirements above.
- from the list of courses classified as general education in the Comprehensive Articulation Agreement General Education Course Listing.

Total General Education Hours Required: 45

Other Required Hours (Total of 15 SHC):

- ACA 122 - College Transfer Success Credit Hours: 1

An additional 14 SHC of courses should be selected from the following lists:

- from the UGETC courses the student did not select for the first 31-32 hours of General Education requirements listed above
- from the list of courses above classified as General Education within the Comprehensive Articulation Agreement.
- from the list of pre-major/elective courses identified in the Comprehensive Articulation Agreement.

Total Semester Hours Credit (SHC) in Program: 60-61

One semester hour of credit may be included in a 61 SHC Associate in Arts program of study. The transfer of this hour is not guaranteed.

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

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, and mathematics. Please refer to the Course Description section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 143/MAT 152) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

OR

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2
- MAT 001P - Math Skills Support Credit Hours: 1

Associate in Engineering (A10500)

The Associate in Engineering (AE) degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use.

The degree plan includes required general education and prerequisite courses that are acceptable to all state funded Bachelor of Engineering programs. Students who follow the degree progression plan will meet the entrance requirements at all of the North Carolina public Bachelor of Science Engineering programs. Associate in Engineering graduates may then apply to any of these programs without taking additional and sometimes duplicative courses. *Admission to Engineering programs is highly competitive and admission is not guaranteed.*

To be eligible for the transfer of credits under the AE to the Bachelor of Science in Engineering Articulation Agreement, community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.5 on a 4.0 scale.

General Education Courses (Total of 42 SHC):**GENERAL EDUCATION**

The general education common course pathway includes study in areas of English composition; humanities and fine arts; social and behavioral sciences; natural sciences, and mathematics.

UNIVERSAL GENERAL EDUCATION TRANSFER COMPONENT (UGETC)
(Universal General Education Transfer Component (UGETC) courses will transfer for equivalency credit to all UNC institutions)
• *Exceptions (i.e. courses which are not classified as UGETC) are noted with an * to the left of the course.*

English Composition (6 SHC):

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3

Humanities/Fine Arts/Communications (6 SHC):

Students must select (1) course from **each category** for a total of 6 SHC:

Humanities:

- ENG 231 - American Literature I Credit Hours: 3
- ENG 232 - American Literature II Credit Hours: 3
- PHI 215 - Philosophical Issues Credit Hours: 3
- PHI 240 - Introduction to Ethics Credit Hours: 3
- REL 110 - World Religions Credit Hours: 3 *

*(*REL 110 will transfer for equivalency credit to the engineering programs at all five UNC institutions that offer undergraduate engineering programs. It may not transfer with equivalency to other programs.)*

Fine Arts and Communications:

Students **must take one (1)** of the following courses:

- COM 231 - Public Speaking Credit Hours: 3
- ART 111 - Art Appreciation Credit Hours: 3
- ART 114 - Art History Survey I Credit Hours: 3
- ART 115 - Art History Survey II Credit Hours: 3
- MUS 110 - Music Appreciation Credit Hours: 3
- MUS 112 - Introduction to Jazz Credit Hours: 3

Preferred Fine Arts and Communication Courses:

COM 231 and PHI 240 are preferred.

Social/Behavioral Sciences (6 SHC):

Students must take the following **required** course:

- ECO 251 - Prin of Microeconomics Credit Hours: 3

Students must select one (1) additional course from the following courses:

- HIS 111 - World Civilizations I Credit Hours: 3
- HIS 112 - World Civilizations II Credit Hours: 3
- HIS 131 - American History I Credit Hours: 3
- HIS 132 - American History II Credit Hours: 3
- POL 120 - American Government Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3
- SOC 210 - Introduction to Sociology Credit Hours: 3

Mathematics (12 SHC):

Calculus I is the lowest level math course that will be accepted by the engineering programs for transfer as a math credit. Students who are not calculus-ready will need to take additional math courses.

Students **must take the following three (3) courses:**

- MAT 271 - Calculus I Credit Hours: 4
- MAT 272 - Calculus II Credit Hours: 4
- * MAT 273 - Calculus III Credit Hours: 4

*Courses which are not classified as Universal General Education Transfer Component (UGETC) courses.

Natural Sciences (12 SHC):

Students **must take the following three (3) courses:**

- CHM 151 - General Chemistry I Credit Hours: 4
- PHY 251 - General Physics I Credit Hours: 4
- PHY 252 - General Physics II Credit Hours: 4

Total General Education Hours Required: 42

Other Required Hours (Total of 18 SHC):

Academic Transition:

Student must take the following required course:

- ACA 122 - College Transfer Success Credit Hours: 1
Students must complete ACA 122 within the first 30 hours of enrollment.

Pre-Major Elective:

Students must take the following **required** course:

- EGR 150 - Intro to Engineering Credit Hours: 2

Other General Education and Pre-Major Elective Hours (15 SHC)

Other General Education and Pre-major Elective Hours (15 SHC)

Students **must choose 15 SHC** from the following courses classified as pre-major, elective, or general education courses within the Comprehensive Articulation Agreement. *(Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.)*

Students should choose courses appropriate to the specific university and engineering major requirements.

- BIO 111 - General Biology I Credit Hours: 4
- CHM 152 - General Chemistry II Credit Hours: 4
- COM 110 - Introduction to Communication Credit Hours: 3
- CSC 134 - C++ Programming Credit Hours: 3
- CSC 151 - JAVA Programming Credit Hours: 3
- DFT 170 - Engineering Graphics Credit Hours: 3
- ECO 252 - Prin of Macroeconomics Credit Hours: 3
- EGR 210 - Intro to Elec/Com Eng Lab Credit Hours: 2
- EGR 212 - Logic System Design I Credit Hours: 3
- EGR 215 - Network Theory I Credit Hours: 3
- EGR 216 - Logic and Network Lab Credit Hours: 1
- EGR 220 - Engineering Statics Credit Hours: 3
- EGR 225 - Engineering Dynamics Credit Hours: 3
- EGR 228 - Intro to Solid Mechanics Credit Hours: 3
- HUM 110 - Technology and Society Credit Hours: 3
- MAT 280 - Linear Algebra Credit Hours: 3
- MAT 285 - Differential Equations Credit Hours: 3
- PED 110 - Fit and Well for Life Credit Hours: 2

Total Semester Hours Credit in the Associate in Engineering Program: 60/61**

**One semester hour of credit may be included in a 61 SHC associate in engineering program of study. The transfer of this hour is not guaranteed.

Note:

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

Associate in Fine Arts in Music (A10700)

The Associate in Fine Arts in Music degree shall be granted for a planned program of study consisting of a minimum of 60-61 semester hours of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use.

The Associate in Fine Arts in Music degree is designed for students who wish to work as professional musicians or transfer into baccalaureate degree programs to complete a Bachelor in Fine Arts (BFA) or a Bachelor of Arts (BA) with a major in Music. Courses are approved for transfer through the Comprehensive Articulation Agreement (CAA).

The Music Program at CVCC provides students with a number of opportunities to engage in music making and cultivate an appreciation of music. Creative performance options such as Chorus and Ensemble are available as electives, as well as history-based Music Appreciation and Introduction to Jazz courses. Music faculty enthusiastically bring their performing experiences into the classroom from a variety of disciplines, including vocal and choral performance, guitar, piano, and instrumental performance.

Universal General Education Transfer Component (22-23 SHC)

All Universal General Education Transfer Component (UGETC) courses will transfer for equivalency credit.

English Composition (6 SHC)

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3

Communications and Humanities/Fine Arts (3 SHC)

Communications/Humanities: Select one course from the following disciplines:

- ART 111 - Art Appreciation Credit Hours: 3
- COM 231 - Public Speaking Credit Hours: 3
- ENG 231 - American Literature I Credit Hours: 3
- ENG 232 - American Literature II Credit Hours: 3
- ENG 241 - British Literature I Credit Hours: 3
- ENG 242 - British Literature II Credit Hours: 3
- MUS 110 - Music Appreciation Credit Hours: 3
- MUS 112 - Introduction to Jazz Credit Hours: 3
- PHI 215 - Philosophical Issues Credit Hours: 3
- PHI 240 - Introduction to Ethics Credit Hours: 3

Social/Behavioral Sciences (6 SHC)

Select two courses from two different disciplines.

- ECO 251 - Prin of Microeconomics Credit Hours: 3
- ECO 252 - Prin of Macroeconomics Credit Hours: 3
- HIS 111 - World Civilizations I Credit Hours: 3
- HIS 112 - World Civilizations II Credit Hours: 3
- HIS 131 - American History I Credit Hours: 3
- HIS 132 - American History II Credit Hours: 3
- POL 120 - American Government Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3
- SOC 210 - Introduction to Sociology Credit Hours: 3

Mathematics (3-4 SHC)

Select one course from the following:

- MAT 143 - Quantitative Literacy Credit Hours: 3
- MAT 171 - Precalculus Algebra Credit Hours: 4

Natural Sciences (4 SHC)

Select 4 SHC from the following:

- AST 151 - General Astronomy I Credit Hours: 3
AND
- AST 151A - General Astronomy I Lab Credit Hours: 1
- BIO 111 - General Biology I Credit Hours: 4
- CHM 151 - General Chemistry I Credit Hours: 4
- GEL 111 - Introductory Geology Credit Hours: 4
- PHY 110 - Conceptual Physics Credit Hours: 3
AND
- PHY 110A - Conceptual Physics Lab Credit Hours: 1

Additional General Education (3 SHC)

Select one course from the following discipline areas: All courses listed below are classified as UGETC with the exception of foreign language.

- ART 111 - Art Appreciation Credit Hours: 3
- COM 231 - Public Speaking Credit Hours: 3
- ENG 231 - American Literature I Credit Hours: 3
- ENG 232 - American Literature II Credit Hours: 3
- ENG 241 - British Literature I Credit Hours: 3
- ENG 242 - British Literature II Credit Hours: 3
- MUS 110 - Music Appreciation Credit Hours: 3
- MUS 112 - Introduction to Jazz Credit Hours: 3
- PHI 215 - Philosophical Issues Credit Hours: 3
- PHI 240 - Introduction to Ethics Credit Hours: 3

Other Required Hours (34-36 SHC)**Academic Transition (1 SHC)**

The following course is required:

- ACA 122 - College Transfer Success Credit Hours: 1

Music Theory (8 SHC)

The following courses are required:

- MUS 121 - Music Theory I Credit Hours: 4
- MUS 122 - Music Theory II Credit Hours: 4

Applied Music (4 SHC)

The following courses are required:

- MUS 161 - Applied Music I Credit Hours: 2
- MUS 162 - Applied Music II Credit Hours: 2

Class Music (2 SHC)

The following courses are required:

- MUS 151 - Class Music I Credit Hours: 1
- MUS 152 - Class Music II Credit Hours: 1

Ensemble (2-4 SHC)

Select 2-4 SHC from the following courses:

- MUS 131 - Chorus I Credit Hours: 1
- MUS 132 - Chorus II Credit Hours: 1
- MUS 135 - Jazz Ensemble I Credit Hours: 1
- MUS 136 - Jazz Ensemble II Credit Hours: 1
- MUS 141 - Ensemble I Credit Hours: 1
- MUS 142 - Ensemble II Credit Hours: 1
- MUS 133 - Band I Credit Hours: 1
- MUS 134 - Band II Credit Hours: 1
- MUS 181 - Show Choir I Credit Hours: 4
- MUS 231 - Chorus III Credit Hours: 1
- MUS 232 - Chorus IV Credit Hours: 1
- MUS 233 - Band III Credit Hours: 1
- MUS 234 - Band IV Credit Hours: 1
- MUS 235 - Jazz Ensemble III Credit Hours: 1
- MUS 236 - Jazz Ensemble IV Credit Hours: 1
- MUS 241 - Ensemble III Credit Hours: 1
- MUS 242 - Ensemble IV Credit Hours: 1

Additional Other Required Hours (15-19 SHC)

An additional 15-19 SHC (depending on selection of math and ensemble courses) of courses should be selected from the one of the following lists:

- from the UGETC courses the student did not select for the first 22-23 hours of General Education requirements above
- from the list of courses classified as pre-major/elective courses identified in the Comprehensive Articulation Agreement.

Students should select these courses based on their intended major and transfer institution.

Total Semester Hours Credit (SHC) in Program: 60-61*

**One semester hour of credit may be included in a 61 SHC Associate in Fine Arts in Music program of study. The transfer of this hour is not guaranteed.*

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, and mathematics. Please refer to the Course Description section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 143/MAT 152) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

OR

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2
- MAT 001 - Math Skills Support Credit Hours: 1

Associate in Fine Arts in Theatre (A10800)

The Associate in Fine Arts in Theatre degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use.

The Associate in Fine Arts in Theatre program prepares students to move towards professional practice or the pursuit of a bachelor's degree at a four-year college or university. The program is grounded in the hands-on practice of both performance and technical theatre. Students may choose between an acting track and a technical theatre track. There is also the possibility of fitting both tracks into a two-year plan.

The A.F.A. in Theatre Program at CVCC offers courses such as play production, acting and stagecraft in the field of Theatre. Students study performance on stage and before the camera and develop skills for behind the scenes. Students have opportunities to perform on stage in a variety of performance venues. Students have opportunities to work with other actors, designers, directors and technicians in an intensive production processes and play production.

Universal General Education Transfer Component (31-32 SHC)

All Universal General Education Transfer Component (UGETC) courses will transfer for equivalency credit.

English Composition (6 SHC)

The following two English composition courses are required.

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3

Communications and Humanities/Fine Arts (9 SHC)

Select three courses from at least two different disciplines.

- ART 111 - Art Appreciation Credit Hours: 3
- ART 114 - Art History Survey I Credit Hours: 3
- ART 115 - Art History Survey II Credit Hours: 3
- COM 231 - Public Speaking Credit Hours: 3
- ENG 231 - American Literature I Credit Hours: 3
- ENG 232 - American Literature II Credit Hours: 3
- ENG 241 - British Literature I Credit Hours: 3
- ENG 242 - British Literature II Credit Hours: 3
- MUS 110 - Music Appreciation Credit Hours: 3
- MUS 112 - Introduction to Jazz Credit Hours: 3
- PHI 215 - Philosophical Issues Credit Hours: 3
- PHI 240 - Introduction to Ethics Credit Hours: 3

Social/Behavioral Sciences (9 SHC)

Select three courses from at least two different disciplines.

- ECO 251 - Prin of Microeconomics Credit Hours: 3
- ECO 252 - Prin of Macroeconomics Credit Hours: 3
- HIS 111 - World Civilizations I Credit Hours: 3
- HIS 112 - World Civilizations II Credit Hours: 3
- HIS 131 - American History I Credit Hours: 3
- HIS 132 - American History II Credit Hours: 3
- POL 120 - American Government Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3
- SOC 210 - Introduction to Sociology Credit Hours: 3

Mathematics (3-4 SHC)

Select one course from the following:

- MAT 143 - Quantitative Literacy Credit Hours: 3
- MAT 152 - Statistical Methods I Credit Hours: 4
- MAT 171 - Precalculus Algebra Credit Hours: 4
- MAT 271 - Calculus I Credit Hours: 4
- MAT 272 - Calculus II Credit Hours: 4

Natural Sciences (4 SHC)

Select 4 SHC from the following:

- AST 151 - General Astronomy I Credit Hours: 3
AND
- AST 151A - General Astronomy I Lab Credit Hours: 1
- BIO 111 - General Biology I Credit Hours: 4
- CHM 151 - General Chemistry I Credit Hours: 4
- GEL 111 - Introductory Geology Credit Hours: 4
- PHY 110 - Conceptual Physics Credit Hours: 3
AND
- PHY 110A - Conceptual Physics Lab Credit Hours: 1

Other Required Hours (16 SHC)

Theatre (15 SHC)

- DRA 211 - Theatre History I Credit Hours: 3
- DRA 212 - Theatre History II Credit Hours: 3

Choose one track:

Acting Track

- DRA 130 - Acting I Credit Hours: 3
- DRA 135 - Acting for the Camera I Credit Hours: 3
- DRA 170 - Play Production I Credit Hours: 3

Technical Track

- DRA 140 - Stagecraft I Credit Hours: 3
- DRA 141 - Stagecraft II Credit Hours: 3
- DRA 170 - Play Production I Credit Hours: 3

Academic Transition (1 SHC)

The following course is required:

- ACA 122 - College Transfer Success Credit Hours: 1

Additional General Education Hours (12-14 SHC):

An additional 12-14 SHC of courses should be selected from one of the following lists:

- from the UGETC courses the student did not select for the first 34 hours of General Education requirements listed above
- from the list of pre-major/elective courses identified in the Comprehensive Articulation Agreement.

Students should select these courses based on their intended major and transfer university.

Total Semester Hours Credit (SHC) in Program: 60-61*

**One semester hour of credit may be included in a 61 SHC Associate in Fine Arts in Theatre program of study. The transfer of this hour is not guaranteed.*

Associate in Fine Arts in Visual Arts (A10600)

The Associate in Fine Arts in Visual Arts degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use.

The Associate in Fine Arts in Visual Arts curriculum helps students strengthen and expand their creativity as well as their technical knowledge of the history and practice of creating art and design. The coursework and studio experiences build students' skills in concept development, visual observation, personal expression, critical thinking, and problem solving - skills essential for prospering in the professional practice of art and design. The program is grounded in the traditions of hands-on practice in drawing, painting, sculpting, ceramics, and printmaking while also connecting fully to the rich opportunities in digital and other emerging technologies.

The Visual Arts Program teaches students appreciation of the arts and visual culture while building the critical thinking skills necessary for becoming innovators and problem-solvers. Courses in art appreciation and art history – as well as studio classes in painting, drawing, printmaking, sculpture, and more – help students learn about the purpose and value of visual art and design as well as teaching skill and technique.

Universal General Education Transfer Component (30-31 SHC)

All Universal General Education Transfer Component (UGETC) courses will transfer for equivalency credit.

English Composition (6 SHC)

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3

Communications and Humanities/Fine Arts (6 SHC)

Select two courses from two different disciplines.

- ART 111 - Art Appreciation Credit Hours: 3
- COM 231 - Public Speaking Credit Hours: 3
- ENG 231 - American Literature I Credit Hours: 3
- ENG 232 - American Literature II Credit Hours: 3
- ENG 241 - British Literature I Credit Hours: 3
- ENG 242 - British Literature II Credit Hours: 3
- MUS 110 - Music Appreciation Credit Hours: 3
- MUS 112 - Introduction to Jazz Credit Hours: 3
- PHI 215 - Philosophical Issues Credit Hours: 3
- PHI 240 - Introduction to Ethics Credit Hours: 3

Social/Behavioral Sciences (6 SHC)

Select two courses from two different disciplines.

- ECO 251 - Prin of Microeconomics Credit Hours: 3
- ECO 252 - Prin of Macroeconomics Credit Hours: 3
- HIS 111 - World Civilizations I Credit Hours: 3
- HIS 112 - World Civilizations II Credit Hours: 3
- HIS 131 - American History I Credit Hours: 3
- HIS 132 - American History II Credit Hours: 3
- POL 120 - American Government Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3
- SOC 210 - Introduction to Sociology Credit Hours: 3

Mathematics (3-4 SHC)

Select one course from the following:

- MAT 143 - Quantitative Literacy Credit Hours: 3
- MAT 152 - Statistical Methods I Credit Hours: 4
- MAT 171 - Precalculus Algebra Credit Hours: 4
- MAT 271 - Calculus I Credit Hours: 4
- MAT 272 - Calculus II Credit Hours: 4

Natural Sciences (4 SHC)

Select 4 SHC from the following:

- AST 151 - General Astronomy I Credit Hours: 3
AND
- AST 151A - General Astronomy I Lab Credit Hours: 1
- BIO 111 - General Biology I Credit Hours: 4
- CHM 151 - General Chemistry I Credit Hours: 4
- GEL 111 - Introductory Geology Credit Hours: 4
- PHY 110 - Conceptual Physics Credit Hours: 3
AND
- PHY 110A - Conceptual Physics Lab Credit Hours: 1

Art (15 SHC)**Additional Universal General Education Transfer Courses: ART**

- ART 114 - Art History Survey I Credit Hours: 3
- ART 115 - Art History Survey II Credit Hours: 3

Other Required: ART

- ART 121 - Two-Dimensional Design Credit Hours: 3
- ART 122 - Three-Dimensional Design Credit Hours: 3
- ART 131 - Drawing I Credit Hours: 3

Other Required Hours (Total of 18-20 SHC)

An additional 18-20 SHC of courses should be selected from the following lists:

- from the UGETC courses the student did not select for the first 30-31 hours of General Education requirements listed above
- from the list of pre-major/elective courses identified in the Comprehensive Articulation Agreement.

Students should select these courses based on their intended major and transfer university.

Academic Transition (1 SHC)

- ACA 122 - College Transfer Success Credit Hours: 1

Total Semester Hours Credit (SHC) in Program: 60-61*

**One semester hour of credit may be included in a 61 SHC Associate in Fine Arts in Visual Arts program of study. The transfer of this hour is not guaranteed.*

Associate in General Education (A10300)

The Associate in General Education curriculum is designed for the academic enrichment of students who wish to broaden their education, with emphasis on personal interest, growth and development. Coursework includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition. Opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers will be provided. Through these skills, students will have a sound base for lifelong learning. Graduates are prepared for advancements within their field of interest and become better qualified for a wide range of employment opportunities.

*All courses in the program are college-level courses. Many of the courses are equivalent to college transfer courses; however, the program is not principally designed for college transfer.

General Education Core (15 SHC):

The general education core includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition. Within the core, colleges must include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers (SACS Criteria, 4.2.2).

English Composition (6 SHC):**Humanities/Fine Arts (3 SHC):**

Select courses from the following discipline areas: music, art, drama, dance, foreign languages, interdisciplinary humanities, literature, philosophy and religion.

Social/Behavioral Sciences (3 SHC):

Select courses from the following discipline areas: anthropology, economics, geography, history, political science, psychology, and sociology.

Natural Sciences/Mathematics (3 SHC):**Mathematics:**

Select courses from the following discipline areas: quantitative literacy, trigonometry, calculus, computer science, and statistics.

OR

Natural Sciences:

Select courses from the following discipline areas: astronomy, biology, chemistry, earth sciences, physics, and/or general science.

Other Required Hours (49-50 SHC):

Other required hours include additional general education and professional courses. A maximum of 7 SHC in health, physical education, college orientation, and/or study skills may be included as other required hours.

Total Semester Hours Credit (SHC) in Program: 64-65**Associate in General Education - Nursing (A1030N)**

The Associate in General Education (AGE)-Nursing is designed for students who wish to begin their study toward the Associate in Nursing degree and a Baccalaureate degree in Nursing as based on Blocks 1 through 3 of the Uniform Articulation Agreement between the University of North Carolina's Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) programs and the North Carolina Community College Associate Degree Nursing Programs which was approved by the State Board of Community Colleges and the UNC Board of Governors in February 2015. The AGE-Nursing shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of courses.

A student who completes an Associate in Applied Science (AAS) in Nursing with a GPA of at least 2.0 and a grade of C or better in the AGE-Nursing courses listed below and who holds a current unrestricted license as a Registered Nurse in North Carolina will have fulfilled the UNC institutions lower-division general education requirements as well as nursing program entry requirements. However, because nursing program admissions are competitive, no student is guaranteed admission to the program of his or her choice.

General Education Courses**English Composition**

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3

Humanities/Fine Arts

Select six (6) hours from the following:

- ART 111 - Art Appreciation Credit Hours: 3
- HUM 115 - Critical Thinking Credit Hours: 3
- MUS 110 - Music Appreciation Credit Hours: 3
- PHI 240 - Introduction to Ethics Credit Hours: 3

Select three (3) hours from the following:

- ENG 231 - American Literature I Credit Hours: 3
- ENG 232 - American Literature II Credit Hours: 3

Social/Behavioral Sciences

Students are required to take the following courses:

- PSY 150 - General Psychology Credit Hours: 3
- PSY 241 - Developmental Psych Credit Hours: 3
- SOC 210 - Introduction to Sociology Credit Hours: 3

Select three (3) hours from the following:

- SOC 213 - Sociology of the Family Credit Hours: 3
- SOC 220 - Social Problems Credit Hours: 3
- SOC 225 - Social Diversity Credit Hours: 3
- SOC 230 - Race and Ethnic Relations Credit Hours: 3

Select three (3) hours from the following:

- HIS 111 - World Civilizations I Credit Hours: 3
- HIS 112 - World Civilizations II Credit Hours: 3
- HIS 131 - American History I Credit Hours: 3
- HIS 132 - American History II Credit Hours: 3

Natural Sciences

- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- BIO 275 - Microbiology Credit Hours: 4
- CHM 131 - Introduction to Chemistry Credit Hours: 3
- CHM 131A - Introduction to Chemistry Lab Credit Hours: 1

Mathematics

The following course is required:

- MAT 152 - Statistical Methods I Credit Hours: 4

Select a minimum of three (3) hours from the following:

- MAT 143 - Quantitative Literacy Credit Hours: 3
- MAT 171 - Precalculus Algebra Credit Hours: 4

Other Required Hours

Academic Transition

- ACA 122 - College Transfer Success Credit Hours: 1

Social/Behavioral Science Elective

Select six (6) hours from the following:

- ECO 251 - Prin of Microeconomics Credit Hours: 3
- ECO 252 - Prin of Macroeconomics Credit Hours: 3
- POL 120 - American Government Credit Hours: 3

Total Credit Hours Required: 60/61

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, and mathematics. Please refer to the Course Description section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 143/MAT 152) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

OR

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2
- MAT 001P - Math Skills Support Credit Hours: 1

Associate in Science (A10400)

The Associate in Science degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic computer use.

The Comprehensive Articulation Agreement (CAA) and the Independent Comprehensive Articulation Agreement (ICAA) enables North Carolina community college graduates of two-year associate in science programs who are admitted to constituent institutions of The University of North Carolina and to Signatory Institutions of North Carolina Independent Colleges and Universities to transfer with junior status.

Community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.0 on a 4.0 scale in order to transfer with a junior status. Courses may also transfer through bilateral agreements between institutions.

General Education Courses (Total of 45 SHC):

Universal General Education Transfer Component (UGETC)

Students will select the first 34 hours of the 45-hour General Education Requirement from the classes listed below. All of these courses are classified by the Comprehensive Articulation Agreement as Universal General Education Transfer Component courses (UGETC), and they will transfer to UNC institutions for equivalency credit.

English Composition (6 SHC):

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3

Humanities/Fine Arts/Communications (6 SHC):

Select two (2) courses from the following list from two (2) different disciplines:

Communications:

- COM 231 - Public Speaking Credit Hours: 3

Humanities/Fine Arts:

- ART 111 - Art Appreciation Credit Hours: 3
- ART 114 - Art History Survey I Credit Hours: 3
- ART 115 - Art History Survey II Credit Hours: 3
- ENG 231 - American Literature I Credit Hours: 3
- ENG 232 - American Literature II Credit Hours: 3
- ENG 241 - British Literature I Credit Hours: 3
- ENG 242 - British Literature II Credit Hours: 3
- MUS 110 - Music Appreciation Credit Hours: 3
- MUS 112 - Introduction to Jazz Credit Hours: 3

Social/Behavioral Sciences (6 SHC):

Select two (2) courses from the following list from two (2) different disciplines:

- ECO 251 - Prin of Microeconomics Credit Hours: 3
- ECO 252 - Prin of Macroeconomics Credit Hours: 3
- HIS 111 - World Civilizations I Credit Hours: 3
- HIS 112 - World Civilizations II Credit Hours: 3
- HIS 131 - American History I Credit Hours: 3
- HIS 132 - American History II Credit Hours: 3
- POL 120 - American Government Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3
- SOC 210 - Introduction to Sociology Credit Hours: 3

Mathematics (8 SHC):

Select two (2) courses from the following list:

- MAT 171 - Precalculus Algebra Credit Hours: 4
- MAT 172 - Precalculus Trigonometry Credit Hours: 4
- MAT 263 - Brief Calculus Credit Hours: 4
- MAT 271 - Calculus I Credit Hours: 4
- MAT 272 - Calculus II Credit Hours: 4

Natural/Physical Sciences (8 SHC):

Select two (2) courses with labs to total eight (8) SHC from the following list:

- AST 151 - General Astronomy I Credit Hours: 3
AND
- AST 151A - General Astronomy I Lab Credit Hours: 1
- BIO 111 - General Biology I Credit Hours: 4
AND
- BIO 112 - General Biology II Credit Hours: 4
- CHM 151 - General Chemistry I Credit Hours: 4
AND
- CHM 152 - General Chemistry II Credit Hours: 4
- GEL 111 - Introductory Geology Credit Hours: 4
- PHY 110 - Conceptual Physics Credit Hours: 3
AND
- PHY 110A - Conceptual Physics Lab Credit Hours: 1
- PHY 151 - College Physics I Credit Hours: 4
AND
- PHY 152 - College Physics II Credit Hours: 4
- PHY 251 - General Physics I Credit Hours: 4
AND
- PHY 252 - General Physics II Credit Hours: 4

Additional General Education Hours (11 SHC):

An additional 11 SHC of courses should be selected from one of the following lists:

- from the UGETC courses the student did not select for the first 34 hours of General Education requirements above.
- from the list of courses classified as General Education within the Comprehensive Articulation Agreement.

Total General Education Hours Required: 45**Other Required Hours (Total of 15 SHC):**

- ACA 122 - College Transfer Success Credit Hours: 1

An additional 14 SHC of courses should be selected from the following lists:

- from the UGETC courses the student did not select for the first 34 hours of General Education requirements listed above
- from the list of courses above classified as General Education within the Comprehensive Articulation Agreement.
- from the list of pre-major/elective courses identified in the Comprehensive Articulation Agreement.

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, and mathematics. Please refer to the Course Description section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2
- MAT 001P - Math Skills Support Credit Hours: 1

Total Semester Hours Credit (SHC) in Program: 60-61

One semester hour of credit may be included in a 61 SHC Associate in Science program of study. The transfer of this hour is not guaranteed.

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

CAREER PROGRAMS

Career Program Electives

Humanities/Fine Arts and/or Social/Behavioral Science elective courses are specified in some programs. In order to assist students in planning their schedules, approved courses in these categories that are generally offered at CVCC are listed below. If a course is specified as a required course in the program sequence, it may not be chosen as an elective. All prerequisites and corequisites must be met for these courses. In programs where only one (1) Humanities/Fine Arts elective is required, introductory foreign language courses are not accepted as the elective. If you have additional questions about program electives please contact the Advising Center.

Humanities/Fine Arts Elective

ART 111 - Art Appreciation	Credit Hours: 3
ART 114 - Art History Survey I	Credit Hours: 3
ART 115 - Art History Survey II	Credit Hours: 3
ART 131 - Drawing I	Credit Hours: 3
ART 132 - Drawing II	Credit Hours: 3
ART 171 - Computer Art I	Credit Hours: 3
ART 240 - Painting I	Credit Hours: 3
ART 241 - Painting II	Credit Hours: 3
ART 271 - Computer Art II	Credit Hours: 3
ART 281 - Sculpture I	Credit Hours: 3
ART 283 - Ceramics I	Credit Hours: 3
DAN 110 - Dance Appreciation	Credit Hours: 3
DRA 111 - Theatre Appreciation	Credit Hours: 3
DRA 112 - Literature of the Theatre	Credit Hours: 3
DRA 115 - Theatre Criticism	Credit Hours: 3
DRA 120 - Voice for Performance	Credit Hours: 3
DRA 122 - Oral Interpretation	Credit Hours: 3
DRA 124 - Readers Theatre	Credit Hours: 3
DRA 126 - Storytelling	Credit Hours: 3
DRA 128 - Children's Theatre	Credit Hours: 3
DRA 130 - Acting I	Credit Hours: 3
DRA 211 - Theatre History I	Credit Hours: 3
DRA 212 - Theatre History II	Credit Hours: 3
ENG 125 - Creative Writing I	Credit Hours: 3
ENG 131 - Introduction to Literature	Credit Hours: 3
ENG 231 - American Literature I	Credit Hours: 3
ENG 232 - American Literature II	Credit Hours: 3
ENG 241 - British Literature I	Credit Hours: 3
ENG 242 - British Literature II	Credit Hours: 3
ENG 251 - Western World Literature I	Credit Hours: 3
ENG 252 - Western World Literature II	Credit Hours: 3
ENG 273 - African-American Literature	Credit Hours: 3
ENG 275 - Science Fiction	Credit Hours: 3
HUM 110 - Technology and Society	Credit Hours: 3
HUM 115 - Critical Thinking	Credit Hours: 3
HUM 120 - Cultural Studies	Credit Hours: 3
HUM 211 - Humanities I	Credit Hours: 3
HUM 220 - Human Values and Meaning	Credit Hours: 3
MUS 110 - Music Appreciation	Credit Hours: 3
MUS 111 - Fundamentals of Music	Credit Hours: 3
MUS 112 - Introduction to Jazz	Credit Hours: 3
MUS 113 - American Music	Credit Hours: 3
MUS 121 - Music Theory I	Credit Hours: 4
MUS 122 - Music Theory II	Credit Hours: 4
MUS 210 - History of Rock Music	Credit Hours: 3
MUS 211 - History of Country Music	Credit Hours: 3
MUS 213 - Opera and Musical Theatre	Credit Hours: 3
PHI 210 - History of Philosophy	Credit Hours: 3
PHI 215 - Philosophical Issues	Credit Hours: 3
PHI 240 - Introduction to Ethics	Credit Hours: 3
REL 110 - World Religions	Credit Hours: 3
REL 211 - Intro to Old Testament	Credit Hours: 3
REL 212 - Intro to New Testament	Credit Hours: 3
REL 221 - Religion in America	Credit Hours: 3
SPA 141 - Culture and Civilization	Credit Hours: 3

Social/Behavioral Science Elective

ANT 220 - Cultural Anthropology	Credit Hours: 3
ANT 221 - Comparative Cultures	Credit Hours: 3
ANT 230 - Physical Anthropology	Credit Hours: 3
ECO 251 - Prin of Microeconomics	Credit Hours: 3
ECO 252 - Prin of Macroeconomics	Credit Hours: 3
GEO 111 - World Regional Geography	Credit Hours: 3
GEO 112 - Cultural Geography	Credit Hours: 3
GEO 130 - General Physical Geography	Credit Hours: 3
HIS 111 - World Civilizations I	Credit Hours: 3
HIS 112 - World Civilizations II	Credit Hours: 3
HIS 121 - Western Civilization I	Credit Hours: 3
HIS 122 - Western Civilization II	Credit Hours: 3
HIS 131 - American History I	Credit Hours: 3
HIS 132 - American History II	Credit Hours: 3
HIS 151 - Hispanic Civilization	Credit Hours: 3
HIS 162 - Women and History	Credit Hours: 3
HIS 211 - Ancient History	Credit Hours: 3
HIS 221 - African-American History	Credit Hours: 3
HIS 226 - The Civil War	Credit Hours: 3
HIS 227 - Native American History	Credit Hours: 3
HIS 236 - North Carolina History	Credit Hours: 3
HIS 261 - East Asian History	Credit Hours: 3
POL 110 - Intro Political Science	Credit Hours: 3
POL 120 - American Government	Credit Hours: 3
POL 130 - State & Local Government	Credit Hours: 3
PSY 110 - Life Span Development	Credit Hours: 3
PSY 150 - General Psychology	Credit Hours: 3
PSY 211 - Psychology of Adjustment	Credit Hours: 3
PSY 237 - Social Psychology	Credit Hours: 3
PSY 239 - Psychology of Personality	Credit Hours: 3
PSY 241 - Developmental Psych	Credit Hours: 3
PSY 243 - Child Psychology	Credit Hours: 3
PSY 244 - Child Development I	Credit Hours: 3
PSY 245 - Child Development II	Credit Hours: 3
PSY 246 - Adolescent Psychology	Credit Hours: 3
PSY 263 - Educational Psychology	Credit Hours: 3
PSY 275 - Health Psychology	Credit Hours: 3
PSY 281 - Abnormal Psychology	Credit Hours: 3
SOC 210 - Introduction to Sociology	Credit Hours: 3
SOC 213 - Sociology of the Family	Credit Hours: 3
SOC 215 - Group Processes	Credit Hours: 3
SOC 220 - Social Problems	Credit Hours: 3
SOC 225 - Social Diversity	Credit Hours: 3
SOC 230 - Race and Ethnic Relations	Credit Hours: 3
SOC 234 - Sociology of Gender	Credit Hours: 3
SOC 242 - Sociology of Deviance	Credit Hours: 3
SOC 244 - Soc of Death & Dying	Credit Hours: 3
SOC 250 - Sociology of Religion	Credit Hours: 3
SOC 254 - Rural and Urban Sociology	Credit Hours: 3

Accounting, A.A.S. (A25100)

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: Day – four semesters full-time attendance. The Associate in Applied Science degree is awarded graduates of this curriculum.

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

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

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

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Electives Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3

Social/Behavioral Sciences:

- Electives Credit Hours: 3

Major Courses:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- ACC 121 - Prin of Managerial Accounting Credit Hours: 4
- ACC 129 - Individual Income Taxes Credit Hours: 3
- ACC 130 - Business Income Taxes Credit Hours: 3
- ACC 140 - Payroll Accounting Credit Hours: 2
- ACC 150 - Acct Software Appl Credit Hours: 2
- ACC 220 - Intermediate Accounting I Credit Hours: 4
- ACC 221 - Intermediate Acct II Credit Hours: 4
- ACC 225 - Cost Accounting Credit Hours: 3
- ACC 240 - Gov & Not-for-Profit Acct Credit Hours: 3
- BUS 110 - Introduction to Business Credit Hours: 3
- BUS 115 - Business Law I Credit Hours: 3
- BUS 116 - Business Law II Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3
- ECO 251 - Prin of Microeconomics Credit Hours: 3

Accounting Electives

- ACC 269 - Audit & Assurance Servcs Credit Hours: 3
- BUS 125 - Personal Finance Credit Hours: 3
- BUS 139 - Entrepreneurship I Credit Hours: 3
- BUS 217 - Employment Law and Regs Credit Hours: 3
- ETR 240 - Funding for Entrepreneurs Credit Hours: 3
- INT 110 - International Business Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1
- WBL XXX Work-Based Learning Credit Hours: 1-3

Total Credit Hours Required 68

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Description section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Students who elect to take (MAT 143) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:

Fall - 1st year:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- BUS 110 - Introduction to Business Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3
- Social/Behavioral Science Elective Credit Hours: 3

Total Hours: Class 14 | Lab 4 | Clin/Wk Exp 0 | Credit 16

Spring - 1st year:

- ACC 121 - Prin of Managerial Accounting Credit Hours: 4
- ACC 150 - Acct Software Appl Credit Hours: 2
- BUS 115 - Business Law I Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
(Preferred)
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Total Hours: Class 12 | Lab 6 | Clin/Wk Exp 0 | Credit 15

Summer - 1st year:

- BUS 116 - Business Law II Credit Hours: 3
- ECO 251 - Prin of Microeconomics Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/Wk Exp 0 | Credit 6

Fall - 2nd year:

- ACC 129 - Individual Income Taxes Credit Hours: 3
- ACC 220 - Intermediate Accounting I Credit Hours: 4
- ACC 225 - Cost Accounting Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3
- Humanities/Fine Arts Elective Course Credit: 3

Total Hours: Class 13 | Lab 6 | Clin/Wk Exp 0 | Credit 16

Spring - 2nd year:

- ACC 130 - Business Income Taxes Credit Hours: 3
- ACC 140 - Payroll Accounting Credit Hours: 2
- ACC 221 - Intermediate Acct II Credit Hours: 4
- ACC 240 - Gov & Not-for-Profit Acct Credit Hours: 3
- Accounting Elective Course Credits: 3

Total Hours: Class 12 | Lab 6 | Clin/Wk Exp 0 | Credit 15

Grand Total Hours: Class 57 | Lab 22 | Clin/Wk Exp 0 | Credit 68

Accounting Diploma (D25100)

General Education Courses

- ENG 111 - Writing and Inquiry Credit Hours: 3
- Social/Behavioral Sciences Elective Credit Hours: 3

Major Courses:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- ACC 121 - Prin of Managerial Accounting Credit Hours: 4
- ACC 129 - Individual Income Taxes Credit Hours: 3
- ACC 140 - Payroll Accounting Credit Hours: 2
- ACC 150 - Acct Software Appl Credit Hours: 2
- BUS 110 - Introduction to Business Credit Hours: 3
- BUS 115 - Business Law I Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3
- ECO 251 - Prin of Microeconomics Credit Hours: 3

Total Credit Hours Required: 36

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Description section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Suggested Sequence:

Fall – 1st year:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- BUS 110 - Introduction to Business Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3

Total Hours: Class 11 | Lab 4 | Clin/Wk Exp 0 | Credit 13

Spring – 1st year:

- ACC 121 - Prin of Managerial Accounting Credit Hours: 4
- ACC 140 - Payroll Accounting Credit Hours: 2
- ACC 150 - Acct Software Appl Credit Hours: 2
- BUS 115 - Business Law I Credit Hours: 3

Total Hours: Class 8 | Lab 6 | Clin/Wk Exp 0 | Credit 11

Fall – 2nd year:

- ACC 129 - Individual Income Taxes Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3
- ECO 251 - Prin of Microeconomics Credit Hours: 3

Total Hours: Class 7 | Lab 4 | Clin/Wk Exp 0 | Credit 9

Spring – 2nd year:

- Social/Behavioral Science Elective Credit Hours: 3

Total Hours: Class 3 | Lab 0 | Clin/Wk Exp 0 | Credit 3

Grand Total Hours: Class 29 | Lab 14 | Clin/Wk Exp 0 | Credit 36

Accounting General Certificate (C2510001)

Major Courses:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- ACC 121 - Prin of Managerial Accounting Credit Hours: 4
- ACC 129 - Individual Income Taxes Credit Hours: 3
- ACC 140 - Payroll Accounting Credit Hours: 2

Total Credit Hours Required: 13

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Description section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Suggested Program Sequence Day:

Fall – 1st year:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- ACC 129 - Individual Income Taxes Credit Hours: 3

Total Hours: Class 5 | Lab 4 | Clin/Wk Exp 0 | Credit 7

Spring – 1st year:

- ACC 121 - Prin of Managerial Accounting Credit Hours: 4
- ACC 140 - Payroll Accounting Credit Hours: 2

Total Hours: Class 4 | Lab 4 | Clin/Wk Exp 0 | Credit 6

Grand Total Hours: Class 9 | Lab 8 | Clin/Wk Exp 0 | Credit 13

Accounting Computerized Certificate (C2510003)**Major Courses:**

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- ACC 150 - Acct Software Appl Credit Hours: 2
- CIS 110 - Introduction to Computers Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3

Total Credit Hours Required: 12**Developmental Course Requirements:**

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Description section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Suggested Program Sequence Day:**Fall – 1st year:**

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- CIS 110 - Introduction to Computers Credit Hours: 3

Total Hours: Class 5 | Lab 4 | Clin/Wk Exp 0 | Credit 7**Spring – 1st year:**

- ACC 150 - Acct Software Appl Credit Hours: 2
- CTS 130 - Spreadsheet Credit Hours: 3

Total Hours: Class 3 | Lab 4 | Clin/Wk Exp 0 | Credit 5**Grand Total Hours: Class 8 | Lab 8 | Clin/Wk Exp 0 | Credit 12****Suggested Program Sequence Day:****Fall – 1st year:**

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- ACC 129 - Individual Income Taxes Credit Hours: 3

Total Hours: Class 5 | Lab 4 | Clin/Wk Exp 0 | Credit 7**Spring – 1st year:**

- ACC 130 - Business Income Taxes Credit Hours: 3
- ACC 140 - Payroll Accounting Credit Hours: 2

Total Hours: Class 3 | Lab 4 | Clin/Wk Exp 0 | Credit 5**Grand Total Hours: Class 8 | Lab 8 | Clin/Wk Exp 0 | Credit 12****Accounting Taxation Certificate (C2510004)****Major Courses:**

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- ACC 129 - Individual Income Taxes Credit Hours: 3
- ACC 130 - Business Income Taxes Credit Hours: 3
- ACC 140 - Payroll Accounting Credit Hours: 2

Total Credit Hours Required: 12**Developmental Course Requirements:**

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Description section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Advertising and Graphic Design, A.A.S. (A30100)

Courses required to meet graduation requirements in this curriculum are offered during day hours only. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science degree is awarded graduates of this curriculum.

The Advertising and Graphic Design curriculum is designed to provide students with knowledge and skills necessary for employment in the graphic design profession which emphasizes design, advertising, illustration, and digital and multimedia preparation of printed and electronic promotional materials.

Students will be trained in the development of concept and design for promotional materials such as newspaper and magazine advertisements, posters, folders, letterheads, corporate symbols, brochures, booklets, preparation of art for printing, lettering and typography, photography, and electronic media.

Graduates should qualify for employment opportunities with graphic design studios, advertising agencies, printing companies, department stores, a wide variety of manufacturing industries, newspapers, and businesses with in-house graphics operations.

Advertising and Graphic Design students learn to think critically and creatively about strategies and concepts in the design process. The Advertising and Graphic Design program uses industry standard research methods, and student projects foster unique and solid student solutions. Students are exposed to in-depth studies on the elements and principles of design, and receive training in typography, drawing fundamentals, illustration, and the ideation process. Using analog and digital lab environments, students are exposed to the latest technology trends for web design, UX Design, and multimedia design.

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 152 - Statistical Methods I Credit Hours: 4
OR
- MAT 171 - Precalculus Algebra Credit Hours: 4

Social/Behavioral Sciences:

- Elective Credit Hours: 3

Major Courses:

- BUS 110 - Introduction to Business Credit Hours: 3
- GRA 151 - Computer Graphics I Credit Hours: 2
- GRA 152 - Computer Graphics II Credit Hours: 2
- GRA 153 - Computer Graphics III Credit Hours: 2
- GRA 255 - Image Manipulation I Credit Hours: 2
- GRD 110 - Typography I Credit Hours: 3
- GRD 121 - Drawing Fundamentals I Credit Hours: 2
- GRD 131 - Illustration I Credit Hours: 2
- GRD 141 - Graphic Design I Credit Hours: 4

Major Courses (continued):

- GRD 142 - Graphic Design II Credit Hours: 4
- GRD 180 - Interactive Design Credit Hours: 3
- GRD 241 - Graphic Design III Credit Hours: 4
- GRD 249 - Advanced Design Practice Credit Hours: 4
- GRD 265 - Digital Print Production Credit Hours: 3
- GRD 280 - Portfolio Design Credit Hours: 4
- MKT 120 - Principles of Marketing Credit Hours: 3

Program Elective

Students are required to take 3 SHC from the following:

- ART 131 - Drawing I Credit Hours: 3
- ART 231 - Printmaking I Credit Hours: 3
- ART 264 - Digital Photography I Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
- GRA 121 - Graphic Arts I Credit Hours: 4
- GRA 256 - Image Manipulation II Credit Hours: 2
- GRD 271 - Multimedia Design I Credit Hours: 2
- MKT 220 - Advertising and Sales Promotion Credit Hours: 3
- MKT 221 - Consumer Behavior Credit Hours: 3
- PHO 110 - Fund of Photography Credit Hours: 5
- PRN 155 - Screen Printing I Credit Hours: 2
- PRN 156 - Screen Printing II Credit Hours: 2
- WBL XXX Work-Based Learning Credit Hours: 1-3

Other Required Courses:

- ACA 111 - College Student Success Credit Hours: 1

Work-Based Learning Option: Qualified students may elect to take up to 3 credit hours of Work-Based Learning in place of 3 hours Program electives.

Total Credit Hours Required 66/67

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 143/MAT 152) from above:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Students who elect to take (MAT 171) from above:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2

Students who elect to take (MAT 171) from above:

- MAT 001P - Math Skills Support Credit Hours: 1

Suggested Program Sequence Day:**Fall – 1st year:**

- ACA 111 - College Student Success Credit Hours: 1
- GRA 151 - Computer Graphics I Credit Hours: 2
- GRD 141 - Graphic Design I Credit Hours: 4
- GRD 110 - Typography I Credit Hours: 3
- GRD 121 - Drawing Fundamentals I Credit Hours: 2
- ENG 111 - Writing and Inquiry Credit Hours: 3

Total Hours: Class 10 | Lab 12 | Clin/Wk Exp 0 | Credit 15

Spring – 1st year:

- GRA 152 - Computer Graphics II Credit Hours: 2
- GRD 142 - Graphic Design II Credit Hours: 4
- GRA 255 - Image Manipulation I Credit Hours: 2
- GRD 131 - Illustration I Credit Hours: 2
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Total Hours: Class 8 | Lab 13 | Clin/Wk Exp 0 | Credit 13

Summer – 1st year:

- BUS 110 - Introduction to Business Credit Hours: 3
- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 152 - Statistical Methods I Credit Hours: 4
OR
- MAT 171 - Precalculus Algebra Credit Hours: 4
- Social/Behavioral Sciences Elective Credit Hours: 3

Total Hours: Class 8/9 | Lab 2 | Clin/Wk Exp 0 | Credit 9/10

Fall – 2nd year:

- GRA 153 - Computer Graphics III Credit Hours: 2
- GRD 180 - Interactive Design Credit Hours: 3
- GRD 241 - Graphic Design III Credit Hours: 4
- GRD 265 - Digital Print Production Credit Hours: 3
- MKT 120 - Principles of Marketing Credit Hours: 3

Total Hours: Class 8 | Lab 15 | Clin/Wk Exp 0 | Credit 15

Spring – 2nd year:

- GRD 249 - Advanced Design Practice Credit Hours: 4
- GRD 280 - Portfolio Design Credit Hours: 4
- Humanities/Fine Arts Elective Credit Hours: 3
- Program/Work-Based Learning Elective Credit Hours: 3

Total Hours: Class 6 | Lab 13 | Clin/Wk Exp 0 | Credit 14

Grand Total Hours: Class 40/41 | Lab 55 | Clin/Wk Exp 0 | Credit 66/67

Air Conditioning, Heating, and Refrigeration Technology Diploma (D35100)

Courses required to meet graduation requirements in this curriculum are offered during daytime and evening hours. Minimum time for completion: Daytime – two semesters full-time attendance; Evening – four semesters of part-time attendance. The Diploma is awarded graduates of this curriculum.

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

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

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

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3

Major Courses:

- AHR 110 - Intro to Refrigeration Credit Hours: 5
- AHR 111 - HVACR Electricity Credit Hours: 3
- AHR 112 - Heating Technology Credit Hours: 4
- AHR 113 - Comfort Cooling Credit Hours: 4
- AHR 114 - Heat Pump Technology Credit Hours: 4
- AHR 130 - HVAC Controls Credit Hours: 3
- AHR 151 - HVAC Duct Systems I Credit Hours: 2
- AHR 160 - Refrigerant Certification Credit Hours: 1
- AHR 180 - HVACR Customer Relations Credit Hours: 1
- AHR 211 - Residential System Design Credit Hours: 3
- AHR 213 - HVACR Building Code Credit Hours: 2
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 39

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from above:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Students who elect to take (MAT 121) from above:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

Suggested Program Sequence:**Fall – 1st year:**

- AHR 110 - Intro to Refrigeration Credit Hours: 5 (1st 8 weeks)
- AHR 111 - HVACR Electricity Credit Hours: 3 (1st 8 weeks)
- AHR 112 - Heating Technology Credit Hours: 4 (2nd 8 weeks)
- AHR 151 - HVAC Duct Systems I Credit Hours: 2
- AHR 180 - HVACR Customer Relations Credit Hours: 1 (2nd 8 weeks)
- AHR 211 - Residential System Design Credit Hours: 3 (2nd 8 weeks)

Total Hours: Class 10 | Lab 17 | Clin/Wk Exp 0 | Credit 18

Spring – 1st year:

- AHR 113 - Comfort Cooling Credit Hours: 4 (2nd 8 weeks)
- AHR 114 - Heat Pump Technology Credit Hours: 4 (1st 8 weeks)
- AHR 130 - HVAC Controls Credit Hours: 3 (2nd 8 weeks)
- AHR 160 - Refrigerant Certification Credit Hours: 1 (2nd 8 weeks)

Total Hours: Class 8 | Lab 12 | Clin/Wk Exp 0 | Credit 14

Summer – 1st year:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Hours: Class 6 | Lab 2 | Clin/Wk Exp 0 | Credit 7

Grand Total Hours: Class 24 | Lab 31 | Clin/Wk Exp 0 | Credit 39

Evening Courses Are Offered On Demand

(See Your HVAC Advisor)

Air Conditioning, Heating, and Refrigeration Technology Certificate (C35100)**Major Courses:**

- AHR 110 - Intro to Refrigeration Credit Hours: 5
- AHR 111 - HVACR Electricity Credit Hours: 3
- AHR 112 - Heating Technology Credit Hours: 4
- AHR 114 - Heat Pump Technology Credit Hours: 4
- AHR 160 - Refrigerant Certification Credit Hours: 1

Total Credit Hours Required: 17**Developmental Course Requirements:**

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Suggested Program Sequence Day:**Fall – 1st Year:**

- AHR 110 - Intro to Refrigeration Credit Hours: 5
- AHR 111 - HVACR Electricity Credit Hours: 3
- AHR 112 - Heating Technology Credit Hours: 4
- AHR 114 - Heat Pump Technology Credit Hours: 4
- AHR 160 - Refrigerant Certification Credit Hours: 1

Total Hours: Class 9 | Lab 16 | Clin/Wk Exp 0 | Credit 17

Grand Total Hours: Class 9 | Lab 16 | Clin/Wk Exp 0 | Credit 17

Associate Degree Nursing, A.A.S. (A45110)

Courses required to meet graduation requirements in this curriculum are offered during day hours only. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science degree is awarded to graduates of this curriculum.

The Associate Degree Nursing curriculum provides knowledge, skills, and strategies to integrate safety and quality into nursing care, to practice in a dynamic environment, and to meet individual needs which impact health, quality of life, and achievement of potential.

Coursework includes and builds upon the domains of healthcare, nursing practice, and the holistic individual. Content emphasizes the nurse as a member of the interdisciplinary team providing safe, individualized care while employing evidence-based practice, quality improvement, and informatics.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN). Employment opportunities are vast within the global health care system and may include positions within acute, chronic, extended, industrial, and community health care facilities.

General Education Courses**English/Communications:**

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Nursing HFA Elective Credit Hours: 3

Natural Sciences/Mathematics:

- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- BIO 169 - Anatomy and Physiology II Credit Hours: 4

Social/Behavioral Sciences:

- PSY 150 - General Psychology Credit Hours: 3

Major Courses:

- BIO 275 - Microbiology Credit Hours: 4
- NUR 111 - Intro to Health Concepts Credit Hours: 8
- NUR 112 - Health-Illness Concepts Credit Hours: 5
- NUR 113 - Family Health Concepts Credit Hours: 5
- NUR 114 - Holistic Health Concepts Credit Hours: 5
- NUR 211 - Health Care Concepts Credit Hours: 5
- NUR 212 - Health System Concepts Credit Hours: 5
- NUR 213 - Complex Health Concepts Credit Hours: 10
- PSY 241 - Developmental Psych Credit Hours: 3

Total Credit Hours Required: 70**Developmental Course Requirements:**

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Nursing Humanities/Fine Arts Elective

Students must select one course from the following:

- ART 111 - Art Appreciation Credit Hours: 3
- ART 114 - Art History Survey I Credit Hours: 3
- ART 115 - Art History Survey II Credit Hours: 3
- HUM 115 - Critical Thinking Credit Hours: 3
- MUS 110 - Music Appreciation Credit Hours: 3
- MUS 112 - Introduction to Jazz Credit Hours: 3
- PHI 215 - Philosophical Issues Credit Hours: 3
- PHI 240 - Introduction to Ethics Credit Hours: 3

Note:

The courses listed in CVCC's Associate Degree Nursing Program have a Uniform Articulation Agreement between the University of North Carolina Registered Nurse to Bachelor of Science in Nursing (RN to BSN) Programs. Students who transfer to senior institutions outside of the University of North Carolina system should contact each college directly for transfer information.

Suggested Program Sequence Day:**Fall – 1st year:**

- NUR 111 - Intro to Health Concepts Credit Hours: 8
- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- PSY 150 - General Psychology Credit Hours: 3

Total Hours: Class 10 | Lab 9 | Clin/Wk Exp 6 | Credit 15

Spring – 1st year:

- NUR 112 - Health-Illness Concepts Credit Hours: 5
- NUR 114 - Holistic Health Concepts Credit Hours: 5
- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- PSY 241 - Developmental Psych Credit Hours: 3

Total Hours: Class 12 | Lab 3 | Clin/Wk Exp 12 | Credit 17

Summer – 1st year:

- NUR 212 - Health System Concepts Credit Hours: 5
- ENG 111 - Writing and Inquiry Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/Wk Exp 6 | Credit 8

Fall – 2nd year:

- NUR 113 - Family Health Concepts Credit Hours: 5
- NUR 211 - Health Care Concepts Credit Hours: 5
- BIO 275 - Microbiology Credit Hours: 4
- Nursing Humanities/Fine Arts Elective Credit Hours: 3

Total Hours: Class 12 | Lab 3 | Clin/Wk Exp 12 | Credit 17

Spring – 2nd year:

- NUR 213 - Complex Health Concepts Credit Hours: 10
- *ENG 112 - Writing/Research in the Disciplines Credit Hours: 3 (Preferred)
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

(*Students considering transfer to a four-year university should take ENG 112)

Total Hours: Class 7 | Lab 3 | Clin/Wk Exp 15 | Credit 13

Grand Total Hours: Class 47 | Lab 18 | Clin/Wk Exp 51 | Credit 70

Suggested Program Sequence Evening:**Spring – 1st year:**

- NUR 111AB - Intro to Health Concepts Credit Hours: 4
- BIO 168 - Anatomy and Physiology I Credit Hours: 4

Total Hours: Class 5 | Lab 6 | Clin/Wk Exp 3 | Credit 8

Summer – 1st year:

- NUR 111BB - Intro to Health Concepts Credit Hours: 4
- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- PSY 150 - General Psychology Credit Hours: 3

Total Hours: Class 8 | Lab 6 | Clin/Wk Exp 3 | Credit 11

Fall – 1st year:

- NUR 112 - Health-Illness Concepts Credit Hours: 5
- NUR 114 - Holistic Health Concepts Credit Hours: 5
- PSY 241 - Developmental Psych Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 12 | Credit 13

Spring – 2nd year:

- NUR 211 - Health Care Concepts Credit Hours: 5
- NUR 212 - Health System Concepts Credit Hours: 5
- ENG 111 - Writing and Inquiry Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 12 | Credit 13

Summer – 2nd year:

- NUR 113 - Family Health Concepts Credit Hours: 5
- BIO 275 - Microbiology Credit Hours: 4

Total Hours: Class 6 | Lab 3 | Clin/Wk Exp 6 | Credit 9

Fall – 2nd year:

- NUR 213AB - Complex Health Concepts Credit Hours: 5
- Nursing Humanities/Fine Arts Elective Credit Hours: 3

Total Hours: Class 5 | Lab 2 | Clin/Wk Exp 7 | Credit 8

Spring – 3rd year:

- NUR 213BB - Complex Health Concepts Credit Hours: 5
- * ENG 112 - Writing/Research in the Disciplines Credit Hours: 3 (Preferred)
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

(*Students considering transfer to a four-year university should take ENG 112)
Total Hours: Class 5 | Lab 1 | Clin/Wk Exp 8 | Credit 8

Grand Total Hours: Class 47 | Lab 18 | Clin/Wk Exp 51 |
Credit 70

Associate Degree Nursing, Hickory RIBN Articulation Agreement, A.A.S. (A45110RB)

Associate Degree Nursing and Lenoir-Rhyne University
Bachelor of Science Degree with a Major in Nursing

This articulation agreement between Catawba Valley Community College (CVCC) and Lenoir-Rhyne University (LRU) allows graduates of Hickory RIBN to earn both an Associate degree in Nursing from CVCC and a Bachelor of Science degree with a Major in Nursing from LRU in 10 semesters through dual admission and continued enrollment. Courses required to meet graduation requirements in this curriculum are offered during day hours only. Minimum time for completion of the A.A.S. portion is seven semesters full-time attendance. During this time students will be dually enrolled in CVCC and LRU. The Associate in Applied Science degree is awarded to graduates of this curriculum, after which students will be eligible to take the NCLEX. The remaining three semesters will be taken at Lenoir-Rhyne University for a total of 10 program semesters.

Non-nursing courses completed at CVCC for the first three years will, as designated, satisfy course requirements towards the Bachelor of Science degree. All courses designated by (LRU/BS) shown in the CVCC sequence will be completed at LRU for the first three years of Hickory RIBN. A total of 128 semester hours are required for students to complete their bachelors of science degree with a major in Nursing.

All courses designated by (BS) will be taken on CVCC's campus, and will be credited toward the Bachelor of Science degree. Nursing students will enroll in NUR 420, Transition to Professional Nursing (3 SHC), during the eighth semester. Successful completion of this course results in the awarding of a 39 semester hour block of credit.

General Education Courses**English/Communications:**

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3

Humanities/Fine Arts:

- Nursing HFA Elective Credit Hours: 3

Natural Sciences/Mathematics:

- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- BIO 169 - Anatomy and Physiology II Credit Hours: 4

Social/Behavioral Sciences:

- PSY 150 - General Psychology Credit Hours: 3

Major Courses:

- BIO 275 - Microbiology Credit Hours: 4
- NUR 111 - Intro to Health Concepts Credit Hours: 8
- NUR 112 - Health-Illness Concepts Credit Hours: 5
- NUR 113 - Family Health Concepts Credit Hours: 5
- NUR 114 - Holistic Health Concepts Credit Hours: 5
- NUR 211 - Health Care Concepts Credit Hours: 5
- NUR 212 - Health System Concepts Credit Hours: 5
- NUR 213 - Complex Health Concepts Credit Hours: 10
- PSY 241 - Developmental Psych Credit Hours: 3

Total Credit Hours Required: 70**Developmental Course Requirements:**

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Nursing Humanities/Fine Arts Elective

Students must select one course from the following:

- ART 111 - Art Appreciation Credit Hours: 3
- ART 114 - Art History Survey I Credit Hours: 3
- ART 115 - Art History Survey II Credit Hours: 3
- HUM 115 - Critical Thinking Credit Hours: 3
- MUS 110 - Music Appreciation Credit Hours: 3
- MUS 112 - Introduction to Jazz Credit Hours: 3

Note:

The courses listed in CVCC's Associate Degree Nursing Program have a Uniform Articulation Agreement between the University of North Carolina Registered Nurse to Bachelor of Science in Nursing (RN to BSN) Programs. Students who transfer to senior institutions outside of the University of North Carolina system should contact each college directly for transfer information.

Associate Degree Nursing, Hickory RIBN Articulation Agreement, A.A.S. (A45110RB)

Suggested Program Sequence Day:**Fall - 1st year:**

- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- CHM 131 - Introduction to Chemistry Credit Hours: 3 (BS)
- CHM 131A - Introduction to Chemistry Lab Credit Hours: 1 (BS)
- ENG 111 - Writing and Inquiry Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3
- FYE 191 First Year Experience I (LRU/BS)

Total Hours: Class 12 | Lab 6 | Clin/Wk Exp 0 | Credit 17

Spring - 1st year:

- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- CIS 110 - Introduction to Computers Credit Hours: 3 **(BS)**
OR
- CIS 111 - Basic PC Literacy Credit Hours: 2 **(BS)** and
- PED (1 Hour Activity) **(BS)**
- MAT 152 - Statistical Methods I Credit Hours: 4 **(BS)**
- PSY 241 - Developmental Psych Credit Hours: 3
- FYE 192 First Year Experience II **(LRU/BS)** Credit Hours: 3

Total Hours: Class 11/12 | Lab 7/9 | Clin/Wk Exp 0 | Credit 17

Fall - 2nd year:

- NUR 111 - Intro to Health Concepts Credit Hours: 8
- BIO 275 - Microbiology Credit Hours: 4
- Foreign Language **(LRU/BS)**

Total Hours: Class 7 | Lab 9 | Clin/Wk Exp 6 | Credit 15

Spring - 2nd year:

- NUR 112 - Health-Illness Concepts Credit Hours: 5
- NUR 114 - Holistic Health Concepts Credit Hours: 5
- Foreign Language **(LRU/BS)**
- Humanities (HIS 111, HIS 112, HUM, REL, PHI) **(BS)** Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 12 | Credit 16

Summer - 2nd year:

- NUR 212 - Health System Concepts Credit Hours: 5
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/Wk Exp 6 | Credit 8

Fall - 3rd year:

- NUR 113 - Family Health Concepts Credit Hours: 5
- NUR 211 - Health Care Concepts Credit Hours: 5
- HES 287 Personal Health Credit Hours: 3 **(LRU/BS)**
OR
- HES 288 Nutrition Credit Hours: 3 **(LRU/BS)**
- Fine Arts Elective (ART 111, ART 114, ART 115, MUS 110, MUS 112) Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 12 | Credit 16

Spring 3rd year:

- NUR 213 - Complex Health Concepts Credit Hours: 10
- COM 231 - Public Speaking Credit Hours: 3 **(BS)**
- REL 100 Christian Faith Credit Hours: 3 **(LRU/BS)**

Total Hours: Class 7 | Lab 3 | Clin/Wk Exp 15 | Credit 16

Grand Total Hours: Class 61/62 | Lab 25/27 | Clin/Wk Exp 51 | Credit 105

• Semester Hour Totals include courses taken at Lenoir Rhyne

Note: The following courses will be taken at Lenoir-Rhyne University upon completion of the A.A.S. at CVCC.

Fall 4th year:

- NUR 400 - Health Assessment of Individuals & Populations Credit Hours: 3 **(LRU)**
- NUR 420 - Transition to Professional Practice Credit Hours: 3 **(LRU)**
- NAT 388 - Environmental Science-Level II Credit Hours: 3 **(LRU)**
- SOC 100 - Intro to Sociology Credit Hours: 3 **(LRU)**

Total: Credit 12

Spring 4th year:

- NUR 455G Health Promotion with Populations Credit Hours: 3 **(LRU)**
- NUR 460 Concepts of Leadership in Nursing: Theory and Application Credit Hours: 4 **(LRU)**
- HSB 388 Level II Credit Hours: 3 **(LRU)**
OR
- HUM 388 Level II Credit Hours: 3 **(LRU)**
- NUR Elective-Select Topics Credit Hours: 2 **(LRU)**

Total: Credit 12

Summer 4th year:

- NUR 435 - Concepts of Evidence-Based Practice Credit Hours: 3 **(LRU)**
- NUR 470G - Trends in Professional Nursing In a Global Society Credit Hours: 3

Total: Credit 6

Automotive Systems Technology, A.A.S. (A60160)

Courses required to meet graduation requirements are offered during day and evening hours. Minimum time for completion: Day - five semesters full-time attendance: Evening - will vary according to semester load of student (usually seven to nine semesters). The Associate of Applied Science degree or Diploma is awarded to graduates in this curriculum.

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, transmission/transaxles, and sustainable transportation, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

Automotive Systems Technology: A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles. Includes instruction in brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drive trains, and heating and air condition systems.

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3

Social/Behavioral Sciences:

- Elective Credit Hours: 3

Major Courses:

- AUT 113 - Automotive Servicing I Credit Hours: 2
- AUT 116 - Engine Repair Credit Hours: 3
- AUT 116A - Engine Repair Lab Credit Hours: 1
- AUT 141 - Suspension & Steering Sys Credit Hours: 3
- AUT 141A - Suspension & Steering Lab Credit Hours: 1
- AUT 151 - Brake Systems Credit Hours: 3
- AUT 151A - Brake Systems Lab Credit Hours: 1
- AUT 163 - Adv Auto Electricity Credit Hours: 3
- AUT 163A - Adv Auto Electricity Lab Credit Hours: 1
- AUT 181 - Engine Performance 1 Credit Hours: 3
- AUT 181A - Engine Performance 1 Lab Credit Hours: 1

Major Courses (continued):

- AUT 183 - Engine Performance 2 Credit Hours: 4
- AUT 212 - Auto Shop Management Credit Hours: 3
- AUT 221 - Auto Transm/Transaxles Credit Hours: 3
- AUT 221A - Auto Transm/Transax Lab Credit Hours: 1
- AUT 231 - Man Trans/Axles/Drtrains Credit Hours: 3
- AUT 231A - Man Trans/Ax/Drtrains Lab Credit Hours: 1
- AUT 281 - Adv Engine Performance Credit Hours: 3
- TRN 110 - Intro to Transport Tech Credit Hours: 2
- TRN 120 - Basic Transp Electricity Credit Hours: 5
- TRN 140 - Transp Climate Control Credit Hours: 2
- TRN 140A - Transp Climate Cont Lab Credit Hours: 2
- TRN 170 - Pc Skills for Transp Credit Hours: 2
- WBL 110 - World of Work Credit Hours: 1
- WLD 112 - Basic Welding Processes Credit Hours: 2

Work-Based Learning Option:

Qualified students may elect to take up to 7 credit hours of Work-Based Learning in place of AUT 113, AUT 116A, AUT 141A, AUT 151A, AUT 163A, AUT 181A, AUT 221A, or AUT 231A.

Total Credit Hours Required: 71

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from above:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Students who elect to take (MAT 143) from above:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:

Fall – 1st year:

- AUT 116 - Engine Repair Credit Hours: 3 (1st 8 weeks)
- AUT 116A - Engine Repair Lab Credit Hours: 1 (1st 8 weeks)
- AUT 181 - Engine Performance 1 Credit Hours: 3 (2nd 8 weeks)
- AUT 181A - Engine Performance 1 Lab Credit Hours: 1 (2nd 8 weeks)
- TRN 110 - Intro to Transport Tech Credit Hours: 2
- TRN 120 - Basic Transp Electricity Credit Hours: 5
- TRN 170 - Pc Skills for Transp Credit Hours: 2

Total Hours: Class 10 | Lab 19 | Clin/Wk Exp 0 | Credit 17

Spring – 1st year:

- AUT 113 - Automotive Servicing I Credit Hours: 2
- AUT 183 - Engine Performance 2 Credit Hours: 4 (1st 8 weeks)
- AUT 151 - Brake Systems Credit Hours: 3 (2nd 8 weeks)
- AUT 151A - Brake Systems Lab Credit Hours: 1 (2nd 8 weeks)
- AUT 163 - Adv Auto Electricity Credit Hours: 3
- AUT 163A - Adv Auto Electricity Lab Credit Hours: 1
- WBL 110 - World of Work Credit Hours: 1

Total Hours: Class 7 | Lab 24 | Clin/Wk Exp 0 | Credit 15

Summer – 1st year:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3

Total Hours: Class 5 | Lab 2 | Clin/Wk Exp 0 | Credit 6

Fall – 2nd year:

- AUT 141 - Suspension & Steering Sys Credit Hours: 3 (2nd 8 Weeks)
- AUT 141A - Suspension & Steering Lab Credit Hours: 1 (2nd 8 Weeks)
- AUT 212 - Auto Shop Management Credit Hours: 3
- AUT 281 - Adv Engine Performance Credit Hours: 3
- TRN 140 - Transp Climate Control Credit Hours: 2 (1st 8 weeks)
- TRN 140A - Transp Climate Cont Lab Credit Hours: 2 (1st 8 weeks)

Total Hours: Class 9 | Lab 12 | Clin/Wk Exp 0 | Credit 14

Spring – 2nd year:

- AUT 221 - Auto Transm/Transaxles Credit Hours: 3 (2nd 8 Weeks)
- AUT 221A - Auto Transm/Transax Lab Credit Hours: 1 (2nd 8 Weeks)
- AUT 231 - Man Trans/Axles/Dtrains Credit Hours: 3 (1st 8 weeks)
- AUT 231A - Man Trans/Ax/Dtrains Lab Credit Hours: 1 (1st 8 weeks)
- WLD 112 - Basic Welding Processes Credit Hours: 2
- Social/Behavioral Science Elective Credit Hours: 3

Total Hours: Class 8 | Lab 15 | Clin/Wk Exp 0 | Credit 13

Summer – 2nd year:

- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
- Humanities/Fine Art Elective Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/Wk Exp 0 | Credit 6

Grand Total Hours: Class 45 | Lab 72 | Clin/Wk Exp 0 | Credit 71

Automotive Systems Technology Diploma (D60160)

General Education Courses**English/Communications:**

- ENG 111 - Writing and Inquiry Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3

Major Courses:

- AUT 116 - Engine Repair Credit Hours: 3
- AUT 116A - Engine Repair Lab Credit Hours: 1
- AUT 141 - Suspension & Steering Sys Credit Hours: 3
- AUT 141A - Suspension & Steering Lab Credit Hours: 1
- AUT 151 - Brake Systems Credit Hours: 3
- AUT 151A - Brake Systems Lab Credit Hours: 1
- AUT 163 - Adv Auto Electricity Credit Hours: 3
- AUT 181 - Engine Performance 1 Credit Hours: 3
- AUT 181A - Engine Performance 1 Lab Credit Hours: 1
- AUT 183 - Engine Performance 2 Credit Hours: 4
- AUT 221 - Auto Transm/Transaxles Credit Hours: 3
- AUT 221A - Auto Transm/Transax Lab Credit Hours: 1
- AUT 231 - Man Trans/Axles/Dtrains Credit Hours: 3
- AUT 231A - Man Trans/Ax/Dtrains Lab Credit Hours: 1
- TRN 110 - Intro to Transport Tech Credit Hours: 2
- TRN 120 - Basic Transp Electricity Credit Hours: 5
- TRN 140 - Transp Climate Control Credit Hours: 2
- TRN 140A - Transp Climate Cont Lab Credit Hours: 2

Automotive Systems Technology Work-Based Learning Option:

Qualified students may elect to take up to 4 credit hours of Work-Based Learning in place of AUT 116A, AUT 141A, AUT 151A, AUT 181A, AUT 221A, or AUT 231A.

Total Credit Hours Required: 48**Developmental Course Requirements:**

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from above:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Students who elect to take (MAT 143) from above:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence Evening:**Fall – 1st year:**

- AUT 116 - Engine Repair Credit Hours: 3 (2nd 8 Wks)
- AUT 116A - Engine Repair Lab Credit Hours: 1 (2nd 8 Wks)
- TRN 110 - Intro to Transport Tech Credit Hours: 2
- TRN 120 - Basic Transp Electricity Credit Hours: 5 (1st 8 Wks)

Total Hours: Class 7 | Lab 11 | Clin/Wk Exp 0 | Credit 11

Spring – 1st year:

- AUT 151 - Brake Systems Credit Hours: 3 (2nd 8 Wks)
- AUT 151A - Brake Systems Lab Credit Hours: 1 (2nd 8 Wks)
- AUT 163 - Adv Auto Electricity Credit Hours: 3 (1st 8 Wks)
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3

Total Hours: Class 6 | Lab 11 | Clin/Wk Exp 0 | Credit 10

Fall – 2nd year:

- AUT 181 - Engine Performance 1 Credit Hours: 3 (1st 8 Wks)
- AUT 181A - Engine Performance 1 Lab Credit Hours: 1 (1st 8 Wks)
- AUT 231 - Man Trans/Axles/Dtrains Credit Hours: 3 (2nd 8 Wks)
- AUT 231A - Man Trans/Ax/Dtrains Lab Credit Hours: 1 (2nd 8 Wks)

Total Hours: Class 4 | Lab 12 | Clin/Wk Exp 0 | Credit 8

Spring – 2nd year:

- AUT 221 - Auto Transm/Transaxles Credit Hours: 3 (1st 8 Wks)
- AUT 221A - Auto Transm/Transax Lab Credit Hours: 1 (1st 8 Wks)
- AUT 183 - Engine Performance 2 Credit Hours: 4 (2nd 8 Wks)
- ENG 111 - Writing and Inquiry Credit Hours: 3

Total Hours: Class 7 | Lab 12 | Clin/Wk Exp 0 | Credit 11

Fall – 3rd year:

- AUT 141 - Suspension & Steering Sys Credit Hours: 3 (2nd 8 Wks)
- AUT 141A - Suspension & Steering Lab Credit Hours: 1 (2nd 8 Wks)
- TRN 140 - Transp Climate Control Credit Hours: 2 (1st 8 Wks)
- TRN 140A - Transp Climate Cont Lab Credit Hours: 2 (1st 8 Wks)

Total Hours: Class 4 | Lab 10 | Clin/Wk Exp 0 | Credit 8

Grand Total Hours: Class 28 | Lab 56 | Clin/Wk Exp 0 | Credit 48

Automotive Systems Technology, Under Car Services Concentration Certificate (C60160)

Major Courses:

- AUT 141 - Suspension & Steering Sys Credit Hours: 3
- AUT 141A - Suspension & Steering Lab Credit Hours: 1
- AUT 151 - Brake Systems Credit Hours: 3
- AUT 151A - Brake Systems Lab Credit Hours: 1
- TRN 110 - Intro to Transport Tech Credit Hours: 2
- TRN 120 - Basic Transp Electricity Credit Hours: 5

Total Credit Hours Required: 15

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Students who elect to take (MAT 110) from above:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Suggested Sequence:**Fall – 1st Year:**

- TRN 110 - Intro to Transport Tech Credit Hours: 2
- TRN 120 - Basic Transp Electricity Credit Hours: 5
- AUT 141 - Suspension & Steering Sys Credit Hours: 3
- AUT 141A - Suspension & Steering Lab Credit Hours: 1

Total Hours: Class 7 | Lab 11 | Clin/Wk Exp 0 | Credit 11

Spring – 1st Year:

- AUT 151 - Brake Systems Credit Hours: 3
- AUT 151A - Brake Systems Lab Credit Hours: 1

Total Hours: Class 2 | Lab 6 | Clin/Wk Exp 0 | Credit 4

Grand Total Hours: Class 9 | Lab 17 | Clin/Wk Exp 0 | Credit 15

Work-Based Learning Option:

Qualified students may elect to take up to 2 credit hours of work-based learning in place of AUT 141A, AUT 151A.

Basic Law Enforcement Training Certificate (C55120)

This course is designed, developed, monitored, and constantly updated by the Criminal Justice Training and Standards Division of the North Carolina Department of Justice. Minimum time for completion is approximately six months. Classes meet during evening hours and on Saturdays.

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

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

Students must successfully complete and pass all units of study mandated by the North Carolina Criminal Justice Education and Training Standards Commission and the North Carolina Sheriffs' Education and Training Standards Commission to receive a certificate.

The application cycle for the Fall class begins in March and ends in June, with the application cycle for the Spring class beginning in August and ending in November. Contact the Law Enforcement Training Director at 828-327-7000, extension 4448 for further information on the application process and to receive an application packet.

Major Courses:

- CJC 100 - Basic Law Enforcement Training Credit Hours: 19

Total Credit Hours Required: 19

Business Administration, A.A.S. (A25120)

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: Day – four semesters full-time attendance; Evening – will vary according to semester load of student (usually eight to nine semesters). The Associate in Applied Science degree is awarded graduates of this curriculum.

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

Course work includes business concepts such as accounting, business law, economics, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making. Through these skills, students will have a sound business education base for lifelong learning.

Graduates are prepared for employment opportunities in government agencies, financial institutions, and large to small business or industry.

General Education Courses**English/Communications:**

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Electives Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3

Social/Behavioral Sciences:

- Electives Credit Hours: 3

Major Courses:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- ACC 121 - Prin of Managerial Accounting Credit Hours: 4
- BUS 110 - Introduction to Business Credit Hours: 3
- BUS 115 - Business Law I Credit Hours: 3
- BUS 116 - Business Law II Credit Hours: 3
- BUS 137 - Principles of Management Credit Hours: 3
- BUS 240 - Business Ethics Credit Hours: 3
- BUS 285 - Business Management Issues Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
- ECO 251 - Prin of Microeconomics Credit Hours: 3
- ECO 252 - Prin of Macroeconomics Credit Hours: 3
- MKT 120 - Principles of Marketing Credit Hours: 3

Business/WBL Electives:

Students are required to take 12 SHC from the following:

- BUS 125 - Personal Finance Credit Hours: 3
- BUS 139 - Entrepreneurship I Credit Hours: 3
- BUS 153 - Human Resource Management Credit Hours: 3
- BUS 217 - Employment Law and Regs Credit Hours: 3
- BUS 230 - Small Business Management Credit Hours: 3
- BUS 245 - Entrepreneurship II Credit Hours: 3
- BUS 253 - Leadership and Mgt Skills Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3
- ETR 215 - Law for Entrepreneurs Credit Hours: 3
- ETR 220 - Innovation and Creativity Credit Hours: 3
- ETR 230 - Entrepreneur Marketing Credit Hours: 3
- ETR 240 - Funding for Entrepreneurs Credit Hours: 3
- INT 110 - International Business Credit Hours: 3
- MKT 123 - Fundamentals of Selling Credit Hours: 3
- MKT 220 - Advertising and Sales Promotion Credit Hours: 3
- MKT 221 - Consumer Behavior Credit Hours: 3
- MKT 223 - Customer Service Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1
- WBL XXX Work-Based Learning Credit Hours: 1-6

Work-Based Learning Option:

Qualified students may elect to take up to 6 credit hours of Work-Based Learning in place of 6 hours Business electives.

Total Credit Hours Required: 65

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Students who elect to take (MAT 143) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:**Fall – 1st year:**

- BUS 110 - Introduction to Business Credit Hours: 3
- BUS 137 - Principles of Management Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3

Total Hours: Class 13 | Lab 4 | Clin/Wk Exp 0 | Credit 15

Spring – 1st year:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- BUS 115 - Business Law I Credit Hours: 3
- BUS 240 - Business Ethics Credit Hours: 3
- MKT 120 - Principles of Marketing Credit Hours: 3
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3

Total Hours: Class 15 | Lab 2 | Clin/Wk Exp 0 | Credit 16

Fall – 2nd year:

- ACC 121 - Prin of Managerial Accounting Credit Hours: 4
- BUS 116 - Business Law II Credit Hours: 3
- ECO 251 - Prin of Microeconomics Credit Hours: 3
- Business - Elective Credit Hours: 3
- Business - Elective Credit Hours: 3
- Social/Behavioral Science - Elective Credit Hours: 3

Total Hours: Class 18 | Lab 2 | Clin/Wk Exp 0 | Credit 19

Spring – 2nd year:

- BUS 285 - Business Management Issues Credit Hours: 3
- ECO 252 - Prin of Macroeconomics Credit Hours: 3
- Business - Elective Credit Hours: 3
- Business - Elective Credit Hours: 3
- Humanities/Fine Arts - Elective Credit Hours: 3

Total Hours: Class 14 | Lab 2 | Clin/Wk Exp 0 | Credit 15

Grand Total Hours: Class 60 | Lab 10 | Clin/Wk Exp 0 | Credit 65

Work-Based Learning Option:

Qualified students may elect to take up to 6 credit hours of Work-Based Learning in place of 6 hours Business electives.

Total Credit Hours Required: 65

Evening Courses Offered On Demand

(See Your Business Advisor)

Business Administration Diploma (D25120)

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3

Social/Behavioral Sciences:

- Electives Credit Hours: 3

Major Courses:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- BUS 110 - Introduction to Business Credit Hours: 3
- BUS 115 - Business Law I Credit Hours: 3
- BUS 137 - Principles of Management Credit Hours: 3
- BUS 240 - Business Ethics Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
- ECO 251 - Prin of Microeconomics Credit Hours: 3
- MKT 120 - Principles of Marketing Credit Hours: 3

Business Elective Courses

Students must select six (6) hours from the following:

- ACC 121 - Prin of Managerial Accounting Credit Hours: 4
- BUS 116 - Business Law II Credit Hours: 3
- BUS 125 - Personal Finance Credit Hours: 3
- BUS 153 - Human Resource Management Credit Hours: 3
- BUS 217 - Employment Law and Regs Credit Hours: 3
- BUS 230 - Small Business Management Credit Hours: 3
- BUS 253 - Leadership and Mgt Skills Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3
- BUS 139 - Entrepreneurship I Credit Hours: 3
- BUS 245 - Entrepreneurship II Credit Hours: 3
- ECO 252 - Prin of Macroeconomics Credit Hours: 3
- ETR 220 - Innovation and Creativity Credit Hours: 3
- ETR 240 - Funding for Entrepreneurs Credit Hours: 3
- INT 110 - International Business Credit Hours: 3
- MKT 123 - Fundamentals of Selling Credit Hours: 3
- MKT 220 - Advertising and Sales Promotion Credit Hours: 3
- MKT 223 - Customer Service Credit Hours: 3
- WBL XXX Work-Based Learning Credit Hours: 1-4

Work-Based Learning Option:

Qualified students may elect to take up to 4 credit hours of Work-Based Learning in place of 4 credit hours of business electives.

Total Credit Hours Required: 37

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Suggested Program Sequence:

Fall – 1st year:

- BUS 110 - Introduction to Business Credit Hours: 3
- BUS 137 - Principles of Management Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3

Total Hours: Class 11 | Lab 2 | Clin/Wk Exp 0 | Credit 12

Spring – 1st year:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- BUS 115 - Business Law I Credit Hours: 3
- BUS 240 - Business Ethics Credit Hours: 3
- MKT 120 - Principles of Marketing Credit Hours: 3

Total Hours: Class 12 | Lab 2 | Clin/Wk Exp 0 | Credit 13

Fall – 2nd year:

- ECO 251 - Prin of Microeconomics Credit Hours: 3
- Business - Elective Credit Hours: 3
- Business - Elective Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Spring – 2nd year:

- Social/Behavioral Science - Elective Credit Hours: 3

Total Hours: Class 3 | Lab 0 | Clin/Wk Exp 0 | Credit 3

Grand Total Hours: Class 35 | Lab 4 | Clin/Wk Exp 0 | Credit 37

Business Administration General Certificate (C2512001)

Major Courses:

- BUS 110 - Introduction to Business Credit Hours: 3
- BUS 115 - Business Law I Credit Hours: 3
- BUS 137 - Principles of Management Credit Hours: 3
- MKT 120 - Principles of Marketing Credit Hours: 3

Total Credit Hours Required: 12

Suggested Program Sequence:

Fall – 1st year:

- BUS 110 - Introduction to Business Credit Hours: 3
- MKT 120 - Principles of Marketing Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/Wk Exp 0 | Credit 6

Spring – 1st year:

- BUS 115 - Business Law I Credit Hours: 3
- BUS 137 - Principles of Management Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/Wk Exp 0 | Credit 6

Grand Total Hours: Class 12 | Lab 0 | Clin/Wk Exp 0 | Credit 12

Business Administration Advanced Certificate #1 (C2512002)

Major Courses:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- BUS 110 - Introduction to Business Credit Hours: 3
- BUS 115 - Business Law I Credit Hours: 3
- BUS 137 - Principles of Management Credit Hours: 3

Total Credit Hours Required: 13

Suggested Program Sequence:

Fall – 1st year:

- BUS 110 - Introduction to Business Credit Hours: 3
- BUS 137 - Principles of Management Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/Wk Exp 0 | Credit 6

Spring – 1st year:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- BUS 115 - Business Law I Credit Hours: 3

Total Hours: Class 6 | Lab 2 | Clin/Wk Exp 0 | Credit 7

Grand Total Hours: Class 12 | Lab 2 | Clin/Wk Exp 0 | Credit 13

Business Administration Advanced Certificate #2 (C2512003)

Major Courses:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- ACC 121 - Prin of Managerial Accounting Credit Hours: 4
- CIS 110 - Introduction to Computers Credit Hours: 3
- ECO 251 - Prin of Microeconomics Credit Hours: 3
- ECO 252 - Prin of Macroeconomics Credit Hours: 3

Total Credit Hours Required: 17

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Suggested Program Sequence:

Fall – 1st year:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- CIS 110 - Introduction to Computers Credit Hours: 3
- ECO 251 - Prin of Microeconomics Credit Hours: 3

Total Hours: Class 8 | Lab 4 | Clin/Wk Exp 0 | Credit 10

Spring – 1st year:

- ACC 121 - Prin of Managerial Accounting Credit Hours: 4
- ECO 252 - Prin of Macroeconomics Credit Hours: 3

Total Hours: Class 6 | Lab 2 | Clin/Wk Exp 0 | Credit 7

Grand Total Hours: Class 14 | Lab 6 | Clin/Wk Exp 0 | Credit 17

Business Administration Marketing Certificate (C2512005)

Major Courses:

- BUS 110 - Introduction to Business Credit Hours: 3
- MKT 120 - Principles of Marketing Credit Hours: 3
- MKT 123 - Fundamentals of Selling Credit Hours: 3
- MKT 220 - Advertising and Sales Promotion Credit Hours: 3

Total Credit Hours Required: 12

Suggested Program Sequence:

Fall – 1st year:

- BUS 110 - Introduction to Business Credit Hours: 3
- MKT 123 - Fundamentals of Selling Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/Wk Exp 0 | Credit 6

Spring – 1st year:

- MKT 120 - Principles of Marketing Credit Hours: 3
- MKT 220 - Advertising and Sales Promotion Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/Wk Exp 0 | Credit 6

Grand Total Hours: Class 12 | Lab 0 | Clin/Wk Exp 0 | Credit 12

Business Administration International Business Certificate (C2512006)

Major Courses:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- BUS 115 - Business Law I Credit Hours: 3
- BUS 137 - Principles of Management Credit Hours: 3
- INT 110 - International Business Credit Hours: 3
- ECO 252 - Prin of Macroeconomics Credit Hours: 3

Total Credit Hours Required: 16

Suggested Program Sequence:

Fall – 1st year:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- INT 110 - International Business Credit Hours: 3

Total Hours: Class 6 | Lab 2 | Clin/Wk Exp 0 | Credit 7

Spring – 1st year:

- BUS 115 - Business Law I Credit Hours: 3
- BUS 137 - Principles of Management Credit Hours: 3
- ECO 252 - Prin of Macroeconomics Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Grand Total Hours: Class 15 | Lab 2 | Clin/Wk Exp 0 | Credit 16

Computer Engineering Technology, A.A.S. (A40160)

Courses required to meet graduation requirements in this curriculum are offered during daytime hours. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science degree is awarded graduates of this curriculum.

These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Computer Engineering Technology: A course of study that prepares the students to use basic engineering principles and technical skills for installing, servicing, and maintaining computers, peripherals, networks, and microprocessor and computer controlled equipment. Includes instruction in mathematics, computer electronics and programming, prototype development and testing, systems installation and testing, solid state and microminiature circuitry, peripheral equipment, and report preparation. Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring knowledge of electronic and computer systems. Graduates may also qualify for certification in electronics, computers, or networks.

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- COM 231 - Public Speaking Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3

Humanities/Fine Arts:

- Electives Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 171 - Precalculus Algebra Credit Hours: 4
OR
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3

Social/Behavioral Sciences:

- Electives Credit Hours: 3

Major Courses:

- CTS 120 - Hardware/Software Support Credit Hours: 3
OR
- CET 111 - Computer Upgrade/Repair I Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
- CSC 134 - C++ Programming Credit Hours: 3
- DFT 117 - Technical Drafting Credit Hours: 2
- DFT 151 - CAD I Credit Hours: 3
- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- ELC 131 - Circuit Analysis I Credit Hours: 4
- ELC 133 - Circuit Analysis II Credit Hours: 4

Major Courses (continued):

- ELC 229 - Applications Project Credit Hours: 2
- ELN 131 - Analog Electronics I Credit Hours: 4
- ELN 132 - Analog Electronics II Credit Hours: 4
- ELN 133 - Digital Electronics Credit Hours: 4
- ELN 232 - Intro to Microprocessors Credit Hours: 4
- MAT 172 - Precalculus Trigonometry Credit Hours: 4
OR
- MAT 122 - Algebra/Trigonometry II Credit Hours: 3
- MEC 180 - Engineering Materials Credit Hours: 3
- PHY 151 - College Physics I Credit Hours: 4
OR
- PHY 131 - Physics-Mechanics Credit Hours: 4

CET Electives:

Students are required to take a minimum of 6 SHC from the following:

- CET 211 - Computer Upgrade/Repair II Credit Hours: 3
- CSC 139 - Visual BASIC Programming Credit Hours: 3
- CSC 151 - JAVA Programming Credit Hours: 3
- CTI 110 - Web, Pgm, & Db Foundation Credit Hours: 3
- DBA 110 - Database Concepts Credit Hours: 3
- NET 125 - Introduction to Networks Credit Hours: 3
- NET 126 - Routing Basics Credit Hours: 3
- NET 175 - Wireless Technology Credit Hours: 3
- NOS 120 - Linux/UNIX Single User Credit Hours: 3
- NOS 130 - Windows Single User Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3
- WEB 140 - Web Development Tools Credit Hours: 3

Math/Physics Note:

Students planning to transfer to a 4-year college should consider taking MAT 171, MAT 172, and PHY 151. Please see your Computer Engineering Technology advisor.

Work-Based Learning Option:

Qualified students may elect to take up to 2 credit hours of WBL XXX in place of ELC 229.

Total Credit Hours Required: 73/75

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 121) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2
- MAT 001P - Math Skills Support Credit Hours: 1

Suggested Program Sequence:**Fall – 1st year:**

- DFT 151 - CAD I Credit Hours: 3
- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- ELC 131 - Circuit Analysis I Credit Hours: 4
- MAT 171 - Precalculus Algebra Credit Hours: 4
OR
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
- MEC 180 - Engineering Materials Credit Hours: 3

Total Hours: Class 10/11 | Lab 13 | Clin/Wk Exp 0 | Credit 15/16

Spring – 1st year:

- CIS 110 - Introduction to Computers Credit Hours: 3
- DFT 117 - Technical Drafting Credit Hours: 2
- ELC 133 - Circuit Analysis II Credit Hours: 4
- ELN 131 - Analog Electronics I Credit Hours: 4
- MAT 172 - Precalculus Trigonometry Credit Hours: 4
OR
- MAT 122 - Algebra/Trigonometry II Credit Hours: 3

Total Hours: Class 11/12 | Lab 12 | Clin/Wk Exp 0 | Credit 16/17

Summer – 1st year:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- Humanities/Fine Arts - Elective Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/Wk Exp 0 | Credit 6

Fall – 2nd year:

- COM 231 - Public Speaking Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
- CSC 134 - C++ Programming Credit Hours: 3
- CTS 120 - Hardware/Software Support Credit Hours: 3
OR
- CET 111 - Computer Upgrade/Repair I Credit Hours: 3
- ELN 132 - Analog Electronics II Credit Hours: 4
- ELN 133 - Digital Electronics Credit Hours: 4

Total Hours: Class 13 | Lab 12 | Clin/Wk Exp 0 | Credit 17

Spring – 2nd year:

- CET Electives Credit Hours: 6
- ELC 229 - Applications Project Credit Hours: 2
- ELN 232 - Intro to Microprocessors Credit Hours: 4
- PHY 151 - College Physics I Credit Hours: 4
OR
- PHY 131 - Physics-Mechanics Credit Hours: 4
- Social/Behavioral Science - Elective Credit Hours: 3

Total Hours: Class 14 | Lab 14 | Clin/Wk Exp 0 | Credit 19

Grand Total Hours: Class 54/56 | Lab 51 | Clin/Wk Exp 0 | Credit 73/75

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 121) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2
- MAT 001P - Math Skills Support Credit Hours: 1

Work-Based Learning Option:

Qualified students may elect to take up to 2 credit hours of WBL XXX in place of ELC 229.

Evening--Courses Are Offered On Demand

Please contact your Computer Engineering Technology advisor.

Computer Engineering Technology Certificate (C40160)

- DFT 151 - CAD I Credit Hours: 3
- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- ELC 131 - Circuit Analysis I Credit Hours: 4
- MAT 171 - Precalculus Algebra Credit Hours: 4
OR
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
- MEC 180 - Engineering Materials Credit Hours: 3

Total Hours: Class 10/11 | Lab 13 | Clin/Wk Exp 0 | Credit 15/16

Computer-Integrated Machining Technology, A.A.S. (A50210)

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. The Associate in Applied Science degree is awarded graduates of this curriculum.

The Computer-Integrated Machining curriculum prepares students with the analytical, creative and innovative skills necessary to take a production idea from an initial concept through design, development and production, resulting in a finished product.

Coursework may include manual machining, computer applications, engineering design, computer-aided drafting (CAD), computer-aided machining (CAM), blueprint interpretation, advanced computerized numeric control (CNC) equipment, basic and advanced machining operations, precision measurement and high-speed multi-axis machining.

Graduates should qualify for employment as machining technicians in high-tech manufacturing, rapid prototyping and rapid-manufacturing industries, specialty machine shops, fabrication industries, and high-tech or emerging industries such as aerospace, aviation, medical, and renewable energy, and to sit for machining certification examinations.

General Education Courses**English/Communications:**

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3

Humanities/Fine Arts:

- Electives Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 121 - Algebra/Trigonometry I Credit Hours: 3

Social /Behavioral Sciences:

- Electives Credit Hours: 3

Major Courses:

- CIS 110 - Introduction to Computers Credit Hours: 3
- ISC 112 - Industrial Safety Credit Hours: 2
- MAC 122 - CNC Turning Credit Hours: 2
- MAC 124 - CNC Milling Credit Hours: 2
- MAC 131 - Blueprint Reading/Mach I Credit Hours: 2
- MAC 132 - Blueprint Reading/Mach II Credit Hours: 2
- MAC 141 - Machining Applications I Credit Hours: 4
- MAC 142 - Machining Applications II Credit Hours: 4
- MAC 143 - Machining Appl III Credit Hours: 4
- MAC 151 - Machining Calculations Credit Hours: 2
- MAC 222 - Advanced CNC Turning Credit Hours: 2
- MAC 224 - Advanced CNC Milling Credit Hours: 2
- MAC 231 - CAM: CNC Turning Credit Hours: 3
- MAC 232 - CAM: CNC Milling Credit Hours: 3
- MAC 234 - Adv Multi-Axis Machin Credit Hours: 3
- MAC 241 - Jigs & Fixtures I Credit Hours: 4
- MAC 242 - Jigs & Fixtures II Credit Hours: 4

Major Courses (continued):

- MAC 245 - Mold Construction I Credit Hours: 4
- MEC 110 - Intro to CAD/CAM Credit Hours: 2
- MEC 142 - Physical Metallurgy Credit Hours: 2
- WBL 110 - World of Work Credit Hours: 1
- WLD 112 - Basic Welding Processes Credit Hours: 2

Work-Based Learning Option:

Qualified students may elect to take 4 credit hours of Work-Based Learning in place of MAC 242 or MAC 245.

Total Credit Hours Required: 74

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 121) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

Suggested Program Sequence:**Fall – 1st year:**

- ISC 112 - Industrial Safety Credit Hours: 2
- MAC 131 - Blueprint Reading/Mach I Credit Hours: 2
- MAC 141 - Machining Applications I Credit Hours: 4
- MAC 142 - Machining Applications II Credit Hours: 4
- MAC 151 - Machining Calculations Credit Hours: 2
- CIS 110 - Introduction to Computers Credit Hours: 3

Total Hours: Class 10 | Lab 18 | Clin/Wk Exp 0 | Credit 17

Spring – 1st year:

- MAC 122 - CNC Turning Credit Hours: 2
- MAC 222 - Advanced CNC Turning Credit Hours: 2
- MAC 132 - Blueprint Reading/Mach II Credit Hours: 2
- MAC 124 - CNC Milling Credit Hours: 2
- MAC 224 - Advanced CNC Milling Credit Hours: 2
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Hours: Class 8 | Lab 16 | Clin/Wk Exp 0 | Credit 14

Summer – 1st year:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- MEC 110 - Intro to CAD/CAM Credit Hours: 2
- MAC 143 - Machining Appl III Credit Hours: 4

Total Hours: Class 6 | Lab 8 | Clin/Wk Exp 0 | Credit 9

Fall – 2nd year:

- MAC 231 - CAM: CNC Turning Credit Hours: 3
- MAC 232 - CAM: CNC Milling Credit Hours: 3
- MAC 241 - Jigs & Fixtures I Credit Hours: 4
- Humanities/Fine Arts - Elective Credit Hours: 3

Total Hours: Class 7 | Lab 14 | Clin/Wk Exp 0 | Credit 13

Spring – 2nd year:

- MAC 234 - Adv Multi-Axis Machin Credit Hours: 3
- MAC 242 - Jigs & Fixtures II Credit Hours: 4
- MEC 142 - Physical Metallurgy Credit Hours: 2
- WLD 112 - Basic Welding Processes Credit Hours: 2
- Social/Behavioral Science - Elective Credit Hours: 3

Total Hours: Class 8 | Lab 17 | Clin/Wk Exp 0 | Credit 14

Summer – 2nd year:

- ENG 114 - Prof Research & Reporting Credit Hours: 3
- OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
- OR
- ENG 113 - Literature-Based Research Credit Hours: 3
- MAC 245 - Mold Construction I Credit Hours: 4

Total Hours: Class 5 | Lab 6 | Clin/Wk Exp 0 | Credit 7

Grand Total Hours: Class 44 | Lab 79 | Clin/Wk Exp 0 | Credit 74

Computer-Integrated Machining Technology Diploma (D50210)**General Education Courses****English/Communications:**

- ENG 111 - Writing and Inquiry Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 121 - Algebra/Trigonometry I Credit Hours: 3

Major Courses:

- CIS 110 - Introduction to Computers Credit Hours: 3
- MAC 122 - CNC Turning Credit Hours: 2
- MAC 124 - CNC Milling Credit Hours: 2
- MAC 131 - Blueprint Reading/Mach I Credit Hours: 2
- MAC 132 - Blueprint Reading/Mach II Credit Hours: 2
- MAC 141 - Machining Applications I Credit Hours: 4
- MAC 142 - Machining Applications II Credit Hours: 4
- MAC 151 - Machining Calculations Credit Hours: 2
- MAC 222 - Advanced CNC Turning Credit Hours: 2
- MAC 224 - Advanced CNC Milling Credit Hours: 2
- MEC 110 - Intro to CAD/CAM Credit Hours: 2
- WBL 110 - World of Work Credit Hours: 1

CIM/WBL Program Electives:

Students are required to take 6 SHC from the following:

- MAC 231 - CAM: CNC Turning Credit Hours: 3
- MAC 232 - CAM: CNC Milling Credit Hours: 3
- MAC 241 - Jigs & Fixtures I Credit Hours: 4
- MEC 142 - Physical Metallurgy Credit Hours: 2
- WBL XXX Work-Based Learning Credit Hours: 1-3

Total Credit Hours Required: 40

Work-Based Learning Option:

Qualified students may elect to take up to 4 credit hours of work-based learning in place of 4 SHC Program electives.

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Students who elect to take (MAT 121) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

Suggested Program Sequence:

Fall – 1st year:

- CIS 110 - Introduction to Computers Credit Hours: 3
- MAC 131 - Blueprint Reading/Mach I Credit Hours: 2
- MAC 141 - Machining Applications I Credit Hours: 4
- MAC 142 - Machining Applications II Credit Hours: 4
- MAC 151 - Machining Calculations Credit Hours: 2
- Program Elective Credit Hours: 3

Total Hours: Class 8 | Lab 18 | Clin/Wk Exp 0 | Credit 18

Spring – 1st year:

- MAC 122 - CNC Turning Credit Hours: 2 (*1st 4-Weeks*)
- MAC 124 - CNC Milling Credit Hours: 2 (*3rd 4-Weeks*)
- MAC 132 - Blueprint Reading/Mach II Credit Hours: 2
- MAC 222 - Advanced CNC Turning Credit Hours: 2 (*2nd 4-Weeks*)
- MAC 224 - Advanced CNC Milling Credit Hours: 2 (*4th 4-Weeks*)
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1
- Program Elective Credit Hours: 3

Total Hours: Class 8 | Lab 16 | Clin/Wk Exp 0 | Credit 17

Summer – 1st year:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- MEC 110 - Intro to CAD/CAM Credit Hours: 2

Total Hours: Class 4 | Lab 2 | Clin/Wk Exp 0 | Credit 5

Grand Total Hours: Class 20 | Lab 36 | Clin/Wk Exp 0 | Credit 40

Evening--Courses Offered on Demand

(Please contact your Computer-Integrated Machining Advisor)

Computer-Integrated Machining Technology Certificate (C50210)**Major Courses:**

- MAC 122 - CNC Turning Credit Hours: 2
- MAC 124 - CNC Milling Credit Hours: 2
- MAC 131 - Blueprint Reading/Mach I Credit Hours: 2
- MAC 141 - Machining Applications I Credit Hours: 4
- MAC 151 - Machining Calculations Credit Hours: 2
- MEC 110 - Intro to CAD/CAM Credit Hours: 2

Total Credit Hours Required: 14

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Suggested Program Sequence:

Fall – 1st year:

- MAC 122 - CNC Turning Credit Hours: 2
- MAC 124 - CNC Milling Credit Hours: 2
- MAC 131 - Blueprint Reading/Mach I Credit Hours: 2
- MAC 141 - Machining Applications I Credit Hours: 4
- MAC 151 - Machining Calculations Credit Hours: 2
- MEC 110 - Intro to CAD/CAM Credit Hours: 2

Grand Total Hours: Class 7 | Lab 18 | Clin/Wk Exp 0 | Credit 14

Evening -- Courses Are Offered On Demand

(Please contact your Computer-Integrated Machining advisor)

Cosmetology Diploma (D55140)

Courses required to meet graduation requirements in this curriculum are offered during daytime hours. All courses, state hours, and state performances must be completed before graduation. Minimum time for completion: four semesters full-time attendance; nine semesters part-time attendance. The Diploma is awarded graduates of this curriculum.

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

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

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

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3

Social/Behavioral Sciences:

- PSY 150 - General Psychology Credit Hours: 3

Major Courses:

- COS 111 - Cosmetology Concepts I Credit Hours: 4
- OR
- COS 111AB - Cosmetology Concepts I-AB Credit Hours: 2
- COS 111BB - Cosmetology Concepts I-BB Credit Hours: 2
- COS 112 - Salon I Credit Hours: 8
- OR
- COS 112AB - Salon I-AB Credit Hours: 4
- COS 112BB - Salon I-BB Credit Hours: 4
- COS 113 - Cosmetology Concepts II Credit Hours: 4
- OR
- COS 113AB - Cosmetology Concepts II-AB Credit Hours: 2
- COS 113BB - Cosmetology Concepts II-BB Credit Hours: 2
- COS 114 - Salon II Credit Hours: 8
- OR
- COS 114AB - Salon II-AB Credit Hours: 4
- COS 114BB - Salon II-BB Credit Hours: 4
- COS 115 - Cosmetology Concepts III Credit Hours: 4
- OR
- COS 115AB - Cosmetology Concepts III-AB Credit Hours: 2
- COS 115BB - Cosmetology Concepts III-BB Credit Hours: 2
- COS 116 - Salon III Credit Hours: 4
- OR
- COS 116AB - Salon III-AB Credit Hours: 2
- COS 116BB - Salon III-BB Credit Hours: 2
- COS 117 - Cosmetology Concepts IV Credit Hours: 2
- OR
- COS 117AB - Cosmetology Concepts IV-AB Credit Hours: 1
- COS 117BB - Cosmetology Concepts IV-BB Credit Hours: 1
- COS 118 - Salon IV Credit Hours: 7
- OR
- COS 118AB - Salon IV-AB Credit Hours: 4
- COS 118BB - Salon IV-BB Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 48

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Suggested Program Sequence Day:

Fall – 1st year:

- COS 111 - Cosmetology Concepts I Credit Hours: 4
- COS 112 - Salon I Credit Hours: 8

Total Hours: Class 4 | Lab 24 | Clin/Wk Exp 0 | Credit 12

Spring – 1st year:

- COS 113 - Cosmetology Concepts II Credit Hours: 4
- COS 114 - Salon II Credit Hours: 8

Total Hours: Class 4 | Lab 24 | Clin/Wk Exp 0 | Credit 12

Summer – 1st year:

- COS 115 - Cosmetology Concepts III Credit Hours: 4
- COS 116 - Salon III Credit Hours: 4
- ENG 111 - Writing and Inquiry Credit Hours: 3

Total Hours: Class 7 | Lab 12 | Clin/Wk Exp 0 | Credit 11

Fall – 2nd year:

- COS 117 - Cosmetology Concepts IV Credit Hours: 2
- COS 118 - Salon IV Credit Hours: 7
- PSY 150 - General Psychology Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Hours: Class 6 | Lab 21 | Clin/Wk Exp 0 | Credit 13

Grand Total Hours: Class 21 | Lab 81 | Clin/Wk Exp 0 | Credit 48

Suggested Program Sequence Evening:

Fall – 1st year:

- COS 111AB - Cosmetology Concepts I-AB Credit Hours: 2
- COS 112AB - Salon I-AB Credit Hours: 4

Total Hours: Class 2 | Lab 12 | Clin/Wk Exp 0 | Credit 6

Spring – 1st year:

- COS 111BB - Cosmetology Concepts I-BB Credit Hours: 2
- COS 112BB - Salon I-BB Credit Hours: 4

Total Hours: Class 2 | Lab 12 | Clin/Wk Exp 0 | Credit 6

Fall – 2nd year:

- COS 113AB - Cosmetology Concepts II-AB Credit Hours: 2
- COS 114AB - Salon II-AB Credit Hours: 4

Total Hours: Class 2 | Lab 12 | Clin/Wk Exp 0 | Credit 6

Spring – 2nd year:

- COS 113BB - Cosmetology Concepts II-BB Credit Hours: 2
- COS 114BB - Salon II-BB Credit Hours: 4

Total Hours: Class 2 | Lab 12 | Clin/Wk Exp 0 | Credit 6

Fall – 3rd year:

- COS 115 - Cosmetology Concepts III Credit Hours: 4
- COS 116 - Salon III Credit Hours: 4
- ENG 111 - Writing and Inquiry Credit Hours: 3

Total Hours: Class 5 | Lab 6 | Clin/Wk Exp 0 | Credit 7

Spring – 3rd year:

- COS 115BB - Cosmetology Concepts III-BB Credit Hours: 2
- COS 116BB - Salon III-BB Credit Hours: 2

Total Hours: Class 2 | Lab 6 | Clin/Wk Exp 0 | Credit 4

Fall – 4th year:

- COS 117AB - Cosmetology Concepts IV-AB Credit Hours: 1
- COS 118AB - Salon IV-AB Credit Hours: 4

Total Hours: Class 1 | Lab 12 | Clin/Wk Exp 0 | Credit 5

Spring – 4th year:

- COS 117BB - Cosmetology Concepts IV-BB Credit Hours: 1
- COS 118BB - Salon IV-BB Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Hours: Class 5 | Lab 9 | Clin/Wk Exp 0 | Credit 8

Grand Total Hours: Class 21 | Lab 81 | Clin/Wk Exp 0 | Credit 48

Criminal Justice Technology, A.A.S. (A55180)

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: Day – five semesters full-time attendance; Evening – ten semesters part-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum.

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

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

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

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3

Social/Behavioral Sciences:

- PSY 150 - General Psychology Credit Hours: 3

Major Courses:

- CIS 110 - Introduction to Computers Credit Hours: 3
- CJC 111 - Intro to Criminal Justice Credit Hours: 3
- CJC 112 - Criminology Credit Hours: 3
- CJC 113 - Juvenile Justice Credit Hours: 3
- CJC 121 - Law Enforcement Operations Credit Hours: 3
- CJC 131 - Criminal Law Credit Hours: 3
- CJC 132 - Court Procedure & Evidence Credit Hours: 3
- CJC 141 - Corrections Credit Hours: 3
- CJC 151 - Intro to Loss Prevention Credit Hours: 3
- CJC 160 - Terrorism: Underlying Issues Credit Hours: 3
- CJC 212 - Ethics & Comm Relations Credit Hours: 3
- CJC 215 - Organization & Administration Credit Hours: 3
- CJC 221 - Investigative Principles Credit Hours: 4
- CJC 225 - Crisis Intervention Credit Hours: 3
- CJC 231 - Constitutional Law Credit Hours: 3
- SOC 210 - Introduction to Sociology Credit Hours: 3

Program Elective:

Students are required to take a minimum of 3 SHC from the following:

- CJC 114 - Investigative Photography Credit Hours: 2
- CJC 222 - Criminalistics Credit Hours: 3
- HIS 111 - World Civilizations I Credit Hours: 3
- HIS 112 - World Civilizations II Credit Hours: 3
- HIS 121 - Western Civilization I Credit Hours: 3
- HIS 122 - Western Civilization II Credit Hours: 3
- POL 120 - American Government Credit Hours: 3
- POL 130 - State & Local Government Credit Hours: 3
- PSY 231 - Forensic Psychology Credit Hours: 3
- PSY 241 - Developmental Psych Credit Hours: 3
- PSY 281 - Abnormal Psychology Credit Hours: 3
- SOC 220 - Social Problems Credit Hours: 3
- WBL XXX Work-Based Learning Credit Hours: 1-3

Work-Based Learning Option:

Qualified students may elect to take 1-3 credit hours of Work-Based Learning.

Credits applied for prior completion of B.L.E.T.

Total Credit Hours Required: 67

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Students who elect to take (MAT 143) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:**Fall – 1st year:**

- CJC 111 - Intro to Criminal Justice Credit Hours: 3
- CJC 131 - Criminal Law Credit Hours: 3
- CJC 132 - Court Procedure & Evidence Credit Hours: 3
- CJC 160 - Terrorism: Underlying Issues Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3

Total Hours: Class 15 | Lab 0 | Clin/Wk Exp 0 | Credit 15

Spring – 1st year:

- CJC 112 - Criminology Credit Hours: 3
- CJC 121 - Law Enforcement Operations Credit Hours: 3
- CJC 221 - Investigative Principles Credit Hours: 4
- CIS 110 - Introduction to Computers Credit Hours: 3

Total Hours: Class 11 | Lab 4 | Clin/Wk Exp 0 | Credit 13

Summer – 1st year:

- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3

Total Hours: Class 8 | Lab 2 | Clin/Wk Exp 0 | Credit 9

Fall – 2nd year:

- CJC 113 - Juvenile Justice Credit Hours: 3
- CJC 215 - Organization & Administration Credit Hours: 3
- CJC 231 - Constitutional Law Credit Hours: 3
- SOC 210 - Introduction to Sociology Credit Hours: 3
- Humanities/Fine Arts Elective Credit Hours: 3

Total Hours: Class 15 | Lab 0 | Clin/Wk Exp 0 | Credit 15

Spring – 2nd year:

- CJC 141 - Corrections Credit Hours: 3
- CJC 151 - Intro to Loss Prevention Credit Hours: 3
- CJC 212 - Ethics & Comm Relations Credit Hours: 3
- CJC 225 - Crisis Intervention Credit Hours: 3
- Program Elective Credit Hours: 3

Total Hours: Class 15 | Lab 0 | Clin/Wk Exp 0 | Credit 15

Grand Total hours: Class 64 | Lab 6 | Clin/Wk Exp 0 | Credit 67

Criminal Justice Technology Law Enforcement Certificate (C5518001)**Major Courses:**

- CJC 111 - Intro to Criminal Justice Credit Hours: 3
- CJC 121 - Law Enforcement Operations Credit Hours: 3
- CJC 131 - Criminal Law Credit Hours: 3
- CJC 132 - Court Procedure & Evidence Credit Hours: 3
- CJC 212 - Ethics & Comm Relations Credit Hours: 3

Total Credit Hours Required: 15

Suggested Program Sequence:**Fall – 1st year:**

- CJC 111 - Intro to Criminal Justice Credit Hours: 3
- CJC 131 - Criminal Law Credit Hours: 3
- CJC 132 - Court Procedure & Evidence Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Spring – 1st year:

- CJC 121 - Law Enforcement Operations Credit Hours: 3
- CJC 212 - Ethics & Comm Relations Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/Wk Exp 0 | Credit 6

Grand Total Hours: Class 15 | Lab 0 | Clin/Wk Exp 0 | Credit 15

Criminal Justice Technology Correctional Probation & Parole Certificate (C5518002)

Major Courses:

- CJC 111 - Intro to Criminal Justice Credit Hours: 3
- CJC 132 - Court Procedure & Evidence Credit Hours: 3
- CJC 141 - Corrections Credit Hours: 3
- CJC 212 - Ethics & Comm Relations Credit Hours: 3
- CJC 215 - Organization & Administration Credit Hours: 3
- CJC 225 - Crisis Intervention Credit Hours: 3

Total Credit Hours Required: 18

Suggested Program Sequence:

Fall – 1st year:

- CJC 111 - Intro to Criminal Justice Credit Hours: 3
- CJC 132 - Court Procedure & Evidence Credit Hours: 3
- CJC 215 - Organization & Administration Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Spring – 2nd year:

- CJC 141 - Corrections Credit Hours: 3
- CJC 212 - Ethics & Comm Relations Credit Hours: 3
- CJC 225 - Crisis Intervention Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Grand Total Hours: Class 18 | Lab 0 | Clin/Wk Exp 0 | Credit 18

Criminal Justice Technology Retail Industrial Security Certificate (C5518003)

Major Courses:

- CJC 111 - Intro to Criminal Justice Credit Hours: 3
- CJC 131 - Criminal Law Credit Hours: 3
- CJC 151 - Intro to Loss Prevention Credit Hours: 3
- CJC 215 - Organization & Administration Credit Hours: 3
- CJC 221 - Investigative Principles Credit Hours: 4

Total Credit Hours Required: 16

Suggested Program Sequence:

Fall – 1st year:

- CJC 111 - Intro to Criminal Justice Credit Hours: 3
- CJC 131 - Criminal Law Credit Hours: 3
- CJC 215 - Organization & Administration Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Spring – 1st year:

- CJC 221 - Investigative Principles Credit Hours: 4
- CJC 151 - Intro to Loss Prevention Credit Hours: 3

Total Hours: Class 6 | Lab 2 | Clin/Wk Exp 0 | Credit 7

Grand Total Hours: Class 15 | Lab 2 | Clin/Wk Exp 0 | Credit 16

Criminal Justice Technology Judicial Court Administrator Certificate (C5518004)

Major Courses:

- CJC 111 - Intro to Criminal Justice Credit Hours: 3
- CJC 131 - Criminal Law Credit Hours: 3
- CJC 132 - Court Procedure & Evidence Credit Hours: 3
- CJC 212 - Ethics & Comm Relations Credit Hours: 3
- CJC 215 - Organization & Administration Credit Hours: 3
- CJC 225 - Crisis Intervention Credit Hours: 3

Total Credit Hours Required: 18

Suggested Program Sequence:

Fall – 1st year:

- CJC 111 - Intro to Criminal Justice Credit Hours: 3
- CJC 131 - Criminal Law Credit Hours: 3
- CJC 132 - Court Procedure & Evidence Credit Hours: 3
- CJC 215 - Organization & Administration Credit Hours: 3

Total Hours: Class 12 | Lab 0 | Clin/Wk Exp 0 | Credit 12

Spring – 1st year:

- CJC 212 - Ethics & Comm Relations Credit Hours: 3
- CJC 225 - Crisis Intervention Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/Wk Exp 0 | Credit 6

Grand Total Hours: Class 18 | Lab 0 | Clin/Wk Exp 0 | Credit 18

Criminal Justice Technology: Latent Evidence Concentration, A.A.S. (A5518A)

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: Day – five semesters full-time attendance; Evening – ten semesters part-time attendance. The Associate in Applied Science degree is awarded graduates of this curriculum.

Latent Evidence is a concentration under the curriculum of Criminal Justice Technology. This curriculum is designed to provide knowledge of latent evidence systems and operations. Study will focus on local, state, and federal law enforcement, evidence processing and procedures.

Students will learn both theory and hands-on analysis of latent evidence. They will learn fingerprint classification, identification, and chemical development. Students will record, cast, and recognize footwear and tire-tracks; and process crime scenes. Issues and concepts of communications and the use of computers and computer assisted design programs in crime scene technology will be discussed.

Graduates should qualify for employment in a variety of criminal justice organizations especially in local, state, and federal law enforcement, and correctional agencies.

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3

Social/Behavioral Sciences:

- PSY 150 - General Psychology Credit Hours: 3

Major Courses:

- CIS 110 - Introduction to Computers Credit Hours: 3
- CJC 111 - Intro to Criminal Justice Credit Hours: 3
- CJC 112 - Criminology Credit Hours: 3
- CJC 113 - Juvenile Justice Credit Hours: 3
- CJC 121 - Law Enforcement Operations Credit Hours: 3
- CJC 131 - Criminal Law Credit Hours: 3
- CJC 132 - Court Procedure & Evidence Credit Hours: 3
- CJC 144 - Crime Scene Processing Credit Hours: 3
- CJC 146 - Trace Evidence Credit Hours: 3
- CJC 212 - Ethics & Comm Relations Credit Hours: 3
- CJC 221 - Investigative Principles Credit Hours: 4
- CJC 222 - Criminalistics Credit Hours: 3
- CJC 231 - Constitutional Law Credit Hours: 3
- CJC 245 - Friction Ridge Analysis Credit Hours: 3
- CJC 246 - Adv Friction Ridge Analys Credit Hours: 3
- CJC 250 - Forensic Biology I Credit Hours: 3
OR
- CJC 251 - Forensic Chemistry I Credit Hours: 4
- PSY 231 - Forensic Psychology Credit Hours: 3

Criminal Justice Elective:

- CJC 114 - Investigative Photography Credit Hours: 2
- WBL XXX Work-Based Learning Credit Hours: 1-4

Total Credit Hours Required: 68/72

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Students who elect to take (MAT 143) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:

Fall – 1st year:

- CJC 111 - Intro to Criminal Justice Credit Hours: 3
- CJC 131 - Criminal Law Credit Hours: 3
- CJC 132 - Court Procedure & Evidence Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3

Total Hours: Class 12 | Lab 0 | Clin/Wk Exp 0 | Credit 12

Spring – 1st year:

- CJC 112 - Criminology Credit Hours: 3
- CJC 121 - Law Enforcement Operations Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
- CJC 221 - Investigative Principles Credit Hours: 4

Total Hours: Class 11 | Lab 4 | Clin/Wk Exp 0 | Credit 13

Summer – 1st year:

- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3
- Humanities/Fine Arts Elective Credit Hours: 3

Total Hours: Class 11 | Lab 2 | Clin/Wk Exp 0 | Credit 12

Fall – 2nd year:

- CJC 113 - Juvenile Justice Credit Hours: 3
- CJC 146 - Trace Evidence Credit Hours: 3
- CJC 231 - Constitutional Law Credit Hours: 3
- CJC 245 - Friction Ridge Analysis Credit Hours: 3
- Criminal Justice Elective Credit Hours: 1/4

Total Hours: Class 10 | Lab 6 | Clin/Wk Exp 0 | Credit 13/16

Spring – 2nd year:

- CJC 222 - Criminalistics Credit Hours: 3
- CJC 144 - Crime Scene Processing Credit Hours: 3
- CJC 212 - Ethics & Comm Relations Credit Hours: 3
- CJC 246 - Adv Friction Ridge Analys Credit Hours: 3
- CJC 250 - Forensic Biology I Credit Hours: 3
OR
- CJC 251 - Forensic Chemistry I Credit Hours: 4
- PSY 231 - Forensic Psychology Credit Hours: 3

Total Hours: Class 15/16 | Lab 8 | Clin/Wk Exp 0 | Credit 18/19

Grand Total Hours: Class 59/60 | Lab 20 | Clin/Wk Exp 0 | Credit 68/72

Criminal Justice Technology Latent Evidence Concentration, Crime Scene Investigation Certificate (C5518A01)

Major Courses:

- CJC 111 - Intro to Criminal Justice Credit Hours: 3
- CJC 114 - Investigative Photography Credit Hours: 2
- CJC 144 - Crime Scene Processing Credit Hours: 3
- CJC 146 - Trace Evidence Credit Hours: 3
- CJC 221 - Investigative Principles Credit Hours: 4
- CJC 245 - Friction Ridge Analysis Credit Hours: 3

Total Credit Hours Required: 18

Suggested Program Sequence:

Fall – 1st year:

- CJC 111 - Intro to Criminal Justice Credit Hours: 3
- CJC 146 - Trace Evidence Credit Hours: 3
- CJC 114 - Investigative Photography Credit Hours: 2
- CJC 245 - Friction Ridge Analysis Credit Hours: 3

Total Hours: Class 8 | Lab 5 | Clin/Wk Exp 0 | Credit 11

Spring – 1st year:

- CJC 221 - Investigative Principles Credit Hours: 4
- CJC 144 - Crime Scene Processing Credit Hours: 3

Total Hours: Class 5 | Lab 5 | Clin/Wk Exp 0 | Credit 7

Grand Total Hours: Class 13 | Lab 13 | Clin/Wk Exp 0 | Credit 18

Dental Hygiene, A.A.S. (A45260)

Courses required to meet graduation requirements in this curriculum are offered during day hours only. Some general education courses are offered at night. Minimum time for completion: seven semesters. The Associate in Applied Science degree is awarded graduates of this curriculum.

The Dental Hygiene curriculum provides individuals with the knowledge and skills to assess, plan, implement, and evaluate dental hygiene care for the individual and the community.

Students will learn to prepare the operatory, take patient histories, note abnormalities, plan care, teach oral hygiene, clean teeth, take x-rays, apply preventive agents, complete necessary chart entries, and perform other procedures related to dental hygiene care.

Graduates of this program may be eligible to take national and state/regional examinations for licensure which are required to practice dental hygiene. Employment opportunities include dental offices, clinics, schools, public health agencies, industry, and professional education.

Background Check - A criminal background check is required for students to participate in some external rotations and for North Carolina Dental Hygiene Licensure.

General Education Courses

English/Communications:

- COM 110 - Introduction to Communication Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- *Humanities/Fine Arts Elective Credit Hours: 3
(*HUM 115 - Critical Thinking preferred.)

Natural Sciences/Mathematics:

- CHM 130 - Gen, Org, & Biochemistry Credit Hours: 3
- CHM 130A - Gen, Org, & Biochemistry Lab Credit Hours: 1

Social/Behavioral Sciences:

- PSY 150 - General Psychology Credit Hours: 3

Note:

General Education Course Requirements— Applicants must have completed the following courses required for the program, prior to the Dental Hygiene Program application deadline (**March 15**). Students must complete BIO 163, BIO 175, CHM 130 & CHM 130A, COM 110, ENG 111, ENG 114, Humanities/Fine Arts Elective, and PSY 150. Grades lower than "C" will not be accepted. Students must also be accepted into the Dental Hygiene program prior to taking DEN courses.

Major Courses:

- BIO 163 - Basic Anat & Physiology Credit Hours: 5
- BIO 175 - General Microbiology Credit Hours: 3
OR
- BIO 275 - Microbiology Credit Hours: 4
- DEN 110 - Orofacial Anatomy Credit Hours: 3
- DEN 111 - Infection/Hazard Control Credit Hours: 2
- DEN 112 - Dental Radiography Credit Hours: 3
- DEN 120 - Dental Hyg Preclinic Lec Credit Hours: 2
- DEN 121 - Dental Hygiene Precl Lab Credit Hours: 2
- DEN 123 - Nutrition/Dental Health Credit Hours: 2
- DEN 124 - Periodontology Credit Hours: 2
- DEN 130 - Dental Hygiene Theory I Credit Hours: 2
- DEN 131 - Dental Hygiene Clinic I Credit Hours: 3
- DEN 140 - Dental Hygiene Theory II Credit Hours: 1
- DEN 141 - Dental Hygiene Clinic II Credit Hours: 2
- DEN 220 - Dental Hygiene Theory III Credit Hours: 2
- DEN 221 - Dental Hygiene Clinic III Credit Hours: 4
- DEN 222 - General & Oral Pathology Credit Hours: 2
- DEN 223 - Dental Pharmacology Credit Hours: 2
- DEN 224 - Materials and Procedures Credit Hours: 2
- DEN 230 - Dental Hygiene Theory IV Credit Hours: 1
- DEN 231 - Dental Hygiene Clinic IV Credit Hours: 4
- DEN 232 - Community Dental Health Credit Hours: 3
- DEN 233 - Professional Development Credit Hours: 2

Other Required Hours:

- MED 118 - Medical Law and Ethics Credit Hours: 2

Total Credit Hours Required: 75/76**Developmental Course Requirements:**

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3
- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:**Spring – 1st year:**

- BIO 163 - Basic Anat & Physiology Credit Hours: 5
- CHM 130 - Gen, Org, & Biochemistry Credit Hours: 3
- CHM 130A - Gen, Org, & Biochemistry Lab Credit Hours: 1
- ENG 111 - Writing and Inquiry Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3

Total Hours: Class 13 | Lab 4 | Clin/Wk Exp 0 | Credit 15**Fall – 1st year:**

- BIO 175 - General Microbiology Credit Hours: 3
OR
- BIO 275 - Microbiology Credit Hours: 4
- COM 110 - Introduction to Communication Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
- *Humanities/Fine Arts Elective Credit Hours: 3
(*HUM 115 - Critical Thinking Preferred.)

Total Hours: Class 11/12 | Lab 2/3 | Clin/Wk Exp 0 | Credit 12/13**Fall – 2nd year:**

- DEN 110 - Orofacial Anatomy Credit Hours: 3
- DEN 111 - Infection/Hazard Control Credit Hours: 2
- DEN 120 - Dental Hyg Preclinic Lec Credit Hours: 2
- DEN 121 - Dental Hygiene Precl Lab Credit Hours: 2

Total Hours: Class 9 | Lab 8 | Clin/Wk Exp 0 | Credit 9**Spring – 2nd year:**

- DEN 112 - Dental Radiography Credit Hours: 3
- DEN 124 - Periodontology Credit Hours: 2
- DEN 130 - Dental Hygiene Theory I Credit Hours: 2
- DEN 131 - Dental Hygiene Clinic I Credit Hours: 3
- DEN 222 - General & Oral Pathology Credit Hours: 2

Total Hours: Class 8 | Lab 3 | Clin/Wk Exp 9 | Credit 12**Summer – 2nd year:**

- DEN 123 - Nutrition/Dental Health Credit Hours: 2
- DEN 140 - Dental Hygiene Theory II Credit Hours: 1
- DEN 141 - Dental Hygiene Clinic II Credit Hours: 2
- MED 118 - Medical Law and Ethics Credit Hours: 2

Total Hours: Class 5 | Lab 0 | Clin/Wk Exp 6 | Credit 7**Fall – 3rd year:**

- DEN 220 - Dental Hygiene Theory III Credit Hours: 2
- DEN 221 - Dental Hygiene Clinic III Credit Hours: 4
- DEN 223 - Dental Pharmacology Credit Hours: 2
- DEN 232 - Community Dental Health Credit Hours: 3

Total Hours: Class 6 | Lab 3 | Clin/Wk Exp 12 | Credit 11**Spring – 3rd year:**

- DEN 224 - Materials and Procedures Credit Hours: 2
- DEN 230 - Dental Hygiene Theory IV Credit Hours: 1
- DEN 231 - Dental Hygiene Clinic IV Credit Hours: 4
- DEN 233 - Professional Development Credit Hours: 2

Total Hours: Class 4 | Lab 3 | Clin/Wk Exp 12 | Credit 9**Grand Total Hours: Class 53/54 | Lab 23/24 Clin/Wk Exp 39 | Credit 75/76**

Early Childhood Education, A.A.S. (A55220)

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: Day – five semesters full-time attendance;

An Associate in Applied Science degree is awarded graduates of the Early Childhood Education degree curriculum. A Diploma is awarded students completing the diploma curriculum. A Certificate is awarded students completing the certificate curriculum.

The Early Childhood Education curriculum prepares individuals to work with children from birth through eight in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

Early Childhood Education: A program that prepares individuals to promote child development and learning, work with diverse families and children, observe, document and assess to support young children and families, use content knowledge to build meaningful curriculum, and use developmentally effective approaches in collaboration with other early childhood professionals. Potential course work includes instruction in all areas of child development such as emotional/social/health/physical/language/communication, approaches to play and learning, working with diverse families, and related observations/student teaching experiences.

Special Admissions Requirements for Early Childhood Education Programs:

In addition to the general procedures to apply for admission to a curriculum program of study, applicants for the Early Childhood Education program must complete other procedures. CVCC's Early Childhood Education program requires completion of educational experiences in childcare facilities and/or public school settings. These settings require students to undergo criminal background checks and/or health assessments. If a student is excluded from an educational setting as a result of one of these requirements, the student may be asked to withdraw from the program. Some settings may also require additional vaccinations and/or health examinations. Completion of CVCC's Early Childhood Education program may be contingent upon receipt of a CVCC medical form documenting that the applicant possesses satisfactory physical and mental health. Facilities for providing health care services are not available on campus.

Program Graduation Requirements: The Early Childhood Education Department is accredited by the National Accreditation through the National Association for the Education of Young Children. The standards for students are rigorous and require students to perform at a minimum competency level. Due to the minimum competency level expected for graduates, the Education Department requires a grade of C or higher on all required Education Courses for graduation with a certificate, diploma, or degree.

General Education Courses

English/Communications:

- COM 110 - Introduction to Communication Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- *Natural Science/Mathematics Elective Credit Hours: 3/4

Social/Behavioral Sciences:

- Elective Credit Hours: 3

Major Courses:

- EDU 119 - Intro to Early Child Educ Credit Hours: 4
- EDU 131 - Child, Family, & Community Credit Hours: 3
- EDU 144 - Child Development I Credit Hours: 3
- EDU 145 - Child Development II Credit Hours: 3
OR
- PSY 244 - Child Development I Credit Hours: 3
- PSY 245 - Child Development II Credit Hours: 3
- EDU 146 - Child Guidance Credit Hours: 3
- EDU 151 - Creative Activities Credit Hours: 3
- EDU 153 - Health, Safety, & Nutrition Credit Hours: 3
- EDU 216 - Foundations of Education Credit Hours: 4
- EDU 221 - Children with Exceptionalities Credit Hours: 3
- EDU 234 - Infants, Toddlers, and Twos Credit Hours: 3
- EDU 251 - Exploration Activities Credit Hours: 3
- EDU 259 - Curriculum Planning Credit Hours: 3
- EDU 271 - Educational Technology Credit Hours: 3
- EDU 280 - Language/Literacy Experiences Credit Hours: 3
- EDU 284 - Early Child Capstone Prac Credit Hours: 4
- PSY 150 - General Psychology Credit Hours: 3
- SOC 210 - Introduction to Sociology Credit Hours: 3

EDU Elective:

Students are required to take one (1) course from the following:

- EDU 216 - Foundations of Education Credit Hours: 4
- EDU 235 - School-Age Develop & Programs Credit Hours: 3
- EDU 261 - Early Childhood Admin I Credit Hours: 3
- EDU 262 - Early Childhood Admin II Credit Hours: 3
- EDU 275 - Effective Teach Train Credit Hours: 2

Other Required Courses:

- ACA 111 - College Student Success Credit Hours: 1

Total Credit Hours Required: 71/74

EDU Electives:

- EDU 216 - Foundations of Education Credit Hours: 4
- EDU 261 - Early Childhood Admin I Credit Hours: 3
- EDU 262 - Early Childhood Admin II Credit Hours: 3
- EDU 235 - School-Age Develop & Programs Credit Hours: 3
- EDU 275 - Effective Teach Train Credit Hours: 2

***Natural Science and Math Electives:**

- AST 151 - General Astronomy I Credit Hours: 3
- AST 151A - General Astronomy I Lab Credit Hours: 1
- BIO 111 - General Biology I Credit Hours: 4
- BIO 143 - Field Biology Minicourse Credit Hours: 2
- BIO 163 - Basic Anat & Physiology Credit Hours: 5
- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- CHM 130 - Gen, Org, & Biochemistry Credit Hours: 3
- CHM 130A - Gen, Org, & Biochemistry Lab Credit Hours: 1
- CHM 131 - Introduction to Chemistry Credit Hours: 3
- CHM 131A - Introduction to Chemistry Lab Credit Hours: 1
- GEL 111 - Introductory Geology Credit Hours: 4
- GEL 120 - Physical Geology Credit Hours: 4
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
- MAT 143 - Quantitative Literacy Credit Hours: 3
- MAT 152 - Statistical Methods I Credit Hours: 4
- MAT 171 - Precalculus Algebra Credit Hours: 4
- PHS 130 - Earth Science Credit Hours: 4
- PHY 110 - Conceptual Physics Credit Hours: 3
- PHY 110A - Conceptual Physics Lab Credit Hours: 1
- PHY 121 - Applied Physics I Credit Hours: 4

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Students who elect to take (MAT 143/MAT 152) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Students who elect to take (MAT 121) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2
- MAT 001P - Math Skills Support Credit Hours: 1

Suggested Program Sequence:**Fall – 1st year:**

- ACA 111 - College Student Success Credit Hours: 1
- EDU 119 - Intro to Early Child Educ Credit Hours: 4
- EDU 144 - Child Development I Credit Hours: 3
OR
- PSY 244 - Child Development I Credit Hours: 3
- EDU 151 - Creative Activities Credit Hours: 3
- EDU 271 - Educational Technology Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3

Total Hours: Class 16 | Lab 2 | Clin/Wk Exp 0 | Credit 17

Spring – 1st year:

- EDU 145 - Child Development II Credit Hours: 3
OR
- PSY 245 - Child Development II Credit Hours: 3
- EDU 146 - Child Guidance Credit Hours: 3
- EDU 153 - Health, Safety, & Nutrition Credit Hours: 3
- SOC 210 - Introduction to Sociology Credit Hours: 3
- EDU Elective Credit Hours: 3/4

Total Hours: Class 14/16 | Lab 0 | Clin/Wk Exp 0 | credit 15/16

Summer – 1st year:

- Humanities/Fine Arts Elective Credit Hours: 3
- Natural Science/Mathematics Elective Credit Hours: 3/4
- Social/Behavioral Science Elective Credit Hours: 3

Total Hours: Class 8/9 | Lab 2 | Clin/Wk Exp 0 | Credit 9/10

Fall – 2nd year:

- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
- EDU 131 - Child, Family, & Community Credit Hours: 3
- EDU 221 - Children with Exceptionalities Credit Hours: 3
- EDU 259 - Curriculum Planning Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3

Total Hours: Class 15 | Lab 0 | Clin/Wk Exp 0 | Credit 15

Spring – 2nd year:

- COM 110 - Introduction to Communication Credit Hours: 3
- EDU 234 - Infants, Toddlers, and Twos Credit Hours: 3
- EDU 251 - Exploration Activities Credit Hours: 3
- EDU 280 - Language/Literacy Experiences Credit Hours: 3
- EDU 284 - Early Child Capstone Prac Credit Hours: 4

Total Hours: Class 13 | Lab 9 | Clin/Wk Exp 0 | Credit 16

Grand Total Hours: Class 66/69 | Lab 13 | Clin/Wk Exp 0 | Credit 71/74

Early Childhood Education Diploma (D55220)

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Major Courses:

- EDU 119 - Intro to Early Child Educ Credit Hours: 4
- EDU 131 - Child, Family, & Community Credit Hours: 3
- EDU 144 - Child Development I Credit Hours: 3
- EDU 145 - Child Development II Credit Hours: 3
OR
- PSY 244 - Child Development I Credit Hours: 3
- PSY 245 - Child Development II Credit Hours: 3
- EDU 146 - Child Guidance Credit Hours: 3
- EDU 151 - Creative Activities Credit Hours: 3
- EDU 153 - Health, Safety, & Nutrition Credit Hours: 3
- EDU 221 - Children with Exceptionalities Credit Hours: 3
- EDU 259 - Curriculum Planning Credit Hours: 3
- EDU 271 - Educational Technology Credit Hours: 3
- EDU 280 - Language/Literacy Experiences Credit Hours: 3
- EDU 284 - Early Child Capstone Prac Credit Hours: 4

Other Required Courses:

- ACA 111 - College Student Success Credit Hours: 1

Total Credit Hours Required: 45

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Suggested Program Sequence:

Fall – 1st year:

* Students may take PSY 244 and PSY 245 for EDU 144 and EDU 145

- ACA 111 - College Student Success Credit Hours: 1
- EDU 119 - Intro to Early Child Educ Credit Hours: 4
- EDU 144 - Child Development I Credit Hours: 3 *
- EDU 151 - Creative Activities Credit Hours: 3
- EDU 271 - Educational Technology Credit Hours: 3

Total Hours: Class 13 | Lab 2 | Clin/Wk Exp 0 | Credit 14

Spring – 1st year:

* Students may take PSY 244 and PSY 245 for EDU 144 and EDU 145

- EDU 145 - Child Development II Credit Hours: 3 *
- EDU 146 - Child Guidance Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3
- EDU 153 - Health, Safety, & Nutrition Credit Hours: 3
- EDU 280 - Language/Literacy Experiences Credit Hours: 3

Total Hours: Class 15 | Lab 0 | Clin/Wk Exp 0 | Credit 15

Fall – 2nd year:

- EDU 131 - Child, Family, & Community Credit Hours: 3
- EDU 221 - Children with Exceptionalities Credit Hours: 3
- EDU 259 - Curriculum Planning Credit Hours: 3
- EDU 284 - Early Child Capstone Prac Credit Hours: 4
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Total Hours: Class 13 | Lab 9 | Clin/Wk Exp 0 | Credit 16

Grand Total Hours: Class 41 | Lab 11 | Clin/Wk Exp 0 | Credit 45

Early Childhood Education School-Age Certificate (C5522004)

Major Courses:

- EDU 131 - Child, Family, & Community Credit Hours: 3
- EDU 144 - Child Development I Credit Hours: 3
- EDU 145 - Child Development II Credit Hours: 3
OR
- PSY 244 - Child Development I Credit Hours: 3
- PSY 245 - Child Development II Credit Hours: 3
- EDU 146 - Child Guidance Credit Hours: 3
- EDU 235 - School-Age Develop & Programs Credit Hours: 3
- EDU 275 - Effective Teach Train Credit Hours: 2

Other Required Courses:

- ACA 111 - College Student Success Credit Hours: 1

Total Credit Hours Required: 18

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Early Childhood Education School-Age Certificate (C5522004)

Suggested Program Sequence:

Fall – 1st year:

* Students may take PSY 244 and PSY 245 for EDU 144 and EDU 145

- ACA 111 - College Student Success Credit Hours: 1
- EDU 131 - Child, Family, & Community Credit Hours: 3
- EDU 144 - Child Development I Credit Hours: 3 *
- EDU 235 - School-Age Develop & Programs Credit Hours: 3

Total Hours: Class 10 | Lab 0 | Clin/Wk Exp 0 | Credit 10

Spring – 1st year:

* Students may take PSY 244 and PSY 245 for EDU 144 and EDU 145

- EDU 145 - Child Development II Credit Hours: 3 *
- EDU 146 - Child Guidance Credit Hours: 3
- EDU 275 - Effective Teach Train Credit Hours: 2

Total Hours: Class 8 | Lab 0 | Clin/Wk Exp 0 | Credit 8

Grand Total Hours: Class 18 | Lab 0 | Clin/Wk Exp 0 | Credit 18

Electrical Systems Technology Diploma (D35130)

Courses required to meet graduation requirements in this curriculum are offered during daytime and evening hours. Minimum time for completion: Daytime – two semesters full-time attendance; Evening – four semesters full-time attendance. The Diploma is awarded graduates of this curriculum.

This curriculum is designed to provide training for persons interested in the installation and maintenance of electrical systems found in residential, commercial, and industrial facilities.

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

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

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3

Major Courses:

- BPR 111 - Print Reading Credit Hours: 2
- ELC 112 - DC/AC Electricity Credit Hours: 5
- ELC 113 - Residential Wiring Credit Hours: 4
- ELC 115 - Industrial Wiring Credit Hours: 4
- ELC 117 - Motors and Controls Credit Hours: 4
- ELC 118 - National Electrical Code Credit Hours: 2
- ELC 119 - NEC Calculations Credit Hours: 2
- ELC 128 - Intro to PLC Credit Hours: 3
- ELN 229 - Industrial Electronics Credit Hours: 4

Total Credit Hours Required: 36

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Students who elect to take (MAT 121) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

Suggested Program Sequence Day:

Fall – 1st year:

- BPR 111 - Print Reading Credit Hours: 2
- ELC 112 - DC/AC Electricity Credit Hours: 5
- ELC 113 - Residential Wiring Credit Hours: 4
- ELC 118 - National Electrical Code Credit Hours: 2
- ELC 119 - NEC Calculations Credit Hours: 2

Total Hours: Class 8 | Lab 18 | Clin/Wk Exp 0 | Credit 15

Spring – 1st year:

- ELC 115 - Industrial Wiring Credit Hours: 4
- ELC 117 - Motors and Controls Credit Hours: 4
- ELC 128 - Intro to PLC Credit Hours: 3
- ELN 229 - Industrial Electronics Credit Hours: 4

Total Hours: Class 8 | Lab 19 | Clin/Wk Exp 0 | Credit 15

Summer – 1st year:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3

Total Hours: Class 5 | Lab 2 | Clin/Wk Exp 0 | Credit 6

Grand Total Hours: Class 21 | Lab 39 | Clin/Wk Exp 0 | Credit 36

Suggested Program Sequence Evening:

Spring – 1st year:

- BPR 111 - Print Reading Credit Hours: 2
- ELC 113 - Residential Wiring Credit Hours: 4
- ELC 118 - National Electrical Code Credit Hours: 2

Total Hours: Class 4 | Lab 10 | Clin/Wk Exp 0 | Credit 8

Summer – 1st year:

- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3

Total Hours: Class 2 | Lab 2 | Clin/Wk Exp 0 | Credit 3

Fall – 1st year:

- ELC 112 - DC/AC Electricity Credit Hours: 5
- ELC 119 - NEC Calculations Credit Hours: 2

Total Hours: Class 4 | Lab 8 | Clin/Wk Exp 0 | Credit 7

Spring – 2nd year:

- ELC 117 - Motors and Controls Credit Hours: 4
- ELN 229 - Industrial Electronics Credit Hours: 4

Total Hours: Class 4 | Lab 10 | Clin/Wk Exp 0 | Credit 8

Summer – 2nd year:

- ENG 111 - Writing and Inquiry Credit Hours: 3

Total Hours: Class 3 | Lab 0 | Clin/Wk Exp 0 | Credit 3

Fall – 2nd year:

- ELC 115 - Industrial Wiring Credit Hours: 4
- ELC 128 - Intro to PLC Credit Hours: 3

Total Hours: Class 4 | Lab 9 | Clin/Wk Exp 0 | Credit 7

Grand Total Hours: Class 21 | Lab 39 | Clin/Wk Exp 0 | Credit 36

Electrical Systems Technology, Electrical Installation, Certificate (C35130)

Major Courses:

- BPR 111 - Print Reading Credit Hours: 2
- ELC 113 - Residential Wiring Credit Hours: 4
- ELC 115 - Industrial Wiring Credit Hours: 4
- ELC 118 - National Electrical Code Credit Hours: 2

Total Credit Hours Required: 12

Developmental Course Requirements:

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Suggested Program Sequence:

Fall – 1st year:

- BPR 111 - Print Reading Credit Hours: 2
- ELC 113 - Residential Wiring Credit Hours: 4
- ELC 118 - National Electrical Code Credit Hours: 2

Total Hours: Class 4 | Lab 10 | Clin/Wk Exp 0 | Credit 8

Spring – 1st year:

- ELC 115 - Industrial Wiring Credit Hours: 4

Total Hours: Class 2 | Lab 6 | Clin/Wk Exp 0 | Credit 4

Grand Total Hours: Class 6 | Lab 16 | Clin/Wk Exp 0 | Credit 12

Electroneurodiagnostic Technology, A.A.S. (A45320)

Courses required to meet graduation requirements in this curriculum are offered during day hours only. Some general education courses are offered at night. Minimum time for completion: four semesters. The Associate in Applied Science degree is awarded graduates of this curriculum.

The Electroneurodiagnostic Technology curriculum is designed to provide students with the knowledge and skills to obtain recordings of patients' nervous system function through the use of electroencephalographic equipment and other electrophysiological devices.

Course work includes communication skills with patients and healthcare personnel, taking appropriate patient histories, electrode application, documentation of patients' clinical status, electrical waveform recognition, management of medical emergencies, and preparation of descriptive reports for the physician.

Graduates should qualify for the ABRET (American Board of Registration of EEG and EP Technologists) Exam and, working under the supervision of a qualified physician, may be employed by hospitals or private offices of neurologists and neurosurgeons.

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 Literature-Based Research Credit Hours: 3
OR
- ENG 114 Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Humanities/Fine Arts Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 143 - Quantitative Literacy Credit Hours: 3

Social/Behavioral Sciences:

- PSY 150 - General Psychology Credit Hours: 3

Major Courses:

- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- CIS 110 - Introduction to Computers Credit Hours: 3
- EDT 110 - Neuroscience/Pathol Cond Credit Hours: 4
- EDT 111 - Laboratory Management Credit Hours: 1
- EDT 111A - EDT Laboratory Basics Credit Hours: 1
- EDT 112 - Instrument/Record Methods Credit Hours: 3
- EDT 113 - Clinical Correlates Credit Hours: 2
- EDT 114 - Special Procedures Credit Hours: 3
- EDT 115 - EDT Laboratory Practice Credit Hours: 2
- EDT 116 - EDT Clinical Experience Credit Hours: 12
- EDT 118 - EDT Laboratory Practice II Credit Hours: 3
- ELC 111 - Intro to Electricity Credit Hours: 3
- MED 118 - Medical Law and Ethics Credit Hours: 2
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3

Total Credit Hours Required: 68

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 143) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:

Fall – 1st year:

- EDT 110 - Neuroscience/Pathol Cond Credit Hours: 4
- EDT 111 - Laboratory Management Credit Hours: 1
- EDT 111A - EDT Laboratory Basics Credit Hours: 1
- ELC 111 - Intro to Electricity Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3

Total Hours: Class 17 | Lab 2 | Clin/Wk Exp 0 | Credit 18

Spring – 1st year:

- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- CIS 110 - Introduction to Computers Credit Hours: 3
- EDT 112 - Instrument/Record Methods Credit Hours: 3
- EDT 113 - Clinical Correlates Credit Hours: 2
- EDT 115 - EDT Laboratory Practice Credit Hours: 2
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Total Hours: Class 13 | Lab 11 | Clin/Wk Exp 0 | Credit 17

Fall – 2nd year:

- EDT 114 - Special Procedures Credit Hours: 3
- EDT 118 - EDT Laboratory Practice II Credit Hours: 3
- MAT 143 - Quantitative Literacy Credit Hours: 3
- MED 118 - Medical Law and Ethics Credit Hours: 2
- MED 122 - Medical Terminology II Credit Hours: 3
- Humanities/Fine Arts Elective Credit Hours: 3

Total Hours: Class 13 | Lab 11 | Clin/Wk Exp 0 | Credit 17

Spring – 2nd year:

- EDT 116 - EDT Clinical Experience Credit Hours: 12

Total Hours: Class 0 | Lab 0 | Clin/WK Exp 36 | Credit 64

Grand Total Hours: Class 43 | Lab 24 | Clin/Wk Exp 36 | Credit 64

Electroneurodiagnostic Technology Degree Completion (A4532009)

This special program was developed to offer technologists who are ABRET registered in EEG and are currently working in the neurodiagnostic field a pathway to obtain an Associate in Applied Science degree. The length of the course will vary depending on the student's prior education and advanced placement success. Applicants will be eligible for admission after having met the following admissions standards:

1. The applicant must apply for and meet CVCC's institutional requirements for admission as a student.
2. The applicant must be currently employed as a neurodiagnostic technologist.
3. The applicant must hold the credentials of R.EEG.T. through ABRET. Credentials must be current and in good standing.
4. The applicant must provide two letters of reference: one from an immediate supervisor and one from the Medical Director of the neurodiagnostic facility with which the applicant is employed. These letters should attest to the individual's competence as a neurodiagnostic technologist.
5. Once admitted to the program, students will receive Advanced Placement in the following courses based on their ABRET credentials and letters of reference:
 - EDT 111A
 - EDT 115
 - EDT 118
 - EDT 116

Advanced Placement Exams

Students will also be offered Advanced Placement Exams in the following courses. **If the written exam is passed with a grade of 80 or higher, advanced placement will be given:**

- EDT 110 - Neuroscience/Pathol Cond Credit Hours: 4
- EDT 111 - Laboratory Management Credit Hours: 1
- EDT 112 - Instrument/Record Methods Credit Hours: 3
- EDT 113 - Clinical Correlates Credit Hours: 2
- EDT 114 - Special Procedures Credit Hours: 3

Required Courses:

Students are required to complete the following courses, and maintain a 2.0 GPA, in order to successfully complete the program requirements.

- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- CIS 110 - Introduction to Computers Credit Hours: 3
- ELC 111 - Intro to Electricity Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
- MAT 143 - Quantitative Literacy Credit Hours: 3
- MED 118 - Medical Law and Ethics Credit Hours: 2
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3

Total Credit Hours: 34

The student may transfer or advance place up to sixty-five percent of the required course hours. The duration and timing of this program will vary between individuals depending on their prior college credits and success with advanced placement testing.

Grading, transcript evaluation, transfer policies, curriculum and graduation requirements will follow current CVCC policy. Program completion will vary according to progression of required classes for each student accepted.

Electronics Engineering Technology, A.A.S. (A40200)

Courses required to meet graduation requirements in this curriculum are offered during daytime hours. Minimum time for completion: Day – five semesters full-time attendance. The Associate in Applied Science degree is awarded graduates of this curriculum.

These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians

Electronics Engineering Technology: A course of study that prepares the students to apply basic engineering principles and technical skills to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communication systems, and power electronic systems. Includes instruction in mathematics, basic electricity, solid-state fundamentals, digital concepts, and microprocessors or programmable logic controllers. Graduates should qualify for employment as electronics engineering technician, field service technician, instrumentation technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- COM 231 - Public Speaking Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 171 - Precalculus Algebra Credit Hours: 4
OR
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3

Social/Behavioral Sciences:

- Elective Credit Hours: 3

Major Courses:

- ATR 112 - Intro to Automation Credit Hours: 3
- CSC 134 - C++ Programming Credit Hours: 3
- DFT 117 - Technical Drafting Credit Hours: 2
- DFT 151 - CAD I Credit Hours: 3
- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- ELC 131 - Circuit Analysis I Credit Hours: 4
- ELC 133 - Circuit Analysis II Credit Hours: 4
- ELC 229 - Applications Project Credit Hours: 2
- ELN 131 - Analog Electronics I Credit Hours: 4
- ELN 132 - Analog Electronics II Credit Hours: 4
- ELN 133 - Digital Electronics Credit Hours: 4

Major Courses (continued):

- ELN 232 - Intro to Microprocessors Credit Hours: 4
- ELN 234 - Communication Systems Credit Hours: 4
- ELN 260 - Prog Logic Controllers Credit Hours: 4
- MAT 172 - Precalculus Trigonometry Credit Hours: 4
OR
- MAT 122 - Algebra/Trigonometry II Credit Hours: 3
- MEC 180 - Engineering Materials Credit Hours: 3
- PHY 151 - College Physics I Credit Hours: 4
OR
- PHY 131 - Physics-Mechanics Credit Hours: 4

Work-Based Learning Option:

Qualified students may elect to take 2 credit hours of Work-Based Learning in place of ELC 229.

Math/Physics Note:

Students planning to transfer to a 4-year college should consider taking MAT 171, MAT 172, and PHY 151. Please see your Electronics Engineering Technology advisor.

Total Credit Hours Required: 72/74

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 121) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2
- MAT 001P - Math Skills Support Credit Hours: 1

Suggested Program Sequence Day:**Fall – 1st year:**

- DFT 151 - CAD I Credit Hours: 3
- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- ELC 131 - Circuit Analysis I Credit Hours: 4
- MAT 171 - Precalculus Algebra Credit Hours: 4
OR
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
- MEC 180 - Engineering Materials Credit Hours: 3

Total Hours: Class 10/11 | Lab 13 | Clin/Wk Exp 0 | Credit 15/16

Spring – 1st year:

- DFT 117 - Technical Drafting Credit Hours: 2
- ELC 133 - Circuit Analysis II Credit Hours: 4
- ELN 131 - Analog Electronics I Credit Hours: 4
- ENG 111 - Writing and Inquiry Credit Hours: 3
- MAT 172 - Precalculus Trigonometry Credit Hours: 4
OR
- MAT 122 - Algebra/Trigonometry II Credit Hours: 3

Total Hours: Class 12/13 | Lab 10 | Clin/Wk Exp 0 | Credit 16/17

Summer – 1st year:

- COM 231 - Public Speaking Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
- Humanities/Fine Arts Elective Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/Wk Exp 0 | Credit 6

Fall – 2nd year:

- ATR 112 - Intro to Automation Credit Hours: 3
- CSC 134 - C++ Programming Credit Hours: 3
- ELN 132 - Analog Electronics II Credit Hours: 4
- ELN 133 - Digital Electronics Credit Hours: 4
- Social/Behavioral Science Elective Credit Hours: 3

Total Hours: Class 13 | Lab 12 | Clin/Wk Exp 0 | Credit 17

Spring – 2nd year:

- ELC 229 - Applications Project Credit Hours: 2
- ELN 232 - Intro to Microprocessors Credit Hours: 4
- ELN 234 - Communication Systems Credit Hours: 4
- ELN 260 - Prog Logic Controllers Credit Hours: 4
- PHY 151 - College Physics I Credit Hours: 4
OR
- PHY 131 - Physics-Mechanics Credit Hours: 4

Total Hours: Class 13 | Lab 14 | Clin/Wk Exp 0 | Credit 18

Grand Total Hours: Class 54/56 | Lab 49 | Clin/Wk Exp 0 | Credit 72/74

Work-Based Learning Option:

Qualified Students may elect to take up to 2 credit hours of Work-Based Learning in place of ELC 229.

Math/Physics Note:

Students planning to transfer to a 4-year college should consider taking MAT 171, MAT 172, and PHY 151. Please see your Electronics Engineering Technology advisor.

Evening -- Courses Are Offered on Demand

(See your Electronics Engineering Technology advisor)

Electronics Engineering Technology Certificate (C40200)

Fall – 1st year:

- DFT 151 - CAD I Credit Hours: 3
- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- ELC 131 - Circuit Analysis I Credit Hours: 4
- MAT 171 - Precalculus Algebra Credit Hours: 4
OR
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
- MEC 180 - Engineering Materials Credit Hours: 3

Total Hours: Class 10/11 | Lab 13 | Clin/Wk Exp 0 | Credit 15/16

Emergency Management (A55460)

The Emergency Management curriculum is designed to provide students with a foundation of technical and professional knowledge needed for emergency services delivery in local and state government agencies. Study involves both management and technical aspects of law enforcement, fire protection, emergency medical services, and emergency planning.

Course work includes classroom and laboratory exercises to introduce the student to various aspects of emergency preparedness, protection, and enforcement. Students will learn technical and administrative skills such as investigative principles, hazardous materials, codes, standards, emergency agency operations, and finance.

Employment opportunities include ambulance services, fire/rescue agencies, law enforcement agencies, fire marshal offices, industrial firms, educational institutions, emergency management offices, and other government agencies. Employed persons should have opportunities for skilled and supervisory-level positions.

General Education Courses

English Composition

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts

Take 3 credits from the following:

- ART 111 - Art Appreciation Credit Hours: 3
- DRA 111 - Theatre Appreciation Credit Hours: 3
- ENG 131 - Introduction to Literature Credit Hours: 3
- ENG 231 - American Literature I Credit Hours: 3
- ENG 241 - British Literature I Credit Hours: 3
- ENG 242 - British Literature II Credit Hours: 3
- ENG 251 - Western World Literature I Credit Hours: 3
- ENG 252 - Western World Literature II Credit Hours: 3
- HUM 110 - Technology and Society Credit Hours: 3
- HUM 115 - Critical Thinking Credit Hours: 3
- MUS 110 - Music Appreciation Credit Hours: 3
- MUS 111 - Fundamentals of Music Credit Hours: 3
- PHI 210 - History of Philosophy Credit Hours: 3
- PHI 215 - Philosophical Issues Credit Hours: 3
- PHI 240 - Introduction to Ethics Credit Hours: 3

Social/Behavioral Sciences

Take 3 credits from the following:

- PSY 150 - General Psychology Credit Hours: 3
- SOC 210 - Introduction to Sociology Credit Hours: 3

Mathematics

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3

Major Courses

- EPT 120 - Sociology of Disaster Credit Hours: 3
- EPT 130 - Mitigation & Preparedness Credit Hours: 3
- EPT 140 - Emergency Management Credit Hours: 3
- EPT 150 - Incident Management Credit Hours: 3
- EPT 210 - Disaster Response Ops Mgt Credit Hours: 3
- EPT 220 - Terrorism and Emer. Mgt. Credit Hours: 3
- EPT 275 - Emergency Ops Center Mgt Credit Hours: 3
- FIP 228 - Local Govt Finance Credit Hours: 3
- EPT 124 - EM Services Law & Ethics Credit Hours: 3
OR
- FIP 152 - Fire Protection Law Credit Hours: 3

Program Electives

Students must select 23 hours from the following courses:

- CJC 160 - Terrorism: Underlying Issues Credit Hours: 3
- CJC 215 - Organization & Administration Credit Hours: 3
- CJC 225 - Crisis Intervention Credit Hours: 3
- EMS 110 - EMT Credit Hours: 8
- EPT 225 - Haz Analysis/Risk Assess Credit Hours: 3
- EPT 230 - Emergency Planning Credit Hours: 3
- EPT 260 - Business Continuity Credit Hours: 3
- EPT 280 - Building Resilient Comm Credit Hours: 3
- FIP 124 - Fire Prevention & Public Ed Credit Hours: 3
- FIP 164 - OSHA Standards Credit Hours: 3
- FIP 230 - Chem of Hazardous Mat I Credit Hours: 5
- FIP 240 - Fire Service Supervision Credit Hours: 3
- FIP 276 - Managing Fire Services Credit Hours: 3

Total Credit Hours Required: 65

Suggested Sequence:

Fall - 1st Year:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- EPT 120 - Sociology of Disaster Credit Hours: 3
- EPT 220 - Terrorism and Emer. Mgt. Credit Hours: 3
- Emergency Management Program Electives Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3
OR
- SOC 210 - Introduction to Sociology Credit Hours: 3

Total Hours: Class 15 | Lab 0 | Clin/Wk Exp 0 | Credit 15

Spring - 1st year:

- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
- EPT 130 - Mitigation & Preparedness Credit Hours: 3
- EPT 140 - Emergency Management Credit Hours: 3
- FIP 152 - Fire Protection Law Credit Hours: 3
OR
- EPT 124 - EM Services Law & Ethics Credit Hours: 3
- Emergency Management Program Electives Credit Hours: 3

Total Hours: Class 15 | Lab 0 | Clin/Wk Exp 0 | Credit 15

Summer - 1st year:

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
- Humanities/Fine Arts Elective Credit Hours: 3

Total Hours: Class 5 | Lab 2 | Clin/Wk Exp 0 | Credit 6

Fall - 2nd year:

- EPT 150 - Incident Management Credit Hours: 3
- EPT 210 - Disaster Response Ops Mgt Credit Hours: 3
- Emergency Management Program Electives Credit Hours: 9

Total Hours: Class 15 | Lab 0 | Clin/Wk Exp 0 | Credit 15

Spring - 2nd year:

- EPT 275 - Emergency Ops Center Mgt Credit Hours: 3
- FIP 228 - Local Govt Finance Credit Hours: 3
- Emergency Management Program Electives Credit Hours: 8

Total Hours: Class 14 | Lab 0 | Clin/Wk Exp 0 | Credit 14

Total Hours: Class 64 | Lab 2 | Clin/Wk Exp 0 | Credit 65

Emergency Management Certificate (C5546001)**Major Courses**

- EPT 120 - Sociology of Disaster Credit Hours: 3
- EPT 130 - Mitigation & Preparedness Credit Hours: 3
- EPT 140 - Emergency Management Credit Hours: 3
- EPT 150 - Incident Management Credit Hours: 3
- EPT 210 - Disaster Response Ops Mgt Credit Hours: 3
- EPT 275 - Emergency Ops Center Mgt Credit Hours: 3

Total Credit Hours Required: 18

Emergency Management -- Fire Certificate (C5546002)**Major Courses**

- EPT 130 - Mitigation & Preparedness Credit Hours: 3
- EPT 140 - Emergency Management Credit Hours: 3
- EPT 210 - Disaster Response Ops Mgt Credit Hours: 3
- EPT 225 - Haz Analysis/Risk Assess Credit Hours: 3
- FIP 152 - Fire Protection Law Credit Hours: 3
OR
- EPT 124 - EM Services Law & Ethics Credit Hours: 3
- FIP 240 - Fire Service Supervision Credit Hours: 3

Total Credit Hours Required: 18

Emergency Management -- Criminal Justice Certificate (C5546003)**Major Courses**

- EPT 130 - Mitigation & Preparedness Credit Hours: 3
- EPT 140 - Emergency Management Credit Hours: 3
- EPT 210 - Disaster Response Ops Mgt Credit Hours: 3
- CJC 160 - Terrorism: Underlying Issues Credit Hours: 3
- CJC 215 - Organization & Administration Credit Hours: 3
- CJC 225 - Crisis Intervention Credit Hours: 3

Total Credit Hours Required: 18

Emergency Medical Science, A.A.S. (A45340)

The paramedic program of Catawba Valley Community College is Accredited by the Commission on Accreditation of Allied Health Education Programs, (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

The Emergency Medical Science curriculum provides individuals with the knowledge, skills and attributes to provide advanced emergency medical care as a paramedic for critical and emergent patients who access the emergency medical system and prepares graduates to enter the workforce.

Students will gain complex knowledge, competency, and experience while employing evidence based practice under medical oversight, and serve as a link from the scene into the healthcare system.

Graduates of this program may be eligible to take state and/or national certification examinations. Employment opportunities include providers of emergency medical services, fire departments, rescue agencies, hospital specialty areas, industry, educational and government agencies.

Note: Students must successfully complete BIO 168 Anatomy and Physiology I (with a grade of "C" or higher), EMS 110 EMT, and HSC 110 Orientation to Health Careers prior to admission into the program.

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- BIO 168 - Anatomy and Physiology I Credit Hours: 4

Social/Behavioral Sciences:

- PSY 150 - General Psychology Credit Hours: 3

Major Courses:

- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- EMS 110 - EMT Credit Hours: 8
- EMS 122 - EMS Clinical Practicum I Credit Hours: 1
- EMS 130 - Pharmacology Credit Hours: 4
- EMS 131 - Advanced Airway Management Credit Hours: 2
- EMS 140 - Rescue Scene Management Credit Hours: 2
- EMS 160 - Cardiology I Credit Hours: 2
- EMS 220 - Cardiology II Credit Hours: 3
- EMS 221 - EMS Clinical Practicum II Credit Hours: 2
- EMS 231 - EMS Clinical Pract III Credit Hours: 3
- EMS 235 - EMS Management Credit Hours: 2
- EMS 240 - Patients W/Special Challenges Credit Hours: 2
- EMS 241 - EMS Clinical Practicum IV Credit Hours: 4
- EMS 250 - Medical Emergencies Credit Hours: 4
- EMS 260 - Trauma Emergencies Credit Hours: 2
- EMS 270 - Life Span Emergencies Credit Hours: 3
- EMS 285 - EMS Capstone Credit Hours: 2
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3

Other Required Hours

- HSC 110 - Orientation to Health Careers Credit Hours: 1

Total Credit Hours Required: 73

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3
- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1

Suggested Program Sequence:

Fall – 1st year:

- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- EMS 110 - EMT Credit Hours: 8
- HSC 110 - Orientation to Health Careers Credit Hours: 1
- MED 121 - Medical Terminology I Credit Hours: 3 (*1st 8-Weeks*)
- MED 122 - Medical Terminology II Credit Hours: 3 (*2nd 8-Weeks*)

Total Hours: Class 16 | Lab 9 | Clin/Wk Exp 0 | Credit 19

Spring – 1st year:

- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- ENG 111 - Writing and Inquiry Credit Hours: 3
- EMS 122 - EMS Clinical Practicum I Credit Hours: 1
- EMS 130 - Pharmacology Credit Hours: 4
- EMS 131 - Advanced Airway Management Credit Hours: 2
- EMS 160 - Cardiology I Credit Hours: 2

Total Hours: Class 11 | Lab 11 | Clin/Wk Exp 3 | Credit 16

Summer – 1st year:

- EMS 140 - Rescue Scene Management Credit Hours: 2
- EMS 220 - Cardiology II Credit Hours: 3
- EMS 221 - EMS Clinical Practicum II Credit Hours: 2
- EMS 240 - Patients W/Special Challenges Credit Hours: 2
- EMS 260 - Trauma Emergencies Credit Hours: 2

Total Hours: Class 5 | Lab 11 | Clin/Wk Exp 6 | Credit 11

Fall – 2nd year:

- EMS 231 - EMS Clinical Pract III Credit Hours: 3
- EMS 235 - EMS Management Credit Hours: 2
- EMS 250 - Medical Emergencies Credit Hours: 4
- EMS 270 - Life Span Emergencies Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3

Total Hours: Class 10 | Lab 6 | Clin/Wk Exp 9 | Credit 15

Spring – 2nd year:

- EMS 241 - EMS Clinical Practicum IV Credit Hours: 4
- EMS 285 - EMS Capstone Credit Hours: 2
- PSY 150 - General Psychology Credit Hours: 3
- Humanities/Fine Arts Elective Credit Hours: 3

Total Hours: Class 7 | Lab 3 | Clin/Wk Exp 12 | Credit 12

Grand Total Hours: Class 49 | Lab 40 | Clin/Wk Exp 30 | Credit 73

Emergency Medical Science Paramedic Advancement Certificate (A4534009)

This special track was developed to facilitate a North Carolina or Nationally Registered certified paramedic in returning to school to obtain an Associate in Applied Science degree. The length of this course varies depending on the individual's experience and prior education. In order to enable the most rapid completion of the CPA Program the following prerequisites and/or admission requirements will be used:

Prerequisites and/or Admission Requirements:

1. Meet CVCC's institutional requirements for admissions as an EMS student.
2. Letter from EMS director confirming 1000 hours or more of direct patient care.
3. Provider and/or instructor cards for ITLS or PHTLS, ACLS or ACLS-EP, PALS or PEPP.
4. Valid North Carolina or National Registry Paramedic Certification.
5. Letter of reference from service's Medical Director attesting to the individual's competence in basic and advanced life support skills.
6. Once the criterion above has been met, the student will then be offered Advanced Placement exams in the following courses so as to facilitate his or her movement through the program. To successfully advance place a student must score a "B" or higher.
 - EMS 110 - EMT Credit Hours: 8
 - EMS 130 - Pharmacology Credit Hours: 4
 - EMS 131 - Advanced Airway Management Credit Hours: 2
 - EMS 140 - Rescue Scene Management Credit Hours: 2
 - EMS 160 - Cardiology I Credit Hours: 2
 - EMS 220 - Cardiology II Credit Hours: 3
 - EMS 240 - Patients W/Special Challenges Credit Hours: 2
 - EMS 250 - Medical Emergencies Credit Hours: 4
 - EMS 260 - Trauma Emergencies Credit Hours: 2
 - EMS 270 - Life Span Emergencies Credit Hours: 3
 - EMS 285 - EMS Capstone Credit Hours: 2
 - EMS 122 - EMS Clinical Practicum I Credit Hours: 1
 - EMS 221 - EMS Clinical Practicum II Credit Hours: 2
 - EMS 231 - EMS Clinical Pract III Credit Hours: 3
 - EMS 241 - EMS Clinical Practicum IV Credit Hours: 4

Note:

Advanced Placement requirement will be satisfied with documentation of 1000 hours or more of direct patient care.

Required Courses:

Students are required to complete the following courses, and maintain a 2.0 GPA, in order to successfully complete the program requirements.

The student may transfer and/or advance place up to sixty-five percent of the required course hours. This track will be highly individualized depending on any prior college credits by the student and his or her success with advanced placement scores.

- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
- EMS 235 - EMS Management Credit Hours: 2
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3
- Humanities/Fine Arts - Elective Credit Hours: 3

Emergency Medical Science Health Science: Therapeutic and Diagnostic Service Diploma (D45910)

This curriculum is designed to prepare students for careers in the Health Sciences.

Students will complete general education courses that provide a foundation for success in nursing and allied health curricula. Students may select a career pathway that will prepare them for an entry level position in health care. Courses may also provide foundational knowledge needed in the pursuit of advanced health science degrees or programs.

Graduates should qualify for an entry-level job associated with the program major such as Emergency Medical Technician (EMT) or Advanced Emergency Medical Technician (AEMT).

Emergency Medical Science: A program that prepares graduates to enter the workforce as Emergency Medical Technicians or Advanced Emergency Medical Technicians. The course of study provides the student an opportunity to acquire basic life support knowledge and skills by utilizing classroom instruction, practical laboratory sessions, and hospital/field internships. Students progressing through the program may be eligible to apply for both state and national certification exams. Employment opportunities include ambulance services, fire and rescue agencies, air medical services, specialty areas of hospitals, industry, educational institutions, and government agencies.

General Education Courses

English/Communication:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3

Humanities/Fine Arts:

- PHI 240 - Introduction to Ethics Credit Hours: 3

Major Courses:

Technical Core

- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3

Program Major

- EMS 110 - EMT Credit Hours: 8
- EMS 120 - Advanced EMT Credit Hours: 6
- EMS 121 - AEMT Clinical Practicum Credit Hours: 2

Other Major

- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- MAT 143 - Quantitative Literacy Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3

Total Credit Hours Required: 45

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, and mathematics. Please refer to the Course Description section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 143) from above:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:

Fall – 1st year:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- PSY 150 - General Psychology Credit Hours: 3
- MAT 143 - Quantitative Literacy Credit Hours: 3

Total Hours: Class 11 | Lab 5 | Clin/Wk Exp 0 | Credit 13

Spring – 1st year:

- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
- PHI 240 - Introduction to Ethics Credit Hours: 3
- BIO 169 - Anatomy and Physiology II Credit Hours: 4

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 10

Fall – 2nd year:

- EMS 110 - EMT Credit Hours: 8
- MED 121 - Medical Terminology I Credit Hours: 3 (1st 8wks)
- MED 122 - Medical Terminology II Credit Hours: 3 (2nd 8wks)

Total Hours: Class 12 | Lab 6 | Clin/Wk Exp 0 | Credit 14

Spring – 2nd year:

- EMS 120 - Advanced EMT Credit Hours: 6
- EMS 121 - AEMT Clinical Practicum Credit Hours: 2

Total Hours: Class 4 | Lab 6 | Clin/Wk Exp 6 | Credit 8

Grand Total Hours: Class 36 | Lab 17 | Clin/Wk Exp 6 | Credit 45

Note:

General Education, Technical Core, Other Major, and EMS 110 must be successfully completed prior to admittance to EMS 120 - Advanced EMT, and EMS 121 - AEMT Clinical Practicum.

Entrepreneurship, A.A.S. (A25490)

The Entrepreneurship curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth as self-employed business owners.

Course work includes developing a student's ability to make informed decisions as future business owners. Courses include entrepreneurial concepts learned in innovation and creativity, business funding, and marketing. Additional course work includes computers and economics.

Through these skills, students will have a sound education base in entrepreneurship for lifelong learning. Graduates are prepared to be self-employed and open their own businesses.

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Electives Credit Hours: 3

Social/Behavioral Sciences:

- Electives Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3

Major Courses:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- BUS 110 - Introduction to Business Credit Hours: 3
- BUS 139 - Entrepreneurship I Credit Hours: 3
- BUS 240 - Business Ethics Credit Hours: 3
- BUS 245 - Entrepreneurship II Credit Hours: 3
- BUS 253 - Leadership and Mgt Skills Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
- ECO 251 - Prin of Microeconomics Credit Hours: 3
- ETR 215 - Law for Entrepreneurs Credit Hours: 3
- ETR 220 - Innovation and Creativity Credit Hours: 3
- ETR 230 - Entrepreneur Marketing Credit Hours: 3
- ETR 240 - Funding for Entrepreneurs Credit Hours: 3
- ETR 270 - Entrepreneurship Issues Credit Hours: 3

Entrepreneurship Electives:

Entrepreneurship/Work-Based Electives: Students are required to take a minimum of 9 SHC from the following courses. Qualified student may elect to take up to 6 credit hours of Work-Based learning.

- ACC 121 - Prin of Managerial Accounting Credit Hours: 4
- BUS 125 - Personal Finance Credit Hours: 3
- BUS 153 - Human Resource Management Credit Hours: 3
- BUS 217 - Employment Law and Regs Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3
- ECO 252 - Prin of Macroeconomics Credit Hours: 3
- INT 110 - International Business Credit Hours: 3
- MKT 123 - Fundamentals of Selling Credit Hours: 3
- MKT 220 - Advertising and Sales Promotion Credit Hours: 3
- MKT 221 - Consumer Behavior Credit Hours: 3
- MKT 223 - Customer Service Credit Hours: 3
- RLS 112 - Broker Prelicensing Credit Hours: 5
- WBL 110 - World of Work Credit Hours: 1
- WBL XXX Work-Based Learning Credit Hours: 1-3

Total Credit Hours Required: 64

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Students who elect to take (MAT 143) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:**Fall – 1st year:**

- BUS 110 - Introduction to Business Credit Hours: 3
- BUS 139 - Entrepreneurship I Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3
- ETR 220 - Innovation and Creativity Credit Hours: 3
- ETR 230 - Entrepreneur Marketing Credit Hours: 3

Total Hours: Class 15 | Lab 0 | Clin/Wk Exp 0 | Credit 15

Spring – 1st year:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- BUS 245 - Entrepreneurship II Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
- ETR 215 - Law for Entrepreneurs Credit Hours: 3
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3

Total Hours: Class 13 | Lab 6 | Clin/Wk Exp 0 | Credit 16

Fall – 2nd year:

- BUS 240 - Business Ethics Credit Hours: 3
- ECO 251 - Prin of Microeconomics Credit Hours: 3
- ENG 114 - Prof Research & Reporting Credit Hours: 3
- Social/Behavioral Science - Elective Credit Hours: 3
- Entrepreneurship Elective Credit Hours: 3
- Entrepreneurship Elective Credit Hours: 3

Total Hours: Class 18 | Lab 0 | Clin/Wk Exp 0 | Credit 18

Spring – 2nd year:

- BUS 253 - Leadership and Mgt Skills Credit Hours: 3
- ETR 240 - Funding for Entrepreneurs Credit Hours: 3
- ETR 270 - Entrepreneurship Issues Credit Hours: 3
- Humanities/Fine Arts - Elective Credit Hours: 3
- Entrepreneurship Elective Credit Hours: 3

Total Hours: Class 15 | Lab 0 | Clin/Wk Exp 0 | Credit 15

Grand Total Hours: Class 61 | Lab 6 | Clin/Wk Exp 0 | Credit 64

Entrepreneurship Diploma (D25490)**General Education Courses****English/Communications:**

- ENG 111 - Writing and Inquiry Credit Hours: 3

Social/Behavioral Sciences:

- Social/Behavioral Science - Elective Credit Hours: 3

Major Courses:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- BUS 110 - Introduction to Business Credit Hours: 3
- BUS 139 - Entrepreneurship I Credit Hours: 3
- BUS 245 - Entrepreneurship II Credit Hours: 3
- BUS 253 - Leadership and Mgt Skills Credit Hours: 3
- ECO 251 - Prin of Microeconomics Credit Hours: 3
- ETR 215 - Law for Entrepreneurs Credit Hours: 3
- ETR 220 - Innovation and Creativity Credit Hours: 3
- ETR 230 - Entrepreneur Marketing Credit Hours: 3
- ETR 270 - Entrepreneurship Issues Credit Hours: 3

Total Credit Hours Required: 37**Developmental Course Requirements:**

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Suggested Program Sequence:**Fall – 1st year:**

- BUS 110 - Introduction to Business Credit Hours: 3
- BUS 139 - Entrepreneurship I Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3
- ETR 230 - Entrepreneur Marketing Credit Hours: 3

Total Hours: Class 12 | Lab 0 | Clin/Wk Exp 0 | Credit 12

Spring – 1st year:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- BUS 245 - Entrepreneurship II Credit Hours: 3
- ETR 215 - Law for Entrepreneurs Credit Hours: 3
- ETR 270 - Entrepreneurship Issues Credit Hours: 3

Total Hours: Class 12 | Lab 2 | Clin/Wk Exp 0 | Credit 13

Fall – 2nd year:

- BUS 253 - Leadership and Mgt Skills Credit Hours: 3
- ECO 251 - Prin of Microeconomics Credit Hours: 3
- ETR 220 - Innovation and Creativity Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Spring – 2nd year:

- Social/Behavioral Science - Elective Credit Hours: 3

Total Hours: Class 3 | Lab 0 | Clin/Wk Exp 0 | Credit 3

Grand Total Hours: Class 36 | Lab 2 | Clin/Wk Exp 0 | Credit 37

Entrepreneurship Certificate (C25490)

Major Courses:

- BUS 139 - Entrepreneurship I Credit Hours: 3
- BUS 245 - Entrepreneurship II Credit Hours: 3
- ETR 220 - Innovation and Creativity Credit Hours: 3
- ETR 230 - Entrepreneur Marketing Credit Hours: 3

Total Credit Hours Required: 12

Suggested Program Sequence:

Fall – 1st year:

- BUS 139 - Entrepreneurship I Credit Hours: 3
- ETR 220 - Innovation and Creativity Credit Hours: 3
- ETR 230 - Entrepreneur Marketing Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Spring – 1st year:

- BUS 245 - Entrepreneurship II Credit Hours: 3

Total Hours: Class 3 | Lab 0 | Clin/Wk Exp 0 | Credit 3

Grand Total Hours: 12 | Lab 0 | Clin/Wk Exp 0 | Credit 12

Fire Protection Technology, A.A.S. (A55240)

The Fire Protection Technology curriculum is designed to provide students with knowledge and skills in the technical, managerial, and leadership areas necessary for advancement within the fire protection community and related firefighting industries, and to provide currently employed firefighters with knowledge and skills often required for promotional consideration.

Course work includes diverse fire protection subject areas, including fire prevention and safety, public education, building construction, fire ground strategies and tactics, and local government finance and laws, as they apply to emergency services management. Emphasis includes understanding fire characteristics and the structural consequences of fire; risk assessment and management; and relevant research, communications, and leadership methodologies.

Employment opportunities exist with fire departments, governmental agencies, industrial firms, insurance rating organizations, and educational organizations.

Due to the minimum competency level expected for graduates, the department requires a grade of "C" or higher on all required Fire Protection Technology courses for graduation with a certificate or degree.

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3

Social/Behavioral Sciences:

- PSY 150 - General Psychology Credit Hours: 3
OR
- SOC 210 - Introduction to Sociology Credit Hours: 3

Major Courses:

- CIS 110 - Introduction to Computers Credit Hours: 3
- EPT 140 - Emergency Management Credit Hours: 3
- FIP 120 - Intro to Fire Protection Credit Hours: 3
- FIP 124 - Fire Prevention & Public Ed Credit Hours: 3
- FIP 132 - Building Construction Credit Hours: 3
- FIP 136 - Inspections & Codes Credit Hours: 3
- FIP 146 - Fire Protection Systems Credit Hours: 4
- FIP 152 - Fire Protection Law Credit Hours: 3
- FIP 164 - OSHA Standards Credit Hours: 3
- FIP 220 - Fire Fighting Strategies Credit Hours: 3
- FIP 228 - Local Govt Finance Credit Hours: 3
- FIP 229 - Fire Dynamics and Combust Credit Hours: 3
- FIP 240 - Fire Service Supervision Credit Hours: 3
- FIP 276 - Managing Fire Services Credit Hours: 3

FIP Electives:

Students are required to select 6/8 credit hours from the following:

- FIP 128 - Detection & Investigation Credit Hours: 3
- FIP 140 - Industrial Fire Protection Credit Hours: 3
- FIP 221 - Adv Fire Fighting Strat Credit Hours: 3
- FIP 224 - Fire Instructor I & II Credit Hours: 4
- FIP 226 - Fire Officer I & II Credit Hours: 4
- FIP 248 - Fire Svc Personnel Adm Credit Hours: 3
- FIP 230 - Chem of Hazardous Mat I Credit Hours: 5

Other Required Hours:

- ACA 111 - College Student Success Credit Hours: 1

Total Credit Hours Required: 65/67

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Students who elect to take (MAT 143) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:**Fall – 1st year:**

- ACA 111 - College Student Success Credit Hours: 1
- CIS 110 - Introduction to Computers Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3
- FIP 120 - Intro to Fire Protection Credit Hours: 3
- FIP 124 - Fire Prevention & Public Ed Credit Hours: 3
- FIP 132 - Building Construction Credit Hours: 3

Total Hours: Class 16 | Lab 0 | Clin/Wk Exp 0 | Credit 16

Spring – 1st year:

- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
- EPT 140 - Emergency Management Credit Hours: 3
- FIP 136 - Inspections & Codes Credit Hours: 3
- FIP 152 - Fire Protection Law Credit Hours: 3
- FIP Elective Credit Hours: 3

Total Hours: Class 15 | Lab 0 | Clin/Wk Exp 0 | Credit 15

Summer – 1st year:

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3
OR
- SOC 210 - Introduction to Sociology Credit Hours: 3
- Humanities/Fine Arts Elective Credit Hours: 3

Total Hours: Class 8 | Lab 2 | Clin/Wk Exp 0 | Credit 9

Fall – 2nd year:

- FIP 146 - Fire Protection Systems Credit Hours: 4
- FIP 220 - Fire Fighting Strategies Credit Hours: 3
- FIP 229 - Fire Dynamics and Combust Credit Hours: 3
- FIP 240 - Fire Service Supervision Credit Hours: 3

Total Hours: Class 12 | Lab 2 | Clin/Wk Exp 0 | Credit 13

Spring – 2nd year:

- FIP 164 - OSHA Standards Credit Hours: 3
- FIP 228 - Local Govt Finance Credit Hours: 3
- FIP 276 - Managing Fire Services Credit Hours: 3
- FIP Elective Credit Hours: 3/5

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 12/14

Grand Total Hours: Class 60 | Lab 4 | Clin/WK Exp 0 | Credit 65/67

Fire Protection Technology, Fire Protection Management Certificate (C5524004)**General Education Courses**

- ENG 111 - Writing and Inquiry Credit Hours: 3

Major Courses:

- FIP 120 - Intro to Fire Protection Credit Hours: 3
- FIP 152 - Fire Protection Law Credit Hours: 3
- FIP 220 - Fire Fighting Strategies Credit Hours: 3
- FIP 228 - Local Govt Finance Credit Hours: 3
- FIP 240 - Fire Service Supervision Credit Hours: 3

Total Credit Hours Required: 18

Suggested Program Sequence:**Fall – 1st year:**

- FIP 120 - Intro to Fire Protection Credit Hours: 3
- FIP 220 - Fire Fighting Strategies Credit Hours: 3
- FIP 240 - Fire Service Supervision Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Spring – 1st year:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- FIP 152 - Fire Protection Law Credit Hours: 3
- FIP 228 - Local Govt Finance Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Grand Total Hours: Class 18 | Lab 0 | Clin/Wk Exp 0 | Credit 18

Fire Protection Technology, Industrial Fire Protection Certificate (C5524005)

General Education Courses

- ENG 111 - Writing and Inquiry Credit Hours: 3

Major Courses:

- FIP 120 - Intro to Fire Protection Credit Hours: 3
- FIP 124 - Fire Prevention & Public Ed Credit Hours: 3
- FIP 132 - Building Construction Credit Hours: 3
- FIP 140 - Industrial Fire Protection Credit Hours: 3
- FIP 164 - OSHA Standards Credit Hours: 3

Total Credit Hours Required: 18

Suggested Program Sequence:

Fall – 1st year:

- FIP 120 - Intro to Fire Protection Credit Hours: 3
- FIP 124 - Fire Prevention & Public Ed Credit Hours: 3
- FIP 132 - Building Construction Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Spring – 1st year:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- FIP 140 - Industrial Fire Protection Credit Hours: 3
- FIP 164 - OSHA Standards Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Grand Total Hours: Class 18 | Lab 0 | Clin/Wk Exp 0 | Credit 18

General Occupational Technology, A.A.S. (A55280)

The General Occupational Technology (GOT) curriculum provides individuals with an opportunity to upgrade their skills and earn an associate degree, diploma, or certificate by taking courses that offer specific job knowledge and skills.

The curriculum content will be individualized for students according to their occupational interests and needs. A program of study for each student will be developed from any non-developmental level courses from approved curriculum programs of study offered by the College.

Graduates will become more effective workers, better qualified for advancements within their field of employment, and better qualified for a wide range of entry-level employment opportunities.

All courses included in the GOT must be taken from CVCC's approved Associate of Applied Science (A.A.S.), diploma or certificate programs.

General Education (15 SHC):

Associate Degree programs must contain a minimum of 15 semester hours of general education coursework. The general education hours must include a minimum of 6 semester hours in communications and at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Diploma programs must contain a minimum of 6 semester hours of general education, 3 semester hours of which must be in communications. General education is optional in certificate programs.

Major Courses (49 SHC):

Program Courses

The General Occupational Technology Associate in Applied Science (A.A.S.), diploma, and certificate programs must include courses which offer specific job knowledge and skills. The student must select and complete a minimum of 49 SHC from a combination of major courses for curriculums approved to be offered by the college. Work experience, including cooperative education, practicums, and internships, may be included in a degree program up to a maximum of 8 semester hours of credit, in a diploma up to a maximum of 4 semester hours credit, and in a certificate program up to a maximum of 2 semester hours of credit.

Other Required Hours (0-7 SHC):

Local employer requirements, as well as college designated graduation requirements, may be accommodated in "other required hours." Up to a maximum of 7 semester hours of credit in other required hours may be included in an A.A.S. degree program, 4 semester hours of credit in a diploma program, and 1 semester hour of credit in other required hours may be included in a certificate program. Any course in the Combined Course Library that is educationally relevant to the student's career objective may be used in other required hours, as long as it is not a restricted or unique course.

Total SHC: 64-76

The total number of semester hour credit must include a minimum of 64 hours and a maximum of 76 hours.

Health and Fitness Science, A.A.S. (A45630)

Courses required to meet graduation requirements in this curriculum are offered during daytime hours. Minimum time for completion: five semesters full-time attendance. The Associate of Applied Science degree is awarded graduates of this curriculum.

The Health and Fitness Science program is designed to provide students with the knowledge and skills necessary for employment in the fitness and exercise industry.

Students will be trained in exercise science and be able to administer basic fitness tests and health risk appraisals, teach specific exercise and fitness classes and provide instruction in the proper use of exercise equipment and facilities.

Graduates should qualify for employment opportunities in commercial fitness clubs, YMCA's/YWCA's, wellness programs in business and industry, Parks & Recreation Departments and other organizations implementing exercise & fitness programs.

General Education Courses

English/Communications:

- COM 110 - Introduction to Communication Credit Hours: 3
OR
- COM 231 - Public Speaking Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Humanities/Fine Arts Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 152 - Statistical Methods I Credit Hours: 4

Social/Behavioral Sciences:

- PSY 150 - General Psychology Credit Hours: 3

Major Courses:

- BIO 155 - Nutrition Credit Hours: 3
- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- HEA 112 - First Aid & CPR Credit Hours: 2
- PED 110 - Fit and Well for Life Credit Hours: 2
- HFS 110 - Exercise Science Credit Hours: 4
- HFS 111 - Fitness & Exer Testing I Credit Hours: 4
- HFS 114 - Phys Fit Theory & Instr Credit Hours: 4
- HFS 116 - Pvnt & Care Exer Injuries Credit Hours: 3
- HFS 118 - Fitness Facility Mgmt Credit Hours: 4
- HFS 120 - Group Exer Instruction Credit Hours: 3
- HFS 210 - Personal Training Credit Hours: 3
- HFS 212 - Exercise Programming Credit Hours: 3
- HFS 218 - Lifestyle Chng & Wellness Credit Hours: 4
- PSY 275 - Health Psychology Credit Hours: 3
- WBL 111 - Work-Based Learning I Credit Hours: 1

PED Electives

Students are required to select 2 credit hours from the following courses.

- PED 113 - Aerobics I Credit Hours: 1
- PED 117 - Weight Training I Credit Hours: 1
- PED 118 - Weight Training II Credit Hours: 1
- PED 120 - Walking for Fitness Credit Hours: 1
- PED 122 - Yoga I Credit Hours: 1

Total Credit Hours Required: 71/72

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3 (DMA 010, DMA 020, DMA 030)
- MAT 143 - Quantitative Literacy Credit Hours: 3 (DMA 010, DMA 020, DMA 030, DMA 040, DMA 050)
- MAT 152 - Statistical Methods I Credit Hours: 4 (DMA 010, DMA 020, DMA 030, DMA 040, DMA 050)

Suggested Program Sequence Day:

Fall - 1st year:

- HEA 112 - First Aid & CPR Credit Hours: 2
- HFS 110 - Exercise Science Credit Hours: 4
- HFS 111 - Fitness & Exer Testing I Credit Hours: 4
- HFS 210 - Personal Training Credit Hours: 3
- HFS 212 - Exercise Programming Credit Hours: 3

Total Hours: Class 12 | Lab 8 | Clin/Wk Exp 0 | Credit 16

Spring - 1st year:

- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- ENG 111 - Writing and Inquiry Credit Hours: 3
- HFS 116 - Pvnt & Care Exer Injuries Credit Hours: 3
- PED 110 - Fit and Well for Life Credit Hours: 2
- PED Elective Credit Hours: 1
- PSY 150 - General Psychology Credit Hours: 3

Total Hours: Class 12 | Lab 9 | Clin/Wk Exp 0 | Credit 16

Summer - 1st year:

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 152 - Statistical Methods I Credit Hours: 4
- Humanities/Fine Arts Elective Credit Hours: 3

Total Hours: Class 5/6 | Lab 2 | Clin/Wk Exp 0 | Credit 6/7

Fall - 2nd year:

- BIO 155 - Nutrition Credit Hours: 3
- COM 110 - Introduction to Communication Credit Hours: 3
OR
- COM 231 - Public Speaking Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
- HFS 114 - Phys Fit Theory & Instr Credit Hours: 4
- HFS 218 - Lifestyle Chng & Wellness Credit Hours: 4

Total Hours: Class 16 | Lab 2 | Clin/Wk Exp 0 | Credit 17

Spring - 2nd year:

- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- HFS 118 - Fitness Facility Mgmt Credit Hours: 4
- HFS 120 - Group Exer Instruction Credit Hours: 3
- PED Elective Credit Hours: 1
- PSY 275 - Health Psychology Credit Hours: 3
- WBL 111 - Work-Based Learning I Credit Hours: 1

Total Hours: Class 12 | Lab 7 | Clin/Wk Exp 10 | Credit 16

Grand Total Hours: Class 57/58 | Lab 28 | Clin/Wk Exp 10 | Credit 71/72

Health and Fitness Science Certificate (C45630)**Major Courses**

- HEA 112 - First Aid & CPR Credit Hours: 2
- HFS 110 - Exercise Science Credit Hours: 4
- HFS 111 - Fitness & Exer Testing I Credit Hours: 4
- HFS 210 - Personal Training Credit Hours: 3
- HFS 212 - Exercise Programming Credit Hours: 3

Total Credit Hours Required: 16

Suggested Sequence:**Fall - 1st Year:**

- HEA 112 - First Aid & CPR Credit Hours: 2
- HFS 110 - Exercise Science Credit Hours: 4
- HFS 111 - Fitness & Exer Testing I Credit Hours: 4
- HFS 210 - Personal Training Credit Hours: 3
- HFS 212 - Exercise Programming Credit Hours: 3

Total Hours: Class 12 | Lab 8 | Clin/Wk Exp 0 | Credit 16

Health Information Technology, A.A.S. (A45360)

Courses required to meet graduation requirements in this curriculum are offered during daytime hours with selected courses offered on demand during evening hours. Minimum time for completion: five semesters fulltime attendance. The Associate of Applied Science degree is awarded graduates of this curriculum.

The Health Information Technology curriculum is accredited by the Commission on Accreditation for Health Informatics and Information Management Education.

The Health Information Technology curriculum provides individuals with the knowledge and skills to process, analyze, abstract, compile, maintain, manage, and report health information.

Students will supervise departmental functions; classify, code, and index diagnoses and procedures; coordinate information for cost control, quality management, statistics, marketing, and planning; monitor governmental and non-governmental standards; facilitate research; and design system controls to monitor patient information security.

Graduates of this program may be eligible to write the national certification examination to become a Registered Health Information Technician (RHIT). Employment opportunities include hospitals, rehabilitation facilities, nursing homes, health insurance organizations, outpatient clinics, physicians' offices, hospice, and mental health facilities.

General Education Courses**English/Communications:**

- ENG 111 - Writing and Inquiry Credit Hours: 3
- English - Elective Credit Hours: 3

Students are required to take one (1) course from the following:

- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
- ENG 113 - Literature-Based Research Credit Hours: 3
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3

Social/Behavioral Sciences:

- PSY 150 - General Psychology Credit Hours: 3

Major Courses:

- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- BUS 137 - Principles of Management Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
OR
- CIS 111 - Basic PC Literacy Credit Hours: 2
- DBA 110 - Database Concepts Credit Hours: 3
- HIT 110 - Fundamentals of HIM Credit Hours: 3
- HIT 112 - Health Law and Ethics Credit Hours: 3
- HIT 114 - Health Data Sys/Standards Credit Hours: 3
- HIT 122 - Prof Practice Exp I Credit Hours: 1
- HIT 210 - Healthcare Statistics Credit Hours: 3
- HIT 211 - ICD Coding Credit Hours: 4
- HIT 214 - CPT/Other Coding Systems Credit Hours: 2
- HIT 215 - Reimbursement Methodology Credit Hours: 2
- HIT 216 - Quality Management Credit Hours: 2
- HIT 220 - Health Informatics & EHRs Credit Hours: 2

Major Courses (continued):

- HIT 222 - Prof Practice Exp III Credit Hours: 2
- HIT 226 - Principles of Disease Credit Hours: 3
- HIT 280 - Professional Issues Credit Hours: 2
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3

Total Credit Hours Required: 69/70

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3
- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Proportion/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1

Suggested Program Sequence:**Fall – 1st year:**

- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- CIS 110 - Introduction to Computers Credit Hours: 3
- CIS 111 - Basic PC Literacy Credit Hours: 2
- ENG 111 - Writing and Inquiry Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3
- HIT 110 - Fundamentals of HIM Credit Hours: 3
- PSY 110 - Life Span Development Credit Hours: 3

Total Hours: Class 16/17 | Lab 5 | Clin/WkExp 0 | Credit 18/19

Spring – 1st year:

- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- DBA 110 - Database Concepts Credit Hours: 3
- HIT 112 - Health Law and Ethics Credit Hours: 3
- HIT 114 - Health Data Sys/Standards Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3

Total Hours: Class 13 | Lab 9 | Clin/WkExp 0 | Credit 16

Summer – 1st year:

- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
- HIT 122 - Prof Practice Exp I Credit Hours: 1
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3

Total Hours: Class 5 | Lab 2 | Clin/WkExp 3 | Credit 7

Fall – 2nd year

- HIT 210 - Healthcare Statistics Credit Hours: 3
- HIT 211 - ICD Coding Credit Hours: 4
- HIT 216 - Quality Management Credit Hours: 2
- HIT 220 - Health Informatics & EHRs Credit Hours: 2
- HIT 222 - Prof Practice Exp III Credit Hours: 2

Total Hours: Class 9 | Lab 13 | Clin/WkExp 0 | Credit 14

Spring – 2nd year:

- BUS 137 - Principles of Management Credit Hours: 3
- HIT 222 - Prof Practice Exp III Credit Hours: 2
- HIT 214 - CPT/Other Coding Systems Credit Hours: 2
- HIT 215 - Reimbursement Methodology Credit Hours: 2
- HIT 280 - Professional Issues Credit Hours: 2
- Humanities Elective Credit Hours: 3

Total Hours: Class 10 | Lab 5 | Clin/WkExp 6 | Credit 14

Grand Total Hours: Class 53/54 | Lab 34 | Clin/WkExp 9 | Credit 69/70

Health Information Technology Certificate (C45360)

Courses required to meet graduation requirements in this curriculum are offered during day hours with selected courses offered during evening hours. Minimum time for completion: two semesters part-time attendance. A Certificate is awarded graduates of this curriculum.

Major Courses:

- CIS 110 - Introduction to Computers Credit Hours: 3
OR
- CIS 111 - Basic PC Literacy Credit Hours: 2
- HIT 110 - Fundamentals of HIM Credit Hours: 3
- HIT 112 - Health Law and Ethics Credit Hours: 3
- HIT 114 - Health Data Sys/Standards Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3

Total Credit Hours Required: 17/18

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Suggested Program Sequence:**Fall – 2nd year:**

- CIS 110 - Introduction to Computers Credit Hours: 3
OR
- CIS 111 - Basic PC Literacy Credit Hours: 2
- HIT 110 - Fundamentals of HIM Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3

Total Hours: Class 7/8 | Lab 2 | Clin/Wk Exp 0 | Credit 8/9

Spring – 2nd year:

- HIT 112 - Health Law and Ethics Credit Hours: 3
- HIT 114 - Health Data Sys/Standards Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3

Total Hours: Class 8 | Lab 3 | Clin/Wk Exp 0 | Credit 9

Grand Total Hours: Class 15/16 | Lab 5 | Clin/Wk Exp 0 | Credit 17/18

**Healthcare Management Technology, A.A.S.
(A25200)**

Core courses, those specific to Healthcare Management Technology, are offered during daytime hours, as well as via distance learning opportunities. Most other courses required to meet graduation requirements are offered by the above methods. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science degree is awarded graduates of this curriculum.

The Healthcare Management Technology curriculum prepares individuals for employment in healthcare business and financial operations in areas such as general healthcare management, entrepreneurship, and long-term care.

Course work includes medical office management, financial management, legal aspects of healthcare, medical insurance and billing analysis, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of healthcare settings including hospitals, medical offices, outpatient clinics, long-term care facilities, and insurance companies. Industry recognized certifications may be available for graduates with work experience.

General Education Courses**English/Communications:**

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
- MAT 152 - Statistical Methods I Credit Hours: 4

Social/Behavioral Sciences:

- Elective Credit Hours: 3

Major Courses:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- ACC 121 - Prin of Managerial Accounting Credit Hours: 4
- CIS 110 - Introduction to Computers Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3
- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- HMT 211 - Long-Term Care Admin Credit Hours: 3
- HMT 212 - Mgt of Healthcare Org Credit Hours: 3
- HMT 220 - Healthcare Financial Mgmt Credit Hours: 4
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3
- OST 148 - Med Ins & Billing Credit Hours: 3
- OST 149 - Medical Legal Issues Credit Hours: 3
- OST 243 - Med Office Simulation Credit Hours: 3
- OST 247 - Procedure Coding Credit Hours: 3
- OST 248 - Diagnostic Coding Credit Hours: 3
- OST 263 - Healthcare Customer Relations Credit Hours: 3
- OST 280 - Electronic Health Records Credit Hours: 3
- WBL XXX Work-Based Learning Credit Hours: 2

Other Required Courses:

- ACA 111 - College Student Success Credit Hours: 1

Total Credit Hours Required: 72/73

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Students who elect to take (MAT 143/MAT 152) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:**Fall – 1st year:**

- ACA 111 - College Student Success Credit Hours: 1
- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- CIS 110 - Introduction to Computers Credit Hours: 3
- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3 (1st 8 Wks)
- MED 122 - Medical Terminology II Credit Hours: 3 (2nd 8 Wks)

Total Hours: Class 15 | Lab 4 | Clin/Wk Exp 0 | Credit 17

Spring – 1st year:

- ACC 121 - Prin of Managerial Accounting Credit Hours: 4
- HMT 211 - Long-Term Care Admin Credit Hours: 3
- OST 148 - Med Ins & Billing Credit Hours: 3
- OST 149 - Medical Legal Issues Credit Hours: 3
- OST 280 - Electronic Health Records Credit Hours: 3

Total Hours: Class 14 | Lab 4 | Clin/Wk Exp 0 | Credit 16

Summer – 1st year:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- Humanities/Fine Arts Elective Credit Hours: 3
- Social/Behavioral Science Elective Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Fall – 2nd year:

- CTS 130 - Spreadsheet Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3 (Preferred)
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 152 - Statistical Methods I Credit Hours: 4
- OST 247 - Procedure Coding Credit Hours: 3
- OST 263 - Healthcare Customer Relations Credit Hours: 3

Total Hours: Class 9/10 | Lab 6 | Clin/Wk Exp 0 | Credit 15/16

Spring – 2nd year:

- HMT 212 - Mgt of Healthcare Org Credit Hours: 3
- HMT 220 - Healthcare Financial Mgmt Credit Hours: 4
- OST 243 - Med Office Simulation Credit Hours: 3
- OST 248 - Diagnostic Coding Credit Hours: 3
- WBL XXX Work-Based Learning Credit Hours: 2

Total Hours: Class 11 | Lab 4 | Clin/Wk Exp 20 | Credit 15

Grand Total Hours: Class 58/59 | Lab 18 | Clin/Wk Exp 20 | Credit 72/73

Healthcare Management Technology Healthcare Management Certificate (C25200)**Major Courses:**

- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- HMT 211 - Long-Term Care Admin Credit Hours: 3
- HMT 212 - Mgt of Healthcare Org Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3
- OST 148 - Med Ins & Billing Credit Hours: 3

Total Credit Hours Required: 18

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Suggested Program Sequence:

Fall – 1st year:

- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Spring – 1st year:

- HMT 211 - Long-Term Care Admin Credit Hours: 3
- HMT 212 - Mgt of Healthcare Org Credit Hours: 3
- OST 148 - Med Ins & Billing Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Grand Total Hours: Class 18 | Lab 0 | Clin/Wk Exp 0 | Credit 18

Healthcare Management Technology Insurance Certificate (C2520004)

Major Courses:

- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3
- OST 148 - Med Ins & Billing Credit Hours: 3
- OST 247 - Procedure Coding Credit Hours: 3
- OST 248 - Diagnostic Coding Credit Hours: 3

Total Credit Hours Required: 18

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Suggested Program Sequence:

Fall – 1st year:

- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3 (1st 8 Wks)
- MED 122 - Medical Terminology II Credit Hours: 3 (2nd 8 Wks)

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Spring – 1st year:

- OST 148 - Med Ins & Billing Credit Hours: 3
- OST 247 - Procedure Coding Credit Hours: 3
- OST 248 - Diagnostic Coding Credit Hours: 3

Total Hours: Class 7 | Lab 4 | Clin/Wk Exp 0 | Credit 9

Grand Total Hours: Class 16 | Lab 4 | Clin/Wk Exp 0 | Credit 18

Healthcare Management Technology Healthcare Receptionist Certificate (C2520005)

Major Courses:

- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3
- OST 148 - Med Ins & Billing Credit Hours: 3
- OST 149 - Medical Legal Issues Credit Hours: 3
- OST 263 - Healthcare Customer Relations Credit Hours: 3

Total Credit Hours Required: 18

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Fall – 1st year:

- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3 (1st 8-Weeks)
- MED 122 - Medical Terminology II Credit Hours: 3 (2nd 8-Weeks)

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Spring – 1st year:

- OST 148 - Med Ins & Billing Credit Hours: 3 (1st 8-Weeks)
- OST 149 - Medical Legal Issues Credit Hours: 3
- OST 263 - Healthcare Customer Relations Credit Hours: 3 (2nd 8-weeks)

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Grand Total Hours: Class 18 | Lab 0 | Clin/Wk Exp 0 | Credit 18

Horticulture Technology, A.A.S. (A15240)

Most courses required to meet graduation requirements in this curriculum are offered during daytime hours. Selected courses may be offered each semester via the Internet. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science degree is awarded graduates of this curriculum.

Special University Articulation Agreement with North Carolina State University: NCSU may accept up to 15 semester credit hours in Horticulture from CVCC toward the Bachelor of Science in Horticulture degree. A course grade of C or higher, for each course, is required.

CVCC has a 2 + 2 Articulation Agreement with NC Agricultural and Technological State University in Horticulture.

These curricula are designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study.

Course work includes plant identification, pest management, plant science and soil science. Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses.

Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, governmental agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens. Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination.

Horticulture Technology: A program that focuses on the general production and management of cultivated plants, shrubs, flowers, foliage, trees, groundcovers, and related plant materials; the management of technical and business operations connected with horticultural services; and the basic scientific principles needed to understand plants and their management and care.

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- COM 110 - Introduction to Communication Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3

Social/Behavioral Sciences:

- Elective Credit Hours: 3

Major Courses:

- HOR 112 - Landscape Design I Credit Hours: 3
- HOR 114 - Landscape Construction Credit Hours: 3
- HOR 134 - Greenhouse Operations Credit Hours: 3
- HOR 160 - Plant Materials I Credit Hours: 3
- HOR 162 - Applied Plant Science Credit Hours: 3
- HOR 164 - Hort Pest Management Credit Hours: 3
- HOR 166 - Soils & Fertilizers Credit Hours: 3
- HOR 168 - Plant Propagation Credit Hours: 3

- HOR 170 - Hort Computer Apps Credit Hours: 2
- HOR 213 - Landscape Design II Credit Hours: 3
- HOR 265 - Adv Plant Materials Credit Hours: 2
- HOR 273 - Hort Mgmt & Marketing Credit Hours: 3
- TRF 110 - Intro Turfgrass Cult & ID Credit Hours: 4
- TRF 120 - Turfgrass Irrigat & Design Credit Hours: 4
- TRF 130 - Native Flora ID Credit Hours: 2
- TRF 150 - Landscape Drafting Credit Hours: 2
- TRF 152 - Landscape Maintenance Credit Hours: 3
- TRF 210 - Turfgrass Eqmt Mgmt Credit Hours: 3
- WBL XXX Work-Based Learning Credit Hours: 2

Other Required Hours:

- SPA 120 - Spanish for the Workplace Credit Hours: 3
OR
- SPA 111 - Elementary Spanish I Credit Hours: 3
AND
- SPA 181 - Spanish Lab 1 Credit Hours: 1

Total Credit Hours Required: 72-73

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Students who elect to take (MAT 143) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:

Fall – 1st year:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- HOR 162 - Applied Plant Science Credit Hours: 3
- HOR 166 - Soils & Fertilizers Credit Hours: 3
- TRF 110 - Intro Turfgrass Cult & ID Credit Hours: 4
- TRF 150 - Landscape Drafting Credit Hours: 2

Total Hours: Class 11 | Lab 9 | Clin/Wk Exp 0 | Credit 15

Spring – 1st year:

- HOR 112 - Landscape Design I Credit Hours: 3
- HOR 160 - Plant Materials I Credit Hours: 3
- TRF 120 - Turfgrass Irrigat & Design Credit Hours: 4
- TRF 152 - Landscape Maintenance Credit Hours: 3
- TRF 210 - Turfgrass Eqmt Mgmt Credit Hours: 3

Total Hours: Class 9 | Lab 15 | Clin/Wk Exp 0 | Credit 16

Summer – 1st year:

- HOR 114 - Landscape Construction Credit Hours: 3
- Humanities/Fine Arts Elective Credit Hours: 3
- WBL XXX Work-Based Learning Credit Hours: 2

Total Hours: Class 5 | Lab 2 | Clin/Wk Exp 20 | Credit 8

Fall – 2nd year:

- HOR 134 - Greenhouse Operations Credit Hours: 3
- HOR 170 - Hort Computer Apps Credit Hours: 2
- HOR 213 - Landscape Design II Credit Hours: 3
- HOR 273 - Hort Mgmt & Marketing Credit Hours: 3
- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
- TRF 130 - Native Flora ID Credit Hours: 2

Total Hours: Class 11 | Lab 12 | Clin/Wk Exp 0 | Credit 16

Spring – 2nd year:

- COM 110 - Introduction to Communication Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
- HOR 164 - Hort Pest Management Credit Hours: 3
- HOR 168 - Plant Propagation Credit Hours: 3
- HOR 265 - Adv Plant Materials Credit Hours: 2
- Social/Behavioral Science Elective Credit Hours: 3
- SPA 120 - Spanish for the Workplace Credit Hours: 3
OR
- SPA 111 - Elementary Spanish I Credit Hours: 3
AND
- SPA 181 - Spanish Lab 1 Credit Hours: 1

Total Hours: Class 14-15 | Lab 6-8 | Clin/Wk Exp 0 | Credit 17-18

Grand Total Hours: Class 50 | Lab 44 | Clin/Wk Exp 20 | Credit 72-73

Horticulture Technology Landscape Management Diploma (D1524002)

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3

Major Courses:

- HOR 112 - Landscape Design I Credit Hours: 3
- HOR 114 - Landscape Construction Credit Hours: 3
- HOR 160 - Plant Materials I Credit Hours: 3
- HOR 162 - Applied Plant Science Credit Hours: 3
- HOR 164 - Hort Pest Management Credit Hours: 3
- HOR 166 - Soils & Fertilizers Credit Hours: 3
- HOR 168 - Plant Propagation Credit Hours: 3
- TRF 110 - Intro Turfgrass Cult & ID Credit Hours: 4
- TRF 120 - Turfgrass Irrigat & Design Credit Hours: 4
- TRF 130 - Native Flora ID Credit Hours: 2
- TRF 150 - Landscape Drafting Credit Hours: 2
- TRF 210 - Turfgrass Eqmt Mgmt Credit Hours: 3

Total Credit Hours Required: 42

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Students who elect to take (MAT 143) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:

Fall – 1st year:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- HOR 162 - Applied Plant Science Credit Hours: 3
- HOR 166 - Soils & Fertilizers Credit Hours: 3
- TRF 110 - Intro Turfgrass Cult & ID Credit Hours: 4
- TRF 130 - Native Flora ID Credit Hours: 2
- TRF 150 - Landscape Drafting Credit Hours: 2

Total Hours: Class 12 | Lab 12 | Clin/Wk Exp 0 | Credit 17

Spring – 1st year:

- HOR 112 - Landscape Design I Credit Hours: 3
- HOR 160 - Plant Materials I Credit Hours: 3
- HOR 164 - Hort Pest Management Credit Hours: 3
- HOR 168 - Plant Propagation Credit Hours: 3
- TRF 120 - Turfgrass Irrigat & Design Credit Hours: 4
- TRF 210 - Turfgrass Eqmt Mgmt Credit Hours: 3

Total Hours: Class 11 | Lab 17 | Clin/Wk Exp 0 | Credit 19

Summer – 1st year:

- HOR 114 - Landscape Construction Credit Hours: 3
- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3

Total Hours: Class 4 | Lab 4 | Clin/Wk Exp 0 | Credit 6

Grand Total Hours: Class 27 | Lab 33 | Clin/Wk Exp 0 | Credit 42

Horticulture Technology Certificate (C1524003)**General Education Courses****Major Courses:**

- HOR 160 - Plant Materials I Credit Hours: 3
- HOR 164 - Hort Pest Management Credit Hours: 3
- HOR 166 - Soils & Fertilizers Credit Hours: 3
- HOR 168 - Plant Propagation Credit Hours: 3
- TRF 110 - Intro Turfgrass Cult & ID Credit Hours: 4

Total Credit Hours Required: 16

Suggested Program Sequence:**Fall – 1st year:**

- HOR 166 - Soils & Fertilizers Credit Hours: 3
- TRF 110 - Intro Turfgrass Cult & ID Credit Hours: 4

Total Hours: Class 5 | Lab 4 | Clin/Wk Exp 0 | Credit 7

Spring – 1st year:

- HOR 160 - Plant Materials I Credit Hours: 3
- HOR 164 - Hort Pest Management Credit Hours: 3
- HOR 168 - Plant Propagation Credit Hours: 3

Total Hours: Class 6 | Lab 6 | Clin/Wk Exp 0 | Credit 9

Grand Total Hours: Class 11 | Lab 10 | Clin/Wk Exp 0 | Credit 16

Industrial Systems Technology, A.A.S. (A50240)

Courses required to meet graduation requirements in this curriculum are offered during daytime hours and evening classes are offered on demand. Minimum time for completion: Daytime – four semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum.

The Industrial Systems Technology curriculum is designed to prepare or upgrade individuals to safely service, maintain, repair, or install equipment. Instruction includes theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial systems.

Students will learn multi-craft technical skills in print reading, mechanical systems maintenance, electricity, hydraulics/pneumatics, welding, machining or fabrication, and includes various diagnostic and repair procedures. Practical application in these industrial systems will be emphasized and additional advanced course work may be offered.

Upon completion of this curriculum, graduates should be able to individually, or with a team, safely install, inspect, diagnose, repair, and maintain industrial process and support equipment. Students will also be encouraged to develop their skills as life-long learners.

General Education Courses**English/Communications:**

- ENG 111 - Writing and Inquiry Credit Hours: 3
- COM 231 - Public Speaking Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3

Social/Behavioral Sciences:

- Elective Credit Hours: 3

Major Courses:

- BPR 111 - Print Reading Credit Hours: 2
- CIS 110 - Introduction to Computers Credit Hours: 3
- ELC 112 - DC/AC Electricity Credit Hours: 5
- ELC 113 - Residential Wiring Credit Hours: 4
- ELC 115 - Industrial Wiring Credit Hours: 4
- ELC 117 - Motors and Controls Credit Hours: 4
- ELC 118 - National Electrical Code Credit Hours: 2
- ELC 119 - NEC Calculations Credit Hours: 2
- ELC 128 - Intro to PLC Credit Hours: 3
- HYD 110 - Hydraulics/Pneumatics I Credit Hours: 3
- ISC 112 - Industrial Safety Credit Hours: 2
- MAC 141 - Machining Applications I Credit Hours: 4
- MAC 142 - Machining Applications II Credit Hours: 4
- MNT 110 - Intro to Maint Procedures Credit Hours: 2
- WLD 112 - Basic Welding Processes Credit Hours: 2

IST Program Electives:

Students are required to take a minimum of 6 SHC from the following:

- AHR 110 - Intro to Refrigeration Credit Hours: 5
- AHR 112 - Heating Technology Credit Hours: 4
- AHR 113 - Comfort Cooling Credit Hours: 4
- AHR 130 - HVAC Controls Credit Hours: 3
- AHR 160 - Refrigerant Certification Credit Hours: 1
- DFT 151 - CAD I Credit Hours: 3
- ELN 229 - Industrial Electronics Credit Hours: 4
- MAC 122 - CNC Turning Credit Hours: 2
- MAC 124 - CNC Milling Credit Hours: 2
- MAC 222 - Advanced CNC Turning Credit Hours: 2
- MAC 224 - Advanced CNC Milling Credit Hours: 2
- WBL XXX Work-Based Learning Credit Hours: 1-3
- WLD 110 - Cutting Processes Credit Hours: 2
- WLD 115 - SMAW (Stick) Plate Credit Hours: 5
OR
- WLD 115AB - SMAW (Stick) Plate-AB Credit Hours: 3
- WLD 115BB - SMAW (Stick) Plate-BB Credit Hours: 2
- WLD 121 - GMAW (MIG) FCAW/Plate Credit Hours: 4
- WLD 131 - GTAW (TIG) Plate Credit Hours: 4

Work-Based Learning Option:

Qualified students may elect to take up to 3 credit hours of Work-Based Learning in place of 3 hours Program Elective.

Total Credit Hours Required: 67

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 121) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Suggested Program Sequence Day:**Fall – 1st year:**

- BPR 111 - Print Reading Credit Hours: 2
- ELC 112 - DC/AC Electricity Credit Hours: 5
- ELC 113 - Residential Wiring Credit Hours: 4
- ELC 118 - National Electrical Code Credit Hours: 2
- ISC 112 - Industrial Safety Credit Hours: 2

Total Hours: Class 9 | Lab 16 | Clin/Wk Exp 0 | Credit 15

Spring – 1st year:

- ELC 115 - Industrial Wiring Credit Hours: 4
- ENG 111 - Writing and Inquiry Credit Hours: 3
- MAC 141 - Machining Applications I Credit Hours: 4
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
- WLD 112 - Basic Welding Processes Credit Hours: 2

Total Hours: Class 10 | Lab 17 | Clin/Wk Exp 0 | Credit 16

Summer – 1st year:

- Humanities/Fine Arts Elective Credit Hours: 3
- Social/Behavioral Science Elective Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/Wk Exp 0 | Credit 6

Fall – 2nd year:

- CIS 110 - Introduction to Computers Credit Hours: 3
- ELC 117 - Motors and Controls Credit Hours: 4
- ELC 119 - NEC Calculations Credit Hours: 2
- MNT 110 - Intro to Maint Procedures Credit Hours: 2
- IST Program Elective Credit Hours: 3

Total Hours: Class 8 | Lab 16 | Clin/Wk Exp 0 | Credit 14

Spring – 2nd year:

- ELC 128 - Intro to PLC Credit Hours: 3
- COM 231 - Public Speaking Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3

OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
- HYD 110 - Hydraulics/Pneumatics I Credit Hours: 3
- MAC 142 - Machining Applications II Credit Hours: 4
- IST Program Elective Credit Hours: 3

Total Hours: Class 11 | Lab 15 | Clin/Wk Exp 0 | Credit 16

Grand Total Hours: Class 44 | Lab 64 | Clin/Wk Exp 0 | Credit 67

Evening -- Courses Are Offered on Demand
(See your Industrial Systems Technology advisor)

Infant/Toddler Care Certificate (C55290)

Courses required to meet graduation requirements in this curriculum are offered during daytime and evening hours. The Certificate is awarded graduates of this curriculum.

The curriculum prepares individuals to work with children from infancy to three years of age in diverse learning environments. Students will combine learned theories, competency-based knowledge, and practice in actual settings with infants and toddlers.

Course work includes infant/toddler growth and development; physical/nutritional needs of infants and toddlers; safety issues in the care of infants and toddlers; care and guidance; communication skills with families and children; design an implementation of appropriate curriculum; and other related topics.

Graduates should be prepared to plan and implement developmentally appropriate infant/toddler programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Early Head Start Programs, and other infant/toddler programs.

Major Courses:

- EDU 119 - Intro to Early Child Educ Credit Hours: 4
- EDU 131 - Child, Family, & Community Credit Hours: 3
- EDU 153 - Health, Safety, & Nutrition Credit Hours: 3
- EDU 234 - Infants, Toddlers, and Twos Credit Hours: 3

Child Development Elective:

(Select a course from the following):

- EDU 144 - Child Development I Credit Hours: 3
- PSY 244 - Child Development I Credit Hours: 3

Other Required Courses:

- ACA 111 - College Student Success Credit Hours: 1

Total Credit Hours Required: 17

Developmental Course Requirements:

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Suggested Program Sequence:

Fall – 1st year:

- ACA 111 - College Student Success Credit Hours: 1
- EDU 119 - Intro to Early Child Educ Credit Hours: 4
- EDU 131 - Child, Family, & Community Credit Hours: 3
- Child Development Elective Credit Hours: 3

Total Hours: Class 11 | Lab 0 | Clin/Wk Exp 0 | Credit 11

Spring – 1st year:

- EDU 153 - Health, Safety, & Nutrition Credit Hours: 3
- EDU 234 - Infants, Toddlers, and Twos Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/Wk Exp 0 | Credit 6

Grand Total Hours: Class 17 | Lab 0 | Clin/Wk Exp 0 | Credit 17

Information Technology: Computer Programming and Development (A25590A)

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

The Information Technology: Computer Programming and Development program prepares individuals for employment as computer programmers and related positions through study and applications in computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations. Students will solve business computer problems through programming techniques and procedures, using appropriate languages and software. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve. Students graduating should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysts, computer operators, systems technicians, or database specialists.

General Education Courses

English/Communications (6 SHC)

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- COM 231 - Public Speaking Credit Hours: 3

Humanities/Fine Arts (3 SHC)

- Humanities/Fine Arts Elective Credit Hours: 3

Mathematics (3-4 SHC)

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 152 - Statistical Methods I Credit Hours: 4
OR
- MAT 171 - Precalculus Algebra Credit Hours: 4

Social/Behavioral Sciences (3 SHC)

- Social/Behavioral Sciences Elective Credit Hours: 3

Technical Core (12 SHC)

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTI 110 - Web, Pgm, & Db Foundation Credit Hours: 3
- CTI 120 - Network & Sec Foundation Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Major Courses

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- CSC 134 - C++ Programming Credit Hours: 3
- CSC 138 - RPG Programming Credit Hours: 3
- CSC 139 - Visual BASIC Programming Credit Hours: 3
- CSC 151 - JAVA Programming Credit Hours: 3
- CSC 238 - Adv RPG Programming Credit Hours: 3
- CSC 251 - Advanced JAVA Programming Credit Hours: 3
- CSC 289 - Programming Capstone Project Credit Hours: 3
- CTS 285 - Systems Analysis & Design Credit Hours: 3
- NET 125 - Introduction to Networks Credit Hours: 3
- NOS 120 - Linux/UNIX Single User Credit Hours: 3
OR
- NOS 130 - Windows Single User Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3
- WBL XXX Work-Based Learning Credit Hours: 1
OR
- WBL 110 - World of Work Credit Hours: 1

Major Courses Elective

Major Course Electives: Students are required to take a minimum of 6 SHC from the following courses. Qualified student may elect to take up to 6 credit hours of Work-Based learning.

- CET 211 - Computer Upgrade/Repair II Credit Hours: 3
- CSC 239 - Adv Visual BASIC Prog Credit Hours: 3
- CTS 120 - Hardware/Software Support Credit Hours: 3
- DBA 110 - Database Concepts Credit Hours: 3
- DBA 115 - Database Applications Credit Hours: 3
- NET 175 - Wireless Technology Credit Hours: 3
- NOS 120 - Linux/UNIX Single User Credit Hours: 3
- NOS 130 - Windows Single User Credit Hours: 3
- SEC 150 - Secure Communications Credit Hours: 3
- SEC 160 - Security Administration I Credit Hours: 3
- WEB 115 - Web Markup and Scripting Credit Hours: 3
- WEB 151 - Mobile Application Dev I Credit Hours: 3
- WEB 250 - Database Driven Websites Credit Hours: 3
- WBL XXX Credit Hours: 1-6

Total Semester Hours of Credit (SHC) in Program: 70-71

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, and mathematics. Please refer to the Course Description section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 143/MAT 152) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

OR

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2
- MAT 001P - Math Skills Support Credit Hours: 1

Information Technology: Computer Programming and Development Diploma (D25590A)

General Education Courses

English Composition

- ENG 111 - Writing and Inquiry Credit Hours: 3

Social/Behavioral Sciences

- Social/Behavioral Science Elective Credit Hours: 3

Technical Core

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Concentration Courses

- CSC 151 - JAVA Programming Credit Hours: 3
- CSC 251 - Advanced JAVA Programming Credit Hours: 3

Other Major Courses

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- CSC 134 - C++ Programming Credit Hours: 3
- CSC 138 - RPG Programming Credit Hours: 3
- CSC 139 - Visual BASIC Programming Credit Hours: 3
- CSC 238 - Adv RPG Programming Credit Hours: 3
- CTS 285 - Systems Analysis & Design Credit Hours: 3

Total Credit Hours Required: 36

Information Technology -- IT Concepts Certificate (C2559001)

The IT Concepts Certificate provides a foundation in internet technologies. Students will learn: Basic fundamentals associated with Networking and Security, Web, Programming, and Databases, and Information Business Systems.

Upon completion graduates will be able to assist in the technical support of Databases, Business Systems, and Web Programming. This certificate includes preparation for the following industry certifications: Security +.

Technical Core (12 SHC)

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTI 110 - Web, Pgm, & Db Foundation Credit Hours: 3
- CTI 120 - Network & Sec Foundation Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Other Major Hours

- SEC 110 - Security Concepts Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 16

Information Technology -- IT Specialist Certificate (C2559002)

The IT Specialist Certificate provides a foundation in programming, security, and networking. Students will learn: Intermediate fundamentals associated with Programming, Security, and Networking. Upon completion graduates will be able to write basic programs and assist in the technical support of Networks utilizing Linux and Windows.

This certificate includes preparation for the following industry certifications: Security +, Linux Essentials, and current Windows Desktop certification.

Other Major Hours

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- NET 125 - Introduction to Networks Credit Hours: 3
- NOS 120 - Linux/UNIX Single User Credit Hours: 3
- NOS 130 - Windows Single User Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 16

Information Technology: Computer Programming and Development -- Programming Foundations Certificate (C25590A1)

Other Major Hours

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- CSC 134 - C++ Programming Credit Hours: 3
- CSC 139 - Visual BASIC Programming Credit Hours: 3
- CSC 151 - JAVA Programming Credit Hours: 3

Total Credit Hours Required: 12

Information Technology: Computer Programming and Development -- JAVA Programming Certificate (C25590A2)

The Java Programming certificate provides a foundation in programming with Java. Students will learn: beginning and intermediate fundamentals associated with programming in Java. Upon completion graduates will be able to write basic and intermediate programs in Java.

This certificate includes preparation for the following industry certifications: Oracle Java Associate (OCA), and Oracle Java Professional (OCP).

Other Major Hours

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- CSC 134 - C++ Programming Credit Hours: 3
- CSC 151 - JAVA Programming Credit Hours: 3
- CSC 251 - Advanced JAVA Programming Credit Hours: 3

Total Credit Hours Required: 12

Information Technology: Computer Programming and Development -- Visual Basic Programming Certificate (C25590A3)

The Visual Basic Programming certificate provides a foundation in programming for Windows with Visual Basic. Students will learn: beginning and intermediate fundamentals associated with programming for Windows with Visual Basic. Upon completion graduates will be able to write basic and intermediate programs for Windows in Visual Basic.

This certificate includes preparation for the following industry certifications: Microsoft MTA Developer.

Other Major Hours

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- CSC 134 - C++ Programming Credit Hours: 3
- CSC 139 - Visual BASIC Programming Credit Hours: 3
- CSC 239 - Adv Visual BASIC Prog Credit Hours: 3

Total Credit Hours Required: 12

Information Technology: Computer Programming and Development -- RPG Programming Certificate (C25590A4)

The RPG Programming certificate provides a foundation in programming with the RPG language on an IBM System i computer. Students will learn: beginning and intermediate fundamentals associated with Programming IBM System computers in the RPG language. Upon completion graduates will be able to write basic and intermediate programs for the IBM System i computer system using RPG.

This certificate includes preparation for the following industry certifications: COMMON Associate Application Developer: ILE RPG Programmer.

Other Major Hours

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- CSC 138 - RPG Programming Credit Hours: 3
- CSC 151 - JAVA Programming Credit Hours: 3
- CSC 238 - Adv RPG Programming Credit Hours: 3

Total Credit Hours Required: 12

Information Technology: Information Systems (A25590B)

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

The Information Technology: Information Systems program is designed to prepare graduates for employment with organizations that use computers to process, manage, and communicate information. Course work will develop a student's ability to communicate complex technical issues related to computer hardware, software, and networks in a manner that computer users can understand. Classes cover computer operations and terminology, operating systems, database, networking, security, and technical support. Students graduating from the Information Technology: Information Systems program should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to manage information; and should be prepared to sit for industry-recognized certification exams.

General Education Courses

English/Communications (6 SHC)

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- COM 231 - Public Speaking Credit Hours: 3

Humanities/Fine Arts (3 SHC)

- Humanities/Fine Arts Elective Credit Hours: 3

Mathematics (3-4 SHC)

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 152 - Statistical Methods I Credit Hours: 4
OR
- MAT 171 - Precalculus Algebra Credit Hours: 4

Social/Behavioral Sciences (3 SHC)

- Social/Behavioral Sciences Elective Credit Hours: 3

Technical Core (12 SHC)

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTI 110 - Web, Pgm, & Db Foundation Credit Hours: 3
- CTI 120 - Network & Sec Foundation Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Required Subject Areas

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- NOS 120 - Linux/UNIX Single User Credit Hours: 3
- NOS 130 - Windows Single User Credit Hours: 3
- NOS 230 - Windows Administration I Credit Hours: 3

Other Major Hours

- CSC 139 - Visual BASIC Programming Credit Hours: 3
OR
- CSC 134 - C++ Programming Credit Hours: 3
- CTS 120 - Hardware/Software Support Credit Hours: 3
- CTS 285 - Systems Analysis & Design Credit Hours: 3
- CTS 289 - System Support Project Credit Hours: 3
- DBA 110 - Database Concepts Credit Hours: 3
- DBA 115 - Database Applications Credit Hours: 3
- DBA 120 - Database Programming I Credit Hours: 3
- NET 125 - Introduction to Networks Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3
- WBL XXX - Work-Based Learning Credit Hours: 1
OR
- WBL 110 - World of Work Credit Hours: 1

Other Major Courses Elective

Major Course Electives: Students are required to take a minimum of 3 SHC from the following courses. Qualified student may elect to take up to 3 credit hours of Work-Based learning.

- CSC 239 - Adv Visual BASIC Prog Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3
- DBA 220 - Oracle DB Programming II Credit Hours: 3
- NET 126 - Routing Basics Credit Hours: 3
- NET 175 - Wireless Technology Credit Hours: 3
- NOS 231 - Windows Administration II Credit Hours: 3
- SEC 150 - Secure Communications Credit Hours: 3
- SEC 160 - Security Administration I Credit Hours: 3
- WEB 140 - Web Development Tools Credit Hours: 3
- WEB 210 - Web Design Credit Hours: 3
- WBL XXX Credit Hours: 3

Total Semester Hours of Credit (SHC) in Program: 70/71

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, and mathematics. Please refer to the Course Description section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 143/MAT 152) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

OR

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2
- MAT 001P - Math Skills Support Credit Hours: 1

Information Technology: Information Systems Diploma (D25590B)

General Education Courses

English Composition

- ENG 111 - Writing and Inquiry Credit Hours: 3

Social/Behavioral Sciences

- Social/Behavioral Science Elective Credit Hours: 3

Technical Core

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Concentration Courses

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- NOS 120 - Linux/UNIX Single User Credit Hours: 3
- NOS 130 - Windows Single User Credit Hours: 3
- NOS 230 - Windows Administration I Credit Hours: 3

Other Major Courses

- CTS 120 - Hardware/Software Support Credit Hours: 3
- CTS 285 - Systems Analysis & Design Credit Hours: 3
- DBA 110 - Database Concepts Credit Hours: 3
- DBA 115 - Database Applications Credit Hours: 3
- DBA 120 - Database Programming I Credit Hours: 3
- NET 125 - Introduction to Networks Credit Hours: 3

Total Credit Hours Required: 42

Information Technology: Information Systems -- Help Desk Support Certificate (C25590B1)

The **Help Desk Support Certificate** provides a foundation in the support of internet technologies. Students will learn: Basic fundamentals associated with computer hardware and software, Networking, and Windows Network Administration. Upon completion graduates will be able to assist in the technical support of hardware, software, and Windows based networks.

This certificate includes preparation for the following industry certifications: current entry level Windows Server.

Technical Core

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Other Major Hours

- CTS 120 - Hardware/Software Support Credit Hours: 3
- NET 125 - Introduction to Networks Credit Hours: 3
- NOS 230 - Windows Administration I Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 16

Information Technology: Information Systems -- Database Applications Certificate (C25590B2)

The Database Applications Certificate provides a foundation in database concepts. Students will learn: Basic fundamentals associated with Computers, Databases, and Business Systems Technologies. Upon completion graduates will be able to assist in the technical support of Databases.

This certificate includes preparation for the following industry certifications: Oracle Database SQL Certified Associate and Excel Core.

Technical Core

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTI 110 - Web, Pgm, & Db Foundation Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Other Major Hours

- CTS 130 - Spreadsheet Credit Hours: 3
- DBA 110 - Database Concepts Credit Hours: 3
- DBA 115 - Database Applications Credit Hours: 3

Total Credit Hours Required: 18

Information Technology: Information Systems -- Database Programming Certificate (C25590B3)

The Database Programming Certificate provides a foundation in Database Programming. Students will learn: Basic up to intermediate fundamentals associated with Database Programming. Upon completion graduates will be able to assist in the technical support of Databases and write basic programs associated with Databases.

This certificate includes preparation for the following industry certifications: Oracle Database SQL Certified Associate and Oracle PL/SQL Developer Certified Associate.

Other Major Hours

- DBA 110 - Database Concepts Credit Hours: 3
- DBA 115 - Database Applications Credit Hours: 3
- DBA 120 - Database Programming I Credit Hours: 3
- DBA 220 - Oracle DB Programming II Credit Hours: 3

Total Credit Hours Required: 12

Information Technology: Network Management (A25590C)

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

The Information Technology: Network Management program prepares students for employment supporting network infrastructure environments. Students will learn how to use technologies to provide reliable transmission and delivery of data, voice, image, and video communications in business, industry, and education. Design, installation, configuration, and management of network infrastructure technologies and network operating systems will be included in course work. Emphasis is placed on the implementation and management of network software and the implementation and management of hardware such as switches and routers. Students may find employment in entry-level jobs as local area network managers, network operators, network analysts, and network technicians. Students may also be qualified to take certification examinations for various network industry certifications, depending on their local program.

General Education Courses

English/Communications (6 SHC)

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- COM 231 - Public Speaking Credit Hours: 3

Humanities/Fine Arts (3 SHC)

- Humanities/Fine Arts Elective Credit Hours: 3

Mathematics (3-4 SHC)

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 152 - Statistical Methods I Credit Hours: 4
OR
- MAT 171 - Precalculus Algebra Credit Hours: 4

Social/Behavioral Sciences (3 SHC)

- Social/Behavioral Sciences Elective Credit Hours: 3

Technical Core (12 SHC)

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTI 110 - Web, Pgm, & Db Foundation Credit Hours: 3
- CTI 120 - Network & Sec Foundation Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Required Subject Areas:

- NET 125 - Introduction to Networks Credit Hours: 3
- NET 126 - Routing Basics Credit Hours: 3

Other Major Hours

- CTI 140 - Virtualization Concepts Credit Hours: 3
- CTI 141 - Cloud & Storage Concepts Credit Hours: 3
- NET 175 - Wireless Technology Credit Hours: 3
- NET 225 - Routing & Switching I Credit Hours: 3
- NET 226 - Routing and Switching II Credit Hours: 3
- NET 240 - Network Design Credit Hours: 3
- NET 241 - Introduction to VOIP Credit Hours: 3
- NET 289 - Networking Project Credit Hours: 3
- NOS 120 - Linux/UNIX Single User Credit Hours: 3
OR
- WBL XXX Work-Based Learning Semester Hours Credit: 2
- NOS 130 - Windows Single User Credit Hours: 3
- NOS 230 - Windows Administration I Credit Hours: 3
- NOS 231 - Windows Administration II Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1
OR
- WBL XXX Work-Based Learning Semester Hours Credit: 1

Total Semester Hours of Credit in Program: 72/74

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, and mathematics. Please refer to the Course Description section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 143/MAT 152) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

OR

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2
- MAT 001P - Math Skills Support Credit Hours: 1

Information Technology: Network Management Diploma (D25590C)

General Education Courses

English Composition

- ENG 111 - Writing and Inquiry Credit Hours: 3

Social/Behavioral Sciences

- Social/Behavioral Science Elective Credit Hours: 3

Technical Core

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTI 120 - Network & Sec Foundation Credit Hours: 3

Concentration Courses

- NET 125 - Introduction to Networks Credit Hours: 3
- NET 126 - Routing Basics Credit Hours: 3

Other Major Courses

- CTI 140 - Virtualization Concepts Credit Hours: 3
- CTI 141 - Cloud & Storage Concepts Credit Hours: 3
- NET 225 - Routing & Switching I Credit Hours: 3
- NET 226 - Routing and Switching II Credit Hours: 3
- NET 240 - Network Design Credit Hours: 3
- NET 241 - Introduction to VOIP Credit Hours: 3
- NOS 120 - Linux/UNIX Single User Credit Hours: 3
- NOS 130 - Windows Single User Credit Hours: 3
- NOS 230 - Windows Administration I Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3

Total Credit Hours Required: 48

Information Technology: Network Management -- Networking Certificate (C25590C1)

The Networking Certificate provides a foundation in networking technologies. Students will learn: Basic fundamentals associated with network communication, routing, switching, and an introduction to WAN technologies. Upon completion graduates will be able to assist in the design, implementation, and administration of computer networks.

This certificate includes preparation for the following industry certifications: Cisco Certified Network Associate (CCNA) and Security +.

Other Major Hours

- NET 125 - Introduction to Networks Credit Hours: 3
- NET 126 - Routing Basics Credit Hours: 3
- NET 225 - Routing & Switching I Credit Hours: 3
- NET 226 - Routing and Switching II Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 16

Information Technology: Network Management -- Operating Systems Certificate (C25590C2)

The Operating Systems Certificate provides a foundation in various computer operating systems and technologies. Students will learn: Basic fundamentals associated with Windows and Linux operating systems, and Microsoft Active Directory. Upon completion graduates will be able to deploy and administer stand-alone personal computers and systems in an Active Directory Domain.

This certificate includes preparation for the following industry certifications: Linux Essentials, current Windows Desktop certification, MCP, Specialist.

Other Major Hours

- NOS 120 - Linux/UNIX Single User Credit Hours: 3
- NOS 130 - Windows Single User Credit Hours: 3
- NOS 230 - Windows Administration I Credit Hours: 3
- NOS 231 - Windows Administration II Credit Hours: 3

Total Credit Hours Required: 12

Information Technology: Network Management -- Virtualization Certificate (C25590C3)

The Virtualization Certificate provides a foundation in general purpose, server, network, and storage virtualization. Students will learn: Basic fundamentals associated with cloud-based services. Upon completion graduates will be able to assist in the implementation and administration of datacenter assets.

This certificate includes preparation for the following industry certifications: Linux Essentials, current Windows Desktop certification, current entry level Windows Server, and VMware Certified Associate (VCA).

Other Major Hours

- CTI 140 - Virtualization Concepts Credit Hours: 3
- CTI 141 - Cloud & Storage Concepts Credit Hours: 3
- NOS 120 - Linux/UNIX Single User Credit Hours: 3
- NOS 130 - Windows Single User Credit Hours: 3
- NOS 230 - Windows Administration I Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 16

Information Technology: Network Management -- Advanced Networking Certificate (C25590C4)

The Advanced Networking Certificate builds on the Networking certificate, introducing key skills to benefit the student's career in the technology sector. Students will learn: Basic fundamentals associated with business networking applications. Upon completion graduates will be able to assist in implementation and administration of wireless networks and IP telephony systems.

This certificate includes preparation for the following industry certifications: Security +, portions of CCNA Voice, and Certified Wireless Network Associate (CWNA).

Other Major Hours

- NET 175 - Wireless Technology Credit Hours: 3
- NET 240 - Network Design Credit Hours: 3
- NET 241 - Introduction to VOIP Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3

Total Credit Hours Required: 12

Information Technology: Systems Security (A25590D)

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

The Information Technology: Systems Security program covers a broad expanse of technology concepts. This program provides students with the skills required to implement effective and comprehensive information security controls. Course work will include networking technologies, operating systems administration, information policy, intrusion detection, security administration, and industry best practices to protect data communications. Students graduating from the Information Technology: Systems Security program should be prepared for employment as security administrators. Additionally, they will acquire the skills that allow them to pursue security certifications.

General Education Courses

English/Communications (6 SHC)

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- COM 231 - Public Speaking Credit Hours: 3

Humanities/Fine Arts (3 SHC)

- Humanities/Fine Arts Elective Credit Hours: 3

Mathematics (3-4 SHC)

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 152 - Statistical Methods I Credit Hours: 4
OR
- MAT 171 - Precalculus Algebra Credit Hours: 4

Social/Behavioral Sciences (3 SHC)

- Social/Behavioral Sciences Elective Credit Hours: 3

Technical Core (12 SHC)

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTI 110 - Web, Pgm, & Db Foundation Credit Hours: 3
- CTI 120 - Network & Sec Foundation Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Required Subject Areas:

- NET 125 - Introduction to Networks Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3

Major Courses:

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- CCT 240 - Data Recovery Techniques Credit Hours: 3
- NET 126 - Routing Basics Credit Hours: 3
- NET 175 - Wireless Technology Credit Hours: 3
- NET 225 - Routing & Switching I Credit Hours: 3
- NET 226 - Routing and Switching II Credit Hours: 3
- NOS 120 - Linux/UNIX Single User Credit Hours: 3
- NOS 130 - Windows Single User Credit Hours: 3
OR
- WBL XXX Work-Based Learning Semester Hours Credit: 2
- SEC 150 - Secure Communications Credit Hours: 3
- SEC 160 - Security Administration I Credit Hours: 3
- SEC 180 - Info Assurance Principles Credit Hours: 3
- SEC 210 - Intrusion Detection Credit Hours: 3
- SEC 285 - Systems Security Project Credit Hours: 3
- WBL XXX Work-Based Learning Semester Hours Credit: 1
OR
- WBL 110 - World of Work Credit Hours: 1

Total Semester Hours of Credit in Program: 72/74

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, and mathematics. Please refer to the Course Description section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 143/MAT 152) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

OR

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2
- MAT 001P - Math Skills Support Credit Hours: 1

Information Technology: Systems Security Diploma (D25590D)

General Education Courses

English Composition

- ENG 111 - Writing and Inquiry Credit Hours: 3

Social/Behavioral Sciences

- Social/Behavioral Science Elective Credit Hours: 3

Technical Core

- CTI 120 - Network & Sec Foundation Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Concentration Courses

- CCT 240 - Data Recovery Techniques Credit Hours: 3
- NET 125 - Introduction to Networks Credit Hours: 3
- NET 126 - Routing Basics Credit Hours: 3
- NET 175 - Wireless Technology Credit Hours: 3
- NET 225 - Routing & Switching I Credit Hours: 3
- NET 226 - Routing and Switching II Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3
- SEC 150 - Secure Communications Credit Hours: 3
- SEC 160 - Security Administration I Credit Hours: 3
- SEC 180 - Info Assurance Principles Credit Hours: 3
- SEC 210 - Intrusion Detection Credit Hours: 3

Total Credit Hours Required: 45

Information Technology: Systems Security -- Network Security Certificate (C25590D1)

The Network Security Certificate provides a foundation in networking technologies and securing networks. Students will learn: Intermediate fundamentals associated with networking and information security. Upon completion graduates will be able to assist in the design, implementation, and administration of computer networks as well as securing networks.

This certificate includes preparation for the following industry certifications: Cisco Certified Network Associate (CCNA), and CCNA Security.

Other Major Hours

- NET 125 - Introduction to Networks Credit Hours: 3
- NET 126 - Routing Basics Credit Hours: 3
- NET 225 - Routing & Switching I Credit Hours: 3
- NET 226 - Routing and Switching II Credit Hours: 3
- SEC 160 - Security Administration I Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 16

Information Technology: Systems Security -- Operating Systems Security Certificate (C25590D2)

The Operating Systems Security Certificate provides a foundation in securing Linux and Windows operating systems. Students will learn: Intermediate fundamentals associated with installing, configuring, and securing Windows and Linux operating systems. Upon completion graduates will be able to deploy, administer, and secure Linux and Windows computers.

This certificate includes preparation for the following industry certifications: Security +, Certified Ethical Hacker (CEH), Linux Essentials, and current Windows Desktop certification.

Other Major Hours

- NET 125 - Introduction to Networks Credit Hours: 3
- NOS 120 - Linux/UNIX Single User Credit Hours: 3
- NOS 130 - Windows Single User Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3
- SEC 150 - Secure Communications Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 16

Information Technology: Systems Security -- Advanced Security Certificate (C25590D3)

The Advanced Security Certificate provides a foundation in wireless networks, data recovery, and advanced security techniques. Students will learn: Intermediate fundamentals associated with wireless networks, data forensics, firewalls, and disaster recovery. Upon completion graduates will be able to implement wireless networks, firewalls, and disaster recovery policies including data forensics.

This certificate includes preparation for the following industry certifications: Certified Wireless Network Associate (CWNA), and Computer Hacking Forensic Investigator (CHFI).

Other Major Courses

- CCT 240 - Data Recovery Techniques Credit Hours: 3
- NET 175 - Wireless Technology Credit Hours: 3
- SEC 180 - Info Assurance Principles Credit Hours: 3
- SEC 210 - Intrusion Detection Credit Hours: 3

Total Credit Hours Required: 12

Information Technology: Web Administration and Design (A25590E)

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

The Information Technology: Web Administration and Design program prepares graduates for careers in the information technology arena using computers and mobile devices to disseminate and collect information via the Internet. Course work in this program covers the terminology and use of computers, Internet-ready devices, servers, databases, programming languages, as well as Internet applications, site development and design. Studies will provide opportunity for students to learn related industry standards. Students graduating from the Information Technology: Web Administration and Design program should qualify for career opportunities as designers, administrators, or developers in the areas of Internet and mobile applications, websites, web services, and related areas of Internet technologies.

General Education Courses

English/Communications (6 SHC)

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- COM 231 - Public Speaking Credit Hours: 3

Humanities/Fine Arts (3 SHC)

- Humanities/Fine Arts Elective Credit Hours: 3

Mathematics (3-4 SHC)

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 152 - Statistical Methods I Credit Hours: 4
OR
- MAT 171 - Precalculus Algebra Credit Hours: 4

Social/Behavioral Sciences (3 SHC)

- Social/Behavioral Sciences Elective Credit Hours: 3

Technical Core (12 SHC)

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTI 110 - Web, Pgm, & Db Foundation Credit Hours: 3
- CTI 120 - Network & Sec Foundation Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Required Subject Areas:

- WEB 115 - Web Markup and Scripting Credit Hours: 3
- WEB 210 - Web Design Credit Hours: 3

Major Courses:

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- CSC 151 - JAVA Programming Credit Hours: 3
- DBA 110 - Database Concepts Credit Hours: 3
- GRD 151 - Computer Design Basics Credit Hours: 3
- NET 125 - Introduction to Networks Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3
- WEB 140 - Web Development Tools Credit Hours: 3
- WEB 151 - Mobile Application Dev I Credit Hours: 3
- WEB 180 - Active Server Pages Credit Hours: 3
- WEB 214 - Social Media Credit Hours: 3
- WEB 215 - Adv Markup and Scripting Credit Hours: 3
- WEB 250 - Database Driven Websites Credit Hours: 3
- WEB 289 - Internet Technologies Project Credit Hours: 3
- WBL XXX Work-based Learning Credit Hours: 1
OR
- WBL 110 - World of Work Credit Hours: 1
- WBL XXX Work-based Learning Credit Hours: 2

Total Semester Hours of Credit in Program: 75/76

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, and mathematics. Please refer to the Course Description section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 143/MAT 152) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

OR

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2
- MAT 001P - Math Skills Support Credit Hours: 1

Information Technology: Web Administration and Design Diploma (D25590E)

General Education Courses

English Composition

- ENG 111 - Writing and Inquiry Credit Hours: 3

Social/Behavioral Sciences

- Social/Behavioral Science Elective Credit Hours: 3

Technical Core

- CTI 110 - Web, Pgm, & Db Foundation Credit Hours: 3
- CTI 120 - Network & Sec Foundation Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Concentration Courses

- WEB 250 - Database Driven Websites Credit Hours: 3
- WEB 115 - Web Markup and Scripting Credit Hours: 3
- WEB 210 - Web Design Credit Hours: 3

Other Major Courses

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- CSC 151 - JAVA Programming Credit Hours: 3
- WEB 140 - Web Development Tools Credit Hours: 3
- WEB 151 - Mobile Application Dev I Credit Hours: 3
- WEB 180 - Active Server Pages Credit Hours: 3
- WEB 214 - Social Media Credit Hours: 3
- WEB 215 - Adv Markup and Scripting Credit Hours: 3
- WEB 289 - Internet Technologies Project Credit Hours: 3

Total Credit Hours Required: 48

Information Technology: Web Administration and Design -- Web Developer Certificate (C25590E1)

The Web Developer Certificate provides a foundation in developing websites. Students will learn: HTML5, CSS3, Javascript, and tools available for use in Web Development. Upon completion, graduates will be able to assist in developing and supporting entire websites, including form-driven pages.

This certificate includes preparation for the following industry certifications: Programming in HTML5 with JavaScript and CSS3.

Other Major Hours

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1
- WEB 115 - Web Markup and Scripting Credit Hours: 3
- WEB 140 - Web Development Tools Credit Hours: 3
- WEB 180 - Active Server Pages Credit Hours: 3
- WEB 215 - Adv Markup and Scripting Credit Hours: 3

Total Credit Hours Required: 16

Information Technology: Web Administration and Design -- Web Design Certificate (C25590E2)

The Web Design Certificate provides a foundation in designing websites and graphics. Students will learn: the basics of web development using HTML5 and CSS3 and the design process for developing robust, efficient, user-friendly websites. Upon completion, graduates will be able to assist in designing website layouts, web multimedia, and e-commerce sites.

Technical Core

- CTI 110 - Web, Pgm, & Db Foundation Credit Hours: 3

Other Major Hours

- GRD 151 - Computer Design Basics Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1
- WEB 115 - Web Markup and Scripting Credit Hours: 3
- WEB 210 - Web Design Credit Hours: 3
- WEB 250 - Database Driven Websites Credit Hours: 3

Total Credit Hours Required: 16

Information Technology: Web Administration and Design -- Web & Mobile Apps Certificate (C25590E3)

The Web & Mobile Apps Certificate provides a foundation in designing cross-platform mobile and web apps and social media marketing. Students will learn: HTML5 and CSS3, web development tools, and mobile app development, including Java and the use of social media analytic tools. Upon completion, graduates will be able to assist in designing and developing apps for use across multiple devices and will explore the use of social media tools and analytics to improve business presence.

Other Major Hours

- CSC 151 - JAVA Programming Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1
- WEB 140 - Web Development Tools Credit Hours: 3
- WEB 151 - Mobile Application Dev I Credit Hours: 3
- WEB 210 - Web Design Credit Hours: 3
- WEB 214 - Social Media Credit Hours: 3

Total Credit Hours Required: 16

Mechanical Engineering Technology, A.A.S. (A40320)

Courses required to meet graduation requirements in this curriculum are offered during daytime hours. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science degree is awarded graduates of this curriculum.

These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, industrial and technology managers, or research technicians.

Mechanical Engineering Technology: A course of study that prepares the students to use basic engineering principles and technical skills to design, develop, test, and troubleshoot projects involving mechanical systems. Includes instruction in principles of mechanics, applications to specific engineering systems, design testing procedures, prototype and operational testing and inspection procedures, manufacturing system-testing procedures, test equipment operation and maintenance, computer applications, critical thinking, planning and problem solving, and oral and written communications. Graduates of the curriculum will find employment opportunities in the manufacturing or service sectors of engineering technology. Engineering technicians may obtain professional certification by application to organizations such as ASQC, SME, and NICET.

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- COM 231 - Public Speaking Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 171 - Precalculus Algebra Credit Hours: 4
OR
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3

Social/Behavioral Sciences:

- Elective Credit Hours: 3

Major Courses:

- ATR 112 - Intro to Automation Credit Hours: 3
- CSC 134 - C++ Programming Credit Hours: 3
- DFT 111 - Technical Drafting I Credit Hours: 2
- DFT 111A - Technical Drafting I Lab Credit Hours: 1
- DFT 151 - CAD I Credit Hours: 3
- DFT 153 - CAD III Credit Hours: 3
- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- EGR 251 - Statics Credit Hours: 3
- EGR 252 - Strength of Materials Credit Hours: 3

Major Courses (continued):

- EGR 285 - Design Project Credit Hours: 2
- ELC 131 - Circuit Analysis I Credit Hours: 4
- MAC 141 - Machining Applications I Credit Hours: 4
- MAT 172 - Precalculus Trigonometry Credit Hours: 4
OR
- MAT 122 - Algebra/Trigonometry II Credit Hours: 3
- MEC 161 - Manufacturing Processes I Credit Hours: 3
- MEC 180 - Engineering Materials Credit Hours: 3
- MEC 231 - Comp-Aided Manufact I Credit Hours: 3
- MEC 265 - Fluid Mechanics Credit Hours: 3
- PHY 151 - College Physics I Credit Hours: 4
OR
- PHY 131 - Physics-Mechanics Credit Hours: 4
- WLD 112 - Basic Welding Processes Credit Hours: 2

Total Credit Hours Required: 69/71

Work-Based Learning Option:

Qualified students may elect to take 2 credit hours of Work-Based Learning in place of EGR 285.

Math/Physics Note:

Students planning to transfer to a 4 year college should consider taking MAT 171, MAT 172, and PHY 151. Please see your Mechanical Engineering Technology advisor.

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 121) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

OR

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2
- MAT 001P - Math Skills Support Credit Hours: 1

Suggested Program Sequence:**Fall – 1st year:**

- DFT 151 - CAD I Credit Hours: 3
- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- ELC 131 - Circuit Analysis I Credit Hours: 4
- MAT 171 - Precalculus Algebra Credit Hours: 4
OR
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
- MEC 180 - Engineering Materials Credit Hours: 3

Total Hours: Class 10/11 | Lab 13 | Clin/WkExp 0 | Credit 15/16

Spring – 1st year:

- DFT 111 - Technical Drafting I Credit Hours: 2
- DFT 111A - Technical Drafting I Lab Credit Hours: 1
- ENG 111 - Writing and Inquiry Credit Hours: 3
- MAC 141 - Machining Applications I Credit Hours: 4
- MAT 172 - Precalculus Trigonometry Credit Hours: 4
OR
- MAT 122 - Algebra/Trigonometry II Credit Hours: 3
- MEC 161 - Manufacturing Processes I Credit Hours: 3

Total Hours: Class 11/12 | Lab 14 | Clin/WkExp 0 | Credit 16/17

Summer – 1st year:

- COM 231 - Public Speaking Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
- Humanities/Fine Arts Elective Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/WkExp 0 | Credit 6

Fall – 2nd year:

- DFT 153 - CAD III Credit Hours: 3
- EGR 251 - Statics Credit Hours: 3 (1st 8 Wks)
- EGR 252 - Strength of Materials Credit Hours: 3 (2nd 8 Wks)
- PHY 151 - College Physics I Credit Hours: 4
OR
- PHY 131 - Physics-Mechanics Credit Hours: 4
- WLD 112 - Basic Welding Processes Credit Hours: 2
- Social/Behavioral Science Elective Credit Hours: 3

Total Hours: Class 13 | Lab 12 | Clin/WkExp 0 | Credit 18

Spring – 2nd year:

- ATR 112 - Intro to Automation Credit Hours: 3
- CSC 134 - C++ Programming Credit Hours: 3
- EGR 285 - Design Project Credit Hours: 2
- MEC 231 - Comp-Aided Manufact I Credit Hours: 3
- MEC 265 - Fluid Mechanics Credit Hours: 3

Total Hours: Class 7 | Lab 16 | Clin/WkExp 0 | Credit 14

Grand Total Hours: Class 47/49 | Lab 55 | Clin/WkExp 0 | Credit 69/71

Work-Based Learning Option:

Qualified students may elect to take up to 2 credit hours of Work-Based Learning in place of EGR 285.

Mechanical Engineering Technology Certificate (C40320)**Major Courses:**

- DFT 151 - CAD I Credit Hours: 3
- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- ELC 131 - Circuit Analysis I Credit Hours: 4
- MAT 171 - Precalculus Algebra Credit Hours: 4
OR
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
- MEC 180 - Engineering Materials Credit Hours: 3

Total Credit Hours Required: 15/16

Mechatronics Engineering Technology, A.A.S. (A40350)

Courses required to meet graduation requirements in this curriculum are offered during day hours. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science degree is awarded graduates of this curriculum.

These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, industrial and technology managers, or research technicians.

Mechatronics Engineering Technology: A course of study that prepares the students to use basic engineering principles and technical skills in developing and testing automated, servomechanical, and other electromechanical systems. Includes instruction in prototype testing, manufacturing and operational testing, systems analysis and maintenance procedures. Graduates should be qualified for employment in industrial maintenance and manufacturing including assembly, testing, startup, troubleshooting, repair, process improvement, and control systems, and should qualify to sit for Packaging Machinery Manufacturers Institute (PMMI) mechatronics or similar industry examinations.

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- COM 231 - Public Speaking Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 171 - Precalculus Algebra Credit Hours: 4
OR
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3

Social/Behavioral Sciences:

- Elective Credit Hours: 3

Major Courses:

- ATR 112 - Intro to Automation Credit Hours: 3
- BPR 111 - Print Reading Credit Hours: 2
- CIS 110 - Introduction to Computers Credit Hours: 3
- DFT 151 - CAD I Credit Hours: 3
- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- ELC 128 - Intro to PLC Credit Hours: 3
- ELC 130 - Advanced Motors/Controls Credit Hours: 3
- ELC 131 - Circuit Analysis I Credit Hours: 4
- ELC 135 - Electrical Machines I Credit Hours: 3
- ELC 213 - Instrumentation Credit Hours: 4
- ELN 229 - Industrial Electronics Credit Hours: 4
- HYD 110 - Hydraulics/Pneumatics I Credit Hours: 3
- ISC 112 - Industrial Safety Credit Hours: 2

- MAT 172 - Precalculus Trigonometry Credit Hours: 4
OR
- MAT 122 - Algebra/Trigonometry II Credit Hours: 3
- MEC 130 - Mechanisms Credit Hours: 3
- MEC 180 - Engineering Materials Credit Hours: 3
- PHY 151 - College Physics I Credit Hours: 4
OR
- PHY 131 - Physics-Mechanics Credit Hours: 4

Program electives:

Students are required to take a minimum of 6 SHC from the following:

- ATR 212 - Industrial Robots Credit Hours: 3
- CSC 134 - C++ Programming Credit Hours: 3
- CSC 139 - Visual BASIC Programming Credit Hours: 3
- ELC 111 - Intro to Electricity Credit Hours: 3
- ELN 260 - Prog Logic Controllers Credit Hours: 4
- MAC 141 - Machining Applications I Credit Hours: 4
- MAC 122 - CNC Turning Credit Hours: 2
- MAC 124 - CNC Milling Credit Hours: 2
- MNT 110 - Intro to Maint Procedures Credit Hours: 2
- NET 125 - Introduction to Networks Credit Hours: 3
- WBL XXX Work-Based Learning Credit Hours: 1-3
- WLD 112 - Basic Welding Processes Credit Hours: 2

Total Credit Hours Required: 73/75

Math/Physics Note:

Students planning to transfer to a 4 year college should consider taking MAT 171, MAT 172, and PHY 151. Please see your Mechatronics Engineering Technology advisor.

Work-Based Learning Option:

Qualified students may elect to take up to 3 credit hours of Work-Based Learning in place of 3 credit hours of Program Electives.

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 121) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

OR

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2
- MAT 001P - Math Skills Support Credit Hours: 1

Suggested Program Sequence:**Fall – 1st year:**

- DFT 151 - CAD I Credit Hours: 3
- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- ELC 131 - Circuit Analysis I Credit Hours: 4
- MAT 171 - Precalculus Algebra Credit Hours: 4
OR
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
- MEC 180 - Engineering Materials Credit Hours: 3

Total Hours: Class 10/11 | Lab 13 | Clin/WkExp 0 | Credit 15/16

Spring – 1st year:

- ATR 112 - Intro to Automation Credit Hours: 3
- BPR 111 - Print Reading Credit Hours: 2
- CIS 110 - Introduction to Computers Credit Hours: 3
- ELC 135 - Electrical Machines I Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3
- MAT 172 - Precalculus Trigonometry Credit Hours: 4
OR
- MAT 122 - Algebra/Trigonometry II Credit Hours: 3

Total Hours: Class 12/13 | Lab 11 | Clin/WkExp 0 | Credit 17/18

Summer – 1st year:

- COM 231 - Public Speaking Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
- Humanities/Fine Arts Elective Credit Hours: 3

Total Hours: Class 6 | Lab 0 | Clin/WkExp 0 | Credit 6

Fall – 2nd year:

- ELC 128 - Intro to PLC Credit Hours: 3
- ELC 130 - Advanced Motors/Controls Credit Hours: 3
- ELN 229 - Industrial Electronics Credit Hours: 4
- PHY 151 - College Physics I Credit Hours: 4
OR
- PHY 131 - Physics-Mechanics Credit Hours: 4
- Program Elective Credit Hours: 3

Total Hours: Class 12 | Lab 13 | Clin/WkExp 0 | Credit 17

Spring - 2nd year:

- ELC 213 - Instrumentation Credit Hours: 4
- HYD 110 - Hydraulics/Pneumatics I Credit Hours: 3
- ISC 112 - Industrial Safety Credit Hours: 2
- MEC 130 - Mechanisms Credit Hours: 3
- Program Elective Credit Hours: 3
- Social/Behavioral Science Elective Credit Hours: 3

Total Hours: Class 14 | Lab 10 | Clin/WkExp 0 | Credit 18

Grand Total Hours: Class 54/56 | Lab 47 | Clin/WkExp 0 | Credit 73/75

**Mechatronics Engineering Technology--
Mechatronics Certificate (C40350)****Major Courses:**

- ATR 112 - Intro to Automation Credit Hours: 3
- ELC 131 - Circuit Analysis I Credit Hours: 4
- HYD 110 - Hydraulics/Pneumatics I Credit Hours: 3
- ISC 112 - Industrial Safety Credit Hours: 2
- MEC 130 - Mechanisms Credit Hours: 3

Total Credit Hours Required: 15

Suggested Program Sequence:**Fall – 1st year:**

- ELC 131 - Circuit Analysis I Credit Hours: 4
- ISC 112 - Industrial Safety Credit Hours: 2

Total Hours: Class 5 | Lab 3 | Clin/WkExp 0 | Credit 6

Spring – 1st year:

- ATR 112 - Intro to Automation Credit Hours: 3
- HYD 110 - Hydraulics/Pneumatics I Credit Hours: 3
- MEC 130 - Mechanisms Credit Hours: 3

Total Hours: Class 6 | Lab 8 | Clin/WkExp 0 | Credit 9

Grand Total Hours: Class 11 | Lab 11 | Clin/WkExp 0 | Credit 15

**Mechatronics Engineering Technology-General
Engineering Certificate (C4035001)****Major Courses:**

- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- ELC 131 - Circuit Analysis I Credit Hours: 4
- DFT 151 - CAD I Credit Hours: 3
- MAT 171 - Precalculus Algebra Credit Hours: 4
OR
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
- MEC 180 - Engineering Materials Credit Hours: 3

Total Credit Hours Required: 15/16

Medical Office Administration A.A.S. (A25310)

The Medical Office Administration curriculum prepares individuals for employment as medical administrative personnel in the areas of medical office, medical billing and coding, dental office, patient services, and medical documents.

Course work includes medical terminology, computer applications, medical office management, medical coding, medical insurance and billing, medical legal and ethical issues, oral and written communication, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of medical office positions in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other healthcare related organizations. Upon graduation, students may be eligible to sit for industry recognized certification exams.

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Science/Mathematics:

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 152 - Statistical Methods I Credit Hours: 4

Social/Behavioral Sciences:

- Elective Credit Hours: 3

Major Courses:

- CIS 110 - Introduction to Computers Credit Hours: 3
- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- HMT 211 - Long-Term Care Admin Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3
- OST 131 - Keyboarding Credit Hours: 2
- OST 136 - Word Processing Credit Hours: 3
- OST 140 - Internet Comm/Research Credit Hours: 2
- OST 148 - Med Ins & Billing Credit Hours: 3
- OST 149 - Medical Legal Issues Credit Hours: 3
- OST 164 - Office Editing Credit Hours: 3
- OST 243 - Med Office Simulation Credit Hours: 3
- OST 247 - Procedure Coding Credit Hours: 3
- OST 248 - Diagnostic Coding Credit Hours: 3
- OST 249 - Med Coding Certification Prep Credit Hours: 3
- OST 263 - Healthcare Customer Relations Credit Hours: 3
- OST 280 - Electronic Health Records Credit Hours: 3
- OST 288 - Medical Office Admin Capstone Credit Hours: 3
- WBL XXX Work-Based Learning Credit Hours: 2

Total Credit Hours Required: 69/70

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

OR

Students who elect to take (MAT 143/MAT 152) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:

Fall – 1st year:

- CIS 110 - Introduction to Computers Credit Hours: 3
- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- OST 131 - Keyboarding Credit Hours: 2
- OST 136 - Word Processing Credit Hours: 3
- OST 164 - Office Editing Credit Hours: 3

Total Hours: Class 11 | Lab 6 | Clin/WkExp 0 | Credit 14

Spring – 1st year:

- MED 121 - Medical Terminology I Credit Hours: 3 (*1st 8-Weeks*)
- MED 122 - Medical Terminology II Credit Hours: 3 (*2nd 8-Weeks*)
- OST 148 - Med Ins & Billing Credit Hours: 3
- OST 149 - Medical Legal Issues Credit Hours: 3
- OST 280 - Electronic Health Records Credit Hours: 3

Total Hours: Class 14 | Lab 2 | Clin/WkExp 0 | Credit 15

Summer – 1st year:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- Social/Behavioral Science Elective Credit Hours: 3
- Humanities/Fine Arts Elective Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/WkExp 0 | Credit 9

Fall – 2nd year:

- HMT 211 - Long-Term Care Admin Credit Hours: 3
- OST 140 - Internet Comm/Research Credit Hours: 2
- OST 243 - Med Office Simulation Credit Hours: 3
- OST 247 - Procedure Coding Credit Hours: 3
- OST 248 - Diagnostic Coding Credit Hours: 3
- OST 263 - Healthcare Customer Relations Credit Hours: 3

Total Hours: Class 13 | Lab 8 | Clin/WkExp 0 | Credit 17

Spring – 2nd year:

- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 152 - Statistical Methods I Credit Hours: 4
- OST 249 - Med Coding Certification Prep Credit Hours: 3
- OST 288 - Medical Office Admin Capstone Credit Hours: 3
- WBL XXX Work-Based Learning Credit Hours: 2

Total Hours: Class 9/10 | Lab 7 | Clin/WkExp 20 | Credit 14/15

Grand Total Hours: Class 56/57 | Lab 23 | Clin/WkExp 20 | Credit 69/70

Medical Office Administration Diploma (D25310)**General Education Courses****English/Communications:**

- ENG 111 - Writing and Inquiry Credit Hours: 3

Social/Behavioral Sciences:

- Social/Behavioral Science Elective Credit Hours: 3

Major Courses:

- CIS 110 - Introduction to Computers Credit Hours: 3
- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3
- OST 131 - Keyboarding Credit Hours: 2
- OST 136 - Word Processing Credit Hours: 3
- OST 148 - Med Ins & Billing Credit Hours: 3
- OST 149 - Medical Legal Issues Credit Hours: 3
- OST 243 - Med Office Simulation Credit Hours: 3
- OST 247 - Procedure Coding Credit Hours: 3
- OST 248 - Diagnostic Coding Credit Hours: 3
- OST 263 - Healthcare Customer Relations Credit Hours: 3
- OST 280 - Electronic Health Records Credit Hours: 3

Total Credit Hours Required: 44

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3
- OST 080 - Keyboarding Literacy Credit Hours: 2

Suggested Program Sequence:**Fall – 1st year:**

- CIS 110 - Introduction to Computers Credit Hours: 3
- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3 (*1st 8-Weeks*)
- MED 122 - Medical Terminology II Credit Hours: 3 (*2nd 8-Weeks*)
- OST 131 - Keyboarding Credit Hours: 2
- OST 136 - Word Processing Credit Hours: 3

Total Hours: Class 14 | Lab 6 | Clin/WkExp 0 | Credit 17

Spring – 1st year:

- OST 148 - Med Ins & Billing Credit Hours: 3
- OST 243 - Med Office Simulation Credit Hours: 3
- OST 247 - Procedure Coding Credit Hours: 3
- OST 248 - Diagnostic Coding Credit Hours: 3
- OST 263 - Healthcare Customer Relations Credit Hours: 3
- OST 280 - Electronic Health Records Credit Hours: 3

Total Hours: Class 15 | Lab 6 | Clin/WkExp 0 | Credit 18

Summer – 1st year:

- OST 149 - Medical Legal Issues Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3
- Social/Behavioral Science Elective Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/WkExp 0 | Credit 9

Grand Total Hours: Class 38 | Lab 12 | Clin/WkExp 0 | Credit 44

Medical Office Administration - Receptionist Certificate (C2531001)**Major Courses**

- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3
- OST 148 - Med Ins & Billing Credit Hours: 3
- OST 149 - Medical Legal Issues Credit Hours: 3
- OST 263 - Healthcare Customer Relations Credit Hours: 3

Total Credit Hours Required: 18

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Suggested Sequence:**Fall - 1st Year:**

- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3 (*1st 8-Weeks*)
- MED 122 - Medical Terminology II Credit Hours: 3 (*2nd 8-Weeks*)

Total Hours: Class 9 | Lab 0 | Clin/WkExp 0 | Credit 9

Spring - 1st year:

- OST 148 - Med Ins & Billing Credit Hours: 3
- OST 149 - Medical Legal Issues Credit Hours: 3
- OST 263 - Healthcare Customer Relations Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/WkExp 0 | Credit 9

Grand Total Hours: Class 18 | Lab 0 | Clin/Wk Exp 0 | Credit 18

Medical Office Administration - Insurance Certificate (C2531002)

Major Courses

- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3
- OST 148 - Med Ins & Billing Credit Hours: 3
- OST 247 - Procedure Coding Credit Hours: 3
- OST 248 - Diagnostic Coding Credit Hours: 3

Total Credit Hours Required: 18

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Suggested Sequence:**Fall - 1st Year:**

- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/Wk Exp 0 | Credit 9

Spring - 1st year:

- OST 148 - Med Ins & Billing Credit Hours: 3
- OST 247 - Procedure Coding Credit Hours: 3
- OST 248 - Diagnostic Coding Credit Hours: 3

Total Hours: Class 7 | Lab 4 | Clin/Wk Exp 0 | Credit 9

Grand Total Hours: Class 16 | Lab 4 | Clin/Wk Exp 0 | Credit 18

Office Administration, A.A.S. (A25370)

Courses required to meet graduation requirements in this curriculum are offered during daytime hours and via the Internet. The Associate in Applied Science degree is awarded graduates of this curriculum.

The Office Administration curriculum prepares individuals for employment as administrative office personnel who use skills in the areas of office management, office finance, legal office, virtual office, customer service, and office software.

Course work includes computer applications, oral and written communication, analysis and coordination of office tasks and procedures, records management, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of office positions in business, government, and industry. Upon graduation, students may be eligible to sit for industry recognized certification exams.

General Education Courses**English/Communications:**

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Social/Behavioral Sciences:

- Elective Credit Hours: 3

Major Courses:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- ACC 150 - Acct Software Appl Credit Hours: 2
- BUS 240 - Business Ethics Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
- CTS 125 - Presentation Graphics Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3
- MKT 223 - Customer Service Credit Hours: 3
- OST 131 - Keyboarding Credit Hours: 2
- OST 132 - Keyboard Skill Building Credit Hours: 2
- OST 136 - Word Processing Credit Hours: 3
- OST 164 - Office Editing Credit Hours: 3
- OST 171 - Intro. to Virtual Office Credit Hours: 3
- OST 181 - Intro to Office Systems Credit Hours: 3
- OST 184 - Records Management Credit Hours: 3
- OST 233 - Office Publications Design Credit Hours: 3
- OST 271 - Office Web Technologies Credit Hours: 3
- OST 286 - Professional Development Credit Hours: 3

Total Credit Hours Required: 64

Work-Based Learning Option:

Qualified students may elect to take 3 credit hours of Work-Based Learning Courses in place of BUS 240.

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

OR

Students who elect to take (MAT 143) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:**Fall – 1st year:**

- CIS 110 - Introduction to Computers Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3
- OST 131 - Keyboarding Credit Hours: 2
- OST 136 - Word Processing Credit Hours: 3
- OST 164 - Office Editing Credit Hours: 3

Total Hours: Class 11 | Lab 6 | Clin/WkExp 0 | Credit 14

Spring – 1st year:

- CTS 125 - Presentation Graphics Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3
- OST 132 - Keyboard Skill Building Credit Hours: 2
- OST 171 - Intro. to Virtual Office Credit Hours: 3
- OST 181 - Intro to Office Systems Credit Hours: 3
- OST 184 - Records Management Credit Hours: 3

Total Hours: Class 11 | Lab 12 | Clin/WkExp 0 | Credit 17

Fall – 2nd year:

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
- MKT 223 - Customer Service Credit Hours: 3
- OST 271 - Office Web Technologies Credit Hours: 3
- OST 286 - Professional Development Credit Hours: 3

Total Hours: Class 14 | Lab 4 | Clin/WkExp 0 | Credit 16

Spring – 2nd year:

- ACC 150 - Acct Software Appl Credit Hours: 2
- BUS 240 - Business Ethics Credit Hours: 3
OR
- WBL XXX Work-Based Learning Credit Hours: 3
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3
- OST 233 - Office Publications Design Credit Hours: 3
- Humanities/Fine Arts Elective Credit Hours: 3
- Social/Behavioral Science Elective Credit Hours: 3

Total Hours: Class 11/13 | Lab 6 | Clin/WkExp 0/30 | Credit 17

Grand Total Hours: Class 47/50 | Lab 28 | Clin/WkExp 0/30 | Credit 64

Office Administration Diploma (D25370)**General Education Courses****English/Communications:**

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Major Courses:

- BUS 240 - Business Ethics Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
- CTS 125 - Presentation Graphics Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3
- OST 131 - Keyboarding Credit Hours: 2
- OST 132 - Keyboard Skill Building Credit Hours: 2
- OST 136 - Word Processing Credit Hours: 3
- OST 164 - Office Editing Credit Hours: 3
- OST 171 - Intro. to Virtual Office Credit Hours: 3
- OST 181 - Intro to Office Systems Credit Hours: 3
- OST 184 - Records Management Credit Hours: 3

Total Credit Hours Required: 37

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3
- OST 080 - Keyboarding Literacy Credit Hours: 2

Suggested Program Sequence:

Fall – 1st year:

- CIS 110 - Introduction to Computers Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3
- OST 131 - Keyboarding Credit Hours: 2
- OST 136 - Word Processing Credit Hours: 3
- OST 164 - Office Editing Credit Hours: 3

Total Hours: Class 11 | Lab 6 | Clin/WkExp 0 | Credit 14

Spring – 1st year:

- BUS 240 - Business Ethics Credit Hours: 3
- CTS 125 - Presentation Graphics Credit Hours: 3
- OST 132 - Keyboard Skill Building Credit Hours: 2
- OST 171 - Intro. to Virtual Office Credit Hours: 3
- OST 181 - Intro to Office Systems Credit Hours: 3
- OST 184 - Records Management Credit Hours: 3

Total Hours: Class 12 | Lab 10 | Clin/WkExp 0 | Credit 17

Summer - 1st year:

- CTS 130 - Spreadsheet Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Total Hours: Class 5 | Lab 2 | Clin/WkExp 0 | Credit 6

Grand Total Hours: Class 28 | Lab 18 | Clin/WkExp 0 | Credit 37

Office Administration -- General Office Certificate (C25370)

Major Courses:

- OST 131 - Keyboarding Credit Hours: 2
- OST 136 - Word Processing Credit Hours: 3
- OST 164 - Office Editing Credit Hours: 3
- OST 171 - Intro. to Virtual Office Credit Hours: 3
- OST 181 - Intro to Office Systems Credit Hours: 3
- OST 184 - Records Management Credit Hours: 3

Total Credit Hours Required: 17

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Suggested Program Sequence:

Fall – 1st year:

- OST 131 - Keyboarding Credit Hours: 2
- OST 136 - Word Processing Credit Hours: 3
- OST 164 - Office Editing Credit Hours: 3

Total Hours: Class 6 | Lab 4 | Clin/WkExp 0 | Credit 8

Spring – 1st year:

- OST 171 - Intro. to Virtual Office Credit Hours: 3
- OST 181 - Intro to Office Systems Credit Hours: 3
- OST 184 - Records Management Credit Hours: 3

Total Hours: Class 6 | Lab 6 | Clin/WkExp 0 | Credit 9

Grand Total Hours: Class 12 | Lab 10 | Clin/WkExp 0 | Credit 17

Office Administration -- Software Applications Certificate (C2537002)

Major Courses:

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTS 125 - Presentation Graphics Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3
- OST 136 - Word Processing Credit Hours: 3

Total Credit Hours Required: 12

Suggested Program Sequence:

Fall 1st year:

- CIS 110 - Introduction to Computers Credit Hours: 3
- OST 136 - Word Processing Credit Hours: 3

Total Hours: Class 4 | Lab 4 | Clin/WkExp 0 | Credit 6

Spring - 1st year:

- CTS 125 - Presentation Graphics Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3

Total Hours: Class 4 | Lab 4 | Clin/WkExp 0 | Credit 6

Grand Total Hours: Class 8 | Lab 8 | Clin/WkExp 0 | Credit 12

Photographic Technology, A.A.S. (A30280)

Courses required to meet graduation requirements in this curriculum are offered during daytime hours. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science degree is awarded graduates of this curriculum.

The Photographic Technology curriculum offers training in photographic techniques and their application in professional photographic disciplines. Students will receive comprehensive course work in one of the following subject areas: Photographic Technology, Biocommunications Photography, Photojournalism, Commercial Photography, or Portrait Studio Management.

Course work includes developing skills in the following areas: fundamentals of camera systems, lighting, photographic process, digital imaging, design, multimedia and business practices.

Graduates should qualify for entry-level jobs in the photographic industry. Employment opportunities exist in the following areas: commercial photography, photojournalism, biomedical photography, portrait photography, equipment sales, photographic laboratories, and imaging technologies depending upon courses offered and completed.

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 152 - Statistical Methods I Credit Hours: 4
OR
- MAT 171 - Precalculus Algebra Credit Hours: 4

Social/Behavioral Sciences:

- Elective Credit Hours: 3

Major Courses:

- PHO 110 - Fund of Photography Credit Hours: 5
- PHO 113 - History of Photography Credit Hours: 3
- PHO 115 - Basic Studio Lighting Credit Hours: 4
- PHO 120 - Intermediate Photography Credit Hours: 4
- PHO 139 - Intro to Digital Imaging Credit Hours: 2
- PHO 150 - Portfolio Development I Credit Hours: 4
- PHO 216 - Documentary Photography Credit Hours: 4
- PHO 217 - Photojournalism I Credit Hours: 4
- PHO 219 - Digital Applications Credit Hours: 2
- PHO 220 - Business of Photography Credit Hours: 3
- PHO 224 - Multimedia Production Credit Hours: 3
- PHO 226 - Portraiture Credit Hours: 4
- PHO 235 - Commercial Photography Credit Hours: 4
- PHO 250 - Portfolio Development II Credit Hours: 4
- WBL 110 - World of Work Credit Hours: 1

PHO Program Electives:

Students are required to take a minimum of 1 SHC from the following:

- BUS 110 - Introduction to Business Credit Hours: 3
- BUS 125 - Personal Finance Credit Hours: 3
- BUS 137 - Principles of Management Credit Hours: 3
- BUS 139 - Entrepreneurship I Credit Hours: 3
- CIS 110 - Introduction to Computers Credit Hours: 3
- PHO 131 - View Camera Credit Hours: 4
- PHO 180 - Creative Problem Solving Credit Hours: 3
- PHO 275 - Travel/Outdoor Photo Credit Hours: 3
- WBL 111 - Work-Based Learning I Credit Hours: 1

Other Required Courses:

- ACA 111 - College Student Success Credit Hours: 1

Total Credit Hours Required: 68/72

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 143/MAT 152) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

OR

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2
- MAT 001P - Math Skills Support Credit Hours: 1

Suggested Program Sequence:

Fall – 1st year:

- ACA 111 - College Student Success Credit Hours: 1
- ENG 111 - Writing and Inquiry Credit Hours: 3
- PHO 110 - Fund of Photography Credit Hours: 5
- PHO 113 - History of Photography Credit Hours: 3
- PHO 139 - Intro to Digital Imaging Credit Hours: 2

Total Hours: Class 11 | Lab 9 | Clin/WkExp 0 | Credit 14

Spring – 1st year:

- PHO 115 - Basic Studio Lighting Credit Hours: 4
- PHO 120 - Intermediate Photography Credit Hours: 4
- PHO 219 - Digital Applications Credit Hours: 2
- PHO 220 - Business of Photography Credit Hours: 3
- PHO 224 - Multimedia Production Credit Hours: 3

Total Hours: Class 10 | Lab 16 | Clin/WkExp 0 | Credit 16

Summer – 1st year:

- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
- Humanities/Fine Arts Elective Credit Hours: 3
- Social/Behavioral Science Elective Credit Hours: 3

Total Hours: Class 9 | Lab 0 | Clin/WkExp 0 | Credit 9

Fall – 2nd year:

- PHO 150 - Portfolio Development I Credit Hours: 4
- PHO 217 - Photojournalism I Credit Hours: 4
- PHO 226 - Portraiture Credit Hours: 4
- PHO 235 - Commercial Photography Credit Hours: 4

Total Hours: Class 9 | Lab 16 | Clin/WkExp 0 | Credit 16

Spring – 2nd year:

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 152 - Statistical Methods I Credit Hours: 4
OR
- MAT 171 - Precalculus Algebra Credit Hours: 4
- PHO 216 - Documentary Photography Credit Hours: 4
- PHO 250 - Portfolio Development II Credit Hours: 4
- PHO Program Elective Credit Hours: 1/4
- WBL 110 - World of Work Credit Hours: 1

Total Hours: Class 7/8 | Lab 10 | Clin/WkExp 10 | Credit 13/17

Grand Total Hours: Class 46/47 | Lab 51 | Clin/WkExp 10 | Credit 68/72

Photographic Technology Certificate (C30280)

Major Courses:

- PHO 110 - Fund of Photography Credit Hours: 5
- PHO 115 - Basic Studio Lighting Credit Hours: 4
- PHO 139 - Intro to Digital Imaging Credit Hours: 2
- PHO 219 - Digital Applications Credit Hours: 2
- PHO 224 - Multimedia Production Credit Hours: 3

Total Credit Hours Required: 16

Suggested Program Sequence:

Fall – 1st year:

- PHO 110 - Fund of Photography Credit Hours: 5
- PHO 139 - Intro to Digital Imaging Credit Hours: 2

Total Hours: Class 4 | Lab 9 | Clin/WkExp 0 | Credit 7

Spring – 1st year:

- PHO 219 - Digital Applications Credit Hours: 2

Total Hours: Class 1 | Lab 3 | Clin/WkExp 0 | Credit 2

Fall – 2nd year:

- PHO 115 - Basic Studio Lighting Credit Hours: 4

Total Hours: Class 2 | Lab 6 | Clin/WkExp 0 | Credit 4

Spring – 2nd year:

- PHO 224 - Multimedia Production Credit Hours: 3

Total Hours: Class 2 | Lab 3 | Clin/WkExp 0 | Credit 3

Grand Total Hours: Class 9 | Lab 21 | Clin/WkExp 0 | Credit 16

Polysomnography, A.A.S. (A45670)

Courses required to meet graduation requirements in this curriculum are offered during daytime hours with clinicals in the evenings. Minimum time for completion: four semesters full-time attendance. The Associate of Applied Science degree is awarded graduates of this curriculum.

The Polysomnography curriculum prepares individuals, working in conjunction with a physician, to perform and interpret sleep studies and to provide comprehensive clinical evaluations that are required for the diagnosis of sleep related disorders.

Students should acquire the knowledge and skills necessary to perform sleep studies, including recording and interpreting events observed during sleep. Treatment of sleep related disorders and patient education focused on healthy sleep habits will also be discussed.

Graduates of accredited programs may be eligible to apply to take the examination offered by the Board of Registered Polysomnographic Technologists. Employment opportunities may be found in hospitals and freestanding sleep centers.

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 143 - Quantitative Literacy Credit Hours: 3

Social/Behavioral Sciences:

- Elective Credit Hours: 3

Major Courses:

- BIO 163 - Basic Anat & Physiology Credit Hours: 5
- CIS 110 - Introduction to Computers Credit Hours: 3
- ELC 111 - Intro to Electricity Credit Hours: 3
- MED 118 - Medical Law and Ethics Credit Hours: 2
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3
- PSG 110 - Intro to Polysomnography Credit Hours: 4
- PSG 111 - Neuro/Cardiopulmonary A&P Credit Hours: 4
- PSG 112 - PSG Fundamentals Credit Hours: 3
- PSG 210 - Polysomnography I Credit Hours: 7
- PSG 211 - Polysomnography II Credit Hours: 7
- PSG 212 - Infant/Pediatric PSG Credit Hours: 4
- PSG 213 - Case Study/Exam Review Credit Hours: 1
- PSG 214 - PSG Clinical Apps I Credit Hours: 1

Other Required Courses:

- ACA 111 - College Student Success Credit Hours: 1

Total Credit Hours Required: 66

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3
- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:

Fall – 1st year:

- ACA 111 - College Student Success Credit Hours: 1
- ELC 111 - Intro to Electricity Credit Hours: 3
- ENG 111 - Writing and Inquiry Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3
- PSG 110 - Intro to Polysomnography Credit Hours: 4

Total Hours: Class 13 | Lab 2 | Clin/WkExp 0 | Credit 14

Spring – 1st year:

- CIS 110 - Introduction to Computers Credit Hours: 3
- MAT 143 - Quantitative Literacy Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3
- PSG 111 - Neuro/Cardiopulmonary A&P Credit Hours: 4
- PSG 112 - PSG Fundamentals Credit Hours: 3

Total Hours: Class 14 | Lab 4 | Clin/WkExp 0 | Credit 16

Summer – 1st year:

- MED 118 - Medical Law and Ethics Credit Hours: 2
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
- Humanities/Fine Arts Elective Credit Hours: 3

Total Hours: Class 8 | Lab 0 | Clin/WkExp 0 | Credit 8

Fall – 2nd year:

- PSG 210 - Polysomnography I Credit Hours: 7
- PSG 214 - PSG Clinical Apps I Credit Hours: 1
- Social/Behavioral Science Elective Credit Hours: 3

Total Hours: Class 6 | Lab 4 | Clin/WkExp 9 | Credit 11

Spring – 2nd year:

- PSG 211 - Polysomnography II Credit Hours: 7
- PSG 212 - Infant/Pediatric PSG Credit Hours: 4
- PSG 213 - Case Study/Exam Review Credit Hours: 1

Total Hours: Class 5 | Lab 11 | Clin/WkExp 9 | Credit 12

Grand Total Hours: Class 46 | Lab 23 | Clin/WkExp 18 | Credit 66

Polysomnography Associate Degree Completion (A4567009)

This will be an ongoing program to offer an Associate in Applied Science to individuals who already hold the national registry credential offered by the Board of Registered Polysomnography Technologists (BRPT) and are currently in good standing with the Board at the time of acceptance. Good standing with the BRPT will be a requirement throughout the duration of the program. These individuals will have to meet the following criteria prior to acceptance:

1. Meet all College requirements regarding basic admission and receipt of prior scholarly transcripts
2. Provide official documentation of current Basic Life Support certification
3. Provide a letter from current employer stating they are actively working in the field of Polysomnography for at least one year.

Student services and the Director of Polysomnography Technology will confirm admission requirements have been met prior to acceptance into the program. After being accepted to the program, these individuals will be required to:

1. Maintain current working status in the field of Polysomnography and provide documentation to the Director of the program as requested
2. Adhere to the rules of the Polysomnography Technology program, Catawba Valley Community College, and the BRPT standards of conduct
3. Complete all required general education requirements of the Polysomnography Technology curriculum
4. Register and complete PSG 112 Fundamentals and PSG 212 Infant/Pediatric PSG classes
5. Students accepted will receive AP credit for the following PSG curriculum classes because competency objectives have been met by possession of current registry status with the Board of Registered Polysomnographic Technologists: PSG 110 Intro to Polysomnography; PSG 111 Neuro/CP A & P; PSG 210 Polysomnography I; PSG 211 Polysomnography II; PSG 213 Exam Review/Case Studies; PSG 214 PSG Clinical Apps I.

All classes will be provided in a distant education online format for convenience of these individuals. Grading, transcript evaluation, transfer policies, curriculum and graduation requirements will follow current CVCC policy. Program completion will vary according to progression of required classes for each student accepted.

Polysomnography Certificate (C45650)

Courses required to meet graduation requirements in this curriculum are offered during daytime hours and clinicals are offered in the evening hours. Minimum time for completion: three semesters part-time attendance. A certificate is awarded graduates of this curriculum.

The Polysomnography curriculum prepares individuals, working in conjunction with a physician, to perform and interpret sleep studies and to provide comprehensive clinical evaluations that are required for the diagnosis of sleep related disorders. Individuals entering the certificate curriculum must possess a minimum of an associate degree in allied health.

Students will acquire the knowledge and skills necessary to perform sleep studies, including recording and interpreting events observed during sleep. Treatment of sleep related disorders and patient education focused on healthy sleep habits will also be discussed.

Graduates of accredited programs may be eligible to take the registry examination given by the Board of Registered Polysomnographic Technologists. Employment opportunities may be found in hospitals and freestanding sleep centers.

Major Courses:

- PSG 189 - Polysomnog Transition Credit Hours: 3 *
- PSG 210 - Polysomnography I Credit Hours: 7
- PSG 211 - Polysomnography II Credit Hours: 7

Total Credit Hours Required: 17

Suggested Program Sequence:

Summer – 1st year:

- PSG 189 - Polysomnog Transition Credit Hours: 3 *

Total Hours: Class 1 | Lab 3 | Clin/WkExp 3 | Credit 3

Fall – 1st year:

- PSG 210 - Polysomnography I Credit Hours: 7

Total Hours: Class 3 | Lab 2 | Clin/WkExp 9 | Credit 7

Spring – 1st year:

- PSG 211 - Polysomnography II Credit Hours: 7

Total Hours: Class 2 | Lab 6 | Clin/WkExp 9 | Credit 7

Grand Total Hours: Class 6 | Lab 11 | Clin/WkExp 21 | Credit 17

Note:

*Credit for course may be earned by successfully completing the Polysomnography Entrance Test.

Radiography, A.A.S. (A45700)

Courses required to meet graduation requirements in this curriculum are offered during daytime hours. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science degree is awarded graduates of this curriculum.

The Radiography curriculum prepares the graduate to be a radiographer, a skilled health care professional who uses radiation to produce images of the human body.

Course work includes clinical rotations to area health care facilities, radiographic exposure, image processing, radiographic procedures, physics, pathology, patient care and management, radiation protection, quality assurance, anatomy and physiology, and radiobiology.

Graduates of accredited programs are eligible to apply to take the American Registry of Radiologic Technologists' national examination for certification and registration as medical radiographers. Graduates may be employed in hospitals, clinics, physicians' offices, medical laboratories, government agencies, and industry

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- English - Elective Credit Hours: 3

Students are required to take one (1) course from the following:

- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
- ENG 113 - Literature-Based Research Credit Hours: 3
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Electives Credit Hours: 3

Natural Sciences/Mathematics:

- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- MAT 143 - Quantitative Literacy Credit Hours: 3

Social/Behavioral Sciences:

- PSY 150 - General Psychology Credit Hours: 3

Major Courses:

- RAD 110 - Rad Intro & Patient Care Credit Hours: 3
- RAD 111 - RAD Procedures I Credit Hours: 4
- RAD 112 - RAD Procedures II Credit Hours: 4
- RAD 121 - Radiographic Imaging I Credit Hours: 3
- RAD 122 - Radiographic Imaging II Credit Hours: 2
- RAD 131 - Radiographic Physics I Credit Hours: 2
- RAD 151 - RAD Clinical Ed I Credit Hours: 2
- RAD 161 - RAD Clinical Ed II Credit Hours: 5
- RAD 171 - RAD Clinical Ed III Credit Hours: 4
- RAD 211 - RAD Procedures III Credit Hours: 3
- RAD 231 - Radiographic Physics II Credit Hours: 2
- RAD 241 - Radiobiology/Protection Credit Hours: 2
- RAD 245 - Image Analysis Credit Hours: 2
- RAD 251 - RAD Clinical Ed IV Credit Hours: 7
- RAD 261 - RAD Clinical Ed V Credit Hours: 7
- RAD 271 - Radiography Capstone Credit Hours: 1

Total Credit Hours Required: 76

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3
- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:

Fall - 1st year:

- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- ENG 111 - Writing and Inquiry Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3

Total Hours: Class 9 | Lab 3 | Clin/Wk Exp 0 | Credit 10

Spring - 1st year:

- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3 (Preferred)
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
- MAT 143 - Quantitative Literacy Credit Hours: 3
- Humanities/Fine Arts Elective Credit Hours: 3

Total Hours: Class 11 | Lab 5 | Clin/Wk Exp 0 | Credit 13

Fall - 2nd year:

- RAD 110 - Rad Intro & Patient Care Credit Hours: 3
- RAD 111 - RAD Procedures I Credit Hours: 4
- RAD 151 - RAD Clinical Ed I Credit Hours: 2

Total Hours: Class 5 | Lab 6 | Clin/Wk Exp 6 | Credit 9

Spring - 2nd year:

- RAD 112 - RAD Procedures II Credit Hours: 4
- RAD 121 - Radiographic Imaging I Credit Hours: 3
- RAD 161 - RAD Clinical Ed II Credit Hours: 5

Total Hours: Class 5 | Lab 6 | Clin/Wk Exp 15 | Credit 12

Summer - 2nd year:

- RAD 131 - Radiographic Physics I Credit Hours: 2
- RAD 122 - Radiographic Imaging II Credit Hours: 2
- RAD 171 - RAD Clinical Ed III Credit Hours: 4

Total Hours: Class 2 | Lab 6 | Clin/Wk Exp 12 | Credit 8

Fall - 3rd year:

- RAD 211 - RAD Procedures III Credit Hours: 3
- RAD 231 - Radiographic Physics II Credit Hours: 2
- RAD 241 - Radiobiology/Protection Credit Hours: 2
- RAD 251 - RAD Clinical Ed IV Credit Hours: 7

Total Hours: Class 5 | Lab 6 | Clin/Wk Exp 21 | Credit 14

Spring - 3rd year:

- RAD 245 - Image Analysis Credit Hours: 2
- RAD 261 - RAD Clinical Ed V Credit Hours: 7
- RAD 271 - Radiography Capstone Credit Hours: 1

Total Hours: Class 1 | Lab 6 | Clin/Wk Exp 21 | Credit 10

Grand Total Hours: Class 38 | Lab 38 | Clin/Wk Exp 75 | Credit 76

Note:

Students must complete BIO 168, BIO 169, ENG 111, ENG 112 or ENG 113 or ENG 114, MAT 143 or higher, PSY 150, and a Humanities/Fine Arts elective, prior to the program application deadline and prior to admission to the program. Students must also be accepted into the Radiography program prior to taking RAD courses.

Respiratory Therapy, A.A.S. (A45720)

Courses required to meet graduation requirements in this curriculum are offered during daytime hours. Minimum time for completion: five semesters full-time attendance. The Associate of Applied Science degree is awarded graduates of this curriculum.

The Respiratory Therapy curriculum prepares individuals to function as respiratory therapists through demonstrated competence in the cognitive, psychomotor, and affective learning domains of respiratory care practice. Graduates perform diagnostic and therapeutic procedures with exposure to current and emerging practice settings.

The curriculum prepares graduates to operate within inter-professional teams and effectively communicate with clients/patients of various ages, ethnicities, and cultures. Application of problem solving strategies, applying ethical decision making, and understanding professional responsibilities are emphasized.

Graduates are eligible to complete the credentialing process through the National Board for Respiratory Care, which will qualify them for a license to practice in a variety of healthcare settings with responsibilities for assessment, treatment, management and education of patients with cardiopulmonary diseases.

Note: Students must complete college level chemistry (CHM 100 or greater), 4 credit hours, prior to admission into the Respiratory Therapy program.

General Education Courses**English/Communications:**

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- BIO 169 - Anatomy and Physiology II Credit Hours: 4

Social/Behavioral Sciences:

- Elective Credit Hours: 3

Major Courses:

- BIO 275 - Microbiology Credit Hours: 4
- RCP 110 - Intro to Respiratory Care Credit Hours: 4
- RCP 111 - Therapeutics/Diagnostics Credit Hours: 5
- RCP 113 - RCP Pharmacology Credit Hours: 2
- RCP 114 - C-P Anatomy & Physiology Credit Hours: 3
- RCP 115 - C-P Pathophysiology Credit Hours: 2
- RCP 122 - Special Practice Lab Credit Hours: 1
- RCP 123 - Special Practice Lab Credit Hours: 1
- RCP 145 - RCP Clinical Practice II Credit Hours: 5
- RCP 152 - RCP Clinical Practice III Credit Hours: 2
- RCP 210 - Critical Care Concepts Credit Hours: 4
- RCP 211 - Adv Monitoring/Procedures Credit Hours: 4
- RCP 214 - Neonatal/Ped's RC Credit Hours: 2
- RCP 215 - Career Prep-Adv Level Credit Hours: 1
- RCP 236 - RCP Clinical Practice IV Credit Hours: 6
- RCP 246 - RCP Clinical Practice V Credit Hours: 6

Total Credit Hours Required: 72

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3
- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1

Suggested Program Sequence Day:

Fall - 1st year:

- RCP 110 - Intro to Respiratory Care Credit Hours: 4
- RCP 113 - RCP Pharmacology Credit Hours: 2
- RCP 122 - Special Practice Lab Credit Hours: 1
- RCP 114 - C-P Anatomy & Physiology Credit Hours: 3
- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- ENG 111 - Writing and Inquiry Credit Hours: 3

Total Hours: Class 14 | Lab 8 | Clin/Wk Exp 0 | Credit 17

Spring - 1st year:

- RCP 111 - Therapeutics/Diagnostics Credit Hours: 5
- RCP 115 - C-P Pathophysiology Credit Hours: 2
- RCP 145 - RCP Clinical Practice II Credit Hours: 5
- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- ENG 114 - Prof Research & Reporting Credit Hours: 3
(Students are recommended to take ENG 114)
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3

Total Hours: Class 12 | Lab 6 | Clin/Wk Exp 15 | Credit 19

Summer - 1st year:

- RCP 152 - RCP Clinical Practice III Credit Hours: 2
- RCP 123 - Special Practice Lab Credit Hours: 1

Total Hours: Class 0 | Lab 3 | Clin/Wk Exp 6 | Credit 3

Fall - 2nd year:

- BIO 275 - Microbiology Credit Hours: 4
- RCP 210 - Critical Care Concepts Credit Hours: 4
- RCP 236 - RCP Clinical Practice IV Credit Hours: 6
- RCP 214 - Neonatal/Ped's RC Credit Hours: 2
- Humanities/Fine Arts Elective Credit Hours: 3

Total Hours: Class 10 | Lab 9 | Clin/Wk Exp 18 | Credit 19

Spring - 2nd year:

- RCP 211 - Adv Monitoring/Procedures Credit Hours: 4
- RCP 246 - RCP Clinical Practice V Credit Hours: 6
- RCP 215 - Career Prep-Adv Level Credit Hours: 1
- Social/Behavioral Science Elective Credit Hours: 3

Total Hours: Class 6 | Lab 6 | Clin/Wk Exp 18 | Credit 14

Grand Total Hours: Class 42 | Lab 32 | Clin/Wk Exp 57 | Credit 72

Surgical Technology Diploma (D45740)

Courses required to meet graduation requirements in this curriculum are offered during day hours only. Minimum time for completion: three semesters full-time attendance. The Diploma is awarded graduates of the surgical technology curriculum.

The Surgical Technology curriculum prepares individuals to assist in the care of the surgical patient in the operating room and to function as a member of the surgical team.

Students will apply theoretical knowledge to the care of patients undergoing surgery and develop skills necessary to prepare supplies, equipment, and instruments; maintain aseptic conditions; prepare patients for surgery; and assist surgeons during operations.

Employment opportunities include labor/delivery/emergency departments, inpatient/outpatient surgery centers, dialysis units/facilities, physicians' offices, and central supply processing units.

Students of Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredited programs are required to take the national certification exam administered by the National Board on Certification in Surgical Technology and Surgical Assisting (NBSTSA) within a four week period prior to or after graduation.

Note: Students must complete MED 121 and MED 122 prior to admission to the Surgical Technology program.

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3

Social/Behavioral Sciences:

- PSY 150 - General Psychology Credit Hours: 3

Major Courses:

- BIO 163 - Basic Anat & Physiology Credit Hours: 5
- BIO 175 - General Microbiology Credit Hours: 3
- SUR 110 - Intro to Surg Tech Credit Hours: 3
- SUR 111 - Periop Patient Care Credit Hours: 7
- SUR 122 - Surgical Procedures I Credit Hours: 6
- SUR 123 - SUR Clinical Practice I Credit Hours: 7
- SUR 134 - Surgical Procedures II Credit Hours: 5
- SUR 135 - SUR Clinical Practice II Credit Hours: 4
- SUR 137 - Prof Success Prep Credit Hours: 1

Other Required Courses:

- ACA 111 - College Student Success Credit Hours: 1

Total Credit Hours Required: 48

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3
- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1

Suggested Program Sequence:**Fall - 1st year:**

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ACA 111 - College Student Success Credit Hours: 1
- BIO 163 - Basic Anat & Physiology Credit Hours: 5
- SUR 110 - Intro to Surg Tech Credit Hours: 3
- SUR 111 - Periop Patient Care Credit Hours: 7

Total Hours: Class 16 | Lab 8 | Clin/Wk Exp 0 | Credit 19

Spring - 1st year:

- BIO 175 - General Microbiology Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3
- SUR 122 - Surgical Procedures I Credit Hours: 6
- SUR 123 - SUR Clinical Practice I Credit Hours: 7

Total Hours: Class 10 | Lab 5 | Clin/Wk Exp 21 | Credit 19

Summer - 1st year:

- SUR 135 - SUR Clinical Practice II Credit Hours: 4
- SUR 134 - Surgical Procedures II Credit Hours: 5
- SUR 137 - Prof Success Prep Credit Hours: 1

Total Hours: Class 6 | Lab 0 | Clin/Wk Exp 12 | Credit 10

Grand Total Hours: Class 32 | Lab 13 | Clin/Wk Exp 33 | Credit 48

Turfgrass Management Technology, A.A.S. (A15420)

Most courses required to meet graduation requirements in this curriculum are offered during day hours only. Selected courses may be offered via the Internet. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum.

CVCC has a 2 + 2 Articulation Agreement with NC Agricultural and Technological State University in Horticulture. CVCC has a 2+2 Online Articulation Agreement with Pennsylvania State University for the B.S. Degree in Turfgrass Management.

These curricula are designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study.

Course work includes plant identification, pest management, plant science and soil science. Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses.

Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, governmental agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens. Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination.

Turfgrass Management Technology: A program that focuses on turfgrasses and related groundcover plants and prepares individuals to develop ornamental or recreational grasses and related products; plant, transplant, and manage grassed areas; and to produce and store turf used for transplantation. Potential course work includes instruction in applicable plant sciences, genetics of grasses, turf science, use analysis, turf management, and related economics

General Education Courses**English/Communications:**

- ENG 111 - Writing and Inquiry Credit Hours: 3
- COM 110 - Introduction to Communication Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3

Humanities/Fine Arts:

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3

Social/Behavioral Sciences:

- Elective Credit Hours: 3

Major Courses:

- HOR 112 - Landscape Design I Credit Hours: 3
- HOR 162 - Applied Plant Science Credit Hours: 3
- HOR 166 - Soils & Fertilizers Credit Hours: 3
- HOR 170 - Hort Computer Apps Credit Hours: 2
- TRF 110 - Intro Turfgrass Cult & ID Credit Hours: 4
- TRF 120 - Turfgrass Irrigat & Design Credit Hours: 4
- TRF 130 - Native Flora ID Credit Hours: 2
- TRF 140 - Turfgrass Mgmt Safety Credit Hours: 3

Major Courses (continued):

- TRF 150 - Landscape Drafting Credit Hours: 2
- TRF 152 - Landscape Maintenance Credit Hours: 3
- TRF 210 - Turfgrass Eqmt Mgmt Credit Hours: 3
- TRF 220 - Turfgrass Calculations Credit Hours: 2
- TRF 230 - Turfgrass Mgmt Apps Credit Hours: 2
- TRF 240 - Turfgrass Pest Control Credit Hours: 3
- TRF 250 - Golf /Sport Field Const Credit Hours: 4
- TRF 260 - Adv Turfgrass Mgmt Credit Hours: 4
- WBL XXX - Work Based Learning Credit Hours: 4

Other Required Courses:

- SPA 120 - Spanish for the Workplace Credit Hours: 3
OR
- SPA 111 - Elementary Spanish I Credit Hours: 3
AND
- SPA 181 - Spanish Lab 1 Credit Hours: 1

Total Credit Hours Required: 69/70

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

OR

Students who elect to take (MAT 143) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence Day:**Fall - 1st year:**

- ENG 111 - Writing and Inquiry Credit Hours: 3
- HOR 162 - Applied Plant Science Credit Hours: 3
- HOR 166 - Soils & Fertilizers Credit Hours: 3
- TRF 110 - Intro Turfgrass Cult & ID Credit Hours: 4
- TRF 150 - Landscape Drafting Credit Hours: 2

Total Hours: Class 11 | Lab 9 | Clin/Wk Exp 0 | Credit 15

Spring - 1st year:

- HOR 112 - Landscape Design I Credit Hours: 3
- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
- TRF 120 - Turfgrass Irrigat & Design Credit Hours: 4
- TRF 152 - Landscape Maintenance Credit Hours: 3
- TRF 210 - Turfgrass Eqmt Mgmt Credit Hours: 3
- TRF 220 - Turfgrass Calculations Credit Hours: 2

Total Hours: Class 11 | Lab 15 | Clin/Wk Exp 0 | Credit 18

Summer - 1st year:

- WBL XXX - Work-Based Learning Credit Hours: 2

Total Hours: Class 0 | Lab 0 | Clin/Wk Exp 20 | Credit 2

Fall - 2nd year:

- COM 110 - Introduction to Communication Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3
- HOR 170 - Hort Computer Apps Credit Hours: 2
- Humanities/Fine Arts Elective Credit Hours: 3
- TRF 130 - Native Flora ID Credit Hours: 2
- TRF 140 - Turfgrass Mgmt Safety Credit Hours: 3
- TRF 240 - Turfgrass Pest Control Credit Hours: 3

Total Hours: Class 12 | Lab 10 | Clin/Wk Exp 10 | Credit 16

Spring - 2nd year:

- Social/Behavioral Science Elective Credit Hours: 3
- SPA 120 - Spanish for the Workplace Credit Hours: 3
OR
- SPA 111 - Elementary Spanish I Credit Hours: 3
AND
- SPA 181 - Spanish Lab 1 Credit Hours: 1
- TRF 230 - Turfgrass Mgmt Apps Credit Hours: 2
- TRF 250 - Golf /Sport Field Const Credit Hours: 4
- TRF 260 - Adv Turfgrass Mgmt Credit Hours: 4
- WBL XXX Work-Based Learning Credit Hours: 2

Total Hours: Class 12 | Lab 8-9 | Clin/Wk Exp 20 | Credit 18-19

Grand Total Hours: Class 46 | Lab 42/43 | Clin/Wk Exp 40 | Credit 69/70

Turfgrass Management Technology Diploma (D15420)

General Education Courses

- ENG 111 - Writing and Inquiry Credit Hours: 3
- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3

Major Courses:

- HOR 166 - Soils & Fertilizers Credit Hours: 3
- TRF 110 - Intro Turfgrass Cult & ID Credit Hours: 4
- TRF 120 - Turfgrass Irrigat & Design Credit Hours: 4
- TRF 140 - Turfgrass Mgmt Safety Credit Hours: 3
- TRF 150 - Landscape Drafting Credit Hours: 2
- TRF 210 - Turfgrass Eqmt Mgmt Credit Hours: 3
- TRF 220 - Turfgrass Calculations Credit Hours: 2
- TRF 230 - Turfgrass Mgmt Apps Credit Hours: 2
- TRF 240 - Turfgrass Pest Control Credit Hours: 3
- WBL XXX Work-Based Learning Credit Hours: 3

Other Required Courses:

- SPA 120 - Spanish for the Workplace Credit Hours: 3
OR
- SPA 111 - Elementary Spanish I Credit Hours: 3
AND
- SPA 181 - Spanish Lab 1 Credit Hours: 1

Total Credit Hours Required: 38/39

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

OR

Students who elect to take (MAT 143) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

Suggested Program Sequence:

Fall - 1st year:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- HOR 166 - Soils & Fertilizers Credit Hours: 3
- TRF 110 - Intro Turfgrass Cult & ID Credit Hours: 4
- TRF 140 - Turfgrass Mgmt Safety Credit Hours: 3
- TRF 150 - Landscape Drafting Credit Hours: 2
- TRF 240 - Turfgrass Pest Control Credit Hours: 3

Total Hours: Class 13 | Lab 11 | Clin/Wk Exp 0 | Credit 18

Spring - 1st year:

- MAT 143 - Quantitative Literacy Credit Hours: 3
OR
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
- SPA 120 - Spanish for the Workplace Credit Hours: 3
OR
- SPA 111 - Elementary Spanish I Credit Hours: 3
AND
- SPA 181 - Spanish Lab 1 Credit Hours: 1
- TRF 120 - Turfgrass Irrigat & Design Credit Hours: 4
- TRF 210 - Turfgrass Eqmt Mgmt Credit Hours: 3
- TRF 220 - Turfgrass Calculations Credit Hours: 2
- TRF 230 - Turfgrass Mgmt Apps Credit Hours: 2
- WBL XXX Work-Based Learning Credit Hours: 1

Total Hours: Class 11 | Lab 12/13 | Clin/Wk Exp 10 | Credit 18/19

Summer - 1st year:

- WBL XXX Work-Based Learning Credit Hours: 2

Total Hours: Class 0 | Lab 0 | Clin/Wk Exp 20 | Credit 2

Grand Total Hours: Class 24 | Lab 23/24 | Clin/Wk Exp 30 | Credit 38/39

Turfgrass Management Technology Certificate (C15420)

Major Courses:

- HOR 166 - Soils & Fertilizers Credit Hours: 3
- TRF 110 - Intro Turfgrass Cult & ID Credit Hours: 4
- TRF 120 - Turfgrass Irrigat & Design Credit Hours: 4
- TRF 220 - Turfgrass Calculations Credit Hours: 2
- TRF 240 - Turfgrass Pest Control Credit Hours: 3

Total Credit Hours Required: 16

Suggested Program Sequence:**Fall - 1st year:**

- HOR 166 - Soils & Fertilizers Credit Hours: 3
- TRF 110 - Intro Turfgrass Cult & ID Credit Hours: 4
- TRF 240 - Turfgrass Pest Control Credit Hours: 3

Total Hours: Class 7 | Lab 6 | Clin/Wk Exp 0 | Credit 10

Spring - 1st year:

- TRF 120 - Turfgrass Irrigat & Design Credit Hours: 4
- TRF 220 - Turfgrass Calculations Credit Hours: 2

Total Hours: Class 4 | Lab 4 | Clin/Wk Exp 0 | Credit 6

Grand Total Hours: Class 11 | Lab 10 | Clin/Wk Exp 0 | Credit 16

Welding Technology, A.A.S. (A50420)

Courses required to meet graduation requirements in this curriculum are offered during daytime and evening hours. Students may begin any semester. The Associate in Applied Science degree, is awarded graduates of this curriculum. A Diploma is awarded graduates who complete the diploma option and the Certificate is awarded students who complete the certificate option.

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

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses may include math, print reading, metallurgy, welding inspection, and destructive and non-destructive testing providing the student with industry-standard skills developed through classroom training and practical application.

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

General Education Courses**English/Communications:**

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 114 - Prof Research & Reporting Credit Hours: 3
OR
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3
OR
- ENG 113 - Literature-Based Research Credit Hours: 3

Humanities/Fine Arts

- Elective Credit Hours: 3

Natural Sciences/Mathematics:

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3

Social/Behavioral Science:

- Elective Credit Hours: 3

Major Courses:

- WLD 110 - Cutting Processes Credit Hours: 2
- WLD 115 - SMAW (Stick) Plate Credit Hours: 5
OR
- WLD 115AB - SMAW (Stick) Plate-AB Credit Hours: 3
- WLD 115BB - SMAW (Stick) Plate-BB Credit Hours: 2
- WLD 116 - SMAW (Stick) Plate/Pipe Credit Hours: 4
OR
- WLD 116AB - SMAW (Stick) Plate/Pipe-AB Credit Hours: 2
- WLD 116BB - SMAW (Stick) Plate/Pipe-BB Credit Hours: 2
- WLD 121 - GMAW (MIG) FCAW/Plate Credit Hours: 4
- WLD 122 - GMAW (MIG) Plate/Pipe Credit Hours: 3
- WLD 131 - GTAW (TIG) Plate Credit Hours: 4
- WLD 132 - GTAW (TIG) Plate/Pipe Credit Hours: 3
- WLD 141 - Symbols & Specifications Credit Hours: 3
- WLD 143 - Welding Metallurgy Credit Hours: 2

Major Courses (continued):

- WLD 215 - SMAW (Stick) Pipe Credit Hours: 4
OR
- WLD 215AB - SMAW (Stick) Pipe-AB Credit Hours: 2
- WLD 215BB - SMAW (Stick) Pipe-BB Credit Hours: 2
- WLD 261 - Certification Practices Credit Hours: 2
- WLD 262 - Inspection & Testing Credit Hours: 3
- WLD 265 - Automated Welding/Cutting Credit Hours: 4

Program electives:

Students are required to take a minimum of 6 SHC from the following:

- DFT 111 - Technical Drafting I Credit Hours: 2
- DFT 151 - CAD I Credit Hours: 3
- DFT 153 - CAD III Credit Hours: 3
- ISC 112 - Industrial Safety Credit Hours: 2
- MAC 122 - CNC Turning Credit Hours: 2
- MAC 124 - CNC Milling Credit Hours: 2
- MAC 131 - Blueprint Reading/Mach I Credit Hours: 2
- MAC 132 - Blueprint Reading/Mach II Credit Hours: 2
- MAC 141 - Machining Applications I Credit Hours: 4
- MAC 142 - Machining Applications II Credit Hours: 4
- MAC 151 - Machining Calculations Credit Hours: 2
- MAC 222 - Advanced CNC Turning Credit Hours: 2
- MAC 224 - Advanced CNC Milling Credit Hours: 2
- MAC 231 - CAM: CNC Turning Credit Hours: 3
- MAC 233 - Appl in CNC Machining Credit Hours: 6
- MEC 110 - Intro to CAD/CAM Credit Hours: 2
- MEC 130 - Mechanisms Credit Hours: 3
- MEC 161 - Manufacturing Processes I Credit Hours: 3
- MEC 180 - Engineering Materials Credit Hours: 3
- MEC 231 - Comp-Aided Manufact I Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1
- WBL XXX Work-Based Learning Credit Hours: 1-6
- WLD 151 - Fabrication I Credit Hours: 4
- WLD 251 - Fabrication II Credit Hours: 3

Total Credit Hours Required: 65

Work-Based Learning Option:

Qualified students may elect to take up to 6 credit hours of Work-Based Learning.

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

OR

Students who elect to take (MAT 143) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

OR

Students who elect to take (MAT 121) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

Welding Technology Diploma (D50420)

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3

Natural Sciences/Mathematics

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3
OR
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3

Major Courses:

- WBL 110 - World of Work Credit Hours: 1
- WLD 110 - Cutting Processes Credit Hours: 2
- WLD 115 - SMAW (Stick) Plate Credit Hours: 5
OR
- WLD 115AB - SMAW (Stick) Plate-AB Credit Hours: 3
- WLD 115BB - SMAW (Stick) Plate-BB Credit Hours: 2
- WLD 121 - GMAW (MIG) FCAW/Plate Credit Hours: 4
- WLD 131 - GTAW (TIG) Plate Credit Hours: 4
- WLD 141 - Symbols & Specifications Credit Hours: 3
- WLD 143 - Welding Metallurgy Credit Hours: 2
- WLD 262 - Inspection & Testing Credit Hours: 3

Program electives:

Students are required to take a minimum of 6 SHC from the following:

- WLD 116 - SMAW (Stick) Plate/Pipe Credit Hours: 4
OR
- WLD 116AB - SMAW (Stick) Plate/Pipe-AB Credit Hours: 2
- WLD 116BB - SMAW (Stick) Plate/Pipe-BB Credit Hours: 2
- WLD 122 - GMAW (MIG) Plate/Pipe Credit Hours: 3
- WLD 132 - GTAW (TIG) Plate/Pipe Credit Hours: 3
- WLD 215 - SMAW (Stick) Pipe Credit Hours: 4
OR
- WLD 215AB - SMAW (Stick) Pipe-AB Credit Hours: 2
- WLD 215BB - SMAW (Stick) Pipe-BB Credit Hours: 2
- WLD 265 - Automated Welding/Cutting Credit Hours: 4
- WLD 261 - Certification Practices Credit Hours: 2

Total Credit Hours Required: 36

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

OR

Students who elect to take (MAT 143) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1

OR

Students who elect to take (MAT 121) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

Suggested Program Sequence Day/Evening:

Fall - 1st year:

- WBL 110 - World of Work Credit Hours: 1
- WLD 110 - Cutting Processes Credit Hours: 2
- WLD 115 - SMAW (Stick) Plate Credit Hours: 5
- WLD 121 - GMAW (MIG) FCAW/Plate Credit Hours: 4
- WLD 141 - Symbols & Specifications Credit Hours: 3

Total Hours: Class 8 | Lab 20 | Clin/Wk Exp 0 | Credit 15

Spring - 1st year:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3
OR
- MAT 143 - Quantitative Literacy Credit Hours: 3
- WLD 131 - GTAW (TIG) Plate Credit Hours: 4
- WLD 143 - Welding Metallurgy Credit Hours: 2
- Program Elective Credit Hours: 3

Total Hours: Class 11 | Lab 10 | Clin/Wk Exp 0 | Credit 15

Summer - 1st year:

- WLD 262 - Inspection & Testing Credit Hours: 3
- Program Elective Credit Hours: 3

Total Hours: Class 11 | Lab 2 | Clin/Wk Exp 0 | Credit 6

Grand Total Hours: Class 24 | Lab 32 | Clin/Wk Exp 0 | Credit 36

Welding Technology Certificate (C50420)

Major Courses:

- WLD 110 - Cutting Processes Credit Hours: 2
- WLD 115 - SMAW (Stick) Plate Credit Hours: 5
OR
- WLD 115AB - SMAW (Stick) Plate-AB Credit Hours: 3
- WLD 115BB - SMAW (Stick) Plate-BB Credit Hours: 2
- WLD 121 - GMAW (MIG) FCAW/Plate Credit Hours: 4
- WLD 131 - GTAW (TIG) Plate Credit Hours: 4
- WLD 141 - Symbols & Specifications Credit Hours: 3

Total Credit Hours Required: 18

Suggested Program Sequence:

Fall - 1st year:

- WLD 110 - Cutting Processes Credit Hours: 2
- WLD 121 - GMAW (MIG) FCAW/Plate Credit Hours: 4
- WLD 141 - Symbols & Specifications Credit Hours: 3

Total Hours: Class 5 | Lab 26 | Clin/Wk Exp 0 | Credit 9

Spring - 1st year:

- WLD 115 - SMAW (Stick) Plate Credit Hours: 5
- WLD 131 - GTAW (TIG) Plate Credit Hours: 4

Total Hours: Class 4 | Lab 15 | Clin/Wk Exp 0 | Credit 9

Grand Total Hours: Class 9 | Lab 26 | Clin/Wk Exp 0 | Credit 18

Welding Technology -- Fabrication certificate (C5042001)

Major Courses:

- WLD 110 - Cutting Processes Credit Hours: 2
- WLD 121 - GMAW (MIG) FCAW/Plate Credit Hours: 4
- WLD 141 - Symbols & Specifications Credit Hours: 3
- WLD 151 - Fabrication I Credit Hours: 4
- WLD 251 - Fabrication II Credit Hours: 3

Total Credit Hours Required: 16

Suggested Program Sequence:

Fall - 1st year:

- WLD 110 - Cutting Processes Credit Hours: 2
- WLD 121 - GMAW (MIG) FCAW/Plate Credit Hours: 4
- WLD 151 - Fabrication I Credit Hours: 4

Total Hours: Class 5 | Lab 15 | Clin/WkExp 0 | Credit 10

Spring - 1st year:

- WLD 141 - Symbols & Specifications Credit Hours: 3
- WLD 251 - Fabrication II Credit Hours: 3

Total Hours: Class 3 | Lab 8 | Clin/WkExp 0 | Credit 6

Grand Total Hours: Class 8 | Lab 23 | Clin/WkExp 0 | Credit 16

Career and College Promise

The Career and College Promise program is established by the State Board of Education and the State Board of Community Colleges.

Career and College Promise provides seamless dual enrollment educational opportunities for eligible North Carolina high school students in order to accelerate completion of college certificates, diplomas, and associate degrees that lead to college transfer or provide entry-level job skills. North Carolina community colleges may offer the following Career and College Promise pathways aligned with the K-12 curriculum and career and college ready standards adopted by the State Board of Education:

1. College Transfer Pathway leading to a minimum of 30 hours of college transfer credit.
2. A Career and Technical Education Pathway leading to a certificate, diploma or degree.
3. A Cooperative Innovative High School Pathway approved under Part 9 of Article 16 of Chapter 115D of the General Statutes.

College Transfer Pathway

1. The Career and College Promise College Transfer Pathway requires the completion of at least thirty semester hours of transfer courses, including English and mathematics, and ACA 122 - College Transfer Success.
2. To be eligible for enrollment, a high school student must meet the following criteria:
 - a. be a high school junior or senior;
 - b. have a weighted GPA of 3.0 on high school courses; and
 - c. demonstrate college readiness on an assessment or placement test. A student must demonstrate college readiness in English, reading and mathematics to be eligible for enrollment in a College Transfer Pathway.
3. A high school junior or senior who does not demonstrate college-readiness on an approved assessment or placement test may be provisionally enrolled in a College Transfer Pathway. To qualify for Provisional Status, a student must meet the following criteria:
 - a. have a cumulative weighted GPA of 3.5;
 - b. have completed two years of high school English with a grade of C or higher;
 - c. have completed high school Algebra II (or a higher level math class) with a grade of C or higher;
 - d. obtain the written approval of the high school principal or his/her designee; and,
 - e. obtain the written approval of the community college president or his/her designee.

A Provisional Status student may register only for college mathematics (MAT) and college English (ENG) courses within the chosen Pathway. To be eligible to register for other courses in the Pathway, the student must first successfully complete mathematics and English courses with a grade of C or higher.
4. To maintain eligibility for continued enrollment, a student must
 - a. continue to make progress toward high school graduation, and
 - b. maintain a 2.0 GPA in college coursework after completing two courses.
 - c. a student who falls below a 2.0 GPA after completing two college courses will be subject to the college's policy for satisfactory academic progress.
5. A student must enroll in one College Transfer Pathway program of study and may not substitute courses in one program for courses in another.
6. A student may change his or her program of study major with approval of the high school principal or his/her designee and the college's chief student development administrator.

7. With approval of the high school principal or his/her designee and the college's chief student development administrator, a student who completes a College Transfer Pathway while still enrolled in high school may continue to earn college transfer credits leading to the completion of the Associate in Arts or Associate in Science.
8. With approval of the high school principal or his/her designee and the college's chief student development administrator, a student may enroll in both a College Transfer Pathway program of study and up to two (2) Career Technical Education program of study (for a total of three (3)).

Career Technical Education Pathway

1. The Career and College Promise Career Technical Education Pathway for juniors and seniors leads to a certificate or diploma aligned with a high school Career Cluster.
2. To be eligible for enrollment, a high school student must meet the following criteria:
 - a. be a high school junior or senior;
 - b. have a weighted GPA of 3.0 on high school courses or have the recommendation of the high school principal or his/her designee; and
 - c. meet the prerequisites for the career pathway.
3. High school counselors should consider students' PLAN scores in making pathway recommendations.
4. College Career Technical Education courses may be used to provide partial or full fulfillment of a four-unit career cluster. Where possible, students should be granted articulated credit based on the local or state North Carolina High School to Community College articulation agreement.
5. To maintain eligibility for continued enrollment, a student must
 - a. continue to make progress toward high school graduation, and
 - b. maintain a 2.0 in college coursework after completing two courses.
 - c. a student who falls below a 2.0 GPA after completing two college courses will be subject to the college's policy for satisfactory academic progress.
6. A student may enroll in two programs of study but may not substitute courses in one program for courses in another. The student may change his or her program of study major with approval of the high school principal or his/her designee and the college's chief student development administrator. A student may concurrently enroll in two CTE programs of study provided the exception has been approved by the college's Chief Academic Officer or his/her designee.

College Transfer Pathway Leading to the Associate in Arts (P1012C)

The CCP College Transfer Pathway leading to the Associate in Arts is designed for high school juniors and seniors who wish to begin study toward the Associate in Arts degree and a baccalaureate degree in a non-STEM major.

General Education:

The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC) component of the Comprehensive Articulation Agreement.

English Composition

The following two English composition courses are required.

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3

Select three courses from the following from at least two different disciplines.

Communications

- COM 231 - Public Speaking Credit Hours: 3

Humanities/Fine Arts

- ART 111 - Art Appreciation Credit Hours: 3
- ART 114 - Art History Survey I Credit Hours: 3
- ART 115 - Art History Survey II Credit Hours: 3
- ENG 231 - American Literature I Credit Hours: 3
- ENG 232 - American Literature II Credit Hours: 3
- ENG 241 - British Literature I Credit Hours: 3
- ENG 242 - British Literature II Credit Hours: 3
- MUS 110 - Music Appreciation Credit Hours: 3
- MUS 112 - Introduction to Jazz Credit Hours: 3
- PHI 215 - Philosophical Issues Credit Hours: 3
- PHI 240 - Introduction to Ethics Credit Hours: 3

Social/Behavioral Sciences

Select three courses from the following from at least two different disciplines:

- ECO 251 - Prin of Microeconomics Credit Hours: 3
- ECO 252 - Prin of Macroeconomics Credit Hours: 3
- HIS 111 - World Civilizations I Credit Hours: 3
- HIS 112 - World Civilizations II Credit Hours: 3
- HIS 131 - American History I Credit Hours: 3
- HIS 132 - American History II Credit Hours: 3
- POL 120 - American Government Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3
- SOC 210 - Introduction to Sociology Credit Hours: 3

Math

Select one course from the following:

- MAT 143 - Quantitative Literacy Credit Hours: 3
- MAT 152 - Statistical Methods I Credit Hours: 4
- MAT 171 - Precalculus Algebra Credit Hours: 4

Natural Sciences

Select 4 SHC from the following course(s):

- AST 151 - General Astronomy I Credit Hours: 3
- AST 151A - General Astronomy I Lab Credit Hours: 1
- BIO 111 - General Biology I Credit Hours: 4
- CHM 151 - General Chemistry I Credit Hours: 4
- GEL 111 - Introductory Geology Credit Hours: 4
- PHY 110 - Conceptual Physics Credit Hours: 3
- PHY 110A - Conceptual Physics Lab Credit Hours: 1

Academic Transition

- ACA 122 - College Transfer Success Credit Hours: 1

Optional General Education Hours

A student may take up to 8 SHC of foreign language courses and accompanying labs, in a single language, designated as General Education in the CAA as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of C or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, pre-major, or elective credit.

- CHI 111 - Elementary Chinese I Credit Hours: 3
- CHI 181 - Chinese Lab I Credit Hours: 1
- CHI 112 - Elementary Chinese II Credit Hours: 3
- CHI 182 - Chinese Lab II Credit Hours: 1
- FRE 111 - Elementary French I Credit Hours: 3
- FRE 181 - French Lab 1 Credit Hours: 1
- FRE 112 - Elementary French II Credit Hours: 3
- FRE 182 - French Lab 2 Credit Hours: 1
- SPA 111 - Elementary Spanish I Credit Hours: 3
- SPA 181 - Spanish Lab 1 Credit Hours: 1
- SPA 112 - Elementary Spanish II Credit Hours: 3
- SPA 182 - Spanish Lab 2 Credit Hours: 1

Total Credit Hours Required: 32-41

High school students in the CCP College Transfer Pathway leading to the Associate in Arts must complete the entire pathway before taking additional courses in the Associate in Arts degree.

College Transfer Pathway Leading to the Associate in Engineering (P1052C)

The College Transfer Pathway (CCP) leading to the Associate in Engineering is designed for high school juniors and seniors who wish to begin study toward the Associate in Engineering degree and a baccalaureate degree in a STEM or technical major.

General Education:

The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC).

English Composition

The following two English composition courses are required.

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3

Humanities/Fine Arts

Select one course from the following (3 SHC):

- ART 111 - Art Appreciation Credit Hours: 3
- ART 114 - Art History Survey I Credit Hours: 3
- ART 115 - Art History Survey II Credit Hours: 3
- COM 231 - Public Speaking Credit Hours: 3
- ENG 231 - American Literature I Credit Hours: 3
- ENG 232 - American Literature II Credit Hours: 3
- ENG 241 - British Literature I Credit Hours: 3
- ENG 242 - British Literature II Credit Hours: 3
- MUS 110 - Music Appreciation Credit Hours: 3
- MUS 112 - Introduction to Jazz Credit Hours: 3
- PHI 215 - Philosophical Issues Credit Hours: 3
- PHI 240 - Introduction to Ethics Credit Hours: 3

Social/Behavioral Sciences

The following course is required:

- ECO 251 - Prin of Microeconomics Credit Hours: 3

Mathematics

The following courses are required (8 SHC): *Calculus I is the lowest level math course that will be accepted by the engineering programs for transfer as a math credit. Students who are not calculus-ready will need to take additional math courses.**

- *MAT 271 - Calculus I Credit Hours: 4
- MAT 272 - Calculus II Credit Hours: 4

*MAT 271 Placement Criteria

High school students in the CCP College Transfer Pathway Leading to the Associate in Engineering must complete the entire pathway before taking additional courses in the Associate in Engineering degree with the following exception: Students may take additional math courses beyond MAT 272 that are required for the Associate in Engineering degree.

For direct placement criteria for MAT 271-Calculus I, please see CC16-025 at <http://www.nccommunitycolleges.edu/search/content/numbered%20memos>.

Natural Sciences

Select 8 SHC from the following course(s):

- CHM 151 - General Chemistry I Credit Hours: 4
- PHY 251 - General Physics I Credit Hours: 4
- PHY 252 - General Physics II Credit Hours: 4

Other Required Hours

Academic Transition

The following course is required:

- ACA 122 - College Transfer Success Credit Hours: 1

Engineering

The following courses are required:

- DFT 170 - Engineering Graphics Credit Hours: 3
- EGR 150 - Intro to Engineering Credit Hours: 2

*Prerequisite General Education Hours

Students who do not place directly into MAT 271 must complete MAT 171 and MAT 172 prior to enrolling in MAT 271 Calculus I.

Optional General Education Hours

A student may take up to 8 SHC of foreign language courses and accompanying labs, in a single language, designated as General Education in the CAA as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of C or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, pre-major, or elective credit.

Total Credit Hours Required: 34-50

Career and College Promise Associate Degree Nursing (ADN) Pathway (P1032C)

The Career and College Promise (CCP) ADN Pathway is designed for high school juniors and seniors who wish to begin their educational studies toward the Associate in Nursing degree and a Baccalaureate degree in Nursing. The Pathway is based on Block 1 of the Uniform Articulation Agreement between the University of North Carolina's Registered Nurse to Bachelor of Science in Nursing programs and the North Carolina Community College Associate Degree Nursing Programs which was approved by the State Board of Community Colleges and the UNC Board of Governors in February 2015.

A student who completes an Associate in Applied Science (AAS) in Nursing, which includes the courses listed below, with a GPA of at least 2.0 and a grade of C or better and completes the courses in Blocks 2-3 of the Uniform Articulation Agreement between the University of North Carolina's Registered Nurse to Bachelor of Science in Nursing programs and the North Carolina Community College Associate Degree Nursing Programs with a GPA of at least 2.0 and a grade of C or better, and who holds a current unrestricted license as a Registered Nurse in North Carolina will have fulfilled the UNC institutions lower-division general education requirements as well as nursing program entry requirements. However, because nursing program admissions are competitive, no student is guaranteed admission to the program of his or her choice.

General Education:

English Composition

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3

Humanities/Fine Arts

- ART 111 - Art Appreciation Credit Hours: 3

Social/Behavioral Sciences

- PSY 150 - General Psychology Credit Hours: 3
- PSY 241 - Developmental Psych Credit Hours: 3

Natural Sciences

- BIO 168 - Anatomy and Physiology I Credit Hours: 4
- BIO 169 - Anatomy and Physiology II Credit Hours: 4

Other Required Hours

- ACA 122 - College Transfer Success Credit Hours: 1

Total Credit Hours Required: 24

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, and mathematics. Please refer to the Course Description section for prerequisite course information.

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DRE 098 - Integrated Reading Writing III Credit Hours: 3

College Transfer Pathway Leading to the Associate in Science (P1042C)

The CCP College Transfer Pathway leading to the Associate in Science is designed for high school juniors and seniors who wish to begin study toward the Associate in Science degree and a baccalaureate degree in a STEM or technical major.

General Education:

The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC).

English Composition

The following two English composition courses are required.

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3

Select two courses from the following from at least two different disciplines

Communications

- COM 231 - Public Speaking Credit Hours: 3

Humanities/Fine Arts

- ART 111 - Art Appreciation Credit Hours: 3
- ART 114 - Art History Survey I Credit Hours: 3
- ART 115 - Art History Survey II Credit Hours: 3
- ENG 231 - American Literature I Credit Hours: 3
- ENG 232 - American Literature II Credit Hours: 3
- ENG 241 - British Literature I Credit Hours: 3
- ENG 242 - British Literature II Credit Hours: 3
- MUS 110 - Music Appreciation Credit Hours: 3
- MUS 112 - Introduction to Jazz Credit Hours: 3
- PHI 215 - Philosophical Issues Credit Hours: 3
- PHI 240 - Introduction to Ethics Credit Hours: 3

Social/Behavioral Sciences

Select two courses from the following from at least two different disciplines:

- ECO 251 - Prin of Microeconomics Credit Hours: 3
- ECO 252 - Prin of Macroeconomics Credit Hours: 3
- HIS 111 - World Civilizations I Credit Hours: 3
- HIS 112 - World Civilizations II Credit Hours: 3
- HIS 131 - American History I Credit Hours: 3
- HIS 132 - American History II Credit Hours: 3
- POL 120 - American Government Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3
- SOC 210 - Introduction to Sociology Credit Hours: 3

Mathematics

Select two courses from the following:

- MAT 171 - Precalculus Algebra Credit Hours: 4
- MAT 172 - Precalculus Trigonometry Credit Hours: 4
- MAT 263 - Brief Calculus Credit Hours: 4
- MAT 271 - Calculus I Credit Hours: 4
- MAT 272 - Calculus II Credit Hours: 4

Natural Sciences

Select 8 SHC from the following course(s):

- AST 151 - General Astronomy I Credit Hours: 3
- AST 151A - General Astronomy I Lab Credit Hours: 1
- BIO 111 - General Biology I Credit Hours: 4
- BIO 112 - General Biology II Credit Hours: 4
- CHM 151 - General Chemistry I Credit Hours: 4
- CHM 152 - General Chemistry II Credit Hours: 4
- GEL 111 - Introductory Geology Credit Hours: 4
- PHY 110 - Conceptual Physics Credit Hours: 3
- PHY 110A - Conceptual Physics Lab Credit Hours: 1
- PHY 151 - College Physics I Credit Hours: 4
- PHY 152 - College Physics II Credit Hours: 4
- PHY 251 - General Physics I Credit Hours: 4
- PHY 252 - General Physics II Credit Hours: 4

Academic Transition

The following course is required:

- ACA 122 - College Transfer Success Credit Hours: 1

Optional General Education Hours

A student may take up to 8 SHC of foreign language courses and accompanying labs, in a single language, designated as General Education in the CAA as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of C or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, pre-major, or elective credit.

- CHI 111 - Elementary Chinese I Credit Hours: 3
- CHI 181 - Chinese Lab I Credit Hours: 1
- CHI 112 - Elementary Chinese II Credit Hours: 3
- CHI 182 - Chinese Lab II Credit Hours: 1
- FRE 111 - Elementary French I Credit Hours: 3
- FRE 181 - French Lab 1 Credit Hours: 1
- FRE 112 - Elementary French II Credit Hours: 3
- FRE 182 - French Lab 2 Credit Hours: 1
- SPA 111 - Elementary Spanish I Credit Hours: 3
- SPA 181 - Spanish Lab 1 Credit Hours: 1
- SPA 112 - Elementary Spanish II Credit Hours: 3
- SPA 182 - Spanish Lab 2 Credit Hours: 1

Total Credit Hours Required: 35-43

High school students in the CCP College Transfer Pathway Leading to the Associate in Science must complete the entire pathway before taking additional courses in the Associate in Science degree.

Accounting Pathway (C25100P)

Core Courses

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- ACC 121 - Prin of Managerial Accounting Credit Hours: 4
- ACC 129 - Individual Income Taxes Credit Hours: 3

Other Major Courses

- ACC 140 - Payroll Accounting Credit Hours: 2

Total Credit Hours Required: 13

Advertising and Graphic Design H.S. Pathway (C30100P)

Core Courses

- GRA 151 - Computer Graphics I Credit Hours: 2
- GRA 152 - Computer Graphics II Credit Hours: 2
- GRD 110 - Typography I Credit Hours: 3
- GRD 121 - Drawing Fundamentals I Credit Hours: 2
- GRD 141 - Graphic Design I Credit Hours: 4
- GRD 142 - Graphic Design II Credit Hours: 4

Total Credit Hours Required: 17

Air Conditioning, Heating, and Refrigeration Technology H.S. Diploma Pathway (D35100P)

General Education Courses

- ENG 111 - Writing and Inquiry Credit Hours: 3
- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3

Core Courses

- AHR 110 - Intro to Refrigeration Credit Hours: 5
- AHR 111 - HVACR Electricity Credit Hours: 3
- AHR 112 - Heating Technology Credit Hours: 4
- AHR 113 - Comfort Cooling Credit Hours: 4
- AHR 114 - Heat Pump Technology Credit Hours: 4

Other Major Courses

- AHR 130 - HVAC Controls Credit Hours: 3
- AHR 160 - Refrigerant Certification Credit Hours: 1
- AHR 180 - HVACR Customer Relations Credit Hours: 1
- AHR 211 - Residential System Design Credit Hours: 3
- AHR 213 - HVACR Building Code Credit Hours: 2

Total Credit Hours Required: 36

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Air Conditioning, Heating, and Refrigeration Technology Pathway (C35100P)

Core Courses

- AHR 110 - Intro to Refrigeration Credit Hours: 5
- AHR 111 - HVACR Electricity Credit Hours: 3
- AHR 112 - Heating Technology Credit Hours: 4

Other Major Courses

- AHR 160 - Refrigerant Certification Credit Hours: 1

Total Credit Hours Required: 13

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Automotive Systems Technology Diploma Pathway (D60160P)

General Education Courses

English/Communication:

- ENG 111 - Writing and Inquiry Credit Hours: 3

Natural Science/Mathematics:

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3

Core Courses

- AUT 141 - Suspension & Steering Sys Credit Hours: 3
- AUT 151 - Brake Systems Credit Hours: 3
- AUT 181 - Engine Performance 1 Credit Hours: 3
- TRN 110 - Intro to Transport Tech Credit Hours: 2
- TRN 120 - Basic Transp Electricity Credit Hours: 5
- TRN 140 - Transp Climate Control Credit Hours: 2

Other Major Courses

- AUT 141A - Suspension & Steering Lab Credit Hours: 1
- AUT 151A - Brake Systems Lab Credit Hours: 1
- AUT 116 - Engine Repair Credit Hours: 3
- AUT 116A - Engine Repair Lab Credit Hours: 1
- AUT 163A - Adv Auto Electricity Lab Credit Hours: 1
- AUT 181A - Engine Performance 1 Lab Credit Hours: 1
- AUT 183 - Engine Performance 2 Credit Hours: 4
- AUT 221 - Auto Transm/Transaxles Credit Hours: 3
- AUT 221A - Auto Transm/Transax Lab Credit Hours: 1
- AUT 231 - Man Trans/Axles/Dtrains Credit Hours: 3

Other Required Courses

- AUT 231A - Man Trans/Ax/Dtrains Lab Credit Hours: 1
- TRN 140A - Transp Climate Cont Lab Credit Hours: 2

Total Credit Hours Required: 48

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Automotive Systems Technology, Under Car Services Pathway (C60160P)

Core Courses

- AUT 141 - Suspension & Steering Sys Credit Hours: 3
- AUT 151 - Brake Systems Credit Hours: 3
- TRN 110 - Intro to Transport Tech Credit Hours: 2
- TRN 120 - Basic Transp Electricity Credit Hours: 5

Other Major Courses

- AUT 141A - Suspension & Steering Lab Credit Hours: 1
- AUT 151A - Brake Systems Lab Credit Hours: 1

Total Credit Hours Required: 15

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Business Administration Advanced Certificate #1 Pathway (C25120P)

Core Courses

- ACC 120 - Prin of Financial Accounting Credit Hours: 4
- BUS 110 - Introduction to Business Credit Hours: 3
- BUS 115 - Business Law I Credit Hours: 3
- BUS 137 - Principles of Management Credit Hours: 3

Total Credit Hours Required: 13

Business Administration H.S. Certificate Pathway (C25120P2)

Core Courses

- BUS 115 - Business Law I Credit Hours: 3
- BUS 137 - Principles of Management Credit Hours: 3
- ECO 251 - Prin of Microeconomics Credit Hours: 3
- MKT 120 - Principles of Marketing Credit Hours: 3

Other Major Courses

- ECO 252 - Prin of Macroeconomics Credit Hours: 3

Total Credit Hours Required: 15

Computer Engineering Technology Pathway #1 (C40160P1)

General Education Courses

- MAT 121 - Algebra/Trigonometry I Credit Hours: 3

Core Courses

- ELC 131 - Circuit Analysis I Credit Hours: 4

Other Major Courses

- DFT 151 - CAD I Credit Hours: 3
- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- MEC 180 - Engineering Materials Credit Hours: 3

Total Credit Hours Required: 15

Computer Engineering Technology Pathway #2 (C40160P2)

General Education Courses

- MAT 171 - Precalculus Algebra Credit Hours: 4

Core Courses

- ELC 131 - Circuit Analysis I Credit Hours: 4

Other Major Courses

- DFT 151 - CAD I Credit Hours: 3
- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- MEC 180 - Engineering Materials Credit Hours: 3

Total Credit Hours Required: 16

Computer-Integrated Machining Technology H.S. Pathway (D50210P)

General Education Courses

- ENG 111 - Writing and Inquiry Credit Hours: 3
- MAT 121 - Algebra/Trigonometry I Credit Hours: 3

Core Courses

- MAC 122 - CNC Turning Credit Hours: 2
- MAC 124 - CNC Milling Credit Hours: 2
- MAC 131 - Blueprint Reading/Mach I Credit Hours: 4
- MAC 141 - Machining Applications I Credit Hours: 4
- MAC 142 - Machining Applications II Credit Hours: 4
- MEC 110 - Intro to CAD/CAM Credit Hours: 2

Other Major Courses

- MAC 132 - Blueprint Reading/Mach II Credit Hours: 2
- MAC 151 - Machining Calculations Credit Hours: 2
- MAC 222 - Advanced CNC Turning Credit Hours: 2
- MAC 224 - Advanced CNC Milling Credit Hours: 2
- MAC 231 - CAM: CNC Turning Credit Hours: 3
- MAC 232 - CAM: CNC Milling Credit Hours: 3

Other Required Courses

- CIS 110 - Introduction to Computers Credit Hours: 3

Total Credit Hours Required: 39

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 121) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

Computer-Integrated Machining Technology Pathway (C50210P)

Core Courses

- MAC 122 - CNC Turning Credit Hours: 2
- MAC 131 - Blueprint Reading/Mach I Credit Hours: 2
- MAC 141 - Machining Applications I Credit Hours: 4

Other Major Courses

- MAC 124 - CNC Milling Credit Hours: 2
- MAC 151 - Machining Calculations Credit Hours: 2
- MEC 110 - Intro to CAD/CAM Credit Hours: 2

Total Credit Hours Required: 14

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Cosmetology Pathway (D55140P)

General Education Courses

- ENG 111 - Writing and Inquiry Credit Hours: 3
- PSY 150 - General Psychology Credit Hours: 3

Core Courses

- COS 111 - Cosmetology Concepts I Credit Hours: 4
OR
- COS 111AB - Cosmetology Concepts I-AB Credit Hours: 2
- COS 111BB - Cosmetology Concepts I-BB Credit Hours: 2
- COS 112 - Salon I Credit Hours: 8
OR
- COS 112AB - Salon I-AB Credit Hours: 4
- COS 112BB - Salon I-BB Credit Hours: 4
- COS 113 - Cosmetology Concepts II Credit Hours: 4
OR
- COS 113AB - Cosmetology Concepts II-AB Credit Hours: 2
- COS 113BB - Cosmetology Concepts II-BB Credit Hours: 2
- COS 114 - Salon II Credit Hours: 8
OR
- COS 114AB - Salon II-AB Credit Hours: 4
- COS 114BB - Salon II-BB Credit Hours: 4
- COS 115 - Cosmetology Concepts III Credit Hours: 4
OR
- COS 115AB - Cosmetology Concepts III-AB Credit Hours: 2
- COS 115BB - Cosmetology Concepts III-BB Credit Hours: 2
- COS 116 - Salon III Credit Hours: 4
OR
- COS 116AB - Salon III-AB Credit Hours: 2
- COS 116BB - Salon III-BB Credit Hours: 2

Other Major Courses

- COS 117 - Cosmetology Concepts IV Credit Hours: 2
OR
- COS 117AB - Cosmetology Concepts IV-AB Credit Hours: 1
- COS 117BB - Cosmetology Concepts IV-BB Credit Hours: 1
- COS 118 - Salon IV Credit Hours: 7
OR
- COS 118AB - Salon IV-AB Credit Hours: 4
- COS 118BB - Salon IV-BB Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 48

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Criminal Justice Technology Law Enforcement H. S. Pathway (C55180P)

Core Courses

- CJC 111 - Intro to Criminal Justice Credit Hours: 3
- CJC 131 - Criminal Law Credit Hours: 3
- CJC 132 - Court Procedure & Evidence Credit Hours: 3
- CJC 212 - Ethics & Comm Relations Credit Hours: 3

Other Required Courses

- CJC 121 - Law Enforcement Operations Credit Hours: 3

Total Credit Hours Required: 15

Criminal Justice Technology-Latent Evidence Concentration Crime Scene H. S. Pathway (C5518AP)

Core Courses

- CJC 111 - Intro to Criminal Justice Credit Hours: 3
- CJC 144 - Crime Scene Processing Credit Hours: 3
- CJC 146 - Trace Evidence Credit Hours: 3
- CJC 221 - Investigative Principles Credit Hours: 4
- CJC 245 - Friction Ridge Analysis Credit Hours: 3

Other Required Courses

- CJC 114 - Investigative Photography Credit Hours: 2

Total Credit Hours Required: 18

Electrical Systems Technology Pathway (C35130P1)

Core Courses

- ELC 113 - Residential Wiring Credit Hours: 4

Other Major Courses

- BPR 111 - Print Reading Credit Hours: 2
- ELC 115 - Industrial Wiring Credit Hours: 4
- ELC 118 - National Electrical Code Credit Hours: 2

Total Credit Hours Required: 12

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Electronics Engineering Technology Pathway (C40200P1)

General Education Courses

- MAT 121 - Algebra/Trigonometry I Credit Hours: 3

Core Courses

- ELC 131 - Circuit Analysis I Credit Hours: 4

Other Major Courses

- DFT 151 - CAD I Credit Hours: 3
- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- MEC 180 - Engineering Materials Credit Hours: 3

Total Credit Hours Required: 15

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 121) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

Electronics Engineering Technology Pathway (C40200P2)

General Education Courses

- MAT 171 - Precalculus Algebra Credit Hours: 4

Core Courses

- ELC 131 - Circuit Analysis I Credit Hours: 4

Other Major Courses

- DFT 151 - CAD I Credit Hours: 3
- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- MEC 180 - Engineering Materials Credit Hours: 3

Total Credit Hours Required: 16

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2

Emergency Management Pathway (C55460P1)

Core Courses:

- EPT 120 - Sociology of Disaster Credit Hours: 3
- EPT 130 - Mitigation & Preparedness Credit Hours: 3
- EPT 140 - Emergency Management Credit Hours: 3
- EPT 150 - Incident Management Credit Hours: 3
- EPT 210 - Disaster Response Ops Mgt Credit Hours: 3
- EPT 220 - Terrorism and Emer. Mgt. Credit Hours: 3

Total Credit Hours Required: 18

Emergency Medical Science - Certificate Pathway #2 (C45340P2)

General Education Courses

- BIO 168 - Anatomy and Physiology I Credit Hours: 4

Core Courses:

- BIO 169 - Anatomy and Physiology II Credit Hours: 4
- EMS 110 - EMT Credit Hours: 8

Total Credit Hours Required: 16

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3
- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1

Emergency Medical Science H. S. Pathway (C45340P)

General Education Courses

- PSY 150 - General Psychology Credit Hours: 3

Core Courses:

- EMS 110 - EMT Credit Hours: 8
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3

Total Credit Hours Required: 17

Developmental Course Requirements:

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Fire Protection Technology Fire Protection Management H.S. Pathway (C55240P)

Core Courses

- FIP 120 - Intro to Fire Protection Credit Hours: 3
- FIP 124 - Fire Prevention & Public Ed Credit Hours: 3
- FIP 132 - Building Construction Credit Hours: 3
- FIP 152 - Fire Protection Law Credit Hours: 3

Other Major Courses

- FIP 136 - Inspections & Codes Credit Hours: 3
- EPT 140 - Emergency Management Credit Hours: 3

Total Credit Hours Required: 18

Health Information Technology H. S. Pathway (C45360P)

Core Courses

- HIT 110 - Fundamentals of HIM Credit Hours: 3
- HIT 112 - Health Law and Ethics Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3

Other Required Courses

- CIS 110 - Introduction to Computers Credit Hours: 3

Total Credit Hours Required: 15

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Healthcare Management Technology Receptionist Pathway (C25200P)

Core Courses

- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3
- OST 148 - Med Ins & Billing Credit Hours: 3
- OST 149 - Medical Legal Issues Credit Hours: 3

Other Major Courses

- OST 263 - Healthcare Customer Relations Credit Hours: 3

Total Credit Hours Required: 18

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Horticulture Technology Pathway Certificate (C15240P2)

Core Courses

- HOR 134 - Greenhouse Operations Credit Hours: 3
- HOR 160 - Plant Materials I Credit Hours: 3
- HOR 166 - Soils & Fertilizers Credit Hours: 3
- HOR 168 - Plant Propagation Credit Hours: 3

Other Major Courses

- TRF 150 - Landscape Drafting Credit Hours: 2
- TRF 152 - Landscape Maintenance Credit Hours: 3

Total Credit Hours Required: 17

Infant/Toddler Care Certificate Pathway (C55290P)

Core Courses

- EDU 119 - Intro to Early Child Educ Credit Hours: 4
- EDU 131 - Child, Family, & Community Credit Hours: 3
- EDU 144 - Child Development I Credit Hours: 3
- EDU 153 - Health, Safety, & Nutrition Credit Hours: 3
- EDU 234 - Infants, Toddlers, and Twos Credit Hours: 3

Other Required Courses

- ACA 111 - College Student Success Credit Hours: 1

Total Credit Hours Required: 17

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Information Technology -- IT Concepts Certificate Pathway (C25590P)

The IT Concepts Certificate provides a foundation in internet technologies. Students will learn: Basic fundamentals associated with Networking and Security, Web, Programming, and Databases, and Information Business Systems.

Upon completion graduates will be able to assist in the technical support of Databases, Business Systems, and Web Programming. This certificate includes preparation for the following industry certifications: Security +.

Technical Core (12 SHC)

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTI 110 - Web, Pgm, & Db Foundation Credit Hours: 3
- CTI 120 - Network & Sec Foundation Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Other Major Hours

- SEC 110 - Security Concepts Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 16

Information Technology -- IT Specialist Certificate Pathway (C25590P1)

The IT Specialist Certificate provides a foundation in programming, security, and networking. Students will learn: Intermediate fundamentals associated with Programming, Security, and Networking.

Upon completion graduates will be able to write basic programs and assist in the technical support of Networks utilizing Linux and Windows. This certificate includes preparation for the following industry certifications: Security +, Linux Essentials, and current Windows Desktop certification.

Other Major Hours

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- NET 125 - Introduction to Networks Credit Hours: 3
- NOS 120 - Linux/UNIX Single User Credit Hours: 3
- NOS 130 - Windows Single User Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 16

Information Technology: Computer Programming and Development Diploma Pathway (D25590P1)

General Education Courses

English Composition

- ENG 111 - Writing and Inquiry Credit Hours: 3

Social/Behavioral Sciences

- PSY 150 - General Psychology Credit Hours: 3

Major Courses:

Technical Core

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Concentration Courses

- CSC 151 - JAVA Programming Credit Hours: 3
- CSC 251 - Advanced JAVA Programming Credit Hours: 3

Other Major Courses

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- CSC 134 - C++ Programming Credit Hours: 3
- CSC 138 - RPG Programming Credit Hours: 3
- CSC 139 - Visual BASIC Programming Credit Hours: 3
- CSC 238 - Adv RPG Programming Credit Hours: 3
- CTS 285 - Systems Analysis & Design Credit Hours: 3

Total Credit Hours Required: 36

Information Technology: Computer Programming and Development -- Programming Foundations Certificate Pathway (C25590P2)

The Programming Foundations certificate provides a foundation in computer programming. Students will learn: fundamentals associated with Computer Programming using four different languages. Upon completion graduates will be able to write basic programs in Python, Java, C++ and Visual Basic.

This certificate includes preparation for the following industry certifications: Oracle Java Associate (OCA), and Microsoft MTA Developer.

Other Major Hours

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- CSC 134 - C++ Programming Credit Hours: 3
- CSC 139 - Visual BASIC Programming Credit Hours: 3
- CSC 151 - JAVA Programming Credit Hours: 3

Total Credit Hours Required: 12

Information Technology: Computer Programming and Development -- JAVA Programming Certificate Pathway (C25590P3)

Other Major Hours

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- CSC 134 - C++ Programming Credit Hours: 3
- CSC 151 - JAVA Programming Credit Hours: 3
- CSC 251 - Advanced JAVA Programming Credit Hours: 3

Total Credit Hours Required: 12

Information Technology: Computer Programming and Development -- Visual Basic Programming Certificate Pathway (C25590P4)

Core Courses:

- CIS 115 - Intro to Prog & Logic Credit Hours: 3

Other Major Hours

- CSC 134 - C++ Programming Credit Hours: 3
- CSC 139 - Visual BASIC Programming Credit Hours: 3
- CSC 239 - Adv Visual BASIC Prog Credit Hours: 3

Total Credit Hours Required: 12

Information Technology: Computer Programming and Development -- RPG Programming Certificate Pathway (C25590P5)

Other Major Hours

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- CSC 138 - RPG Programming Credit Hours: 3
- CSC 151 - JAVA Programming Credit Hours: 3
- CSC 238 - Adv RPG Programming Credit Hours: 3

Total Credit Hours Required: 12

Information Technology: Information Systems Diploma Pathway (D25590P2)

General Education Courses

English Composition

- ENG 111 - Writing and Inquiry Credit Hours: 3

Social/Behavioral Sciences

- PSY 150 - General Psychology Credit Hours: 3

Major Courses:

Technical Core

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Concentration Courses

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- NOS 120 - Linux/UNIX Single User Credit Hours: 3
- NOS 130 - Windows Single User Credit Hours: 3
- NOS 230 - Windows Administration I Credit Hours: 3

Other Major Courses

- CTS 120 - Hardware/Software Support Credit Hours: 3
- CTS 285 - Systems Analysis & Design Credit Hours: 3
- DBA 110 - Database Concepts Credit Hours: 3
- DBA 115 - Database Applications Credit Hours: 3
- DBA 120 - Database Programming I Credit Hours: 3
- NET 125 - Introduction to Networks Credit Hours: 3

Total Credit Hours Required: 42

Information Technology: Information Systems -- Help Desk Support Certificate Pathway (C25590P6)

Technical Core

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Other Major Hours

- CTS 120 - Hardware/Software Support Credit Hours: 3
- NET 125 - Introduction to Networks Credit Hours: 3
- NOS 230 - Windows Administration I Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 16

Information Technology: Information Systems -- Database Applications Certificate Pathway (C25590P7)

Technical Core

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTI 110 - Web, Pgm, & Db Foundation Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Other Major Hours

- CTS 130 - Spreadsheet Credit Hours: 3
- DBA 110 - Database Concepts Credit Hours: 3
- DBA 115 - Database Applications Credit Hours: 3

Total Credit Hours Required: 18

Information Technology: Information Systems -- Database Programming Certificate Pathway (C25590P8)

Other Major Hours

- DBA 110 - Database Concepts Credit Hours: 3
- DBA 115 - Database Applications Credit Hours: 3
- DBA 120 - Database Programming I Credit Hours: 3
- DBA 220 - Oracle DB Programming II Credit Hours: 3

Total Credit Hours Required: 12

Information Technology: Network Management -- Networking Certificate Pathway (C25590P9)

Other Major Hours

- NET 125 - Introduction to Networks Credit Hours: 3
- NET 126 - Routing Basics Credit Hours: 3
- NET 225 - Routing & Switching I Credit Hours: 3
- NET 226 - Routing and Switching II Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 16

Information Technology: Network Management Diploma Pathway (D25590P3)

General Education Courses

English Composition

- ENG 111 - Writing and Inquiry Credit Hours: 3

Social/Behavioral Sciences

- PSY 150 - General Psychology Credit Hours: 3

Major Courses:

Technical Core

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTI 120 - Network & Sec Foundation Credit Hours: 3

Concentration Courses

- NET 125 - Introduction to Networks Credit Hours: 3
- NET 126 - Routing Basics Credit Hours: 3

Other Major Courses

- CTI 140 - Virtualization Concepts Credit Hours: 3
- CTI 141 - Cloud & Storage Concepts Credit Hours: 3
- NET 225 - Routing & Switching I Credit Hours: 3
- NET 226 - Routing and Switching II Credit Hours: 3
- NET 240 - Network Design Credit Hours: 3
- NET 241 - Introduction to VOIP Credit Hours: 3
- NOS 120 - Linux/UNIX Single User Credit Hours: 3
- NOS 130 - Windows Single User Credit Hours: 3
- NOS 230 - Windows Administration I Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3

Total Credit Hours Required: 48

Information Technology: Network Management -- Operating Systems Certificate Pathway (C25590PA)

Other Major Hours

- NOS 120 - Linux/UNIX Single User Credit Hours: 3
- NOS 130 - Windows Single User Credit Hours: 3
- NOS 230 - Windows Administration I Credit Hours: 3
- NOS 231 - Windows Administration II Credit Hours: 3

Total Credit Hours Required: 12

Information Technology: Network Management -- Virtualization Certificate Pathway (C25590PB)

Other Major Hours

- CTI 140 - Virtualization Concepts Credit Hours: 3
- CTI 141 - Cloud & Storage Concepts Credit Hours: 3
- NOS 120 - Linux/UNIX Single User Credit Hours: 3
- NOS 130 - Windows Single User Credit Hours: 3
- NOS 230 - Windows Administration I Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 16

Information Technology: Network Management -- Advanced Networking Certificate Pathway (C25590PC)

Other Major Hours

- NET 175 - Wireless Technology Credit Hours: 3
- NET 240 - Network Design Credit Hours: 3
- NET 241 - Introduction to VOIP Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3

Total Credit Hours Required: 12

Information Technology: Systems Security Diploma Pathway (D25590P4)

General Education Courses

English Composition

- ENG 111 - Writing and Inquiry Credit Hours: 3

Social/Behavioral Sciences

- PSY 150 - General Psychology Credit Hours: 3

Major Courses:

Technical Core

- CTI 120 - Network & Sec Foundation Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Concentration Courses

- CCT 240 - Data Recovery Techniques Credit Hours: 3
- NET 125 - Introduction to Networks Credit Hours: 3
- NET 126 - Routing Basics Credit Hours: 3
- NET 175 - Wireless Technology Credit Hours: 3
- NET 225 - Routing & Switching I Credit Hours: 3
- NET 226 - Routing and Switching II Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3
- SEC 150 - Secure Communications Credit Hours: 3
- SEC 160 - Security Administration I Credit Hours: 3
- SEC 180 - Info Assurance Principles Credit Hours: 3
- SEC 210 - Intrusion Detection Credit Hours: 3

Total Credit Hours Required: 45

Information Technology: Systems Security -- Network Security Certificate Pathway (C25590PD)

Other Major Hours

- NET 125 - Introduction to Networks Credit Hours: 3
- NET 126 - Routing Basics Credit Hours: 3
- NET 225 - Routing & Switching I Credit Hours: 3
- NET 226 - Routing and Switching II Credit Hours: 3
- SEC 160 - Security Administration I Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 16

Information Technology: Systems Security -- Operating Systems Security Certificate Pathway (C25590PE)

Other Major Hours

- NET 125 - Introduction to Networks Credit Hours: 3
- NOS 120 - Linux/UNIX Single User Credit Hours: 3
- NOS 130 - Windows Single User Credit Hours: 3
- SEC 110 - Security Concepts Credit Hours: 3
- SEC 150 - Secure Communications Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1

Total Credit Hours Required: 16

Information Technology: Web Administration and Design Diploma Pathway (D25590P5)

General Education Courses

English Composition

- ENG 111 - Writing and Inquiry Credit Hours: 3

Social/Behavioral Sciences

- PSY 150 - General Psychology Credit Hours: 3

Major Courses:

Technical Core

- CTI 110 - Web, Pgm, & Db Foundation Credit Hours: 3
- CTI 120 - Network & Sec Foundation Credit Hours: 3
- CTS 115 - Info Sys Business Concept Credit Hours: 3

Concentration Courses

- WEB 115 - Web Markup and Scripting Credit Hours: 3
- WEB 210 - Web Design Credit Hours: 3
- WEB 250 - Database Driven Websites Credit Hours: 3

Other Major Courses

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- CSC 151 - JAVA Programming Credit Hours: 3
- WEB 140 - Web Development Tools Credit Hours: 3
- WEB 151 - Mobile Application Dev I Credit Hours: 3
- WEB 180 - Active Server Pages Credit Hours: 3
- WEB 214 - Social Media Credit Hours: 3
- WEB 215 - Adv Markup and Scripting Credit Hours: 3
- WEB 289 - Internet Technologies Project Credit Hours: 3

Total Credit Hours Required: 48

Information Technology: Web Administration and Design -- Web Developer Certificate Pathway (C25590PF)

Other Major Hours

- CIS 115 - Intro to Prog & Logic Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1
- WEB 115 - Web Markup and Scripting Credit Hours: 3
- WEB 140 - Web Development Tools Credit Hours: 3
- WEB 180 - Active Server Pages Credit Hours: 3
- WEB 215 - Adv Markup and Scripting Credit Hours: 3

Total Credit Hours Required: 16

Information Technology: Web Administration and Design -- Web Design Certificate Pathway (C25590PG)

Technical Core

- CTI 110 - Web, Pgm, & Db Foundation Credit Hours: 3

Other Major Hours

- GRD 151 - Computer Design Basics Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1
- WEB 115 - Web Markup and Scripting Credit Hours: 3
- WEB 210 - Web Design Credit Hours: 3
- WEB 250 - Database Driven Websites Credit Hours: 3

Total Credit Hours Required: 16

Information Technology: Web Administration and Design -- Web & Mobile Apps Certificate Pathway (C25590PH)

Other Major Hours

- CSC 151 - JAVA Programming Credit Hours: 3
- WBL 110 - World of Work Credit Hours: 1
- WEB 140 - Web Development Tools Credit Hours: 3
- WEB 151 - Mobile Application Dev I Credit Hours: 3
- WEB 210 - Web Design Credit Hours: 3
- WEB 214 - Social Media Credit Hours: 3

Total Credit Hours Required: 16

Mechanical Engineering Technology Pathway (C40320P1)

General Education Courses

- MAT 121 - Algebra/Trigonometry I Credit Hours: 3

Core Courses

- DFT 151 - CAD I Credit Hours: 3
- MEC 180 - Engineering Materials Credit Hours: 3

Other Major Courses

- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- ELC 131 - Circuit Analysis I Credit Hours: 4

Total Credit Hours Required: 15

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 121) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

Mechanical Engineering Technology Pathway (C40320P2)

General Education Courses

- MAT 171 - Precalculus Algebra Credit Hours: 4

Core Courses

- DFT 151 - CAD I Credit Hours: 3
- MEC 180 - Engineering Materials Credit Hours: 3

Other Major Courses

- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- ELC 131 - Circuit Analysis I Credit Hours: 4

Total Credit Hours Required: 16

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2

Mechatronics Engineering Technology H. S. Certificate Pathway #1 (C40350P)

Core Courses

- ATR 112 - Intro to Automation Credit Hours: 3
- ELC 131 - Circuit Analysis I Credit Hours: 4
- HYD 110 - Hydraulics/Pneumatics I Credit Hours: 3
- ISC 112 - Industrial Safety Credit Hours: 2
- MEC 130 - Mechanisms Credit Hours: 3

Total Credit Hours Required: 15

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1
- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Mechatronics Engineering Technology H. S. Certificate Pathway #2 (C40350P2)

General Education Courses

- MAT 121 - Algebra/Trigonometry I Credit Hours: 3

Core Courses

- DFT 151 - CAD I Credit Hours: 3
- ELC 131 - Circuit Analysis I Credit Hours: 4

Other Major Courses

- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- MEC 180 - Engineering Materials Credit Hours: 3

Total Credit Hours Required: 15

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 121) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 060 - Polynomial/Quadratic Appl Credit Hours: 1

Mechatronics Engineering Technology H. S. Certificate Pathway #3 (C40350P3)

General Education Courses

- MAT 171 - Precalculus Algebra Credit Hours: 4

Core Courses

- DFT 151 - CAD I Credit Hours: 3
- ELC 131 - Circuit Analysis I Credit Hours: 4

Other Major Courses

- EGR 110 - Intro to Engineering Tech Credit Hours: 2
- MEC 180 - Engineering Materials Credit Hours: 3

Total Credit Hours Required: 16

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Students who elect to take (MAT 171) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1
- DMA 040 - Express/Lin Equat/Inequal Credit Hours: 1
- DMA 050 - Graphs/Equations of Lines Credit Hours: 1
- DMA 065 - Algebra for Precalculus Credit Hours: 2

Medical Office Administration Certificate Pathway (C25310P)

Major Courses

- HMT 110 - Intro to Healthcare Mgt Credit Hours: 3
- MED 121 - Medical Terminology I Credit Hours: 3
- MED 122 - Medical Terminology II Credit Hours: 3
- OST 148 - Med Ins & Billing Credit Hours: 3
- OST 149 - Medical Legal Issues Credit Hours: 3
- OST 263 - Healthcare Customer Relations Credit Hours: 3

Total Credit Hours Required: 18

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Office Administration Diploma Pathway (D25370P)

General Education Courses

English/Communication:

- ENG 111 - Writing and Inquiry Credit Hours: 3
- ENG 112 - Writing/Research in the Disciplines Credit Hours: 3

Major Courses:

Core Courses

- CIS 110 - Introduction to Computers Credit Hours: 3
- OST 131 - Keyboarding Credit Hours: 2
- OST 132 - Keyboard Skill Building Credit Hours: 2
- OST 136 - Word Processing Credit Hours: 3
- OST 164 - Office Editing Credit Hours: 3
- OST 171 - Intro. to Virtual Office Credit Hours: 3
- OST 181 - Intro to Office Systems Credit Hours: 3
- OST 184 - Records Management Credit Hours: 3

Other Major Courses

- BUS 240 - Business Ethics Credit Hours: 3
- CTS 125 - Presentation Graphics Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3

Total Credit Hours Required: 37

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Office Administration - General Office Certificate Pathway (C25370P)

Core Courses

- OST 131 - Keyboarding Credit Hours: 2
- OST 136 - Word Processing Credit Hours: 3
- OST 164 - Office Editing Credit Hours: 3
- OST 171 - Intro. to Virtual Office Credit Hours: 3
- OST 181 - Intro to Office Systems Credit Hours: 3
- OST 184 - Records Management Credit Hours: 3

Total Credit Hours Required: 17

Office Administration - Software Applications Certificate Pathway (C25370P2)

Core Courses

- CIS 110 - Introduction to Computers Credit Hours: 3
- CTS 125 - Presentation Graphics Credit Hours: 3
- CTS 130 - Spreadsheet Credit Hours: 3
- OST 136 - Word Processing Credit Hours: 3

Total Credit Hours Required: 12

Photographic Technology H.S. Pathway #1 (C30280P)

Core Courses

- PHO 110 - Fund of Photography Credit Hours: 5
- PHO 115 - Basic Studio Lighting Credit Hours: 4
- PHO 139 - Intro to Digital Imaging Credit Hours: 2
- PHO 224 - Multimedia Production Credit Hours: 3

Total Credit Hours Required: 14

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Photographic Technology H.S. Pathway #2 (C30280P2)

Core Courses

- PHO 110 - Fund of Photography Credit Hours: 5
- PHO 115 - Basic Studio Lighting Credit Hours: 4
- PHO 139 - Intro to Digital Imaging Credit Hours: 2
- PHO 224 - Multimedia Production Credit Hours: 3

Other Major Courses

- PHO 120 - Intermediate Photography Credit Hours: 4

Total Credit Hours Required: 18

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Photographic Technology Certificate Pathway (C30280P3)

Core Courses

- PHO 110 - Fund of Photography Credit Hours: 5
- PHO 115 - Basic Studio Lighting Credit Hours: 4
- PHO 139 - Intro to Digital Imaging Credit Hours: 2
- PHO 224 - Multimedia Production Credit Hours: 3

Other Major Courses

- PHO 219 - Digital Applications Credit Hours: 2

Total Credit Hours Required: 16

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 098 - Integrated Reading Writing III Credit Hours: 3

Turfgrass Management H.S. Pathway (C15420P1)

Core Courses

- HOR 166 - Soils & Fertilizers Credit Hours: 3
- TRF 110 - Intro Turfgrass Cult & ID Credit Hours: 4
- TRF 120 - Turfgrass Irrigat & Design Credit Hours: 4
- TRF 240 - Turfgrass Pest Control Credit Hours: 3

Total Credit Hours Required: 14

Welding Technology H.S. Diploma Pathway (D50420P)

General Education Courses

English/Communications:

- ENG 111 - Writing and Inquiry Credit Hours: 3

Natural Sciences/Mathematics

- MAT 110 - Mathematical Measurement and Literacy Credit Hours: 3

Core Courses

- WLD 110 - Cutting Processes Credit Hours: 2
- WLD 115 - SMAW (Stick) Plate Credit Hours: 5
- WLD 121 - GMAW (MIG) FCAW/Plate Credit Hours: 4
- WLD 131 - GTAW (TIG) Plate Credit Hours: 4
- WLD 141 - Symbols & Specifications Credit Hours: 3

Other Major Courses

- WLD 116 - SMAW (Stick) Plate/Pipe Credit Hours: 4
- WLD 132 - GTAW (TIG) Plate/Pipe Credit Hours: 3
- WLD 143 - Welding Metallurgy Credit Hours: 2
- WLD 262 - Inspection & Testing Credit Hours: 3

Total Credit Hours Required: 36

Developmental Course Requirements

Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

- DRE 097 - Integrated Reading Writing II Credit Hours: 3

Students who elect to take (MAT 110) from below:

- DMA 010 - Operations With Integers Credit Hours: 1
- DMA 020 - Fractions and Decimals Credit Hours: 1
- DMA 030 - Propor/Ratio/Rate/Percent Credit Hours: 1

Welding Technology Certificate Pathway (C50420P)

Core Courses

- WLD 110 - Cutting Processes Credit Hours: 2
- WLD 115 - SMAW (Stick) Plate Credit Hours: 5
OR
- WLD 115AB - SMAW (Stick) Plate-AB Credit Hours: 3
- WLD 115BB - SMAW (Stick) Plate-BB Credit Hours: 2
- WLD 121 - GMAW (MIG) FCAW/Plate Credit Hours: 4
- WLD 131 - GTAW (TIG) Plate Credit Hours: 4
- WLD 141 - Symbols & Specifications Credit Hours: 3

Total Credit Hours Required: 18

Welding Technology -- Fabrication Certificate H.S. Pathway (C50420P2)

Core Courses (9 SHC)

- WLD 110 - Cutting Processes Credit Hours: 2
- WLD 121 - GMAW (MIG) FCAW/Plate Credit Hours: 4
- WLD 141 - Symbols & Specifications Credit Hours: 3

Other Major Courses (7 SHC)

- WLD 151 - Fabrication I Credit Hours: 4
- WLD 251 - Fabrication II Credit Hours: 3

Total Credit Hours Required: 16

Course Descriptions

Academic Related

ACA 111 - College Student Success

Hours--Class: 1 Lab: 0 Clinic/Work Exp: 0 Credit: 1

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

Prerequisites: None.

Corequisites: None.

When Offered: (F,S,SU)

ACA 122 - College Transfer Success (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college policies and culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

Accounting

ACC 120 - Prin of Financial Accounting (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course introduces business decision-making using accounting information systems. Emphasis is placed on analyzing, summarizing, reporting, and interpreting financial information. Upon completion, students should be able to prepare financial statements, understand the role of financial information in decision-making, and address ethical considerations.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

ACC 121 - Prin of Managerial Accounting (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course includes a greater emphasis on managerial and cost accounting skills. Emphasis is placed on managerial accounting concepts for external and internal analysis, reporting, and decision-making. Upon completion, students should be able to analyze and interpret transactions relating to managerial concepts including product-costing systems.

Prerequisites: ACC 120.

Corequisites: None.

When Offered: (S)

ACC 129 - Individual Income Taxes

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the relevant laws governing individual income taxation. Topics include tax law, electronic research and methodologies, and the use of technology for preparation of individual tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various individual tax forms.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

ACC 130 - Business Income Taxes

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the relevant laws governing business and fiduciary income taxes. Topics include tax law relating to business organizations, electronic research and methodologies, and the use of technology for the preparation of business tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various business tax forms.

Prerequisites: None.

Corequisites: None.

ACC 140 - Payroll Accounting

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

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

Prerequisites: ACC 120.

Corequisites: None.

When Offered: (S)

ACC 150 - Acct Software Appl

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course introduces microcomputer applications related to accounting systems. Topics include general ledger, accounts receivable, accounts payable, inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting package to solve accounting problems. This course is offered only in a distant format (Internet).

Prerequisites: ACC 120.

Corequisites: None.

When Offered: (S)

ACC 220 - Intermediate Accounting I

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: ACC 120.

Corequisites: None.

When Offered: (F)

ACC 221 - Intermediate Acct II

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course is a continuation of ACC 220. Emphasis is placed on special problems which may include leases, bonds, investments, ratio analyses, present value applications, accounting changes, and corrections. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

Prerequisites: ACC 220.

Corequisites: None.

When Offered: (S)

ACC 225 - Cost Accounting

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: ACC 121.

Corequisites: None.

When Offered: (F)

ACC 240 - Gov & Not-for-Profit Acct

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: ACC 121.

Corequisites: None.

When Offered: (S)

ACC 269 - Audit & Assurance Servcs

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces selected topics pertaining to the objectives, theory and practices in engagements providing auditing and other assurance services. Topics will include planning, conducting and reporting, with emphasis on the related professional ethics and standards. Upon completion, students should be able to demonstrate an understanding of the types of professional services, the related professional standards, and engagement methodology.

Prerequisites: ACC 220.

Corequisites: None.

When Offered: (S)

Air Conditioning**AHR 110 - Intro to Refrigeration**

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 0 Credit: 5

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

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

AHR 111 - HVACR Electricity

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

AHR 112 - Heating Technology

Hours--Class: 2 Lab: 4 Clinic/Work Exp: 0 Credit: 4

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

explain the basic oil, gas, and electrical heating systems and describe the major components of a heating system.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

AHR 113 - Comfort Cooling

Hours--Class: 2 Lab: 4 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (S)

AHR 114 - Heat Pump Technology

Hours--Class: 2 Lab: 4 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: AHR 110 or AHR 113.

Corequisites: None.

When Offered: (S)

AHR 130 - HVAC Controls

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: AHR 111 or ELC 112.

Corequisites: None.

When Offered: (S)

AHR 151 - HVAC Duct Systems I

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

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

Prerequisites: None.

Corequisites: None.

When Offered: (F)

AHR 160 - Refrigerant Certification

Hours--Class: 1 Lab: 0 Clinic/Work Exp: 0 Credit: 1

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

Prerequisites: None.

Corequisites: None.

When Offered: (S)

AHR 180 - HVACR Customer Relations

Hours--Class: 1 Lab: 0 Clinic/Work Exp: 0 Credit: 1

This course introduces common business and customer relation practices that may be encountered in HVACR. Topics include business practices, appearance of self and vehicle, ways of handling customer complaints, invoices, telephone communications, and warranties. Upon completion,

students should be able to present themselves to customers in a professional manner, understand how the business operates, complete invoices, and handle complaints.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

AHR 211 - Residential System Design

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

AHR 213 - HVACR Building Code

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

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

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

Anthropology

ANT 220 - Cultural Anthropology (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the nature of human culture. Emphasis is placed on cultural theory, methods of fieldwork, and cross-cultural comparisons in the areas of ethnology, language, and the cultural past. Upon completion, students should be able to demonstrate an understanding of basic cultural processes and how cultural data are collected and analyzed.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

ANT 221 - Comparative Cultures (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an ethnographic survey of societies around the world covering their distinctive cultural characteristics and how these relate to cultural change. Emphasis is placed on the similarities and differences in social institutions such as family, economics, politics, education, and religion. Upon completion, students should be able to demonstrate knowledge of a variety of cultural adaptive strategies.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None

When Offered: (F,S)

ANT 230 - Physical Anthropology (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the scientific study of human evolution and adaptation. Emphasis is placed on evolutionary theory, population genetics, biocultural adaptation and human variation, as well as non-human primate evolution, morphology, and behavior. Upon completion, students should be able to demonstrate an understanding of the biological and cultural processes which have resulted in the formation of the human species.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

Arabic

ARA 111 - Elementary Arabic I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the fundamental elements of the modern standard Arabic language within the cultural context of Arabic-speaking people. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Arabic and demonstrate cultural awareness. This course has been approved for transfer under the Comprehensive Articulation Agreement as a premajor and/or elective course requirement.

Prerequisites: None.

Corequisites: ARA 181.

When Offered: (On demand)

ARA 112 - Elementary Arabic II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course includes the basic fundamental elements of the modern standard Arabic language within the cultural context of Arabic-speaking people. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Arabic and demonstrate further cultural awareness. This course has been approved for transfer under the Comprehensive Articulation Agreement as a premajor and/or elective course requirement.

Prerequisites: ARA 111 must pass with a grade of C or higher.

Corequisites: ARA 182.

When Offered: (On demand)

ARA 181 - Arabic Lab I (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to enhance acquisition of the fundamental elements of the modern standard Arabic language. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Arabic and to demonstrate cultural awareness. This course has been approved for transfer under the Comprehensive Articulation Agreement as a premajor and/or elective course requirement.

Prerequisites: None.

Corequisites: ARA 111.

When Offered: (On demand)

ARA 182 - Arabic Lab II (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to enhance acquisition of the fundamental elements of the modern standard Arabic language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Arabic and demonstrate cultural awareness. This course has been approved for transfer under the Comprehensive Articulation Agreement as a premajor and/or elective course requirement.

Prerequisites: ARA 181 must pass with a grade of C or higher.

Corequisites: ARA 112.

When Offered: (On demand)

Art

ART 111 - Art Appreciation (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms, including but not limited to, sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S,SU)

ART 113 - Art Methods and Materials (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course provides an overview of media and techniques. Emphasis is placed on exploration and manipulation of materials. Upon completion, students should be able to demonstrate familiarity with a variety of methods, materials, and processes.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

ART 114 - Art History Survey I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

ART 115 - Art History Survey II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

ART 117 - Non-Western Art History (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces non-Western cultural perspectives. Emphasis is placed on, but not limited to, African, Oriental, and Oceanic art forms throughout history. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of non-Western social and cultural development.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

ART 121 - Two-Dimensional Design (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

ART 122 - Three-Dimensional Design (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course introduces basic studio problems in three-dimensional visual design. Emphasis is placed on the structural elements and organizational principles as applied to mass and space. Upon completion, students should be able to apply three-dimensional design concepts.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

ART 130 - Basic Drawing (Coll/Tran)

Hours--Class: 0 Lab: 4 Clinic/Work Exp: 0 Credit: 2

This course introduces basic drawing techniques and is designed to increase observation skills. Emphasis is placed on the fundamentals of drawing. Upon completion, students should be able to demonstrate various methods and their application to representational imagery.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

ART 131 - Drawing I (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course introduces the language of drawing and the use of various drawing materials. Emphasis is placed on drawing techniques, media, and graphic principles. Upon completion, students should be able to demonstrate competence in the use of graphic form and various drawing processes.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

ART 132 - Drawing II (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: ART 131.

Corequisites: None.

When Offered: (On demand)

ART 140 - Basic Painting (Coll/Tran)

Hours--Class: 0 Lab: 4 Clinic/Work Exp: 0 Credit: 2

This course introduces the mechanics of painting. Emphasis is placed on the exploration of painting media through fundamental techniques. Upon completion, students should be able to demonstrate a basic understanding and application of painting.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

ART 171 - Computer Art I (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course introduces the use of the computer as a tool for solving visual problems. Emphasis is placed on fundamentals of computer literacy and design through bit-mapped image manipulation. Upon completion, students should be able to demonstrate an understanding of paint programs, printers, and scanners to capture, manipulate, and output images.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

ART 212 - Gallery Assistantship I (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course covers the practical application of display techniques. Emphasis is placed on preparation of artwork for installation, hardware systems, and exhibition graphics. Upon completion, students should be able to demonstrate basic gallery exhibition skills.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

ART 214 - Portfolio and Resume (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course covers resume writing, interview skills, and the preparation and presentation of an art portfolio. Emphasis is placed on the preparation of a portfolio of original artwork, the preparation of a photographic portfolio, approaches to resume writing, and interview techniques. Upon completion, students should be able to mount original art for portfolio presentation, photograph and display a professional slide portfolio, and write an effective resume.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

ART 222 - Wood Design I (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course introduces the historical and contemporary design concepts and their application to the construction of functional and sculptural wood forms. Emphasis is placed on the mastery of hand and power tools. Upon completion, students should be able to demonstrate appropriate use of tools to create unique designs.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

ART 231 - Printmaking I (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

ART 232 - Printmaking II (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course includes additional methods and printmaking processes. Emphasis is placed on the printed image as related to method, source, and concept. Upon completion, students should be able to produce expressive images utilizing both traditional and innovative methods.

Prerequisites: ART 231.

Corequisites: None.

When Offered: (On demand)

ART 240 - Painting I (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

ART 241 - Painting II (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: ART 240.

Corequisites: None.

When Offered: (On demand)

ART 264 - Digital Photography I (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course introduces digital photographic equipment, theory and processes. Emphasis is placed on camera operation, composition, computer photo manipulation and creative expression. Upon completion, students should be able to successfully expose, digitally manipulate, and print a well-conceived composition.

Prerequisites: None.

Corequisites: None.

When Offered: (Su)

ART 271 - Computer Art II (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course includes advanced computer imaging techniques. Emphasis is placed on creative applications of digital technology. Upon completion, students should be able to demonstrate command of computer systems and applications to express their personal vision.

Prerequisites: ART 171.

Corequisites: None.

When Offered: (On demand)

ART 281 - Sculpture I (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

ART 282 - Sculpture II (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: ART 281.

Corequisites: None.

When Offered: (On demand)

ART 283 - Ceramics I (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

ART 284 - Ceramics II (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: ART 283.

Corequisites: None.

When Offered: (On demand)

Astronomy

AST 151 - General Astronomy I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the science of modern astronomy with a concentration on the solar system. Emphasis is placed on the history and physics of astronomy and an introduction to the solar system, including the planets, comets, and meteors. Upon completion, students should be able to demonstrate a general understanding of the solar system. As astronomy is a branch of physics, an emphasis will be placed on the physics concepts underlying topics covered in this course.

Prerequisites: None.

Corequisites: AST 151A.

When Offered: (F,S)

AST 151A - General Astronomy I Lab (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

The course is a laboratory to accompany AST 151. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 151 and which provide practical experience. Upon completion, students should be able to demonstrate a general understanding of the solar system. Some day and evening observations will be required.

Prerequisites: None.

Corequisites: AST 151.

When Offered: (F,S)

AST 152 - General Astronomy II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is a continuation of AST 151 with primary emphasis beyond the solar system. Topics include the sun, stars, galaxies, and the larger universe, including cosmology. Upon completion, students should be able to demonstrate a working knowledge of astronomy. As astronomy is a branch of physics, an emphasis will be placed on the physics concepts underlying topics covered in this course.

Prerequisites: AST 151 must pass with a grade of C or higher.

Corequisites: AST 152A.

When Offered: (S)

AST 152A - General Astronomy II Lab (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

The course is a laboratory to accompany AST 152. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 152 and which provide practical experience. Upon completion, students should be able to demonstrate a working knowledge of astronomy. Some day and evening observations will be required.

Prerequisites: AST 151 must pass with a grade of C or higher.

Corequisites: AST 152.

When Offered: (S)

Automation & Robotics

ATR 112 - Intro to Automation

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course introduces the basic principles of automated systems and describes the tasks that technicians perform on the job. Topics include the history, development, and current applications of robots and automated systems including their configuration, operation, components, and controls. Upon completion, students should be able to understand the basic concepts of automation and robotic systems.

Prerequisites: DRE 097, DMA 010, DMA 020, DMA 030, or appropriate placement test score.

Corequisites: ELC 112 or ELC 131.

When Offered: (F,S)

ATR 212 - Industrial Robots

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course covers the operation of industrial robots. Topics include the classification of robots, activators, grippers, work envelopes, computer interfaces, overlapping work envelopes, installation, and programming. Upon completion, students should be able to install, program, and troubleshoot industrial robots.

Prerequisites: ATR 112 must pass with grade of C or higher.

Corequisites: None.

Automotive

AUT 113 - Automotive Servicing I

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 2

This course is a lab used as an alternative to co-op placement. Emphasis is placed on shop operations, troubleshooting, testing, adjusting, repairing, and replacing components using appropriate test equipment and service information. Upon completion, students should be able to perform a variety of automotive repairs using proper service procedures and to operate appropriate equipment.

Prerequisites: DRE 097 or appropriate placement test scores, TRN 110, TRN 120.

Corequisites: None.

When Offered: (SU)

AUT 116 - Engine Repair

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course covers the theory, construction, inspection, diagnosis, and repair of internal combustion engines and related systems. Topics include fundamental operating principles of engines and diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement, and repair of automotive engines using appropriate tools, equipment, procedures, and service information.

Prerequisites: DRE 097 or appropriate placement test score, TRN 110, TRN 120.

Corequisites: AUT 116A.

When Offered: (F)

AUT 116A - Engine Repair Lab

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement, and repair of automotive engines using appropriate tools, equipment, procedures, and service information.

Prerequisites: None.

Corequisites: AUT 116.

When Offered: (F)

AUT 141 - Suspension & Steering Sys

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course covers principles of operation, types, and diagnosis/repair of suspension and steering systems to include steering geometry. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

Prerequisites: DRE 097 or appropriate placement test score, TRN 110, TRN 120.

Corequisites: AUT 141A.

When Offered: (F)

AUT 141A - Suspension & Steering Lab

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

Prerequisites: None.

Corequisites: AUT 141.

When Offered: (F)

AUT 151 - Brake Systems

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

Prerequisites: DRE 097 or appropriate placement test score, TRN 110, TRN 120.

Corequisites: AUT 151A.

When Offered: (S)

AUT 151A - Brake Systems Lab

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock, parking brake systems and emerging brake systems technologies. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

Prerequisites: None.

Corequisites: AUT 151.

When Offered: (S)

AUT 163 - Adv Auto Electricity

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course covers electronic theory, wiring diagrams, test equipment, and diagnosis, repair, and replacement of electronics, lighting, gauges, horn, wiper, accessories, and body modules. Topics include networking and module communication, circuit construction, wiring diagrams, circuit testing, and troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair wiring, lighting, gauges, accessories, modules, and electronic concerns.

Prerequisites: TRN 120.

Corequisites: None.

When Offered: (S)

AUT 163A - Adv Auto Electricity Lab

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include networking and module communication, circuit construction, wiring diagrams, circuit testing, troubleshooting and emerging electrical/electronic systems technologies. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair wiring, lighting, gauges, accessories, modules, and electronic concerns.

Prerequisites: None.

Corequisites: AUT 163.

When Offered: (S)

AUT 181 - Engine Performance 1

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course covers the introduction, theory of operation, and basic diagnostic procedures required to restore engine performance to vehicles equipped with complex engine control systems. Topics include an overview of engine operation, ignition components and systems, fuel delivery, injection components and systems and emission control devices. Upon completion, students should be able to describe operation and diagnose/repair basic ignition, fuel and emission related driveability problems using appropriate test equipment/ service information.

Prerequisites: TRN 110, TRN 120.

Corequisites: AUT 181A.

When Offered: (F)

AUT 181A - Engine Performance 1 Lab

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include overviews of engine operation, ignition components and systems, fuel delivery, injection components and systems and emission control devices and emerging engine performance technologies. Upon completion, students should be able to describe operation and diagnose/repair basic ignition, fuel and emission related driveability problems using appropriate test equipment/service information.

Prerequisites: None.

Corequisites: AUT 181.

When Offered: (F)

AUT 183 - Engine Performance 2

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 0 Credit: 4

This course covers study of the electronic engine control systems, the diagnostic process used to locate engine performance concerns and procedures used to restore normal operation. Topics will include currently used fuels and fuel systems, exhaust gas analysis, emission control components and systems, OBD II (on-board diagnostics) and inter-related electrical/electronic systems. Upon completion, students should be able to diagnose and repair complex engine performance concerns using appropriate test equipment and service information.

Prerequisites: AUT 181.

Corequisites: None.

When Offered: (S)

AUT 212 - Auto Shop Management

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the principles of management essential to decision-making, communication, authority, and leadership. Topics include shop supervision, shop organization, customer relations, cost effectiveness and work place ethics. Upon completion, students should be able to describe basic automotive shop operation from a management standpoint.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

AUT 221 - Auto Transm/Transaxles

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course covers operation, diagnosis, service, and repair of automatic transmissions/transaxles. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to explain operational theory, diagnose and repair automatic drive trains.

Prerequisites: DRE 097 or appropriate placement test score. TRN 110, TRN 120.

Corequisites: AUT 221A.

When Offered: (S)

AUT 221A - Auto Transm/Transax Lab

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to diagnose and repair automatic drive trains.

Prerequisites: None.

Corequisites: AUT 221.

When Offered: (S)

AUT 231 - Man Trans/Axles/Dtrains

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course covers the operation, diagnosis, and repair of manual transmissions/ transaxles, clutches, driveshafts, axles, and final drives. Topics include theory of torque, power flow, and manual drive train service and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to explain operational theory, diagnose and repair manual drive trains.

Prerequisites: DRE 097 or appropriate placement test score, TRN 110.

Corequisites: AUT 231A.

When Offered: (S)

AUT 231A - Man Trans/Ax/Dtrains Lab

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course is an optional lab for the program that needs to meet NATEF hour standards but does not have a co-op component in the program. Topics include manual drive train diagnosis, service and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to diagnose and repair manual drive trains.

Prerequisites: None.

Corequisites: AUT 231.

When Offered: (F,S)

AUT 281 - Adv Engine Performance

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course utilizes service information and specialized test equipment to diagnose and repair power train control systems. Topics include computerized ignition, fuel and emission systems, related diagnostic tools and equipment, data communication networks, and service information. Upon completion, students should be able to perform diagnosis and repair.

Prerequisites: AUT 163, AUT 183.

Corequisites: None.

When Offered: (F)

Biology**BIO 111 - General Biology I** (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics, evolution, classification, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 or appropriate placement test score; DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S,On demand)

BIO 112 - General Biology II (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course is a continuation of BIO 111. Emphasis is placed on organisms, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels.

Prerequisites: BIO 111 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S,On demand)

BIO 120 - Introductory Botany (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides an introduction to the classification, relationships, structure, and function of plants. Topics include reproduction and development of seed and non-seed plants, levels of organization, form and function of systems, and a survey of major taxa. Upon completion, students should be able to demonstrate comprehension of plant form and function, including selected taxa of both seed and non-seed plants.

Prerequisites: BIO 111 (must pass with a grade of C or higher).

Corequisites: None.

When Offered: (S)

BIO 130 - Introductory Zoology (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides an introduction to the classification, relationships, structure, and function of major animal phyla. Emphasis is placed on levels of organization, reproduction and development, comparative systems, and a survey of selected phyla. Upon completion, students should be able to demonstrate comprehension of animal form and function including comparative systems of selected groups.

Prerequisites: BIO 111 (must pass with a grade of C or higher).

Corequisites: None.

When Offered: (F)

BIO 140 - Environmental Biology (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces environmental processes and the influence of human activities upon them. Topics include ecological concepts, population growth, natural resources, and a focus on current environmental problems from scientific, social, political, and economic perspectives. Upon completion, students should be able to demonstrate an understanding of environmental interrelationships and of contemporary environmental issues.

Prerequisites: BIO 111 must pass with a grade of C or higher.

Corequisites: BIO 140A.

When Offered: (On demand)

BIO 140A - Environmental Biology Lab (Coll/Tran)

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course provides a laboratory component to complement BIO 140. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental interrelationships and of contemporary environmental issues.

Prerequisites: None.

Corequisites: BIO 140.

When Offered: (On demand)

BIO 143 - Field Biology Minicourse (Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course introduces the biological and physical components of a field environment. Emphasis is placed on a local field environment with extended field trips to other areas. Upon completion, students should be able to demonstrate an understanding of the biological and physical components of the specific biological environment.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

BIO 145 - Ecology (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides an introduction to ecological concepts using an ecosystems approach. Topics include energy flow, nutrient cycling, succession, population dynamics, community structure, and other related topics. Upon completion, students should be able to demonstrate comprehension of basic ecosystem structure and dynamics.

Prerequisites: Take BIO 111.

Corequisites: None.

When Offered: (On demand)

BIO 146 - Regional Natural History (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course is an interdisciplinary and historical analysis of the natural resources of the region. Emphasis is placed on geology, climate, forest systems, watersheds, water resources, and fish and wildlife resources of the region. Upon completion, students should be able to demonstrate comprehension of the natural history and the integration of the natural resources of the region.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

BIO 155 - Nutrition (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the biochemistry of foods and nutrients with consideration of the physiological effects of specialized diets for specific biological needs. Topics include cultural, religious, and economic factors that influence a person's acceptance of food, as well as nutrient requirements of the various life stages. Upon completion, students should be able to identify the functions and sources of nutrients, the mechanisms of digestion, and the nutritional requirements of all age groups.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

BIO 163 - Basic Anat & Physiology (Coll/Tran)

Hours--Class: 4 Lab: 2 Clinic/Work Exp: 0 Credit: 5

This course provides a basic study of the structure and function of the human body. Topics include a basic study of the body systems as well as an introduction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040; DRE 098 or appropriate placement test scores.

Corequisites: None.

When Offered: (F,S,On demand)

BIO 168 - Anatomy and Physiology I (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, and nervous systems and special senses. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. Successful completion of high school chemistry (C), or a higher level chemistry course is recommended prior to taking BIO 168.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040; DRE 098 or appropriate placement test scores.

Corequisites: None.

When Offered: (F,S,On demand)

BIO 169 - Anatomy and Physiology II (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive

systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships.

Prerequisites: BIO 168 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S,On demand)

BIO 175 - General Microbiology (Coll/Tran)

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques.

Prerequisites: BIO 111 or BIO 163 or BIO 168 (must pass with a grade of C or higher).

Corequisites: None.

When Offered: (F,S,On demand)

BIO 224 - Local Flora Spring (Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course provides an introduction to the identification of native plants. Emphasis is placed on spring wild flowers. Upon completion, students should be able to identify a variety of spring wild flowers and native plants.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

BIO 230 - Entomology (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course covers the biology of insects. Topics include harmful and beneficial insects, their identification, classification, life cycles, behavior, distribution, economic importance, and the methods involved in collection and preservation. Upon completion, students should be able to identify common insects and describe their biology and ecology.

Prerequisites: BIO 112 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (On demand)

BIO 250 - Genetics (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course covers principles of prokaryotic and eukaryotic cell genetics. Emphasis is placed on the molecular basis of heredity, chromosome structure, patterns of Mendelian and non-Mendelian inheritance, evolution, and biotechnological applications. Upon completion, students should be able to recognize and describe genetic phenomena and demonstrate knowledge of important genetic principles.

Prerequisites: BIO 112.

Corequisites: None.

When Offered: (On demand)

BIO 275 - Microbiology (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course covers principles of microbiology and the impact these organisms have on man and the environment. Topics include the various groups of microorganisms, their structure, physiology, genetics, microbial pathogenicity, infectious diseases, immunology, and selected practical applications. Upon completion, students should be able to demonstrate knowledge and skills including microscopy, aseptic technique, staining, culture methods, and identification of microorganisms.

Prerequisites: BIO 112 or BIO 163 or BIO 168 (must pass with a grade of C or higher).

Corequisites: None.

When Offered: (F,S,On demand)

BIO 280 - Biotechnology (Coll/Tran)

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3
 This course provides experience in selected laboratory procedures. Topics include proper laboratory techniques in biology and chemistry. Upon completion, students should be able to identify laboratory techniques and instrumentation in basic biotechnology.

Prerequisites: BIO 111 or CHM 151, must pass with a grade of C or higher.

Corequisites: None.

When Offered: (On demand)

Blueprint Reading**BPR 111 - Print Reading**

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2
 This course introduces the basic principles of print reading. Topics include line types, orthographic projections, dimensioning methods, and notes. Upon completion, students should be able to interpret basic prints and visualize the features of a part or system.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S)

Business**BUS 110 - Introduction to Business** (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3
 This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

BUS 115 - Business Law I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3
 This course introduces the ethics and legal framework of business. Emphasis is placed on contracts, negotiable instruments, Uniform Commercial Code, and the working of the court systems. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision making situations.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

BUS 116 - Business Law II

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3
 This course continues the study of ethics and business law. Emphasis is placed on bailments, sales, risk-bearing, forms of business ownership, and copyrights. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations.

Prerequisites: BUS 115.

Corequisites: None.

When Offered: (On demand)

BUS 125 - Personal Finance

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3
 This course provides a study of individual and family financial decisions. Emphasis is placed on building useful skills in buying, managing finances, increasing resources, and coping with current economic conditions. Upon completion, students should be able to develop a personal financial plan.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

BUS 137 - Principles of Management (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3
 This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

BUS 139 - Entrepreneurship I

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3
 This course provides an introduction to the principles of entrepreneurship. Topics include self-analysis of entrepreneurship readiness, the role of entrepreneur in economic development, legal problems, organizational structure, sources of financing, budgeting, and cash flow. Upon completion, students should have an understanding of the entrepreneurial process and issues faced by entrepreneurs.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

BUS 153 - Human Resource Management

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3
 This course introduces the functions of personnel/human resource management within an organization. Topics include equal opportunity and the legal environment, recruitment and selection, performance appraisal, employee development, compensation planning, and employee relations. Upon completion, students should be able to anticipate and resolve human resource concerns.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

BUS 217 - Employment Law and Regs

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3
 This course introduces the principle laws and regulations affecting public and private organizations and their employees or prospective employees. Topics include fair employment practices, EEO, affirmative action, and employee rights and protections. Upon completion, students should be able to evaluate organization policy for compliance and assure that decisions are not contrary to law.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

BUS 230 - Small Business Management

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3
 This course introduces the challenges of entrepreneurship including the startup and operation of a small business. Topics include market research techniques, feasibility studies, site analysis, financing alternatives, and managerial decision making. Upon completion, students should be able to develop a small business plan.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

BUS 240 - Business Ethics

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces contemporary and controversial ethical issues that face the business community. Topics include moral reasoning, moral dilemmas, law and morality, equity, justice and fairness, ethical standards, and moral development. Upon completion, students should be able to demonstrate an understanding of their moral responsibilities and obligations as members of the workforce and society.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

BUS 245 - Entrepreneurship II

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is designed to allow the student to develop a business plan. Topics include the need for a business plan, sections of the plan, writing the plan, and how to find assistance in preparing the plan. Upon completion, students should be able to design and implement a business plan based on sound entrepreneurship principles.

Prerequisites: BUS 139.

Corequisites: None.

When Offered: (S)

BUS 253 - Leadership and Mgt Skills

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course includes a study of the qualities, behaviors, and personal styles exhibited by leaders. Emphasis is placed on coaching, counseling, team building, and employee involvement. Upon completion, students should be able to identify and exhibit the behaviors needed for organizational effectiveness.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

BUS 285 - Business Management Issues

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers contemporary issues that affect successful businesses and their managers and employees. Emphasis is placed on using case studies and exercises to develop analytical and problem-solving skills, ethics, quality management concepts, team skills, and effective communication. Upon completion, students should be able to apply the specific knowledge and skills covered to become more effective managers and employees.

Prerequisites: BUS 137.

Corequisites: None.

When Offered: (S)

Cyber Crime**CCT 240 - Data Recovery Techniques**

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course introduces the unique skills and methodologies necessary to assist in the investigation and prosecution of cyber crimes. Topics include hardware and software issues, recovering erased files, overcoming encryption, advanced imaging, transient data, Internet issues and testimony considerations. Upon completion, students should be able to recover digital evidence, extract information for criminal investigation and legally seize criminal evidence.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

Computer Engineering Technology**CET 111 - Computer Upgrade/Repair I**

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course covers repairing, servicing, and upgrading computers and peripherals in preparation for industry certification. Topics include CPU/memory/bus identification, disk subsystems, hardware/software installation/configuration, common device drivers, data recovery, system maintenance, and other related topics. Upon completion, students should be able to safely repair and/or upgrade computer systems to perform within specifications.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: CIS 110.

When Offered: (On demand)

CET 211 - Computer Upgrade/Repair II

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course covers concepts of repair, service, and upgrade of computers and peripherals in preparation for industry certification. Topics may include resolving resource conflicts and system bus specifications, configuration and troubleshooting peripherals, operating system configuration and optimization, and other related topics. Upon completion, students should be able to identify and resolve system conflicts and optimize system performance.

Prerequisites: CET 111 or CTS 120 must pass with a grade of C or higher; DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

Chinese**CHI 111 - Elementary Chinese I (Coll/Tran)**

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the fundamental elements of the Chinese language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Chinese and demonstrate cultural awareness.

Prerequisites: None.

Corequisites: CHI 181.

When Offered: (On demand)

CHI 112 - Elementary Chinese II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course includes the basic fundamentals of the Chinese language within a cultural context of the Chinese people and its history. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Chinese and demonstrate further cultural awareness.

Prerequisites: CHI 111 must pass with a grade of C or higher.

Corequisites: CHI 182.

When Offered: (On demand)

CHI 181 - Chinese Lab I (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to enhance acquisition of the fundamental elements of the Chinese language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Chinese and demonstrate cultural awareness.

Prerequisites: None.

Corequisites: CHI 111.

When Offered: (On demand)

CHI 182 - Chinese Lab II (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to enhance acquisition of the fundamental elements of the Chinese language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Chinese and demonstrate cultural awareness.

Prerequisites: CHI 181 must pass with a grade of C or higher.

Corequisites: CHI 112.

When Offered: (On demand)

Chemistry**CHM 130 - Gen, Org, & Biochemistry** (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a survey of basic facts and principles of general, organic, and biochemistry. Topics include measurement, molecular structure, nuclear chemistry, solutions, acid-base chemistry, gas laws, and the structure, properties, and reactions of major organic and biological groups. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, or appropriate placement test scores; DRE 098 or appropriate placement test scores.

Corequisites: CHM 130A.

When Offered: (F,S,On demand)

CHM 130A - Gen, Org, & Biochemistry Lab (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a laboratory for CHM 130. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 130. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 130.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, or appropriate placement test scores; DRE 098 or appropriate placement test scores.

Corequisites: CHM 130.

When Offered: (F ,S,On demand)

CHM 131 - Introduction to Chemistry (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the fundamental concepts of inorganic chemistry. Topics include measurement, matter and energy, atomic and molecular structure, nuclear chemistry, stoichiometry, chemical formulas and reactions, chemical bonding, gas laws, solutions, and acids and bases. Upon completion, students should be able to demonstrate a basic understanding of chemistry as it applies to other fields.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, or appropriate placement test scores; DRE 098 or appropriate placement test scores.

Corequisites: CHM 131A.

When Offered: (F,S,On demand)

CHM 131A - Introduction to Chemistry Lab (Coll/Tran)

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course is a laboratory to accompany CHM 131. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 131. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 131.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, or appropriate placement test scores; DRE 098 or appropriate placement test scores.

Corequisites: CHM 131.

When Offered: (F,S,On demand)

CHM 132 - Organic and Biochemistry (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides a survey of major functional classes of compounds in organic and biochemistry. Topics include structure, properties, and reactions of the major organic and biological molecules and basic principles of metabolism. Upon completion, student should be able to demonstrate an understanding of fundamental chemical concepts needed to pursue studies in related professional fields.

Prerequisites: CHM 131 and CHM 131A must pass with a grade of C or higher; or CHM 151 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

CHM 151 - General Chemistry I (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. Successful completion of high school chemistry (C), or a higher level chemistry course is recommended prior to taking CHM 151.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065; or appropriate placement test scores; DRE 098 or appropriate placement test scores.

Corequisites: None.

When Offered: (F,S,On demand)

CHM 152 - General Chemistry II (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields.

Prerequisites: CHM 151 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S,On demand)

CHM 251 - Organic Chemistry I (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides a systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of hydrocarbons, alkyl halides, alcohols, and ethers; further topics include isomerization, stereochemistry, and spectroscopy. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of covered organic topics as needed in CHM 252.

Prerequisites: CHM 152 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F)

CHM 252 - Organic Chemistry II (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides continuation of the systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of aromatics, aldehydes, ketones, carboxylic acids and derivatives, amines and heterocyclics; multi-step synthesis will be emphasized. Upon completion, students should be able to demonstrate an understanding of organic concepts as needed to pursue further study in chemistry and related professional fields.

Prerequisites: CHM 251 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

(Computer) Information Systems

CIS 110 - Introduction to Computers (Coll/Tran)

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems.

Prerequisites: None

Corequisites: None.

When Offered: (F,S,SU)

CIS 111 - Basic PC Literacy

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course provides an overview of computer concepts. Emphasis is placed on the use of personal computers and software applications for personal and fundamental workplace use. Upon completion, students should be able to demonstrate basic personal computer skills.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

CIS 115 - Intro to Prog & Logic (Coll/Tran)

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course introduces computer programming and problem solving in a structured program logic environment. Topics include language syntax, data types, program organization, problem solving methods, algorithm design, and logic control structures. Upon completion, students should be able to use top-down algorithm design and implement algorithmic solutions in a programming language.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, or MAT 121 or MAT 171 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

Criminal Justice

CJC 100 - Basic Law Enforcement Training

Hours--Class: 9 Lab: 30 Clinic/Work Exp: 0 Credit: 19

This course covers the basic skills and knowledge needed for entry-level employment as a law enforcement officer in North Carolina. Topics are divided into general units of study: legal, patrol duties, law enforcement communications, investigations, practical application and sheriff-specific. Upon successful completion, the student will be able to demonstrate competence in topics and areas required for the state comprehensive certification examination. This is a certificate-level course.

Prerequisites: Completion of admission process for BLET.

Corequisites: None.

When Offered: (F,S)

CJC 111 - Intro to Criminal Justice (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options.

Prerequisites: None.

Corequisites: None

When Offered: (F)

CJC 112 - Criminology

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

CJC 113 - Juvenile Justice

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: None.

Corequisites: None.

When Offered: (F)

CJC 114 - Investigative Photography

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course covers the operation of digital photographic equipment and its application to criminal justice. Topics include the use of digital cameras, storage of digital images, the retrieval of digital images and preparation of digital images as evidence. Upon completion, students should be able to demonstrate and explain the role and use of digital photography, image storage and retrieval in criminal investigations.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

CJC 121 - Law Enforcement Operations (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: None.

Corequisites: None.

When Offered: (S)

CJC 131 - Criminal Law

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: None.

Corequisites: None.

When Offered: (F)

CJC 132 - Court Procedure & Evidence

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers judicial structure/process/procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of evidence in court. Topics include consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper judicial procedures, and the admissibility of evidence.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

CJC 141 - Corrections

(Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the history, major philosophies, components, and current practices and problems of the field of corrections. Topics include historical evolution, functions of the various components, alternatives to incarceration, treatment programs, inmate control, and other related topics. Upon completion, students should be able to explain the various components, processes, and functions of the correctional system.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

CJC 144 - Crime Scene Processing

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course introduces the theories and practices of crime scene processing and investigating. Topics include legal considerations at the crime scene, processing indoor and outdoor scenes, recording, note taking, collection and preservation of evidence and submission to the crime laboratory. Upon completion, the student should be able to evaluate and search various crime scenes and demonstrate the appropriate techniques.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

CJC 146 - Trace Evidence

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course provides a study of trace evidence as it relates to forensic science. Topics include collection, packaging, and preservation of trace evidence from crime scenes such as bombings, fires and other scenes. Upon completion, students should be able to demonstrate the fundamental concepts of trace evidence collection, preservation and submission to the crime laboratory.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

CJC 151 - Intro to Loss Prevention

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the concepts and methods related to commercial and private security systems. Topics include the historical, philosophical, and legal basis of security, with emphasis on security surveys, risk analysis, and associated functions. Upon completion, students should be able to demonstrate and understand security systems, risk management, and the laws relative to loss prevention.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

CJC 160 - Terrorism: Underlying Issues

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course identifies the fundamental reasons why America is a target for terrorists, covering various domestic/international terrorist groups and ideologies from a historical aspect. Emphasis is placed upon recognition of terrorist crime scene; weapons of mass destruction; chemical, biological, and nuclear terrorism; and planning consideration involving threat assessments.

Upon completion, the student should be able to identify and discuss the methods used in terrorists' activities and complete a threat assessment for terrorists' incidents.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

CJC 212 - Ethics & Comm Relations

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems; social change, values, and norms; cultural diversity; citizen involvement in criminal justice issues; and other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

CJC 215 - Organization & Administration

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: None.

Corequisites: None.

When Offered: (F)

CJC 221 - Investigative Principles

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: None.

Corequisites: None.

When Offered: (S)

CJC 222 - Criminalistics

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: None.

Corequisites: None.

When Offered: (S)

CJC 225 - Crisis Intervention

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: None.

Corequisites: None.

When Offered: (S)

CJC 231 - Constitutional Law

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: None.

Corequisites: None.

When Offered: (F)

CJC 245 - Friction Ridge Analysis

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course introduces the basic elements of fingerprint technology and techniques applicable to the criminal justice field. Topics include the history and meaning of fingerprints, pattern types and classification, filing sequence, searching and referencing. Upon completion, students should be able to discuss and demonstrate the fundamental techniques of basic fingerprint technology.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

CJC 246 - Adv Friction Ridge Analys

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course introduces the theories and processes of advanced friction ridge analysis. Topics include evaluation of friction ridges, chart preparation, comparative analysis for valued determination rendering proper identification, chemical enhancement and AFIS preparation and usage. Upon completion, students must show an understanding of proper procedures for friction ridge analysis through written testing and practical exercises.

Prerequisites: CJC 245.

Corequisites: None.

When Offered: (S)

CJC 250 - Forensic Biology I

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers important biological principles that are applied in the crime laboratory. Topics include forensic toxicology, forensic serology, microscopy, and DNA typing analysis, with an overview of organic and inorganic analysis. Upon completion, students should be able to articulate how a crime laboratory processes physical evidence submitted by law enforcement agencies.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

CJC 251 - Forensic Chemistry I

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course provides a study of the fundamental concepts of chemistry as it relates to forensic science. Topics include physical and chemical properties of substances, metric measurements, chemical changes, elements, compounds, gases, and atomic structure. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of forensic chemistry.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

Communication**COM 110 - Introduction to Communication** (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an overview of the basic concepts of communication and the skills necessary to communicate in various contexts. Emphasis is placed on communication theories and techniques used in interpersonal group, public, intercultural, and mass communication situations. Upon completion,

students should be able to explain and illustrate the forms and purposes of human communication in a variety of contexts.

Prerequisites: None.

Corequisites: ENG 111.

When Offered: (F,S,SU)

COM 120 - Intro Interpersonal Com (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is placed on the communication process, perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication relationships. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

COM 231 - Public Speaking (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support.

Prerequisites: None.

Corequisites: ENG 111.

When Offered: (F,S,SU)

COM 251 - Debate I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the principles of debate. Emphasis is placed on argument, refutation, research, and logic. Upon completion, students should be able to use research skills and logic in the presentation of ideas within the context of formal debate.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

Cosmetology**COS 111 - Cosmetology Concepts I**

Hours--Class: 4 Lab: 0 Clinic/Work Exp: 0 Credit: 4

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

Prerequisite: None.

Corequisites: COS 112.

When Offered: (F)

COS 111AB - Cosmetology Concepts I-AB

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

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

Prerequisite: None.

Corequisites: COS 112AB.

When Offered: (F)

COS 111BB - Cosmetology Concepts I-BB

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

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

Prerequisites: None.

Corequisites: COS 112BB.

When Offered: (S)

COS 112 - Salon I

Hours--Class: 0 Lab: 24 Clinic/Work Exp: 0 Credit: 8

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

Prerequisites: None.

Corequisites: COS 111.

When Offered: (S)

COS 112AB - Salon I-AB

Hours--Class: 0 Lab: 12 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: None.

Corequisites: COS 111AB.

When Offered: (F)

COS 112BB - Salon I-BB

Hours--Class: 0 Lab: 12 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: None.

Corequisites: COS 111BB.

When Offered: (S)

COS 113 - Cosmetology Concepts II

Hours--Class: 4 Lab: 0 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: COS 111 and COS 112, must past with a grade of C or higher.

Corequisites: COS 114.

When Offered: (S)

COS 113AB - Cosmetology Concepts II-AB

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

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

Prerequisites: COS 111AB and COS 112AB, must past with a grade of C or higher.

Corequisites: COS 114AB.

When Offered: (F)

COS 113BB - Cosmetology Concepts II-BB

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

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

Prerequisites: COS 111BB and COS 112BB, must past with a grade of C or higher.

Corequisites: COS 114BB.

When Offered: (S)

COS 114 - Salon II

Hours--Class: 0 Lab: 24 Clinic/Work Exp: 0 Credit: 8

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

Prerequisites: COS 111 and COS 112, must past with a grade of C or higher.

Corequisites: COS 113.

When Offered: (S)

COS 114AB - Salon II-AB

Hours--Class: 0 Lab: 12 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: COS 111AB and COS 112AB, must past with a grade of C or higher.

Corequisites: COS 113AB.

When Offered: (F)

COS 114BB - Salon II-BB

Hours--Class: 0 Lab: 12 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: COS 111BB and COS 112BB, must past with a grade of C or higher.

Corequisites: COS 113BB.

When Offered: (S)

COS 115 - Cosmetology Concepts III

Hours--Class: 4 Lab: 0 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: COS 111 and COS 112, must past with a grade of C or higher.

Corequisites: COS 116, ENG 111.

When Offered: (SU)

COS 115AB - Cosmetology Concepts III-AB

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

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

Prerequisites: COS 111 and COS 112, must past with a grade of C or higher.

Corequisites: COS 116AB, ENG 111.

When Offered: (F)

COS 115BB - Cosmetology Concepts III-BB

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

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

Prerequisites: COS 111 and COS 112, must past with a grade of C or higher.

Corequisites: COS 116BB.

When Offered: (S)

COS 116 - Salon III

Hours--Class: 0 Lab: 12 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: COS 111 and COS 112, must past with a grade of C or higher.

Corequisites: COS 115.

When Offered: (SU)

COS 116AB - Salon III-AB

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 2

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

Prerequisites: COS 111 and COS 112, must past with a grade of C or higher.

Corequisites: COS 115AB.

When Offered: (F)

COS 116BB - Salon III-BB

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 2

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

Prerequisites: COS 111 and COS 112, must past with a grade of C or higher.

Corequisites: COS 115BB.

When Offered: (S)

COS 117 - Cosmetology Concepts IV

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements.

Prerequisites: COS 111 and COS 112, must past with a grade of C or higher.

Corequisites: COS 118, PSY 150, and WBL 110.

When Offered: (F)

COS 117AB - Cosmetology Concepts IV-AB

Hours--Class: 1 Lab: 0 Clinic/Work Exp: 0 Credit: 1

This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements.

Prerequisites: COS 111 and COS 112, must past with a grade of C or higher.

Corequisites: COS 118AB.

When Offered: (F)

COS 117BB - Cosmetology Concepts IV-BB

Hours--Class: 1 Lab: 0 Clinic/Work Exp: 0 Credit: 1

This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements.

Prerequisites: COS 111 and COS 112, must past with a grade of C or higher.

Corequisites: COS 118BB, PSY 150, and WBL 110.

When Offered: (S)

COS 118 - Salon IV

Hours--Class: 0 Lab: 21 Clinic/Work Exp: 0 Credit: 7

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

Prerequisites: COS 111 and COS 112, must past with a grade of C or higher.

Corequisites: COS 117.

When Offered: (F)

COS 118AB - Salon IV-AB

Hours--Class: 0 Lab: 12 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: COS 111 and COS 112, must past with a grade of C or higher.

Corequisites: COS 117AB.

When Offered: (F)

COS 118BB - Salon IV-BB

Hours--Class: 0 Lab: 9 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: COS 111 and COS 112, must past with a grade of C or higher.

Corequisites: COS 117BB.

When Offered: (S)

Computer Science**CSC 120 - Computing Fundamentals I (Coll/Tran)**

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course provides the essential foundation for the discipline of computing and a program of study in computer science, including the role of the professional. Topics include algorithm design, data abstraction, searching and sorting algorithms, and procedural programming techniques. Upon completion, students should be able to solve problems, develop algorithms, specify data types, perform sorts and searches, and use an operating system.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060, DMA 065, or MAT 121 or MAT 171 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S)

CSC 130 - Computing Fundamentals II (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course provides in-depth coverage of the discipline of computing and the role of the professional. Topics include software design methodologies, analysis of algorithm and data structures, searching and sorting algorithms,

and file organization methods. Upon completion, students should be able to use software design methodologies and choice of data structures and understand social/ethical responsibilities of the computing professional.

Prerequisites: CSC 120.

Corequisites: None.

When Offered: (S)

CSC 134 - C++ Programming (Coll/Tran)

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course introduces computer programming using the C++ programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

CSC 138 - RPG Programming

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course introduces computer programming using the RPG programming language with structured programming principles. Topics include input/output operations, iteration, arithmetic operations, arrays, pointers, filters, and other related topics. Upon completion, students should be able to design, code, test and debug at a beginning level.

Prerequisites: CIS 115.

Corequisites: None.

When Offered: (F)

CSC 139 - Visual BASIC Programming (Coll/Tran)

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course introduces computer programming using the Visual BASIC programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

CSC 151 - JAVA Programming (Coll/Tran)

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course introduces computer programming using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

CSC 234 - Adv C++ Programming

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course is a continuation of CSC 134 using the C++ programming language with standard programming principles. Emphasis is placed on advanced arrays/ tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug and document programming solutions.

Prerequisites: CSC 134.

Corequisites: None.

When Offered: (On demand)

CSC 238 - Adv RPG Programming

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: CSC 138.

Corequisites: None.

When Offered: (S)

CSC 239 - Adv Visual BASIC Prog (Coll/Tran)

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course is a continuation of CSC 139 using the Visual BASIC programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment.

Prerequisites: CSC 139.

Corequisites: None.

When Offered: (S)

CSC 251 - Advanced JAVA Programming

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course is a continuation of CSC 151 using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment.

Prerequisites: CSC 151.

Corequisites: None.

When Offered: (F)

CSC 289 - Programming Capstone Project

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course provides an opportunity to complete a significant programming project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, testing, presentation, and implementation. Upon completion, students should be able to complete a project from the definition phase through implementation.

Prerequisites: CTI 110, CTI 120, CTS 115, and CTS 285.

Corequisites: None.

When Offered: (S)

Computer Tech Information

CTI 110 - Web, Pgm, & Db Foundation

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers the introduction of the tools and resources available to students in programming, mark-up language and services on the Internet. Topics include standard mark-up language Internet services, creating web pages, using search engines, file transfer programs; and database design and creation with DBMS products. Upon completion students should be able to demonstrate knowledge of programming tools, deploy a web-site with mark-up tools, and create a simple database table.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

CTI 120 - Network & Sec Foundation

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces students to the Network concepts, including networking terminology and protocols, local and wide area networks, and network standards. Emphasis is placed on securing information systems

and the various implementation policies. Upon completion, students should be able to perform basic tasks related to networking mathematics, terminology, media and protocols.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

CTI 140 - Virtualization Concepts

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course introduces operating system virtualization. Emphasis is placed on virtualization terminology, virtual machine storage, virtual networking and access control. Upon completion, students should be able to perform tasks related to installation, configuration and management of virtual machines.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

CTI 141 - Cloud & Storage Concepts

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course introduces cloud computing and storage concepts. Emphasis is placed on cloud terminology, virtualization, storage networking and access control. Upon completion, students should be able to perform tasks related to installation, configuration and management of cloud storage systems.

Prerequisites: CTI 140.

Corequisites: None.

When Offered: (S)

Computer Information Technology

CTS 115 - Info Sys Business Concept

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the role of IT in managing business processes and the need for business process and IT alignment. Emphasis is placed on industry need for understanding business challenges and developing/managing information systems to contribute to the decision making process based on these challenges. Upon completion, students should be able to demonstrate knowledge of the 'hybrid business manager' and the potential offered by new technology and systems.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

CTS 120 - Hardware/Software Support

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course covers the basic hardware of a personal computer, including installation, operations and interactions with software. Topics include component identification, memory-system, peripheral installation and configuration, preventive maintenance, hardware diagnostics/repair, installation and optimization of system software, commercial programs, system configuration, and device-drivers. Upon completion, students should be able to select appropriate computer equipment and software, upgrade/maintain existing equipment and software, and troubleshoot/repair non-functioning personal computers.

Prerequisites: None.

Corequisites: CIS 110 or CIS 111.

When Offered: (F,S)

CTS 125 - Presentation Graphics

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course provides hands-on experience with a graphics presentation package. Topics include terminology, effective chart usage, design and layout, integrating hardware components, and enhancing presentations with text, graphics, audio and video. Upon completion, students should be able to design and demonstrate an effective presentation.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

CTS 130 - Spreadsheet

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: CIS 110 or CIS 111 or OST 137.

Corequisites: None.

When Offered: (F,S,SU)

CTS 285 - Systems Analysis & Design

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces established and evolving methodologies for the analysis, design, and development of an information system. Emphasis is placed on system characteristics, managing projects, prototyping, CASE/OOM tools, and systems development life cycle phases. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

CTS 289 - System Support Project

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course provides an opportunity to complete a significant support project with minimal instructor assistance. Emphasis is placed on written and oral communication skills, project definition, documentation, installation, testing, presentation, and user training. Upon completion, students should be able to complete a project from the definition phase through implementation.

Prerequisites: CTI 110, CTI 120, CTS 115, and CTS 285.

Corequisites: None.

When Offered: (S)

Dance

DAN 110 - Dance Appreciation

(Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course for non-dance majors surveys diverse dance forms and the religious and cultural values that shape them. Topics include dances from Europe, Africa, Asia, and America. Upon completion, students should be able to demonstrate an understanding of the diverse forms and values that dance embraces.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

Database Management Technology

DBA 110 - Database Concepts

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course introduces database design and creation using a DBMS product. Emphasis is placed on data dictionaries, normalization, data integrity, data modeling, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to design and implement normalized database structures by creating simple database tables, queries, reports, and forms.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

DBA 115 - Database Applications

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course applies concepts learned in DBA 110 to a specific DBMS. Topics include manipulating multiple tables, advanced queries, screens and reports, linking, and command files. Upon completion, students should be able to

create multiple table systems that demonstrate updates, screens, and reports representative of industry requirements.

Prerequisites: DBA 110.

Corequisites: None.

When Offered: (S)

DBA 120 - Database Programming I

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course is designed to develop SQL programming proficiency. Emphasis is placed on data definition, data manipulation, and data control statements as well as on report generation. Upon completion, students should be able to write programs which create, update, and produce reports.

Prerequisites: DBA 115.

Corequisites: None.

When Offered: (F)

DBA 220 - Oracle DB Programming II

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course is designed to enhance programming skills developed in DBA 120. Topics include application development with GUI front-ends and embedded programming. Upon completion, students should be able to develop an Oracle DBMS application which includes a GUI front-end and report generation.

Prerequisites: DBA 120.

Corequisites: None.

When Offered: (On demand)

Dental Hygiene

DEN 110 - Orofacial Anatomy

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the structures of the head, neck, and oral cavity. Topics include tooth morphology, head and neck anatomy, histology, and embryology. Upon completion, students should be able to relate the identification of normal structures and development to the practice of dental assisting and dental hygiene.

Prerequisites: Enrollment in the Dental Hygiene program.

Corequisites: None.

When Offered: (F)

DEN 111 - Infection/Hazard Control

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course introduces the infection and hazard control procedures necessary for the safe practice of dentistry. Topics include microbiology, practical infection control, sterilization and monitoring, chemical disinfectants, aseptic technique, infectious diseases, OSHA standards, and applicable North Carolina laws. Upon completion, students should be able to understand infectious diseases, disease transmission, infection control procedures, biohazard management, OSHA standards, and applicable North Carolina laws.

Prerequisites: Enrollment in the Dental Hygiene program.

Corequisites: None.

When Offered: (F)

DEN 112 - Dental Radiography

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course provides a comprehensive view of the principles and procedures of radiology as they apply to dentistry. Topics include techniques in exposing, processing, and evaluating radiographs, as well as radiation safety, quality assurance, and legal issues. Upon completion, students should be able to demonstrate proficiency in the production of diagnostically acceptable radiographs using appropriate safety precautions.

Prerequisites: DEN 110.

Corequisites: None.

When Offered: (S)

DEN 120 - Dental Hyg Preclinic Lec

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course introduces preoperative and clinical dental hygiene concepts. Emphasis is placed on the assessment phase of patient care as well as the theory of basic dental hygiene instrumentation. Upon completion, students should be able to collect and evaluate patient data at a basic level and demonstrate basic knowledge of dental hygiene instrumentation.

Prerequisites: Enrollment in the Dental Hygiene program.

Corequisites: DEN 121.

When Offered: (F)

DEN 121 - Dental Hygiene Precl Lab

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 2

This course provides the opportunity to perform clinical dental hygiene procedures discussed in DEN 120. Emphasis is placed on clinical skills in patient assessment and instrumentation techniques. Upon completion, students should be able to demonstrate the ability to perform specific preclinical procedures.

Prerequisites: Enrollment in the Dental Hygiene program.

Corequisites: DEN 120.

When Offered: (F)

DEN 123 - Nutrition/Dental Health

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course introduces basic principles of nutrition with emphasis on nutritional requirements and their application to individual patient needs. Topics include the study of the food pyramid, nutrient functions, Recommended Daily Allowances, and related psychological principles. Upon completion, students should be able to recommend and counsel individuals on their food intake as related to their dental health.

Prerequisites: Enrollment in the Dental Hygiene program.

Corequisites: None.

When Offered: (SU)

DEN 124 - Periodontology

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course provides an in-depth study of the periodontium, periodontal pathology, periodontal monitoring, and the principles of periodontal therapy. Topics include periodontal anatomy and a study of the etiology, classification, and treatment modalities of periodontal diseases. Upon completion, students should be able to describe, compare, and contrast techniques involved in periodontal/maintenance therapy, as well as patient care management.

Prerequisites: DEN 110.

Corequisites: None.

When Offered: (S)

DEN 130 - Dental Hygiene Theory I

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of the didactic dental hygiene concepts necessary for providing an oral prophylaxis. Topics include deposits/removal, instrument sharpening, patient education, fluorides, planning for dental hygiene treatment, charting, and clinical records and procedures. Upon completion, students should be able to demonstrate knowledge needed to complete a thorough oral prophylaxis.

Prerequisites: DEN 120.

Corequisites: DEN 131.

When Offered: (S)

DEN 131 - Dental Hygiene Clinic I

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 9 Credit: 3

This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of the recall patients with gingivitis or light deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

Prerequisites: DEN 121.

Corequisites: DEN 130.

When Offered: (S)

DEN 140 - Dental Hygiene Theory II

Hours--Class: 1 Lab: 0 Clinic/Work Exp: 0 Credit: 1

This course provides a continuation of the development, theory, and practice of patient care. Topics include modification of treatment for special needs patients, advanced radiographic interpretation, and ergonomics. Upon completion, students should be able to differentiate necessary treatment modifications, effective ergonomic principles, and radiographic abnormalities.

Prerequisites: DEN 130.

Corequisites: DEN 141.

When Offered: (SU)

DEN 141 - Dental Hygiene Clinic II

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 6 Credit: 2

This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of patients with early periodontal disease and subgingival deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

Prerequisites: DEN 131.

Corequisites: DEN 140.

When Offered: (SU)

DEN 220 - Dental Hygiene Theory III

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course introduces advanced principles of patient care. Topics include advanced periodontal debridement, subgingival irrigation, air polishing, special needs and case presentations. Upon completion, students should be able to demonstrate knowledge of methods of treatment and management of periodontally compromised and special needs patients.

Prerequisites: DEN 140.

Corequisites: DEN 221.

When Offered: (F)

DEN 221 - Dental Hygiene Clinic III

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 12 Credit: 4

This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of patients with moderate to advanced periodontal involvement and moderate deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

Prerequisites: DEN 141.

Corequisites: DEN 220.

When Offered: (F)

DEN 222 - General & Oral Pathology

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course provides a general knowledge of oral pathological manifestations associated with selected systemic and oral diseases. Topics include developmental and degenerative diseases, selected microbial diseases, specific and nonspecific immune and inflammatory responses with emphasis on recognizing abnormalities. Upon completion, students should be able to differentiate between normal and abnormal tissues and refer unusual findings to the dentist for diagnosis.

Prerequisites: BIO 163 or BIO 168.

Corequisites: None.

When Offered: (S)

DEN 223 - Dental Pharmacology

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course provides basic drug terminology, general principles of drug actions, dosages, routes of administration, adverse reactions, and basic principles of anesthesiology. Emphasis is placed on knowledge of drugs in overall understanding of patient histories and health status. Upon completion, students should be able to recognize that each patient's general health or drug usage may require modification of the treatment procedures.

Prerequisites: Enrollment in the Dental Hygiene program.

Corequisites: BIO 163 or BIO 168.

When Offered: (F)

DEN 224 - Materials and Procedures

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course introduces the physical properties of materials and related procedures used in dentistry. Topics include restorative and preventive materials, fabrication of casts and appliances, and chairside functions of the dental hygienist. Upon completion, students should be able to demonstrate proficiency in the laboratory and/or clinical application of routinely used dental materials and chairside functions.

Prerequisites: DEN 111.

Corequisites: None.

When Offered: (S)

DEN 230 - Dental Hygiene Theory IV

Hours--Class: 1 Lab: 0 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to increase knowledge of the profession. Emphasis is placed on dental specialties, technological advances, and completion of a case study presentation. Upon completion, students should be able to demonstrate knowledge of various disciplines of dentistry, technological advances and principles of case presentations.

Prerequisites: DEN 220.

Corequisites: DEN 231.

When Offered: (S)

DEN 231 - Dental Hygiene Clinic IV

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 12 Credit: 4

This course continues skill development in providing an oral prophylaxis. Emphasis is placed on periodontal maintenance and on treating patients with moderate to advanced/refractory periodontal disease. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

Prerequisites: DEN 221.

Corequisites: DEN 230.

When Offered: (S)

DEN 232 - Community Dental Health

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course provides a study of the principles and methods used in assessing, planning, implementing, and evaluating community dental health programs. Topics include epidemiology, research methodology, biostatistics, preventive dental care, dental health education, program planning, and financing and utilization of dental services. Upon completion, students should be able to assess, plan, implement, and evaluate a community dental health program.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

DEN 233 - Professional Development

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course includes professional development, ethics, and jurisprudence with applications to practice management. Topics include conflict management, state laws, résumés, interviews, and legal liabilities as health care professionals. Upon completion, students should be able to demonstrate the ability to practice dental hygiene within established ethical standards and state laws.

Prerequisites: Enrollment in the Dental Hygiene program.

Corequisites: None.

When Offered: (S)

Drafting

DFT 111 - Technical Drafting I

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

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

Prerequisites: DFT 151 with a grade of C or higher.

Corequisites: DFT 111A.

When Offered: (S)

DFT 111A - Technical Drafting I Lab

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course provides a laboratory setting to enhance basic drafting skills. Emphasis is placed on practical experiences that enhance the topics presented in DFT 111. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in DFT 111.

Prerequisites: DFT 151, with a grade of C or higher.

Corequisites: DFT 111.

When Offered: (S)

DFT 117 - Technical Drafting

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course introduces basic drafting practices for non-drafting majors. Emphasis is placed on instrument use and care, shape and size description, sketching, and pictorials. Upon completion, students should be able to produce drawings of assigned parts.

Prerequisites: DFT 151 with a grade of C or higher.

Corequisites: None.

When Offered: (F)

DFT 151 - CAD I

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S)

DFT 153 - CAD III

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course introduces advanced CAD applications. Emphasis is placed upon advanced applications of CAD skills. Upon completion, students should be able to use advanced CAD applications to generate and manage data.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

DFT 170 - Engineering Graphics (Coll/Tran)

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces basic engineering graphics skills and applications. Topics include sketching, selection and use of current methods and tools, and the use of engineering graphics applications. Upon completion, students should be able to demonstrate an understanding of basic engineering graphics principles and practices.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (S)

Developmental Mathematics

DMA 010 - Operations With Integers

Hours--Class: 0.75 Lab: 0.5 Clinic/Work Exp: 0 Credit: 1

This course provides a conceptual study of integers and integer operations. Topics include integers, absolute value, exponents, square roots, perimeter and area of basic geometric figures, Pythagorean theorem, and use of the correct order of operations. Upon completion, students should be able to demonstrate an understanding of pertinent concepts and principles and apply this knowledge in the evaluation of expressions.

Prerequisites: DRE 096 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S,SU)

DMA 020 - Fractions and Decimals

Hours--Class: 0.75 Lab: 0.5 Clinic/Work Exp: 0 Credit: 1

This course provides a conceptual study of the relationship between fractions and decimals and covers related problems. Topics include application of operations and solving contextual application problems, including determining the circumference and area of circles with the concept of pi. Upon completion, students should be able to demonstrate an understanding of the connections between fractions and decimals.

Prerequisites: DMA 010 and DRE 096, or by placement testing.

Corequisites: None.

When Offered: (F,S,SU)

DMA 030 - Propor/Ratio/Rate/Percent

Hours--Class: 0.75 Lab: 0.5 Clinic/Work Exp: 0 Credit: 1

This course provides a conceptual study of the problems that are represented by rates, ratios, percent, and proportions. Topics include rates, ratios, percent, proportion, conversion of English and metric units, and applications of the geometry of similar triangles. Upon completion, students should be able to use their understanding to solve conceptual application problems.

Prerequisites: DMA 010, DMA 020, and DRE 096, or by placement testing.

Corequisites: None.

When Offered: (F,S,SU).

DMA 040 - Express/Lin Equat/Inequal

Hours--Class: 0.75 Lab: 0.5 Clinic/Work Exp: 0 Credit: 1

This course provides a conceptual study of problems involving linear expressions, equations, and inequalities. Emphasis is placed on solving contextual application problems. Upon completion, students should be able to distinguish between simplifying expressions and solving equations and apply this knowledge to problems involving linear expressions, equations, and inequalities.

Prerequisites: DMA 010, DMA 020, DMA 030, and DRE 097, or by placement testing.

Corequisites: None.

When Offered: (F,S,SU)

DMA 050 - Graphs/Equations of Lines

Hours--Class: 0.75 Lab: 0.5 Clinic/Work Exp: 0 Credit: 1

This course provides a conceptual study of problems involving graphic and algebraic representations of lines. Topics include slope, equations of lines, interpretation of basic graphs, and linear modeling. Upon completion, students should be able to solve contextual application problems and represent realworld situations as linear equations in two variables.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, and DRE 097, or by placement testing.

Corequisites: None.

When Offered: (F,S,SU)

DMA 060 - Polynomial/Quadratic Appl

Hours--Class: 0.75 Lab: 0.5 Clinic/Work Exp: 0 Credit: 1

This course provides a study of problems involving algebraic representations of quadratic equations. Topics include basic polynomial operations, factoring polynomials, and solving polynomial equations by means of factoring. Upon

completion, students should be able to find algebraic solutions to contextual problems with quadratic applications.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, and DRE 097, or by placement testing.

Corequisites: None.

When Offered: (F,S,SU).

DMA 065 - Algebra for Precalculus

Hours--Class: 1.5 Lab: 1 Clinic/Work Exp: 0 Credit: 2

This course provides a study of problems involving algebraic representations of quadratic, rational, and radical equations. Topics include simplifying polynomial, rational, and radical expressions and solving quadratic, rational, and radical equations. Upon completion, students should be able to find algebraic solutions to contextual problems with quadratic and rational applications.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, and DRE 097, or by placement testing.

Corequisites: None.

When Offered: (F,S,SU).

Drama

DRA 111 - Theatre Appreciation (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a study of the art, craft, and business of the theatre. Emphasis is placed on the audience's appreciation of the work of the playwright, director, actor, designer, producer, and critic. Upon completion, students should be able to demonstrate a vocabulary of theatre terms and to recognize the contributions of various theatre artists.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S,SU)

DRA 112 - Literature of the Theatre (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a survey of dramatic works from the classical Greek through the present. Emphasis is placed on the language of drama, critical theory, and background as well as on play reading and analysis. Upon completion, students should be able to articulate, orally and in writing, their appreciation and understanding of dramatic works.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

DRA 115 - Theatre Criticism (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is designed to develop a critical appreciation of the theatre from the viewpoint of the audience/consumer. Emphasis is placed on viewing, discussing, and evaluating selected theatre performance, either live or on film/video. Upon completion, students should be able to express their critical judgments both orally and in writing.

Prerequisites: DRA 111.

Corequisites: None.

When Offered: (On demand)

DRA 120 - Voice for Performance (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides guided practice in the proper production of speech for the theatre. Emphasis is placed on improving speech, including breathing, articulation, pronunciation, and other vocal variables. Upon completion, students should be able to demonstrate effective theatrical speech.

Prerequisites: None

Corequisites: None.

When Offered: (F)

DRA 122 - Oral Interpretation (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the dramatic study of literature through performance. Emphasis is placed on analysis and performance of poetry, drama, and prose fiction. Upon completion, students should be able to embody and discuss critically the speakers inherent in literature.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

DRA 124 - Readers Theatre (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a theoretical and applied introduction to the medium of readers theatre. Emphasis is placed on the group performance considerations posed by various genres of literature. Upon completion, students should be able to adapt and present a literary script following the conventions of readers theatre.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

DRA 126 - Storytelling (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the art of storytelling and the oral traditions of folk literature. Topics include the history of storytelling, its value and purpose, techniques of the storyteller, and methods of collecting verbal art. Upon completion, students should be able to present and discuss critically stories from the world's repertory of traditional lore.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

DRA 128 - Children's Theatre (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the philosophy and practice involved in producing plays for young audiences. Topics include the selection of age-appropriate scripts and the special demands placed on directors, actors, designers, and educators in meeting the needs of young audiences. Upon completion, students should be able to present and critically discuss productions for children.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

DRA 130 - Acting I (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course provides an applied study of the actor's craft. Topics include role analysis, training the voice, and body concentration, discipline, and self-evaluation. Upon completion, students should be able to explore their creativity in an acting ensemble.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

DRA 131 - Acting II (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course provides additional hands-on practice in the actor's craft. Emphasis is placed on further analysis, characterization, growth, and training for acting competence. Upon completion, students should be able to explore their creativity in an acting ensemble.

Prerequisites: DRA 130.

Corequisites: None.

When Offered: (S)

DRA 132 - Stage Movement (Coll/Tran)

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course provides an applied study of selected principles of stage movement for actors. Topics include improvisation, mime, stage combat, clowning, choreography, and masks. Upon completion, students should be able to focus properly on stage, to create characters, and to improvise scenes, perform mimes, fight, clown, juggle, and waltz.

Prerequisites: None.

Corequisites: DRA 111.

When Offered: (On demand)

DRA 135 - Acting for the Camera I (Coll/Tran)

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course provides an applied study of the camera actor's craft. Topics include commercial, dramatic, and print performance styles. Upon completion, students should be able to explore their creativity in on-camera performance.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

DRA 136 - Acting for the Camera II (Coll/Tran)

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course provides additional hands-on study of the camera actor's craft. Emphasis is placed on more advanced camera acting theories, auditioning techniques, daytime drama, feature film, and print advertisement performance styles. Upon completion, students should be able to explore their creativity in on-camera performance.

Prerequisites: DRA 135.

Corequisites: None.

When Offered: (On demand)

DRA 140 - Stagecraft I (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course introduces the theory and basic construction of stage scenery and properties. Topics include stage carpentry, scene painting, stage electrics, properties, and backstage organization. Upon completion, students should be able to pursue vocational and avocational roles in technical theatre.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

DRA 141 - Stagecraft II (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course provides additional hands-on practice in the elements of stagecraft. Emphasis is placed on the design and implementation of the arts and crafts of technical theatre. Upon completion, students should be able to pursue vocational or avocational roles in technical theatre.

Prerequisites: DRA 140.

Corequisites: None.

When Offered: (On demand)

DRA 142 - Costuming (Coll/Tran)

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers the techniques of costume construction and crafts processes. Emphasis is placed on learning costuming techniques, using equipment and materials, and finishing production-appropriate costumes. Upon completion, students should be able to demonstrate an understanding of pattern drafting, construction techniques, and costume fitting procedures.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

DRA 145 - Stage Make-up (Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course covers the research, design, selection of materials, and application of stage make-up, prosthetics, wigs, and hairpieces. Emphasis is

placed on the development of techniques, style, and presentation of the finished makeup. Upon completion, students should be able to create and apply make-up, prosthetics, and hairpieces.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

DRA 170 - Play Production I (Coll/Tran)

Hours--Class: 0 Lab: 9 Clinic/Work Exp: 0 Credit: 3

This course provides an applied laboratory study of the processes involved in the production of a play. Topics include fundamental practices, principles, and techniques associated with producing plays of various periods and styles. Upon completion, students should be able to participate in an assigned position with a college theatre production.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

DRA 171 - Play Production II (Coll/Tran)

Hours--Class: 0 Lab: 9 Clinic/Work Exp: 0 Credit: 3

This course provides an applied laboratory study of the processes involved in the production of a play. Topics include fundamental practices, principles, and techniques associated with producing plays of various periods and styles. Upon completion, students should be able to participate in an assigned position with a college theatre production.

Prerequisites: DRA 170.

Corequisites: None.

When Offered: (F,S)

DRA 211 - Theatre History I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the development of theatre from its origin to the closing of the British theatre in 1642. Topics include the history, aesthetics, and representative dramatic literature of the period. Upon completion, students should be able to trace the evolution of theatre and recognize the styles and types of world drama.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

DRA 212 - Theatre History II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the development of theatre from 1660 through the diverse influences which shaped the theatre of the twentieth century. Topics include the history, aesthetics, and representative dramatic literature of the period. Upon completion, students should be able to trace the evolution of theatre and recognize the styles and types of world drama.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

DRA 240 - Lighting for the Theatre (Coll/Tran)

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course is an applied study of theatre lighting and is designed to train theatre technicians. Emphasis is placed on lighting technology including the mechanics of lighting and light control equipment by practical work with lighting equipment. Upon completion, students should be able to demonstrate competence with lighting equipment.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

DRA 260 - Directing (Coll/Tran)

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course provides an analysis and application of the techniques of theatrical directing. Topics include script selection, analysis, casting, rehearsal planning, blocking, stage business, tempo, and technical considerations. Upon

completion, students should be able to plan, execute, and critically discuss a student-directed production.

Prerequisites: DRA 130.

Corequisites: DRA 140.

When Offered: (F)

DRA 270 - Play Production III (Coll/Tran)

Hours--Class: 0 Lab: 9 Clinic/Work Exp: 0 Credit: 3

This course provides an applied laboratory study of the processes involved in the production of a play. Topics include fundamental practices, principles, and techniques associated with producing plays of various periods and styles. Upon completion, students should be able to participate in an assigned position with a college theatre production.

Prerequisites: DRA 171.

Corequisites: None.

When Offered: (F,S)

DRA 271 - Play Production IV (Coll/Tran)

Hours--Class: 0 Lab: 9 Clinic/Work Exp: 0 Credit: 3

This course provides an applied laboratory study of the processes involved in the production of a play. Topics include fundamental practices, principles, and techniques associated with producing plays of various periods and styles. Upon completion, students should be able to participate in an assigned position with a college theatre production.

Prerequisites: DRA 270.

Corequisites: None.

When Offered: (F,S)

Developmental Reading

DRE 096 - Integrated Reading and Writing

Hours--Class: 2.5 Lab: 1 Clinic/Work Exp: 0 Credit: 3

This course is designed to develop proficiency in specific integrated and contextualized reading and writing skills and strategies. Topics include reading and writing processes, critical thinking strategies, and recognition and composition of well-developed, coherent, and unified texts; these topics are primarily taught at the introductory level using texts primarily in a Lexile® range of 960 to 1115. Upon completion, students should be able to apply those skills toward understanding a variety of academic and career-related texts and composing effective paragraphs.

Prerequisites: Appropriate placement test score or successful completion of English Foundations.

Corequisites: None.

When Offered: (F,S,SU)

DRE 097 - Integrated Reading Writing II

Hours--Class: 2.5 Lab: 1 Clinic/Work Exp: 0 Credit: 3

This course is designed to develop proficiency in integrated and contextualized reading and writing skills and strategies. Topics include reading and writing processes, critical thinking strategies, and recognition and composition of well-developed, coherent, and unified texts; except where noted, these topics are taught at a reinforcement level using texts primarily in a Lexile® range of 1070 to 1220. Upon completion, students should be able to demonstrate and apply those skills toward understanding a variety of complex academic and career texts and composing essays incorporating relevant, valid evidence.

Prerequisites: DRE 096.

Corequisites: None.

When Offered: (F,S,SU)

DRE 098 - Integrated Reading Writing III

Hours--Class: 2.5 Lab: 1 Clinic/Work Exp: 0 Credit: 3

This course is designed to develop proficiency in integrated and contextualized reading and writing skills and strategies. Topics include reading and writing processes, critical thinking strategies, and recognition and composition of well-developed, coherent, and unified texts; these topics are taught using texts primarily in the Lexile® range of 1185 to 1385. Upon completion, students

should be able to apply those skills toward understanding a variety of texts at the career and college ready level and toward composing a documented essay.

Prerequisites: DRE 097.

Corequisites: None.

When Offered: (F,S,SU)

DRE 099 - Integrated Reading Writing III

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course is designed to develop proficiency in integrated and contextualized reading and writing skills and strategies by complementing, supporting and reinforcing material covered in ENG 111. Topics include reading and writing processes, critical thinking strategies, and recognition and composition of well-developed, coherent, and unified texts; except where noted, these topics are taught using texts primarily in the Lexile® range of 1185 to 1385. Upon completion, students should be able to apply those skills toward understanding a variety of texts at the career and college ready level and toward composing a documented essay.

Prerequisites: DRE 097.

Corequisites: ENG 111.

When Offered: (F,S,SU)

Economics

ECO 251 - Prin of Microeconomics (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces economic analysis of individual, business, and industry in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

ECO 252 - Prin of Macroeconomics (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

Electroneurodiagnostic Technology

EDT 110 - Neuroscience/Pathol Cond

Hours--Class: 4 Lab: 0 Clinic/Work Exp: 0 Credit: 4

This course covers the anatomy and physiology of the nervous system as well as those disease processes which affect nervous system components. Topics include anatomy, physiology, and pathology of the neuron, brain, spinal cord, peripheral nerves, and the special senses. Upon completion, students should be able to understand the structure and function of the nervous system and how this structure/function is affected by specific diseases.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

EDT 111 - Laboratory Management

Hours--Class: 1 Lab: 0 Clinic/Work Exp: 0 Credit: 1

This course provides the skills and knowledge necessary to effectively manage and/or function as a team player in an electroneurodiagnostics department. Topics include the role of an effective manager, the role of a team

player, techniques for scheduling, record keeping/storage, and creation/implementation of department policies. Upon completion, students should be able to understand those skills necessary to manage an electroneurodiagnostics department, both independently and as a team worker.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

EDT 111A - EDT Laboratory Basics

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is designed to be offered as a supplemental lab for the EDT 111 course. Emphasis is placed on interview skills, system of electrode placement, and the role of effective communication in the EDT department. Upon completion, students should be able to demonstrate basic competencies in preparation for performing electroneurodiagnostic testing.

Prerequisites: None.

Corequisites: EDT 111.

When Offered: (F)

EDT 112 - Instrument/Record Methods

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers theories of electrode placement, various instrumentation components used in neurological testing, and optimal recording techniques based on patient status. Topics include the International 10-20 System of electrode placement, electrode types/applications, electronics applicable to neurological testing, instrument controls, montages, and polarity/localization. Upon completion, students should be able to understand the theories underlying optimal utilization of electrodes and instrumentation for neurological testing.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

EDT 113 - Clinical Correlates

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course covers normal and abnormal neurological test findings associated with the anatomy/physiology/pathology covered in EDT 110. Topics include normal and abnormal neurological test results, artifacts, and activation procedures utilizing teaching records from affiliated laboratories. Upon completion, students should be able to identify patterns and artifacts on neurological tests in order that optimal recording strategies may be utilized.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

EDT 114 - Special Procedures

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a basic understanding of special testing procedures used in neurological diagnosis. Topics include foundations of evoked potentials, nerve conduction studies, operating room monitoring, ambulatory EEGs, long-term video monitoring, polysomnography, and various radiological procedures. Upon completion, students should be able to demonstrate an understanding of the principles of various special procedures used in neurological diagnosis.

Prerequisites: EDT 112.

Corequisites: None.

When Offered: (F)

EDT 115 - EDT Laboratory Practice

Hours--Class: 0 Lab: 6 Clinic/Work Exp: 0 Credit: 2

This course provides a practical application of theories covered in previous EDT courses. Emphasis is placed on practical skill development in neurological testing, appropriate patient rapport, infection control, and electrical safety guidelines, using mock situations. Upon completion, students should be able to conduct optimal neurological testing in mock situations.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

EDT 116 - EDT Clinical Experience

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 36 Credit: 12

This course provides clinical experience in a hospital neurology department under the supervision of a qualified technologist. Emphasis is placed on qualified interaction between patients/families and hospital personnel and optimal skill level development in neurological testing. Upon completion, students should be able to conduct themselves professionally in a hospital setting and conduct optimal neurological studies as ordered by physicians.

Prerequisites: EDT 118.

Corequisites: None.

When Offered: (S)

EDT 118 - EDT Laboratory Practice II

Hours--Class: 0 Lab: 9 Clinic/Work Exp: 0 Credit: 3

This course is a continuation of EDT 115. Emphasis is placed on practical skills developed in neurological testing, to include the basic EEG along with special testing procedures. Upon completion, students should be able to conduct neurological testing in mock situations.

Prerequisites: EDT 115.

Corequisites: EDT 114.

When Offered: (F)

Education

EDU 119 - Intro to Early Child Educ

Hours--Class: 4 Lab: 0 Clinic/Work Exp: 0 Credit: 4

This course introduces the foundations of early childhood education, the diverse educational settings for young children, professionalism and planning intentional developmentally appropriate experiences for each child. Topics include theoretical foundations, national early learning standards, NC Foundations for Early Learning and Development, state regulations, program types, career options, professionalism, ethical conduct, quality inclusive environments, and curriculum responsive to the needs of each child/family. Upon completion, students should be able to design a career/professional development plan, appropriate environments, schedules, and activity plans.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

EDU 131 - Child, Family, & Community

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the development of partnerships between culturally, linguistically and ability diverse families, children, schools and communities through the use of evidence-based strategies. Emphasis is placed on developing skills and identifying benefits for establishing, supporting, and maintaining respectful, collaborative relationships between diverse families, programs/schools, and community agencies/resources reflective of the NAEYC Code of Ethical Conduct. Upon completion, students should be able to identify appropriate relationship building strategies between diverse families, children, schools, and communities and demonstrate a variety of communication skills including appropriate use of technology to support every child.

Prerequisites: None.

Corequisites: DRE 097 or appropriate placement test score.

When Offered: (F)

EDU 144 - Child Development I

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from conception through approximately 36 months. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental

characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse.

Prerequisites: None.

Corequisites: DRE 097 or appropriate placement test score.

When Offered: (F)

EDU 145 - Child Development II

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from preschool through middle childhood. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse.

Prerequisites: None.

Corequisites: DRE 097 or appropriate placement test score.

When Offered: (S)

EDU 146 - Child Guidance

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces evidence-based strategies to build nurturing relationships with each child by applying principles and practical techniques to facilitate developmentally appropriate guidance. Topics include designing responsive/supportive learning environments, cultural, linguistic and socio-economic influences on behavior, appropriate expectations, the importance of communication with children/families including using technology and the use of formative assessments in establishing intentional strategies for children with unique needs. Upon completion, students should be able to demonstrate direct/indirect strategies to encourage social skills, self-regulation, emotional expression and positive behaviors while recognizing the relationship between children's social, emotional and cognitive development.

Prerequisites: None.

Corequisites: DRE 097 or appropriate placement test score.

When Offered: (S)

EDU 151 - Creative Activities

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces developmentally supportive creative learning environments with attention to divergent thinking, creative problem-solving, evidence-based teaching practices, and open-ended learning materials while applying NC Foundations for Early Learning and Development. Emphasis is placed on observation of process driven learning experiences in art, music, creative movement, dance, and dramatics for every young child age birth through eight, integrated through all domains and academic content. Upon completion, students should be able to examine, create, and adapt developmentally creative learning materials, experiences, and environments for children that are culturally, linguistically, and ability diverse.

Prerequisites: None.

Corequisites: DRE 097 or appropriate placement test score.

When Offered: (F)

EDU 153 - Health, Safety, & Nutrition

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers promoting and maintaining the health and well-being of every child. Topics include health and nutritional guidelines, common childhood illnesses, maintaining safe and healthy learning environments, health benefits of active play, recognition and reporting of abuse/neglect, and state regulations. Upon completion, students should be able to apply knowledge of NC Foundations for Early Learning and Development for health, safety, nutritional needs and safe learning environments.

Prerequisites: None.

Corequisites: DRE 097 or appropriate placement test score.

When Offered: (S)

EDU 216 - Foundations of Education

Hours--Class: 4 Lab: 0 Clinic/Work Exp: 0 Credit: 4

This course introduces the American educational system and the teaching profession. Topics include the historical and philosophical influences on education, various perspectives on educational issues, and experiences in K-12 classrooms. Upon completion, students should be able to reflect on classroom observations, analyze the different educational approaches, including classical/traditional and progressive, and have knowledge of the various roles of educational systems at the federal, state and local level.

Prerequisites: None.

Corequisites: DRE 098 or appropriate placement test score.

When Offered: (On demand)

EDU 221 - Children with Exceptionalities

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers atypical patterns of child development, inclusive/diverse settings, evidenced-based educational/family plans, differentiated instruction, adaptive materials, and assistive technology. Emphasis is placed on the characteristics of exceptionalities and delays, early intervention/special education, transitions, observation, developmental screening, formative assessment of children, and collaborating with families and community partners. Upon completion, students should be able to recognize diverse abilities, describe the referral process, identify community resources, explain the importance of collaboration with families/professionals, and develop appropriate strategies/adaptations to support children in all environments with best practices as defined by laws, policies and the NC Foundations for Early Learning and Development.

Prerequisites: EDU 144 and EDU 145, or PSY 244 and PSY 245.

Corequisites: DRE 098 or appropriate placement test score.

When Offered: (F)

EDU 234 - Infants, Toddlers, and Twos

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the development of high-quality, individualized, responsive/engaging relationships and experiences for infants, toddlers, and twos. Emphasis is placed on typical and atypical child development, positive early learning experiences, supporting and engaging diverse families, providing safe, warm and nurturing interactions, and the application of the NC Foundations for Early Learning and Development. Upon completion, students should be able to demonstrate responsive planning, respectful relationships and exposure to a variety of developmentally appropriate experiences/materials that support a foundation for healthy development and growth of culturally, linguistically and ability diverse children birth to 36 months.

Prerequisites: EDU 119.

Corequisites: DRE 098 or appropriate placement test score.

When Offered: (S)

EDU 235 - School-Age Develop & Programs

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course includes developmentally appropriate practices in group settings for school-age children. Emphasis is placed on principles of development, environmental planning, and positive guidance techniques and program development. Upon completion, students should be able to discuss developmental principles for culturally, linguistically, and ability diverse children ages five to twelve and plan and implement developmentally appropriate programs and activities.

Prerequisites: None.

Corequisites: DRE 098 or appropriate placement test score.

When Offered: (On demand)

EDU 251 - Exploration Activities

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers fundamental concepts in the content areas of science, technology, engineering, math and social studies through investigative experiences. Emphasis is placed on exploring fundamental concepts, developmentally appropriate scope and sequence, and teaching strategies to

engage each child in the discovery approach. Upon completion, students should be able to understand major concepts in each content area and implement appropriate experiences for young children.

Prerequisites: None.

Corequisites: DRE 098 or appropriate placement test score

When Offered: (S)

EDU 259 - Curriculum Planning

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is designed to focus on using content knowledge to build developmentally effective approaches for culturally/linguistically/ability diverse young children. Topics include components of curriculum, a variety of curriculum models, authentic observation and assessment, and planning developmentally appropriate experiences aligned with the NC Foundations for Early Learning and Development. Upon completion, students should be able to understand, evaluate, and use curriculum to plan for individual/group needs

Prerequisites: EDU 119.

Corequisites: DRE 098 or appropriate placement test score.

When Offered: (F)

EDU 261 - Early Childhood Admin I

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces principles and practices essential to preparing and supporting child care administrators. Topics include program philosophy, policies and procedures, NC Child Care Law and Rules, business planning, personnel and fiscal management, and NAEYC Code of Ethical Conduct Supplement for Early Childhood Program Administration. Upon completion, students should be able to articulate a developmentally appropriate program philosophy, locate current state licensing regulations, analyze a business plan and examine comprehensive program policies and procedures.

Prerequisites: None.

Corequisites: DRE 098 or appropriate placement test score and EDU 119.

When Offered: (F)

EDU 262 - Early Childhood Admin II

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course focuses on advocacy/leadership, public relations/community outreach and program quality/evaluation for diverse early childhood programs. Topics include program evaluation/accreditation, involvement in early childhood professional organizations, leadership/mentoring, family, volunteer and community involvement and early childhood advocacy. Upon completion, students should be able to define and evaluate all components of early childhood programs, develop strategies for advocacy and integrate community into programs.

Prerequisites: DRE 098 or appropriate placement test score, EDU 119, and EDU 261.

Corequisites: None.

When Offered: (S)

EDU 271 - Educational Technology

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the ethical use of technology to enhance teaching and learning in all educational settings. Emphasis is placed on technology concepts, ethical issues, digital citizenship, instructional strategies, assistive technology, and the use of technology for professional development and communication. Upon completion, students should be able to discuss technology concepts, ethically use a variety of technology resources, demonstrate appropriate technology skills in educational environments, and identify assistive technology.

Prerequisites: None.

Corequisites: DRE 098 or appropriate placement test score

When Offered: (F)

EDU 275 - Effective Teach Train

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course provides specialized training using an experienced-based approach to learning. Topics include instructional preparation and presentation, student interaction, time management, learning expectations,

evaluation, and curriculum principles and planning. Upon completion, students should be able to prepare and present a six-step lesson plan and demonstrate ways to improve students' time-on-task.

Prerequisites: None.

Corequisites: DRE 098 or appropriate placement test score.

When Offered: (On demand)

EDU 280 - Language/Literacy Experiences

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides evidence-based strategies for enhancing language and literacy experiences that align with NC Foundations for Early Learning and Development. Topics include developmental sequences for children's emergent receptive and expressive language, print concepts, appropriate observations/assessments, literacy enriched environments, quality selection of diverse literature, interactive media, and inclusive practices. Upon completion, students should be able to select, plan, implement and evaluate developmentally appropriate language and literacy experiences for children who are culturally, linguistically and ability diverse.

Prerequisites: None.

Corequisites: DRE 098 or appropriate placement test score.

When Offered: (S)

EDU 284 - Early Child Capstone Prac

Hours--Class: 1 Lab: 9 Clinic/Work Exp: 0 Credit: 4

This course is designed to allow students to demonstrate acquired skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on designing, implementing and evaluating developmentally appropriate activities and environments for all children; supporting/engaging families; and modeling reflective and professional practices based on national and state guidelines. Upon completion, students should be able to apply NC Foundations for Early Learning and Development to demonstrate developmentally appropriate plans/assessments, appropriate guidance techniques and ethical/professional behaviors, including the use of appropriate technology, as indicated by assignments and onsite faculty assessments.

Prerequisites: EDU 119, EDU 144, EDU 145, EDU 146, EDU 151.

Corequisites: DRE 098 or appropriate placement test score.

When Offered: (S)

Engineering

EGR 110 - Intro to Engineering Tech

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course introduces general topics relevant to engineering technology. Topics include career assessment, professional ethics, critical thinking and problem solving, usage of college resources for study and research, and using tools for engineering computations. Upon completion, students should be able to choose a career option in engineering technology and utilize college resources to meet their educational goals.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

EGR 150 - Intro to Engineering

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is an overview of the engineering profession. Topics include goal setting and career assessment, ethics, public safety, the engineering method and design process, written and oral communication, interpersonal skills and team building, and computer applications. Upon completion, students should be able to understand the engineering process, the engineering profession, and utilize college resources to meet their educational goals.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

EGR 210 - Intro to Elec/Com Eng Lab (Coll/Tran)

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course provides an overview of electrical and computer engineering, through a lecture and laboratory setting. Topics include fundamental concepts, electronic circuits, digital circuits, communication systems, and signal processing. Upon completion, students should be able to discuss the wide range of fields available to the electrical or computer engineer.

Prerequisites: MAT 271, PHY 251.

Corequisites: None.

When Offered: (On demand)

EGR 212 - Logic System Design I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an introduction to digital circuits and analysis. Topics include Boolean Algebra; mixed logic; design of combinational circuits; introduction to sequential systems; and MSI building blocks. Upon completion, students should be able to analyze and design digital circuits and systems.

Prerequisites: MAT 271 and PHY 251.

Corequisites: None.

EGR 215 - Network Theory I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an introduction to Kirchoff's laws and terminal equations, circuit analysis techniques and network theorems, transient and natural response, and state variable analysis. Topics include Kirchoff's laws, Ohm's law, circuit analysis techniques, Network theorems, singularity functions, transient and natural responses, power, and state variable analysis. Upon completion, students should be able to analyze electric circuits involving capacitors, inductors, and resistors to determine required parameters.

Prerequisites: MAT 272 and PHY 251.

Corequisites: PHY 252 and MAT 273.

EGR 216 - Logic and Network Lab (Coll/Tran)

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course provides laboratory experiments in network measurements and logic design and laboratory equipment and techniques. Topics include network measurement and applications, experimental logic design and introduction to laboratory equipment and techniques. Upon completion, students should be able to complete network measurement logic design and be able to use laboratory equipment with proper techniques.

Prerequisites: MAT 272 and PHY 251.

Corequisites: EGR 212 and EGR 215.

EGR 220 - Engineering Statics (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the concepts of engineering based on forces in equilibrium. Topics include concentrated forces, distributed forces, forces due to friction, and inertia as they apply to machines, structures, and systems. Upon completion, students should be able to solve problems which require the ability to analyze systems of forces in static equilibrium.

Prerequisites: PHY 251.

Corequisites: MAT 272.

When Offered: (On demand)

EGR 225 - Engineering Dynamics (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the concepts of engineering based on the analysis of motion in Cartesian, cylindrical, and spherical coordinate systems. Topics include the two and three dimensional motion of particles and rigid bodies, the forces associated with that motion, and relative motion between two coordinate systems. Upon completion, students should be able to solve problems which require the ability to analyze the motion and forces involved in a dynamic system.

Prerequisites: EGR 220.

Corequisites: MAT 273.

EGR 228 - Intro to Solid Mechanics (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an introduction to engineering theory of deformable solids and applications. Topics include stress and deformation resulting from axial, torsion, and bending loads; shear and moment diagrams; Mohr's circle of stress; and strain and buckling of columns. Upon completion, students should be able to analyze solids subject to various forces and design systems using a variety of materials.

Prerequisites: EGR 220.

Corequisites: None.

EGR 251 - Statics

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers the concepts and principles of statics. Topics include systems of forces and moments on structures in two- and three-dimensions in equilibrium. Upon completion, students should be able to analyze forces and moments on structures.

Prerequisites: MAT 121 or MAT 171, must pass with grade of C or higher.

Corequisites: None.

When Offered: (F)

EGR 252 - Strength of Materials

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers the principles and concepts of stress analysis. Topics include centroids, moments of inertia, shear/moment diagrams, and stress and strain. Upon completion, students should be able to perform a stress and strain analysis on structural components.

Prerequisites: EGR 251.

Corequisites: None.

When Offered: (F)

EGR 285 - Design Project

Hours--Class: 0 Lab: 4 Clinic/Work Exp: 0 Credit: 2

This course provides the opportunity to design an instructor-approved project using previously acquired skills. Emphasis is placed on selection, proposal, design, testing, and documentation of the approved project. Upon completion, students should be able to present and demonstrate projects.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

Electronics**ELC 111 - Intro to Electricity**

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the fundamental concepts of electricity and test equipment to non-electrical/electronics majors. Topics include basic DC and AC principles (voltage, resistance, current, impedance); components (resistors, inductors, and capacitors); power; and operation of test equipment. Upon completion, students should be able to construct and analyze simple DC and AC circuits using electrical test equipment.

Prerequisites: DMA 030 or appropriate placement test score; DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

ELC 112 - DC/AC Electricity

Hours--Class: 3 Lab: 6 Clinic/Work Exp: 0 Credit: 5

This course introduces the fundamental concepts of and computations related to DC/AC electricity. Emphasis is placed on DC/AC circuits, components, operation of test equipment; and other related topics. Upon completion, students should be able to construct, verify, and analyze simple DC/AC circuits.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: DMA 010, DMA 020, DMA 030 or appropriate placement test score.

When Offered: (F,S)

ELC 113 - Residential Wiring

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

ELC 115 - Industrial Wiring

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: ELC 113 must pass with a grade of C or higher; DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (S)

ELC 117 - Motors and Controls

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: ELC 112, BPR 111, must pass with a grade of C or higher; DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S)

ELC 118 - National Electrical Code

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

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

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

ELC 119 - NEC Calculations

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

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

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: ELC 118.

When Offered: (F,S)

ELC 128 - Intro to PLC

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to install PLCs and create simple programs.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: ELC 117 or ELC 130.

When Offered: (S)

ELC 130 - Advanced Motors/Controls

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers motors concepts, construction and characteristics and provides a foundation in motor controls. Topics include motor control ladder logic, starters, timers, overload protection, braking, reduced voltage starting, SCR control, AC/DC drives, system and component level troubleshooting. Upon completion, students should be able to specify, connect, control, troubleshoot, and maintain motors and motor control systems.

Prerequisites: ATR 112, BPR 111, ELC 135; and ELC 111, ELC 112, or ELC 131.

Corequisites: None.

When Offered: (F,S)

ELC 131 - Circuit Analysis I

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: DMA 060, DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

ELC 133 - Circuit Analysis II

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 3 Credit: 4

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

Prerequisites: ELC 131, and MAT 121 or MAT 171, must pass with a grade of C or higher.

Corequisites: MAT 122 or MAT 172.

When Offered: (S)

ELC 135 - Electrical Machines I

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: ELC 112 or ELC 131, MAT 121 or MAT 171, must pass with a grade of C or higher; DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

ELC 213 - Instrumentation

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course covers the fundamentals of instrumentation used in industry. Emphasis is placed on electric, electronic, and other instruments. Upon completion, students should be able to install, maintain, and calibrate instrumentation.

Prerequisites: ELC 112 or ELC 131, ELN 229, must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

ELC 229 - Applications Project

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course provides an individual and/or integrated team approach to a practical project as approved by the instructor. Topics include project selection

and planning, implementation and testing, and a final presentation. Upon completion, students should be able to plan and implement an applications-oriented project.

Prerequisites: ELN 132, ELN 133, must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

Electronics

ELN 131 - Analog Electronics I

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course introduces the characteristics and applications of semiconductor devices and circuits. Emphasis is placed on analysis, selection, biasing, and applications. Upon completion, students should be able to construct, analyze, verify, and troubleshoot analog circuits using appropriate techniques and test equipment.

Prerequisites: ELC 131 must pass with a grade of C or higher.

Corequisites: None

When Offered: (F,S)

ELN 132 - Analog Electronics II

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course covers additional applications of analog electronic circuits with an emphasis on analog and mixed signal integrated circuits (IC). Topics include amplification, filtering, oscillation, voltage regulation, and other analog circuits. Upon completion, students should be able to construct, analyze, verify, and troubleshoot analog electronic circuits using appropriate techniques and test equipment.

Prerequisites: ELN 131 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S)

ELN 133 - Digital Electronics

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, medium scale integration (MSI) and large scale integration (LSI) circuits, analog to digital (A/D), and digital to analog (D/A) conversion, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.

Prerequisites: ELN 131 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S)

ELN 229 - Industrial Electronics

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course covers semiconductor devices used in industrial applications. Topics include the basic theory, application, and operating characteristics of semiconductor devices. Upon completion, students should be able to construct and/or troubleshoot these devices for proper operation in an industrial electronic circuit.

Prerequisites: ELC 112 or ELC 131 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S)

ELN 232 - Intro to Microprocessors

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: ELN 133, CSC 134 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

ELN 234 - Communication Systems

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: ELN 132 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

ELN 260 - Prog Logic Controllers

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

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

Prerequisites: ELN 133 or ELC 128, must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

Emergency Medical Science

EMS 110 - EMT

Hours--Class: 6 Lab: 6 Clinic/Work Exp: 0 Credit: 8

This course introduces basic emergency medical care. Topics include preparatory, airway, patient assessment, medical emergencies, trauma, infants and children, and operations. Upon completion, students should be able to demonstrate the knowledge and skills necessary to achieve North Carolina State or National Registry EMT certification.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

EMS 120 - Advanced EMT

Hours--Class: 4 Lab: 6 Clinic/Work Exp: 0 Credit: 6

This course is designed to provide the essential information on interventions/treatments appropriate to the Advanced EMT and is required for Advanced EMT certification. Topics include airway management, automatic external defibrillation, cardiac electrophysiology, vascular access, acid-base balance, pharmacology, medical emergencies, traumatic injuries, and fluids and electrolytes. Upon completion, students should be able to properly obtain vascular access, manage medical and trauma patients, utilize simple and advanced airways, and correctly interpret arterial blood gases.

Prerequisites: EMS 110.

Corequisites: EMS 121.

EMS 121 - AEMT Clinical Practicum

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 6 Credit: 2

This course provides the hospital and field internship/clinical experiences required in preparation for the Advanced EMT certification. Emphasis is placed on performing patient assessments, treatments, and interactions appropriate at the Advanced EMT level of care. Upon completion, students should be able to demonstrate competence at the Advanced EMT skill level.

Prerequisites: EMS 110.

Corequisites: EMS 120

EMS 122 - EMS Clinical Practicum I

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 3 Credit: 1

This course provides the introductory hospital clinical experience for the paramedic student. Emphasis is placed on mastering fundamental paramedic skills. Upon completion, students should be able to demonstrate competence with fundamental paramedic level skills.

Prerequisites: EMS 110.

Corequisites: EMS 130.

When Offered: (S)

EMS 130 - Pharmacology

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course introduces the fundamental principles of pharmacology and medication administration and is required for paramedic certification. Topics include medical terminology, pharmacological concepts, weights, measures, drug calculations, vascular access for fluids and medication administration and legislation. Upon completion, students should be able to accurately calculate drug dosages, properly administer medications, and demonstrate general knowledge of pharmacology.

Prerequisites: EMS 110; DMA 010, DMA 020, DMA 030, DMA 040 or appropriate placement test score.

Corequisites: EMS 122.

When Offered: (S)

EMS 131 - Advanced Airway Management

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is designed to provide advanced airway management techniques and is required for paramedic certification. Topics include respiratory anatomy and physiology, airway/ventilation, adjuncts, surgical intervention, and rapid sequence intubation. Upon completion, students should be able to properly utilize all airway adjuncts and pharmacology associated with airway control and maintenance.

Prerequisites: EMS 110.

Corequisites: None.

When Offered: (S)

EMS 140 - Rescue Scene Management

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course introduces rescue scene management. Topics include response to hazardous material conditions, incident command, and extrication of patients from a variety of situations. Upon completion, students should be able to recognize and manage rescue operations based upon initial and follow-up scene assessment. Students are expected to participate in hands-on training and simulated incidents.

Prerequisites: Enrollment in EMS program.

Corequisites: None.

When Offered: (SU)

EMS 160 - Cardiology I

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course introduces the study of cardiovascular emergencies and is required for paramedic certification. Topics include anatomy and physiology, pathophysiology, electrophysiology, and basic rhythm interpretation in the monitoring leads. Upon completion, students should be able to recognize and interpret basic rhythms.

Prerequisites: EMS 110, and Enrollment in EMS program.

Corequisites: None.

When Offered: (S)

EMS 220 - Cardiology II

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course provides an in-depth study of cardiovascular emergencies and is required for paramedic certification. Topics include assessment and treatment of cardiac emergencies, application and interpretation of advanced

electrocardiography utilizing the twelve-lead ECG, cardiac pharmacology, and patient care. Upon completion, students should be able to assess and treat patients utilizing American Heart Association guidelines.

Prerequisites: EMS 122, EMS 130, EMS 160.

Corequisites: None.

When Offered: (SU)

EMS 221 - EMS Clinical Practicum II

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 6 Credit: 2

This course provides clinical experiences in the hospital and/or field. Emphasis is placed on increasing the proficiency of students' skills and abilities in patient assessments and the delivery of care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

Prerequisites: EMS 122, EMS 130.

Corequisites: None.

When Offered: (SU)

EMS 231 - EMS Clinical Pract III

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 9 Credit: 3

This course provides clinical experiences in the hospital and/or field. Emphasis is placed on enhancing the students' skills and abilities in providing advanced level care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

Prerequisites: EMS 130, EMS 221.

Corequisites: None.

When Offered: (F)

EMS 235 - EMS Management

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course stresses the principles of managing a modern emergency medical service system. Topics include structure and function of municipal governments, EMS grantsmanship, finance, regulatory agencies, system management, legal issues, and other topics relevant to the EMS manager. Upon completion, students should be able to understand the principles of managing emergency medical service delivery systems.

Prerequisites: Enrollment in EMS program.

Corequisites: None.

When Offered: (F)

EMS 240 - Patients W/Special Challenges

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course includes concepts of crisis intervention and techniques of interacting with patients with special challenges and is required for paramedic certification. Topics include appropriate intervention and interaction for neglected, abused, terminally ill, chronically ill, technology assisted, bariatric, physically challenged, mentally challenged, or assaulted patients as well as behavioral emergencies. Upon completion, students should be able to recognize and manage the care of patients with special challenges.

Prerequisites: EMS 122, EMS 130.

Corequisites: None.

When Offered: (SU)

EMS 241 - EMS Clinical Practicum IV

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 12 Credit: 4

This course provides clinical experiences in the hospital and/or field. Emphasis is placed on mastering the skills/competencies required of the paramedic providing advanced-level care. Upon completion, students should be able to provide advanced-level patient care as an entry-level paramedic.

Prerequisites: EMS 130, EMS 231.

Corequisites: EMS 285.

When Offered: (S)

EMS 250 - Medical Emergencies

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides an in-depth study of medical conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include appropriate interventions/treatments for disorders/

diseases/injuries affecting the following systems: respiratory, neurological, abdominal/gastrointestinal, endocrine, genitourinary, musculoskeletal, and immunological as well as toxicology, infectious diseases and diseases of the eyes, ears, nose and throat. Upon completion, students should be able to recognize, assess and manage the care of frequently encountered medical conditions based upon initial patient assessment.

Prerequisites: EMS 122, EMS 130.

Corequisites: None.

When Offered: (F)

EMS 260 - Trauma Emergencies

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course provides in-depth study of trauma including pharmacological interventions for conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include an overview of thoracic, abdominal, genitourinary, orthopedic, neurological, and multi-system trauma, soft tissue trauma of the head, neck, and face as well as environmental emergencies. Upon completion, students should be able to recognize and manage trauma situations based upon patient assessment and should adhere to standards of care.

Prerequisites: EMS 122, EMS 130.

Corequisites: None.

When Offered: (SU)

EMS 270 - Life Span Emergencies

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course covers medical/ethical/legal issues and the spectrum of age specific emergencies from conception through death required for paramedic certification. Topics include gynecological, obstetrical, neonatal, pediatric, and geriatric emergencies and pharmacological therapeutics. Upon completion, students should be able to recognize and treat age-specific emergencies.

Prerequisites: BIO 169, EMS 122, EMS 130.

Corequisites: None.

When Offered: (F)

EMS 285 - EMS Capstone

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course provides an opportunity to demonstrate problem-solving skills as a team leader in simulated patient scenarios and is required for paramedic certification. Emphasis is placed on critical thinking, integration of didactic and psychomotor skills, and effective performance in simulated emergency situations. Upon completion, students should be able to recognize and appropriately respond to a variety of EMS-related events. Students will be challenged to perform under adverse conditions which may include but are not limited to inclement weather, faulty equipment, non-cooperative patients and insufficient help.

Prerequisites: EMS 220, EMS 250, EMS 260.

Corequisites: None.

When Offered: (S)

English

ENG 111 - Writing and Inquiry (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is designed to develop the ability to produce clear writing in a variety of genres and formats using a recursive process. Emphasis includes inquiry, analysis, effective use of rhetorical strategies, thesis development, audience awareness, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: DRE 099 may be required. Consult the Advising Center for more information.

When Offered: (F,S,SU)

ENG 112 - Writing/Research in the Disciplines

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course, the second in a series of two, introduces research techniques, documentation styles, and writing strategies. Emphasis is placed on analyzing information and ideas and incorporating research findings into documented writing and research projects. Upon completion, students should be able to evaluate and synthesize information from primary and secondary sources using documentation appropriate to various disciplines.

Prerequisites: ENG 111 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S,SU)

ENG 113 - Literature-Based Research (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: ENG 111 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S,SU)

ENG 114 - Prof Research & Reporting (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course, the second in a series of two, is designed to teach professional communication skills. Emphasis is placed on research, listening, critical reading and thinking, analysis, interpretation, and design used in oral and written presentations. Upon completion, students should be able to work individually and collaboratively to produce well-designed business and professional written and oral presentations.

Prerequisites: ENG 111 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S,SU)

ENG 125 - Creative Writing I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: ENG 111 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S)

ENG 126 - Creative Writing II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is designed as a workshop approach for advancing imaginative and literary skills. Emphasis is placed on the discussion of style, techniques, and challenges for first publications. Upon completion, students should be able to submit a piece of their writing for publication.

Prerequisites: ENG 125 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S)

ENG 131 - Introduction to Literature (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the principal genres of literature. Emphasis is placed on literary terminology, devices, structure, and interpretation. Upon completion, students should be able to analyze and respond to literature.

Prerequisites: ENG 111.

Corequisites: ENG 112 or ENG 113 or ENG 114.

When Offered: (F,S)

ENG 231 - American Literature I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts.

Prerequisites: ENG 112 or ENG 113 or ENG 114 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S,SU)

ENG 232 - American Literature II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts.

Prerequisites: ENG 112 or ENG 113 or ENG 114 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S,SU)

ENG 235 - Survey of Film as Lit

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a study of the medium of film with a focus on the historical impact and the various literary genres of movies. Emphasis is placed on an appreciation of film as a form of literature which demonstrates various elements of fiction (character, setting, theme, etc.). Upon completion, students should be able to analyze film critically in various literary contexts.

Prerequisites: ENG 113 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

ENG 241 - British Literature I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts.

Prerequisites: ENG 112 or ENG 113 or ENG 114 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S,SU)

ENG 242 - British Literature II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts.

Prerequisites: ENG 112 or ENG 113 or ENG 114 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S,SU)

ENG 251 - Western World Literature I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a survey of selected European works from the Classical period through the Renaissance. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama.

Upon completion, students should be able to interpret, analyze, and respond to selected works.

Prerequisites: ENG 112 or ENG 113 or ENG 114 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F)

ENG 252 - Western World Literature II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a survey of selected European works from the Neoclassical period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected texts.

Prerequisites: ENG 112 or ENG 113 or ENG 114 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

ENG 273 - African-American Literature (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a survey of the development of African-American literature from its beginnings to the present. Emphasis is placed on historical and cultural context, themes, literary traditions, and backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and respond to selected texts.

Prerequisites: ENG 112 or ENG 113 or ENG 114 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F)

ENG 275 - Science Fiction (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the relationships between science and literature through analysis of short stories and novels. Emphasis is placed on scientific discoveries that shaped Western culture and our changing view of the universe as reflected in science fiction literature. Upon completion, students should be able to trace major themes and ideas and illustrate relationships between science, worldview, and science fiction literature.

Prerequisites: ENG 112 or ENG 113 or ENG 114 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

Emergency Preparedness**EPT 120 - Sociology of Disaster**

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is designed to overview sociological disaster research, disaster systems, and alternative research approaches. Topics include human and organizational behaviors, long disaster impact on communities, disaster warning, and evacuation considerations. Upon completion, students should be able to assess and predict the impact of disaster-related human behavior.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

EPT 124 - EM Services Law & Ethics

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers federal and state laws that affect emergency service personnel in the event of a natural disaster or terrorist incident. Topics include initial response and long-term management strategies, with an emphasis on legal and ethical considerations and coordination between local, state, and federal agencies. Upon completion, students should have an understanding of the role of private industry, government agencies, public policies, and federal/state declarations of disasters in emergency situations.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

EPT 130 - Mitigation & Preparedness

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the mitigation and preparation techniques and methods necessary to minimize the impact of natural, technological, and man-made disasters. Topics include hazard identification and mapping, design and construction applications, financial incentives, insurance, structural controls, preparation, planning, assessment, implementation, and exercises. Upon completion students should be able to develop a mitigation and preparedness plan.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

EPT 140 - Emergency Management

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the four phases of emergency management: mitigation, preparedness, response, and recovery. Topics include organizing for emergency management, coordinating for community resources, public sector liability, and the roles of government agencies at all levels. Upon completion, students should be able to demonstrate an understanding of comprehensive emergency management and the integrated emergency management system.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

EPT 150 - Incident Management

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the National Incident Management System (NIMS). Topics include integrating command and control systems, maintaining communication within command and control systems, and using NIMS procedures. Upon completion, students should be able to demonstrate knowledge of key concepts necessary for operating within the National Incident Management System.

Prerequisite: None.

Corequisites: None.

When Offered: (F)

EPT 210 - Disaster Response Ops Mgt

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the basic concepts and operational procedures and authorities involved in responding to major disasters. Topics include federal, state, and local roles and responsibilities in major disaster recovery work with an emphasis on governmental coordination. Upon completion, students should be able to implement a disaster plan and assess the needs of those involved in a major disaster.

Prerequisite: None.

Corequisites: None.

When Offered: (F)

EPT 220 - Terrorism and Emer. Mgt.

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers preparing for, responding to, and safely mitigating terrorism incidents. Topics include the history of terrorism, scene hazards, evidence preservation, risk assessment, roles and responsibilities, explosive recognition, and terrorism planning. Upon completion, students should be able to recognize the threat of terrorism and operate within the emergency management framework at a terrorism incident.

Prerequisite: None.

Corequisites: None.

When Offered: (F)

EPT 225 - Haz Analysis/Risk Assess

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the probability and frequency of hazards, level of hazard exposure, and the effect or cost, both direct and indirect, of this exposure. Topics include identifying and characterizing hazards, evaluating hazard severity and frequency, estimating risks, and determining potential societal

and economic effects. Upon completion, students should be able to identify the potential hazards and risks within a community.

Prerequisite: None.

Corequisites: None.

When Offered: (On Demand)

EPT 230 - Emergency Planning

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the rationale for and methods related to a comprehensive approach to emergency planning. Topics include the emergency planning process, command arrangement, coordination, budgetary issues, environmental contamination issues, and public policy concerns. Upon completion, students should be able to develop an emergency plan for a community.

Prerequisite: None.

Corequisites: None.

When Offered: (On Demand)

EPT 260 - Business Continuity

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers emergency preparedness techniques necessary to maintain business continuity. Topics include critical processes, planning, risk assessment, impact analysis, mitigation strategies, response, recovery and resumption activities. Upon completion, students should be able to demonstrate a working knowledge of the partnership between business and emergency response.

Prerequisite: None.

Corequisites: None.

When Offered: (On Demand)

EPT 275 - Emergency Ops Center Mgt

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides students with the knowledge and skills to effectively manage and operate an emergency operations center (EOC) during crisis situations. Topics include properly locating and designing an EOC, staffing, training and briefing EOC personnel, and how to operate an EOC. Upon completion, students should be able to demonstrate how to set up and operate an effective emergency operations center.

Prerequisite: None.

Corequisites: None.

When Offered: (S)

EPT 280 - Building Resilient Comm

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers concepts needed to design and implement strategies in protecting communities from disasters, including decreasing community vulnerability and increasing community resiliency. Topics include disclosure of hazards, lifeline systems, evacuation planning, infrastructure location, analysis of building codes, public policy, natural environmental proactive systems, and educational programs. Upon completion, students should be able to develop a basic disaster-resilient community plan.

Prerequisite: None.

Corequisites: None.

When Offered: (On Demand)

Entrepreneurship**ETR 215 - Law for Entrepreneurs**

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces students to basic legal concepts specifically relevant to a business start-up venture. Topics include bailments and documents of title, nature and form of sales, risk and property rights, obligations and performance, business organizations, and agency and employment. Upon completion, students should be able to assess the legal responsibilities of a business start-up.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

ETR 220 - Innovation and Creativity

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a study of developing and enhancing individual and organizational creativity and innovation. Topics include that innovation needs to be applied to products, services, and processes to increase competitive advantages and add value to businesses. Upon completion, students should be able to apply innovation and creativity principles in the work place.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

ETR 230 - Entrepreneur Marketing

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the techniques to correctly research and define the target market to increase sales for start-up businesses or to expand current businesses. Topics include how to target market and meet customers' needs with a limited budget in the early stages of the life of a start-up business. Upon completion, students should be able to demonstrate an understanding of how to correctly target market for a start-up business with limited resources.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

ETR 240 - Funding for Entrepreneurs

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a focus on the financial issues and needs confronting entrepreneurs attempting to grow their businesses by attracting start-up and growth capital. Topics include sources of funding including: angel investors, venture capital, IPO's, private placement, banks, suppliers, buyers, partners, and the government. Upon completion, students should be able to demonstrate an understanding of how to effectively finance a business venture.

Prerequisites: ACC 120.

Corequisites: None.

When Offered: (S)

ETR 270 - Entrepreneurship Issues

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces current and emerging entrepreneurship issues and opportunities. Topics include franchising, import/export, small business taxes, legal structures, negotiations, contract management, and time management. Upon completion, students should be able to apply a variety of analytical and decision-making requirements to start a new business.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

Fire Protection**FIP 120 - Intro to Fire Protection**

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an overview of the history, development, methods, systems, and regulations that apply to the fire protection field. Topics include history, evolution, statistics, suppression, organizations, careers, curriculum, and other related topics. Upon completion, students should be able to demonstrate a broad understanding of the fire protection field.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

FIP 124 - Fire Prevention & Public Ed

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces fire prevention concepts as they relate to community and industrial operations referenced in NFPA standard 101. Topics include the development and maintenance of fire prevention programs, educational

programs, and inspection programs. Upon completion, students should be able to research, develop, and present a fire safety program to a citizens or industrial group.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

FIP 128 - Detection & Investigation

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers procedures for determining the origin and cause of accidental and incendiary fires referenced in NFPA standard. Topics include collection and preservation of evidence, detection and determination of accelerants, courtroom procedure and testimony, and documentation of the fire scene. Upon completion, students should be able to conduct a competent fire investigation and present those findings to appropriate officials or equivalent.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

FIP 132 - Building Construction

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the principles and practices referenced in NFPA standard 220 related to various types of building construction, including residential and commercial, as impacted by fire conditions. Topics include types of construction and related elements, fire resistive aspects of construction materials, building codes, collapse, and other related topics. Upon completion, students should be able to understand and recognize various types of construction as related to fire conditions.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

FIP 136 - Inspections & Codes

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the fundamentals of fire and building codes and procedures to conduct an inspection referenced in NFPA standard 1730. Topics include review of fire and building codes, writing inspection reports, identifying hazards, plan reviews, site sketches, and other related topics. Upon completion, students should be able to conduct a fire code compliance inspection and produce a written report.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

FIP 140 - Industrial Fire Protection

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers fire protection systems in industrial facilities referenced in NFPA standard 1. Topics include applicable health and safety standards, insurance carrier regulations, other regulatory agencies, hazards of local industries, fire brigade operation, and loss prevention programs. Upon completion, students should be able to plan and evaluate an industrial facility's fire protection program.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

FIP 146 - Fire Protection Systems

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course introduces various types of automatic sprinklers, standpipes, fire alarm systems, and fixed and portable extinguishing systems referenced in NFPA standard 25, including their operation, installation, and maintenance. Topics include wet and dry systems, testing and maintenance, water supply requirements, fire detection and alarm systems, including application, testing, and maintenance of Halon, carbon dioxide, dry chemical, and special extinguishing agents utilized in fixed and portable systems. Upon completion,

students should be able to demonstrate a working knowledge of sprinkler and alarm systems, both fixed and portable, including appropriate application, operation, inspection, and maintenance requirements.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

FIP 152 - Fire Protection Law

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers fire protection law as referenced in NFPA standard 1. Topics include torts, legal terms, contracts, liability, review of case histories, and other related topics. Upon completion, students should be able to discuss laws, codes, and ordinances as they relate to fire protection.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

FIP 164 - OSHA Standards

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers public and private sector OSHA work site requirements referenced in NFPA standard 1250. Emphasis is placed on accident prevention and reporting, personal safety, machine operations, and hazardous material handling. Upon completion, students should be able to analyze and interpret specific OSHA regulations and write workplace policies designed to achieve compliance.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

FIP 220 - Fire Fighting Strategies

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides preparation for command of initial incident operations involving emergencies within both the public and private sector referenced in NFPA standards 1561, 1710, and 1720. Topics include incident management, fire-ground tactics and strategies, incident safety, and command/control of emergency operations. Upon completion, students should be able to describe the initial incident system related to operations involving various emergencies in fire/non-fire situations.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

FIP 221 - Adv Fire Fighting Strat

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers command-level operations for multi-company/agency operations involving fire and non-fire emergencies. Topics include advanced use of the Incident Command System (ICS), advanced incident analysis, command-level fire operations, and control of both man-made and natural major disasters. Upon completion, students should be able to describe proper and accepted systems for the mitigation of emergencies at the level of overall scene command.

Prerequisites: FIP 220.

Corequisites: None.

When Offered: (On demand)

FIP 224 - Fire Instructor I & II

Hours--Class: 4 Lab: 0 Clinic/Work Exp: 0 Credit: 4

This course covers the knowledge, skills, and abilities needed to train others in fire service operations. Topics include planning, presenting, and evaluating lesson plans, learning styles, use of media, communication, and other related topics. Upon completion, students should be able to meet all requirements of the Fire Instructor I and II objectives from National Fire Protection Association (NFPA) 1041.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

FIP 226 - Fire Officer I & II

Hours--Class: 4 Lab: 0 Clinic/Work Exp: 0 Credit: 4

This course covers the knowledge, skills, and requirements referenced in the National Fire Protection Association (NFPA) Standard 1021 for Fire Officer I and II training. Topics include officer roles and responsibilities, budgets, fire cause determination, inspections, education, leadership, management, public relations, and other requirements included in the NFPA standard. Upon completion, students should be able to demonstrate an understanding of relevant NFPA standards as required for state Fire Officer I and II certification.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

FIP 228 - Local Govt Finance

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces local governmental financial principles and practices. Topics include budget preparation and justification, revenue policies, statutory requirements, taxation, audits, and the economic climate. Upon completion, students should be able to comprehend the importance of finance as it applies to the operation of a department.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

FIP 229 - Fire Dynamics and Combust

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the theories and fundamentals of how and why fires start and spread, and how they are safely controlled referenced in NFPA standard 1001. Topics include components of fire, fire sources, fire behavior, properties of combustible solids, classification of hazards, and the use of fire extinguishing agents. Upon completion, students should be able to describe the properties of matter and dynamics of fire, identify fuel sources, and compare suppressants and extinguishment techniques.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

FIP 230 - Chem of Hazardous Mat I

Hours--Class: 5 Lab: 0 Clinic/Work Exp: 0 Credit: 5

This course covers the evaluation of hazardous materials referenced in NFPA standard 1072. Topics include use of the periodic table, hydrocarbon derivatives, placards and labels, parameters of combustion, and spill and leak mitigation. Upon completion, students should be able to demonstrate knowledge of the chemical behavior of hazardous materials.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

FIP 240 - Fire Service Supervision

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers supervisory skills and practices in the fire protection field. Topics include the supervisor's job, supervision skills, the changing work environment, managing change, organizing for results, discipline and grievances, and safety. Upon completion, students should be able to demonstrate an understanding of the roles and responsibilities of effective fire service supervision, meeting elements of NFPA 1021.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

FIP 248 - Fire Svc Personnel Adm

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the basics of setting up and administering the personnel functions of fire protection organizations referenced in NFPA standard 1021. Emphasis is placed on human resource planning, classification and job analysis, equal opportunity employment, affirmative action, recruitment, retention, development, performance evaluation, and assessment centers.

Upon completion, students should be able to demonstrate knowledge of the personnel function as it relates to managing fire protection.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

FIP 276 - Managing Fire Services

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an overview of fire department operative services referenced in NFPA standard 1021. Topics include finance, staffing, equipment, code enforcement, management information, specialized services, legal issues, planning, and other related topics. Upon completion, students should be able to understand concepts and apply fire department management and operations principles.

Prerequisites: ENG 111, FIP 152, and FIP 240.

Corequisites: None.

When Offered: (S)

French

FRE 111 - Elementary French I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the fundamental elements of the French language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written French and demonstrate cultural awareness.

Prerequisites: None.

Corequisites: FRE 181.

When Offered: (F)

FRE 112 - Elementary French II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is a continuation of FRE 111 focusing on the fundamental elements of the French language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written French and demonstrate further cultural awareness.

Prerequisites: FRE 111 must pass with a grade of C or higher.

Corequisites: FRE 182.

When Offered: (S)

FRE 181 - French Lab 1 (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to enhance acquisition of the fundamental elements of the French language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written French and demonstrate cultural awareness.

Prerequisites: None.

Corequisites: FRE 111.

When Offered: (F)

FRE 182 - French Lab 2 (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to enhance acquisition of the fundamental elements of the French language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written French and demonstrate cultural awareness.

Prerequisites: FRE 181 must pass with a grade of C or higher.

Corequisites: FRE 112.

When Offered: (S)

FRE 211 - Intermediate French I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a review and expansion of the essential skills of the French language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future.

Prerequisites: FRE 112 must pass with a grade of C or higher.

Corequisites: FRE 281.

When Offered: (On demand)

FRE 212 - Intermediate French II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is a continuation of FRE 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication.

Prerequisites: FRE 211 must pass with a grade of C or higher.

Corequisites: FRE 282.

When Offered: (On demand)

FRE 281 - French Lab 3 (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to enhance the review and expansion of the essential skills of the French language. Emphasis is placed on the study of authentic and representative literary and cultural texts through the use of supplementary learning media and materials. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future.

Prerequisites: FRE 182 must pass with a grade of C or higher.

Corequisites: FRE 211.

When Offered: (On demand)

FRE 282 - French Lab 4 (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to enhance the review and expansion of the essential skills of the French language. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts through the use of supplementary learning media and materials. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication.

Prerequisites: FRE 281 must pass with a grade of C or higher.

Corequisites: FRE 212.

When Offered: (On demand)

Geology

GEL 111 - Introductory Geology (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course introduces basic landforms and geological processes. Topics include rocks, minerals, volcanoes, fluvial processes, geological history, plate tectonics, glaciers, and coastal dynamics. Upon completion, students should be able to describe basic geological processes that shape the earth.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 or appropriate placement test scores.

Corequisites: DRE 098 or appropriate placement test scores.

When Offered: (F,S,On demand)

GEL 113 - Historical Geology

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course covers the geological history of the earth and its life forms. Emphasis is placed on the study of rock strata, fossil groups, and geological time. Upon completion, students should be able to identify major fossil groups and associated rock strata and approximate ages of geological formations.

Prerequisites: GEL 111 or GEL 120, must pass with a grade of C or higher.

Corequisites: None.

When Offered: (On demand)

GEL 120 - Physical Geology (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course provides a study of the structure and composition of the earth's crust. Emphasis is placed on weathering, erosional and depositional processes, mountain building forces, rocks and minerals, and structural changes. Upon completion, students should be able to explain the structure, composition, and formation of the earth's crust.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, and DRE 098.

Corequisites: None.

When Offered: (On Demand)

GEL 230 - Environmental Geology (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course provides insights into geologic forces that cause environmental changes influencing man's activities. Emphasis is placed on natural hazards and disasters caused by geologic forces. Upon completion, students should be able to relate major hazards and disasters to the geologic forces responsible for their occurrence.

Prerequisites: GEL 111 or GEL 120 or PHS 130 must pass with a grade of C or higher; DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

Geography**GEO 111 - World Regional Geography (Coll/Tran)**

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the regional concept which emphasizes the spatial association of people and their environment. Emphasis is placed on the physical, cultural, and economic systems that interact to produce the distinct regions of the earth. Upon completion, students should be able to describe variations in physical and cultural features of a region and demonstrate an understanding of their functional relationships.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (F, On demand)

GEO 112 - Cultural Geography (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is designed to explore the diversity of human cultures and to describe their shared characteristics. Emphasis is placed on the characteristics, distribution, and complexity of earth's cultural patterns. Upon completion, students should be able to demonstrate an understanding of the differences and similarities in human cultural groups.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

GEO 130 - General Physical Geography (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces both the basic physical components that help shape the earth and the study of minerals, rocks, and evolution of landforms. Emphasis is placed on the geographic grid, cartography, weather, climate, mineral composition, fluvial processes, and erosion and deposition.

Upon completion, students should be able to identify these components and processes and explain how they interact.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (S, On demand)

German**GER 111 - Elementary German I (Coll/Tran)**

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the fundamental elements of the German language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written German and demonstrate cultural awareness.

Prerequisites: None.

Corequisites: GER 181.

When Offered: (On demand)

GER 112 - Elementary German II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is a continuation of GER 111 focusing on the fundamental elements of the German language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written German and demonstrate further cultural awareness.

Prerequisites: GER 111 must pass with a grade of C or higher.

Corequisites: GER 182.

When Offered: (On demand)

GER 181 - German Lab 1 (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to enhance acquisition of the fundamental elements of the German language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written German and demonstrate cultural awareness.

Prerequisites: None.

Corequisites: GER 111.

When Offered: (On demand)

GER 182 - German Lab 2 (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to enhance acquisition of the fundamental elements of the German language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written German and demonstrate cultural awareness.

Prerequisites: GER 181 must pass with a grade of C or higher.

Corequisites: GER 112.

When Offered: (On demand)

Graphic Arts**GRA 121 - Graphic Arts I**

Hours--Class: 2 Lab: 4 Clinic/Work Exp: 0 Credit: 4

This course introduces terminology, tools and materials, procedures, and equipment used in graphic arts production. Topics include copy preparation and pre-press production relative to printing. Upon completion, students should be able to demonstrate an understanding of graphic arts production.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

GRA 151 - Computer Graphics I

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course introduces the use of hardware and software for production and design in graphic arts. Topics include graphical user interface and current industry uses such as design, layout, typography, illustration, and imaging for production. Upon completion, students should be able to understand and use the computer as a fundamental design and production tool.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

GRA 152 - Computer Graphics II

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course covers advanced design and layout concepts utilizing illustration, page layout, and imaging software in graphic arts. Emphasis is placed on enhancing and developing the skills that were introduced in GRA 151. Upon completion, students should be able to select and utilize appropriate software for design and layout solutions.

Prerequisites: GRA 151, GRD 110, GRD 121, GRD 141.

Corequisites: None.

When Offered: (S)

GRA 153 - Computer Graphics III

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of GRA 152. Emphasis is placed on advanced computer graphics hardware and software applications. Upon completion, students should be able to demonstrate competence in selection and utilization of appropriate software for specialized applications.

Prerequisites: GRA 152.

Corequisites: None.

When Offered: (F)

GRA 255 - Image Manipulation I

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course covers applications associated with electronic image manipulation, including color correction, color separation, special effects, and image conversion. Topics include image-capturing hardware, image-processing software, and output options. Upon completion, students should be able to utilize hardware and software to acquire, manipulate, and output images to satisfy design and production.

Prerequisites: GRA 151, GRD 110, GRD 121, GRD 141.

Corequisites: None.

When Offered: (S)

GRA 256 - Image Manipulation II

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course covers electronic color separation and its relationship to multi-color printing. Topics include color theory, separation, color matching, proofing, and output of process and spot color images. Upon completion, students should be able to use hardware and image processing software to produce color separations and proofs for various printing processes.

Prerequisites: GRA 255.

Corequisites: None.

When Offered: (F)

Graphic Design**GRD 110 - Typography I**

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the history and mechanics of type and its application to layout and design. Topics include typographic fundamentals, anatomy, measurements, composition, identification, and terminology. Upon completion, students should be able to demonstrate proficiency in design application, analysis, specification, and creation of typographic elements.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

GRD 121 - Drawing Fundamentals I

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course increases observation skills using basic drawing techniques and media in graphic design. Emphasis is placed on developing the use of graphic design principles, media applications, spatial considerations, drawing styles, and approaches. Upon completion, students should be able to show competence and proficiency in finished works.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

GRD 131 - Illustration I

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course introduces the application of rendering techniques to create illustrations. Emphasis is placed on controlling various media, methods, surfaces, design problems, and the appropriate media selection process. Upon completion, students should be able to produce quality illustrations from conception through finished artwork. The course will concentrate on technique, and subject matter will include product, architecture and fashion.

Prerequisites: ART 131 or GRD 121; and GRA 151, GRD 110, GRD 121, GRD 141.

Corequisites: None.

When Offered: (S)

GRD 141 - Graphic Design I

Hours--Class: 2 Lab: 4 Clinic/Work Exp: 0 Credit: 4

This course introduces the conceptualization process used in visual problem solving. Emphasis is placed on learning the principles of design and on the manipulation and organization of elements. Upon completion, students should be able to apply design principles and visual elements to projects.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

GRD 142 - Graphic Design II

Hours--Class: 2 Lab: 4 Clinic/Work Exp: 0 Credit: 4

This course covers the application of visual elements and design principles in advertising and graphic design. Topics include creation of various designs, such as logos, advertisements, posters, outdoor advertising, and publication design. Upon completion, students should be able to effectively apply design principles and visual elements to projects.

Prerequisites: GRD 110, GRD 121, GRD 141.

Corequisites: None.

When Offered: (S)

GRD 151 - Computer Design Basics

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course covers designing and drawing with various types of software applications for advertising and graphic design. Emphasis is placed on creative and imaginative use of space, shapes, value, texture, color, and typography to provide effective solutions to advertising and graphic design problems. Upon completion, students should be able to use the computer as a creative tool.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

GRD 180 - Interactive Design

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course covers skills and techniques used in designing interactive presentations. Emphasis is placed on design, including interface design, color, illustration, scripting, audio, typography, and animated elements. Upon completion, students should be able to design and produce interactive presentations.

Prerequisites: GRA 151.

Corequisites: None.

When Offered: (S)

GRD 241 - Graphic Design III

Hours--Class: 2 Lab: 4 Clinic/Work Exp: 0 Credit: 4

This course is an advanced exploration of various techniques and media for advertising and graphic design. Emphasis is placed on advanced concepts and solutions to complex and challenging graphic design problems. Upon completion, students should be able to demonstrate competence and professionalism in visual problem solving.

Prerequisites: GRD 142.

Corequisites: None.

When Offered: (F)

GRD 249 - Advanced Design Practice

Hours--Class: 1 Lab: 9 Clinic/Work Exp: 0 Credit: 4

This course covers advanced techniques used in graphic design. Emphasis is placed on providing solutions to complex design problems. Upon completion, students should be able to demonstrate advanced levels of competence and professionalism in visual problem solving.

Prerequisites: GRD 241.

Corequisites: None.

When Offered: (S)

GRD 265 - Digital Print Production

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course covers preparation of digital files for output and reproduction. Emphasis is placed on output options, separations, color proofing, and cost and design considerations. Upon completion, students should be able to prepare files and select appropriate output methods for design solutions.

Prerequisites: GRA 151, GRA 152.

Corequisites: None.

When Offered: (F)

GRD 271 - Multimedia Design I

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course introduces the fundamentals of multimedia design and production for computer-related presentations. Topics include interface design, typography, storyboarding, scripting, simple animation, graphics, digital audio video, and copyright issues. Upon completion, students should be able to design and produce multimedia presentations.

Prerequisites: GRA 151.

Corequisites: None.

When Offered: (F)

GRD 280 - Portfolio Design

Hours--Class: 2 Lab: 4 Clinic/Work Exp: 0 Credit: 4

This course covers the organization and presentation of a design/advertising or graphic art portfolio and appropriate related materials. Emphasis is placed on development and evaluation of the portfolio, design and production of a resume and self-promotional materials, and interview techniques. Upon completion, students should be able to prepare and professionally present an effective portfolio and related self-promotional materials.

Prerequisites: GRA 152, GRD 142, and permission of instructor.

Corequisites: None.

When Offered: (S)

Health**HEA 110 - Personal Health/Wellness** (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

HEA 112 - First Aid & CPR

(Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

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

Prerequisites: None.

Corequisites: None.

When Offered: (F,On demand)

HEA 120 - Community Health

(Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

Health and Fitness Science**HFS 110 - Exercise Science**

Hours--Class: 4 Lab: 0 Clinic/Work Exp: 0 Credit: 4

This course is a survey of scientific principles, methodologies, and research as applied to exercise and physical adaptations to exercise. Topics include the basic elements of kinesiology, biomechanics, and motor learning. Upon completion, students should be able to identify and describe physiological responses and adaptations to exercise.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

HFS 111 - Fitness & Exer Testing I

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course introduces the student to graded exercise testing. Topics include various exercise testing protocols with methods for prescribing exercise programs based on exercise tolerance tests and the use of various equipment and protocols. Upon completion, students should be able to conduct specific exercise tests and the use of various equipment.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

HFS 114 - Phys Fit Theory & Instr

Hours--Class: 4 Lab: 0 Clinic/Work Exp: 0 Credit: 4

This course provides information about related components of fitness and general information about the industry. Topics include the study of the components of fitness, theories of exercise and fitness, and information about the industry. Upon completion, students should be able to identify fitness components and demonstrate these in an exercise setting.

Prerequisites: HFS 110.

Corequisites: None.

When Offered: (S)

HFS 116 - Pvnt & Care Exer Injuries

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course provides information about the care and prevention of exercise injuries. Topics include proper procedures, prevention techniques, and on-site care of injuries. Upon completion, students should be able to demonstrate the knowledge and skills necessary to prevent and care for exercise related injuries.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

HFS 118 - Fitness Facility Mgmt

Hours--Class: 4 Lab: 0 Clinic/Work Exp: 0 Credit: 4
 This course provides information about the management and operation of health and fitness facilities and programs. Topics include human resources, sales and marketing, member retention, financial management, facility design and maintenance, and risk management. Upon completion, students should be able to demonstrate the knowledge and skills necessary to effectively manage a fitness facility.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

HFS 120 - Group Exer Instruction

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3
 This course introduces the concepts and guidelines of instructing exercise classes. Topics include program designs, working with special populations, and principles of teaching and monitoring physical activity. Upon completion, students should be able to demonstrate basic skills in instructing an exercise class and monitoring workout intensity.

Prerequisites: HFS 110.

Corequisites: None.

When Offered: (F)

HFS 210 - Personal Training

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3
 This course introduces the student to the aspects of personal (one-on-one) training. Topics include training systems, marketing, and program development. Upon completion, students should be able to demonstrate personal training techniques and competencies of same.

Prerequisites: HFS 110, HFS 111.

Corequisites: None.

When Offered: (S)

HFS 212 - Exercise Programming

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3
 This course provides information about organizing, scheduling, and implementation of physical fitness programs. Topics include programming for various age groups, competitive activities and special events, and evaluating programs. Upon completion, students should be able to organize and implement exercise activities in a competent manner.

Prerequisites: HFS 110.

Corequisites: None.

When Offered: (S)

HFS 218 - Lifestyle Chng & Wellness

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4
 This course introduces health risk appraisals and their application to lifestyle changes. Topics include nutrition, weight control, stress management, and the principles of exercise. Upon completion, students should be able to conduct health risk appraisals and apply behavior modification techniques in a fitness setting.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

History**HIS 111 - World Civilizations I** (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3
 This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S,SU)

HIS 112 - World Civilizations II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3
 This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S,SU)

HIS 121 - Western Civilization I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3
 This course introduces western civilization from pre-history to the early modern era. Topics include ancient Greece, Rome, and Christian institutions of the Middle Ages and the emergence of national monarchies in western Europe. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early western civilization.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

HIS 122 - Western Civilization II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3
 This course introduces western civilization from the early modern era to the present. Topics include the religious wars, the Industrial Revolution, World Wars I and II, and the Cold War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern western civilization.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

HIS 131 - American History I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3
 This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S,SU)

HIS 132 - American History II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3
 This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S,SU)

HIS 141 - Genealogy & Local History (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3
 This course explores the role of the local or family historian. Emphasis is placed on historical or genealogical research techniques including a survey of local, state, and national archival resources. Upon completion, students should be able to conduct genealogical research and do a major research project on local or family history.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

HIS 145 - The Second World War (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the period of the Second World War from 1919 to 1945. Topics include the Treaty of Versailles, the rise of totalitarian regimes, the origins of the war, the major military campaigns in Europe and the Pacific, and the aftermath. Upon completion, students should be able to analyze significant political, military, socioeconomic, and cultural developments that influenced the Second World War.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

HIS 151 - Hispanic Civilization (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course surveys the cultural history of Spain and its impact on the New World. Topics include Spanish and Latin American culture, literature, religion, and the arts. Upon completion, students should be able to analyze the cultural history of Spain and Latin America.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

HIS 162 - Women and History (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course surveys the experience of women in historical perspective. Topics include the experiences and contributions of women in culture, politics, economics, science, and religion. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural contributions of women in history.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

HIS 211 - Ancient History (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course traces the development of the cultural, intellectual, and political foundations of western civilization. Topics include the civilizations of the Near East, the classical Greek and Hellenistic eras, the Roman world, Judaism, and Christianity. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the ancient world.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

HIS 221 - African-American History (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers African-American history from the Colonial period to the present. Topics include African origins, the slave trade, the Civil War, Reconstruction, the Jim Crow era, the civil rights movement, and contributions of African Americans. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the history of African Americans.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

HIS 226 - The Civil War (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course examines the social, political, economic, and ideological forces that led to the Civil War and Reconstruction. Topics include regional conflicts and sectionalism, dissolution of the Union, military campaigns, and the War's socioeconomic impact, aftermath, and consequences. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the United States during the era of the Civil War.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

HIS 227 - Native American History (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course surveys the history and cultures of Native Americans from prehistory to the present. Topics include Native American civilizations, relations with Europeans, and the continuing evolution of Native American cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments among Native Americans.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

HIS 228 - History of the South (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the origin and development of the South as a distinct region of the United States. Emphasis is placed on Southern identity and its basis in cultural, social, economic, and political developments during the 19th and 20th centuries. Upon completion, students should be able to identify and analyze the major cultural, social, economic, and political developments in the South.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

HIS 236 - North Carolina History (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is a study of geographical, political, economic, and social conditions existing in North Carolina from America's discovery to the present. Topics include native and immigrant backgrounds; colonial, antebellum, and Reconstruction periods; party politics; race relations; and the transition from an agrarian to an industrial economy. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in North Carolina.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

HIS 261 - East Asian History (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course surveys the history of China and Japan from the development of civilization in Asia to the present. Emphasis is placed on the evaluation of social, political, economic, and governmental structures in China and Japan. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in east Asia.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

Health Information Technology**HIT 110 - Fundamentals of HIM**

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces Health Information Management (HIM) and its role in healthcare delivery systems. Topics include standards, regulations, and initiatives; payment and reimbursement systems, healthcare providers and disciplines, and EHRs. Upon completion, the student should be able to demonstrate an understanding of health information management and healthcare organizations, professions, and trends.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

HIT 112 - Health Law and Ethics

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers legislative and regulatory processes, legal terminology, and professional-related and practice-related ethical issues. Topics include confidentiality; privacy and security policies, procedures and monitoring; release of information policies and procedures; and professional-related and practice-related ethical issues. Upon completion, students should be able to

apply policies and procedures for access and disclosure of Protected Health Information and apply and promote ethical standards.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

HIT 114 - Health Data Sys/Standards

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course covers concepts and techniques for managing and maintaining manual and electronic health records (EHR). Topics include structure and use of health information including data collection and analysis, data sources and sets, archival systems, quality and integrity of healthcare data. Upon completion, students should be able to monitor and apply system-wide clinical documentation guidelines and comply with regulatory standards.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

HIT 122 - Prof Practice Exp I

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 3 Credit: 1

This course provides supervised clinical experience in healthcare settings. Emphasis is placed on practical application of curriculum concepts to the healthcare setting. Upon completion, students should be able to apply health information theory to healthcare facility practices.

Prerequisites: HIT 112, HIT 114.

Corequisites: None.

When Offered: (SU)

HIT 210 - Healthcare Statistics

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers maintenance, compilation, analysis, and presentation of healthcare statistics and research protocols and techniques. Topics include basic statistical principles, indices, databases, registries, vital statistics, descriptive statistics, research protocol monitoring, Institutional Review Board processes, and knowledge-based research techniques. Upon completion, students should be able to apply, interpret, and present healthcare statistics and utilize research techniques to gather and interpret healthcare data.

Prerequisites: MAT 110.

Corequisites: None.

When Offered: (F)

HIT 211 - ICD Coding

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 0 Credit: 4

This course covers ICD diagnostic and procedural coding conventions and guidelines for inpatient, outpatient and ambulatory care. Emphasis is placed on a comprehensive application of anatomy, physiology and interrelationships among organ systems. Upon completion, students should be able to accurately assign and sequence diagnostic and procedural codes for patient outcomes, statistical, and reimbursement purposes.

Prerequisites: BIO 168 & BIO 169; MED 121, MED 122.

Corequisites: None.

When Offered: (F)

HIT 214 - CPT/Other Coding Systems

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course covers application of principles and guidelines of CPT/HCPCS coding. Topics include clinical classification/nomenclature systems such as SNOMED, DSM, ICD-O and the use of encoders. Upon completion, students should be able to apply coding principles to correctly assign CPT/HCPCS codes.

Prerequisites: HIT 211.

Corequisites: None.

When Offered: (S)

HIT 215 - Reimbursement Methodology

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course covers reimbursement methodologies used in all healthcare settings as they relate to national billing, compliance, and reporting requirements. Topics include prospective payment systems, billing process and procedures, chargemaster maintenance, regulatory guidelines, reimbursement monitoring, and compliance strategies and reporting. Upon completion, students should be able to perform data quality reviews to validate code assignment and comply with reimbursement and reporting requirements.

Prerequisites: HIT 211.

Corequisites: None.

When Offered: (S)

HIT 216 - Quality Management

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course introduces principles of quality assessment and improvement, and utilization, risk, and case management, in healthcare. Topics include Continuous Quality Improvement, and case management processes, data analysis/reporting techniques, credentialing, regulatory quality monitoring requirements, and outcome measures and monitoring. Upon completion, students should be able to abstract, analyze, and report clinical data for facility wide quality management/performance improvement programs and monitor compliance measures.

Prerequisites: HIT 114.

Corequisites: None.

When Offered: (F)

HIT 220 - Health Informatics & EHRs

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course covers electronic health information (EHR) systems design, implementation, and application. Topics include EHR, informatics, speech & imaging technology, information/network security & integrity, data dictionaries, modeling and warehousing. Upon completion, students should be able to facilitate usage of electronic health record systems and other technologies.

Prerequisites: HIT 114; CIS 110 or CIS 111.

Corequisites: None.

When Offered: (F)

HIT 222 - Prof Practice Exp III

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 6 Credit: 2

This course provides supervised clinical experience in healthcare settings. Emphasis is placed on practical application of curriculum concepts to the healthcare setting. Upon completion, students should be able to apply health information theory to healthcare facility practices.

Prerequisites: HIT 122.

Corequisites: None.

When Offered: (S)

HIT 226 - Principles of Disease

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers disease etiology and organ system involvement, including physical signs and symptoms, prognoses, and common complications and their management. Topics include basic microbiology, basic pharmacology, and principles of disease. Upon completion, students should be able to relate disease processes to etiology, physical signs and symptoms, prognosis, and common complications and their management.

Prerequisites: BIO 169.

Corequisites: None.

When Offered: (F)

HIT 280 - Professional Issues

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course provides a comprehensive discussion of topics common to the health information profession. Emphasis is placed on application of professional competencies, job search tools, and preparation for the

certification examination. Upon completion, students should be able to demonstrate competence in entry-level domains and subdomains for health information technologies.

Prerequisites: HIT 211.

Corequisites: HIT 214.

When Offered: (S)

Healthcare Management

HMT 110 - Intro to Healthcare Mgt

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the functions, practices, organizational structures, and professional issues in healthcare management. Emphasis is placed on planning, controlling, directing, and communicating within health and human services organizations. Upon completion, students should be able to apply the concepts of management within a healthcare service environment.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

HMT 211 - Long-Term Care Admin

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the administration of long-term care facilities and services. Emphasis is placed on nursing home care, home health care, hospice, skilled nursing facilities, and other long-term care services. Upon completion, students should be able to administer state and national standards and regulations as they apply to long-term care.

Prerequisites: HMT 110 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F)

HMT 212 - Mgt of Healthcare Org

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course examines current issues affecting the management of healthcare delivery systems. Topics include current problems, changes, and challenges in the healthcare environment. Upon completion, students should be able to identify current healthcare issues and their impact on healthcare management.

Prerequisites: HMT 110 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

HMT 220 - Healthcare Financial Mgmt

Hours--Class: 4 Lab: 0 Clinic/Work Exp: 0 Credit: 4

This course covers the methods and techniques utilized in the financial management of healthcare programs. Topics include cost determination, pricing of services, financial statement analysis, forecasting/projections, third-party billing, reimbursement, Medicare, Medicaid, and budgeting. Upon completion, students should be able to interpret and apply the principles of financial management in a healthcare environment.

Prerequisites: HMT 110 & ACC 121 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

Horticulture

HOR 112 - Landscape Design I

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course covers landscape principles and practices for residential and commercial sites. Emphasis is placed on drafting, site analysis, and common elements of good design, plant material selection, and proper plant utilization (encouraged use of native plants and discouraged use of invasive species). Upon completion, students should be able to read, plan, and draft a landscape design according to sustainable practices.

Prerequisites: None.

Corequisites: None.

When Offered: (SU)

HOR 114 - Landscape Construction

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the design and fabrication of landscape structures/features. Emphasis is placed on safety, tool identification and use, material selection, construction techniques, and fabrication. Upon completion, students should be able to design and construct common landscape structures/features.

Prerequisites: None.

Corequisites: None.

When Offered: (SU)

HOR 134 - Greenhouse Operations

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers the principles and procedures involved in the operation and maintenance of greenhouse facilities. Emphasis is placed on the operation of greenhouse systems, including the environmental control, record keeping, scheduling, and production practices. Upon completion, students should be able to demonstrate the ability to operate greenhouse systems and facilities to produce greenhouse crops.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

HOR 160 - Plant Materials I

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers identification, culture, characteristics, and use of plants. Emphasis is placed on nomenclature, identification, growth requirements, cultural requirements, soil preferences, and landscape applications. Upon completion, students should be able to demonstrate knowledge of the proper selection and utilization of plant materials, including natives and invasive plants.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

HOR 162 - Applied Plant Science

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the basic concepts of botany as they apply to horticulture. Topics include nomenclature, physiology, morphology, and anatomy as they apply to plant culture. Upon completion, students should be able to apply the basic principles of botany to horticulture.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

HOR 164 - Hort Pest Management

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers the identification and management of plant pests including insects, diseases, and weeds. Topics include pest identification and beneficial organisms, pesticide application safety and use of least toxic methods of management. Upon completion, students should be able to manage common landscape pests using least toxic methods of control and be prepared to sit for North Carolina Commercial Pesticide Ground Applicators license.

Prerequisites: None.

Corequisites: None.

When Offered: (S,SU)

HOR 166 - Soils & Fertilizers

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers the physical and chemical properties of soils and soil fertility and management. Topics include soil formation; classification; physical, chemical, and biological properties (including microorganisms); testing; and fertilizer application. Upon completion, students should be able to analyze, evaluate, and properly amend soils/media according to sustainable practices.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

HOR 168 - Plant Propagation

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course is a study of sexual and asexual reproduction of plants. Emphasis is placed on seed propagation, grafting, stem and root propagation, micropropagation, and other propagation techniques. Upon completion, students should be able to successfully propagate ornamental plants.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

HOR 170 - Hort Computer Apps

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course introduces computer programs as they apply to the horticulture industry. Emphasis is placed on applications of software for plant identification, design, and irrigation. Upon completion, students should be able to use computer programs in horticultural situations.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

HOR 213 - Landscape Design II

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers residential and commercial landscape design, cost analysis, and installation. Emphasis is placed on job cost estimates, installation of the landscape design, and maintenance techniques. Upon completion, students should be able to read landscape design blueprints, develop cost estimates, and implement the design.

Prerequisites: HOR 112.

Corequisites: None.

When Offered: (F)

HOR 265 - Adv Plant Materials

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course covers important landscape plants. Emphasis is placed on identification, plant nomenclature, growth characteristics, cultural requirements, and landscape uses. Upon completion, students should be able to correctly select plants for specific landscape uses.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

HOR 273 - Hor Mgmt & Marketing

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the steps involved in starting or managing a horticultural business. Topics include financing, regulations, market analysis, employer/employee relations, formulation of business plans, and operational procedures in a horticultural business. Upon completion, students should be able to assume ownership or management of a horticultural business.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

Health Sciences**HSC 110 - Orientation to Health Careers**

Hours--Class: 1 Lab: 0 Clinic/Work Exp: 0 Credit: 1

This course is a survey of health care professions. Topics include professional duties and responsibilities, working environments, and career choices. Upon completion, students should be able to demonstrate an understanding of the health care professions and be prepared to make informed career choices.

Prerequisite: None.

Corequisites: None.

When Offered: (F)

Humanities**HUM 110 - Technology and Society** (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course considers technological change from historical, artistic, and philosophical perspectives and its effect on human needs and concerns. Emphasis is placed on the causes and consequences of technological change. Upon completion, students should be able to critically evaluate the implications of technology.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

HUM 115 - Critical Thinking (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the use of critical thinking skills in the context of human conflict. Emphasis is placed on evaluating information, problem solving, approaching cross-cultural perspectives, and resolving controversies and dilemmas. Upon completion, students should be able to demonstrate orally and in writing the use of critical thinking skills in the analysis of appropriate texts.

Prerequisite: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

HUM 120 - Cultural Studies (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the distinctive features of a particular culture. Topics include art, history, music, literature, politics, philosophy, and religion. Upon completion, students should be able to appreciate the unique character of the study culture.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

HUM 211 - Humanities I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the humanities as a record in literature, music, art, history, religion, and philosophy of humankind's answers to the fundamental questions of existence. Emphasis is placed on the interconnectedness of various aspects of cultures from ancient through early modern times. Upon completion, students should be able to identify significant figures and cultural contributions of the periods studied.

Prerequisites: ENG 111.

Corequisites: None.

When Offered: (S)

HUM 220 - Human Values and Meaning (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course presents some major dimensions of human experience as reflected in art, music, literature, philosophy, and history. Topics include the search for identity, the quest for knowledge, the need for love, the individual and society, and the meaning of life. Upon completion, students should be able to recognize interdisciplinary connections and distinguish between open and closed questions and between narrative and scientific models of understanding.

Prerequisites: ENG 111.

Corequisites: None.

When Offered: (On demand)

Hydraulics and Pneumatics

HYD 110 - Hydraulics/Pneumatics I

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

International Business

INT 110 - International Business

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an overview of the environment, concepts, and basic differences involved in international business. Topics include forms of foreign involvement, international trade theory, governmental influences on trade and strategies, international organizations, multinational corporations, personnel management, and international marketing. Upon completion, students should be able to describe the foundation of international business.

Prerequisites: None.

Corequisites: None.

Industrial Science

ISC 112 - Industrial Safety

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course introduces the principles of industrial safety. Emphasis is placed on industrial safety, and OSHA regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment and OSHA compliance.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

Journalism

JOU 110 - Intro to Journalism (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course presents a study of journalistic news, feature, and sports writing. Emphasis is placed on basic news writing techniques and on related legal and ethical issues. Upon completion, students should be able to gather, write, and edit news, feature, and sports articles.

Prerequisites: ENG 111.

Corequisites: None.

When Offered: (On demand)

Machining

MAC 122 - CNC Turning

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

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.

Prerequisites: MAC 141, DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (S)

MAC 124 - CNC Milling

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

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.

Prerequisites: MAC 141, DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (S)

MAC 131 - Blueprint Reading/Mach I

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 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.

Prerequisites: DMA 010, DMA 020, DMA 030; DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

MAC 132 - Blueprint Reading/Mach II

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course introduces more complex industrial blueprints. Emphasis is placed on auxiliary views, section views, violations of true project, special views, applications of GD & T, and interpretation of complex parts. Upon completion, students should be able to read and interpret complex industrial blueprints.

Prerequisites: MAC 131.

Corequisites: None.

When Offered: (S)

MAC 141 - Machining Applications I

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 0 Credit: 4

This course provides an introduction to a variety of material-working processes that are common to the machining industry. Topics include safety, process-specific machining equipment, measurement devices, set-up and layout instruments, and common shop practices. Upon completion, students should be able to safely demonstrate basic machining operations, accurately measure components, and effectively use layout instruments.

Prerequisites: DMA 010, DMA 020, DMA 030; DRE 097 or appropriate placement test score.

Corequisites: None.

MAC 142 - Machining Applications II

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 0 Credit: 4

This course provides instruction in the wide variety of processes associated with machining. Topics include safety, equipment set-up, holding fixtures, tooling, cutting speeds and depths, metal properties, and proper finishes. Upon completion, students should be able to safely demonstrate advanced machining operations, accurately measure components, and produce accurate components with a proper finish.

Prerequisites: MAC 141.

Corequisites: None.

MAC 143 - Machining Appl III

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 0 Credit: 4

This course provides instruction in the field of advanced machining. Emphasis is placed on creating complex components, close-tolerance machining, precise measurement, and proper equipment usage. Upon completion, students should be able to demonstrate the ability to produce an accurately machined component with a quality finish using the proper machining process.

Prerequisites: MAC 142.

Corequisites: None.

MAC 151 - Machining Calculations

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 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.

Prerequisites: DMA 010, DMA 020, DMA 030; DRE 097 or appropriate placement test score.

Corequisites: None

MAC 222 - Advanced CNC Turning

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course covers advanced methods in setup and operation of CNC turning centers. Emphasis is placed on programming and production of complex parts. Upon completion, students should be able to demonstrate skills in programming, operations, and setup of CNC turning centers.

Prerequisites: MAC 122.

Corequisites: None.

When Offered: (S)

MAC 224 - Advanced CNC Milling

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course covers advanced methods in setup and operation of CNC machining centers. Emphasis is placed on programming and production of complex parts. Upon completion, students should be able to demonstrate skills in programming, operations, and setup of CNC machining centers.

Prerequisites: MAC 124.

Corequisites: None.

When Offered: (S)

MAC 231 - CAM: CNC Turning

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course introduces Computer Numerical Control graphics programming and concepts for turning center applications. Emphasis is placed on the interaction of menus to develop a shape file in a graphics CAM system and to develop tool path geometry and part geometry. Upon completion, students should be able to develop a job plan using CAM software, including machine selection, tool selection, operational sequence, speed, feed, and cutting depth.

Prerequisites: MEC 110.

Corequisites: None.

When Offered: (F)

MAC 232 - CAM: CNC Milling

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course introduces Computer Numerical Control graphics programming and concepts for machining center applications. Emphasis is placed on developing a shape file in a graphics CAM system and transferring coded information from CAM graphics to the CNC milling center. Upon completion, students should be able to develop a complete job plan using CAM software to create a multi-axis CNC program.

Prerequisites: MEC 110.

Corequisites: None.

When Offered: (F)

MAC 233 - Appl in CNC Machining

Hours--Class: 2 Lab: 12 Clinic/Work Exp: 0 Credit: 6

This capstone course provides students the opportunity to apply skills learned throughout the curriculum. Emphasis is placed on production of parts and assemblies using modern CNC machine tools. Upon completion, students should be able to manufacture complex parts using a variety of CNC machine tools.

Prerequisites: MAC 234.

Corequisites: None.

When Offered: (S)

MAC 234 - Adv Multi-Axis Machin

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course includes multi-axis machining using machining centers with multi-axis capabilities. Emphasis is placed on generation of machining center input with a CAM system and setup of pallet changer and rotary system for multi-axis machining fixtures. Upon completion, students should be able to convert CAD to output for multi-axis machining centers, including tooling, setup, and debugging processes.

Prerequisites: MAC 222, MAC 224.

Corequisites: None.

When Offered: (S)

MAC 241 - Jigs & Fixtures I

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 0 Credit: 4

This course introduces the application and use of jigs and fixtures. Emphasis is placed on design and manufacture of simple jigs and fixtures. Upon completion, students should be able to design and build simple jigs and fixtures.

Prerequisites: MAC 142, MAC 222, MAC 224.

Corequisites: None.

When Offered: (F)

MAC 242 - Jigs & Fixtures II

Hours--Class: 1 Lab: 9 Clinic/Work Exp: 0 Credit: 4

This course provides continued study in the application of jigs and fixtures. Emphasis is placed on design and manufacture of complex jigs and fixtures. Upon completion, students should be able to design and build complex jigs and fixtures.

Prerequisites: MAC 241.

Corequisites: None.

When Offered: (S)

MAC 245 - Mold Construction I

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 0 Credit: 4

This course introduces the principles of mold making. Topics include types, construction, and application of molds. Upon completion, students should be able to design and build simple molds.

Prerequisites: None.

Corequisites: None.

When Offered: (SU)

Mathematics**MAT 001 - Math Skills Support**

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides opportunities for students to build a stronger foundation for success in their corequisite math course by obtaining skills through a variety of instructional strategies. Emphasis is placed on foundational skills as well as concepts, skills, vocabulary and definitions necessary to master student learning outcomes of the co-requisite math course. Upon completion, students should be able to apply mathematical concepts and critical thinking skills to solve problems relevant to the student's co-requisite math course.

Prerequisites: None.

Corequisites: MAT 110, MAT 121, MAT 143, MAT 152, or MAT 171.

When Offered: (F,S)

MAT 001P - Math Skills Support

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides opportunities for students to build a stronger foundation for success in their corequisite math course by obtaining skills through a variety of instructional strategies. Emphasis is placed on foundational skills as well as concepts, skills, vocabulary and definitions necessary to master student learning outcomes of the co-requisite math course. Upon completion,

students should be able to apply mathematical concepts and critical thinking skills to solve problems relevant to the student's co-requisite math course. MAT-001P is a support course for MAT-171 (Precalculus Algebra) intended for students taking MAT-171 with a High School GPA of 2.60-2.99.

Prerequisites: None.

Corequisites: MAT 171.

When Offered: (F,S)

MAT 110 - Mathematical Measurement and Literacy

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course provides an activity-based approach that develops measurement skills and mathematical literacy using technology to solve problems for nonmath intensive programs. Topics include unit conversions and estimation within a variety of measurement systems; ratio and proportion; basic geometric concepts; financial literacy; and statistics including measures of central tendency, dispersion, and charting of data. Upon completion, students will demonstrate the use of mathematics and technology to solve practical problems, and to analyze and communicate results.

Prerequisites: DMA 010, DMA 020, DMA 030.

Corequisites: DRE 097.

When Offered: (F,S)

MAT 121 - Algebra/Trigonometry I

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060, or by placement testing; DRE 098 or by placement testing.

Corequisites: None.

When Offered: (F,S)

MAT 122 - Algebra/Trigonometry II

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

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

Prerequisites: MAT 121 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

MAT 143 - Quantitative Literacy (Coll/Tran)

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course is designed to engage students in complex and realistic situations involving the mathematical phenomena of quantity, change and relationship, and uncertainty through project- and activity-based assessment. Emphasis is placed on authentic contexts which will introduce the concepts of numeracy, proportional reasoning, dimensional analysis, rates of growth, personal finance, consumer statistics, practical probabilities, and mathematics for citizenship. Upon completion, students will be informed consumers of quantitative information with the ability to use data to make personal, professional, and civic decisions by decoding, interpreting, using, and communicating quantitative information found in modern media and encountered in everyday life.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DRE 098 or by placement testing.

Corequisites: None.

When Offered: (F,S,SU)

MAT 152 - Statistical Methods I (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course provides a project-based approach to introductory statistics with an emphasis on using real-world data and statistical literacy. Topics include descriptive statistics, correlation and regression, basic probability, discrete and continuous probability distributions, confidence intervals and hypothesis testing. Upon completion, students will be able to use appropriate technology to describe important characteristics of a data set, draw inferences about a population from sample data, and interpret and communicate results.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050; DRE 098 or by placement testing.

Corequisites: None.

When Offered: (F,S,SU)

MAT 171 - Precalculus Algebra (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This is the first of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is placed on equations and inequalities, functions (linear, polynomial, rational), systems of equations and inequalities, and parametric equations. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and predictions.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065 or MAT 121 or by placement testing; DRE 098 or by placement testing.

Corequisites: MAT 001P may be required. Consult the Advising Center for more information.

When Offered: (F,S,SU)

MAT 172 - Precalculus Trigonometry (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This is the second of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is placed on properties and applications of transcendental functions and their graphs, right and oblique triangle trigonometry, conic sections, vectors, and polar coordinates. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction.

Prerequisites: MAT 171 must pass with a grade of C or higher; DRE 098 or by placement testing.

Corequisites: None.

When Offered: (F,S)

MAT 263 - Brief Calculus (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course is designed for students needing only one semester of calculus. Topics include functions, graphing, differentiation, and integration with emphasis on applications drawn from business, economics, and biological and behavioral sciences. Upon completion, students should be able to demonstrate an understanding of the use of basic calculus and technology to solve problems and to analyze and communicate results.

Prerequisites: MAT 171 must pass with a grade of C or higher; and DRE 098 or by placement testing.

Corequisites: None.

When Offered: (S)

MAT 271 - Calculus I (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course covers in depth the differential calculus portion of a three-course calculus sequence. Topics include limits, continuity, derivatives, and integrals of algebraic and transcendental functions of one variable, with applications. Upon completion, students should be able to apply differentiation and integration techniques to algebraic and transcendental functions.

Prerequisites: MAT 172 must pass with a grade of C or higher; DRE 098 or by placement testing.

Corequisites: None.

When Offered: (F,S,SU)

MAT 272 - Calculus II (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course provides a rigorous treatment of integration and is the second calculus course in a three-course sequence. Topics include applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to use integration and approximation techniques to solve application problems.

Prerequisites: MAT 271 must pass with a grade of C or higher; DRE 098 or by placement testing.

Corequisites: None.

When Offered: (F,S)

MAT 273 - Calculus III (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course covers the calculus of several variables and is the third calculus course in a three-course sequence. Topics include functions of several variables, partial derivatives, multiple integrals, solid analytical geometry, vector-valued functions, and line and surface integrals. Upon completion, students should be able to solve problems involving vectors and functions of several variables.

Prerequisites: MAT 272 must pass with a grade of C or higher; DRE 098 or by placement testing.

Corequisites: None.

When Offered: (F,S)

MAT 280 - Linear Algebra (Coll/Tran)

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course provides an introduction to linear algebra topics. Emphasis is placed on the development of abstract concepts and applications for vectors, systems of equations, matrices, determinants, vector spaces, multi-dimensional linear transformations, eigenvectors, eigenvalues, diagonalization and orthogonality. Upon completion, students should be able to demonstrate understanding of the theoretical concepts and select and use appropriate models and techniques for finding solutions to linear algebra-related problems with and without technology.

Prerequisites: MAT 271.

Corequisites: None.

When Offered: (F)

MAT 285 - Differential Equations (Coll/Tran)

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course provides an introduction to ordinary differential equations with an emphasis on applications. Topics include first order, linear higher-order, and systems of differential equations; numerical methods; series solutions; eigenvalues and eigenvectors; Laplace transforms; and Fourier series. Upon completion, students should be able to use differential equations to model physical phenomena, solve the equations, and use the solutions to analyze the phenomena.

Prerequisites: MAT 272 must pass with a grade of C or higher; DRE 098 or by placement testing.

Corequisites: None.

When Offered: (S)

Mechanical**MEC 110 - Intro to CAD/CAM**

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course introduces CAD/CAM. Emphasis is placed on transferring part geometry from CAD to CAM for the development of a CNC-ready program. Upon completion, students should be able to use CAD/CAM software to produce a CNC program.

Prerequisites: None

Corequisites: MAC 122, MAC 124.

When Offered: (SU)

MEC 130 - Mechanisms

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the purpose and action of various mechanical devices. Topics include cams, cables, gear trains, differentials, screws, belts, pulleys, shafts, levers, lubricants, and other devices. Upon completion, students should be able to analyze, maintain, and troubleshoot the components of mechanical systems.

Prerequisites: DRE 097 or appropriate placement test score; DMA 010, DMA 020, DMA 030.

Corequisites: None.

When Offered: (On demand)

MEC 142 - Physical Metallurgy

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course covers the heat treating of metals. Emphasis is placed on the effects of hardening, tempering, and annealing on the structure and physical properties of metals. Upon completion, students should be able to heat treat materials.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

MEC 161 - Manufacturing Processes I

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides the fundamental principles of value-added processing of materials into usable forms for the customer. Topics include material properties and traditional and non-traditional manufacturing processes. Upon completion, students should be able to specify appropriate manufacturing processing for common engineering materials.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (S)

MEC 180 - Engineering Materials

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course introduces the physical and mechanical properties of materials. Topics include materials testing, pre- and post-manufacturing processes, and material selection of ferrous and non-ferrous metals, plastics, composites, and non-conventional materials. Upon completion, students should be able to utilize basic material property tests and select appropriate materials for applications.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

MEC 231 - Comp-Aided Manufact I

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course introduces computer-aided design/manufacturing (CAD/CAM) applications and concepts. Topics include software, programming, data transfer and verification, and equipment setup. Upon completion, students should be able to produce parts using CAD/CAM applications.

Prerequisites: MAC 141 must pass with grade of C or higher.

Corequisites: None.

When Offered: (S)

MEC 265 - Fluid Mechanics

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

Topics include fluid statics and dynamics, laminar and turbulent flow, Bernoulli's Equation, components, applications, and other related topics. Upon completion, students should be able to apply fluid power principles to practical applications.

Prerequisites: None.

Corequisites: DRE 097 or appropriate placement test score; and PHY 131 or PHY 151.

When Offered: (S)

Medical Assisting

MED 118 - Medical Law and Ethics

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course covers legal relationships of physicians and patients, contractual agreements, professional liability, malpractice, medical practice acts, informed consent, and bioethical issues. Emphasis is placed on legal terms, professional attitudes, and the principles and basic concepts of ethics and laws involved in providing medical services. Upon completion, students should be able to meet the legal and ethical responsibilities of a multi-skilled health professional.

Prerequisites: None.

Corequisites: None.

When Offered: (F,SU)

MED 121 - Medical Terminology I

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S)

MED 122 - Medical Terminology II

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

Prerequisites: MED 121 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S)

Marketing

MKT 120 - Principles of Marketing

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

MKT 123 - Fundamentals of Selling

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is designed to emphasize the necessity of selling skills in a modern business environment. Emphasis is placed on sales techniques involved in various types of selling situations. Upon completion, students should be able to demonstrate an understanding of the techniques covered.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

MKT 220 - Advertising and Sales Promotion

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and sales promotion as a

marketing tool, and means of testing effectiveness. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

MKT 221 - Consumer Behavior

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is designed to describe consumer behavior as applied to the exchange processes involved in acquiring, consuming, and disposing of goods and services. Topics include an analysis of basic and environmental determinants of consumer behavior with emphasis on the decision-making process. Upon completion, students should be able to analyze concepts related to the study of the individual consumer.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

MKT 223 - Customer Service

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course stresses the importance of customer relations in the business world. Emphasis is placed on learning how to respond to complex customer requirements and to efficiently handle stressful situations. Upon completion, students should be able to demonstrate the ability to handle customer relations.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

Maintenance

MNT 110 - Intro to Maint Procedures

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course covers basic maintenance fundamentals for power transmission equipment. Topics include equipment inspection, lubrication, alignment, and other scheduled maintenance procedures. Upon completion, students should be able to demonstrate knowledge of accepted maintenance procedures and practices according to current industry standards.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

Music

MUS 110 - Music Appreciation (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S,SU)

MUS 111 - Fundamentals of Music (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is an introductory course for students with little or no music background. Emphasis is placed on music notation, rhythmic patterns, scales, key signatures, intervals, and chords. Upon completion, students should be able to demonstrate an understanding of the rudiments of music.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

MUS 112 - Introduction to Jazz (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the origins and musical components of jazz and the contributions of its major artists. Emphasis is placed on the development of discriminating listening habits, as well as the investigation of the styles and structural forms of the jazz idiom. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

MUS 113 - American Music (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces various musical styles, influences, and composers of the United States from pre-Colonial times to the present. Emphasis is placed on the broad variety of music particular to American culture. Upon completion, students should be able to demonstrate skills in basic listening and understanding of American music.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

MUS 121 - Music Theory I (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course provides an in-depth introduction to melody, rhythm, and harmony. Emphasis is placed on fundamental melodic, rhythmic, and harmonic analysis, introduction to part writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

MUS 122 - Music Theory II (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course is a continuation of studies begun in MUS 121. Emphasis is placed on advanced melodic, rhythmic, and harmonic analysis and continued studies in part-writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above.

Prerequisites: MUS 121.

Corequisites: None.

When Offered: (S)

MUS 131 - Chorus I (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to gain experience singing in a chorus. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. This course includes a performance choir that will prepare a Christmas Music Presentation in conjunction with a neighborhood church choir; rehearsals at both locations (on campus and church site) will be required.

Prerequisites: Appropriate vocal proficiency.

Corequisites: None.

When Offered: (On demand)

MUS 132 - Chorus II (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides a continuation of studies begun in MUS 131. Emphasis is placed on vocal techniques and the study and performance of a variety of

styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.

Prerequisites: MUS 131.

Corequisites: None.

When Offered: (On demand)

MUS 133 - Band I (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity for those who play a band instrument to gain experience playing in an ensemble. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

Prerequisites: Audition.

Corequisites: None.

When Offered: (F, On demand)

MUS 134 - Band II (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 133. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

Prerequisites: MUS 133.

Corequisites: None.

When Offered: (S, On demand)

MUS 135 - Jazz Ensemble I

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity for those who play an appropriate instrument to gain experience playing in a jazz ensemble. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

MUS 136 - Jazz Ensemble II (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 135. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

Prerequisites: MUS 135.

Corequisites: None.

When Offered: (On demand)

MUS 137 - Orchestra I (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity for those who play an orchestral instrument to gain experience playing in an ensemble. Emphasis is placed on orchestral techniques and the study and performance of a variety of styles and periods of orchestral and string ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

Prerequisites: None.

Corequisites: None.

When Offered: (F, S)

MUS 138 - Orchestra II (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 137. Emphasis is placed on orchestral techniques and the study and performance of a variety of styles and periods

of orchestral and string ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

Prerequisites: MUS 137.

Corequisites: None.

When Offered: (F,S)

MUS 141 - Ensemble I (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to perform in any combination of instrumental, vocal, or keyboard groups of two or more. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

Prerequisites: Audition.

Corequisites: None.

When Offered: (F)

MUS 142 - Ensemble II (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 141. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

Prerequisites: MUS 141.

Corequisites: None.

When Offered: (S)

MUS 151 - Class Music I (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

MUS 151G - Class Music I-Guitar

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

MUS 151P - Class Music I-Piano

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

MUS 151V - Class Music I-Voice

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: None.

Corequisites: None.

When Offered: (F,On demand)

MUS 152 - Class Music II (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 151. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 151.

Corequisites: None.

When Offered: (S)

MUS 152G - Class Music II-Guitar

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 151G. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 151.

Corequisites: None.

When Offered: (S)

MUS 152P - Class Music II-Piano

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 151P. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 151.

Corequisites: None.

When Offered: (S)

MUS 152V - Class Music II-Voice

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 151V. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 151.

Corequisites: None.

When Offered: (F,On demand)

MUS 161 - Applied Music I (Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course provides individual instruction in the skills and techniques of the particular instrument or voice. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S,SU)

MUS 161B - Applied Music I-Brass

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course provides individual instruction in the skills and techniques of the particular instrument or voice. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

MUS 161D - Applied Music I-Percussion

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course provides individual instruction in the skills and techniques of the particular instrument or voice. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

MUS 161G - Applied Music I-Guitar

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course provides individual instruction in the skills and techniques of the particular instrument or voice. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

MUS 161P - Applied Music I-Piano

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course provides individual instruction in the skills and techniques of the particular instrument or voice. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S,SU)

MUS 161V - Applied Music I-Voice

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course provides individual instruction in the skills and techniques of the particular instrument or voice. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S,SU)

MUS 161W - Applied Music I-Woodwinds

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course provides individual instruction in the skills and techniques of the particular instrument or voice. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

MUS 162 - Applied Music II

(Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 161. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 161.

Corequisites: None.

When Offered: (F,S)

MUS 162B - Applied Music II-Brass

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 161B. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 161.

Corequisites: None.

When Offered: (F,S)

MUS 162D - Applied Music II - Percussion

(Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 161D. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 161.

Corequisites: None.

When Offered: (F,S)

MUS 162G - Applied Music II-Guitar

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 161G. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 161.

Corequisites: None.

When Offered: (F,S)

MUS 162P - Applied Music II-Piano

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 161P. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 161.

Corequisites: None.

When Offered: (F,S)

MUS 162V - Applied Music II-Voice

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 161V. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 161.

Corequisites: None.

When Offered: (F,S)

MUS 162W - Applied Music II-Woodwinds

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 161W. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 161.

Corequisites: None.

When Offered: (F,S)

MUS 173 - Opera Production I (Coll/Tran)

Hours--Class: 0 Lab: 9 Clinic/Work Exp: 0 Credit: 3

This course provides an applied laboratory study of the processes involved in the production of an opera. Topics include fundamental practices, principles, and techniques associated with producing operas of various musical periods with an emphasis on vocal technique. Upon completion, students should be able to participate in an assigned position in a college opera production. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

MUS 174 - Opera Production II (Coll/Tran)

Hours--Class: 0 Lab: 9 Clinic/Work Exp: 0 Credit: 3

This course provides an applied laboratory study of the processes involved in the production of an opera. Topics include fundamental practices, principles, and techniques associated with producing operas of various musical periods with an emphasis on musical/language production. Upon completion, students should be able to participate in an assigned position in a college opera production.

Prerequisites: MUS 173.

Corequisites: None.

When Offered: (F,S)

MUS 181 - Show Choir I (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides students the initial training in basic competencies of dance/voice-based performances and to the nuances of preparation for such pop/jazz/theatre performances. Emphasis is placed on the introduction to, and subsequent development of, basic performance skills necessary for choreographed performance. Upon completion, students should be able to demonstrate the foundation competencies necessary to perform the assigned literature in various venues and under various professional conditions.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

MUS 182 - Show Choir II (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides intermediate training in dance/voice-based performances and in the nuances of preparation for such pop/jazz/theatre performances. Emphasis is placed on continued development of skills necessary for professional group choral preparation and performance, as well as effective social interaction with a performance troupe. Upon completion, students should be able to demonstrate the intermediate competencies necessary to perform the assigned literature in various venues and under various professional conditions.

Prerequisites: MUS 181.

Corequisites: None.

When Offered: (F,S)

MUS 210 - History of Rock Music (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is a survey of Rock music from the early 1950's to the present. Emphasis is placed on musical groups, soloists, and styles related to the evolution of this idiom and on related historical and social events. Upon

completion, students should be able to identify specific styles and to explain the influence of selected performers within their respective eras.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

MUS 211 - History of Country Music (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the varied origins of country music and the commercialization of this art form. Emphasis is placed on historical, sociocultural, and stylistic factors related to country music and musicians. Upon completion, students should be able to identify specific styles and explain the influence of pop culture on the development of country music.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

MUS 212 - American Musical Theatre (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the origins and development of the musical from Show Boat to the present. Emphasis is placed on the investigation of the structure of the musical and its components through listening and analysis. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

MUS 213 - Opera and Musical Theatre (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the origins and development of opera and musical theatre from the works of Claudio Monteverdi to the present. Emphasis is placed on how the structure and components of opera and musicals effect dramaturgy through listening examples and analysis. Upon completion, students should be able to demonstrate analytical and listening skills in understanding both opera and the musical.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

MUS 214 - Electronic Music I (Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course provides an opportunity to study and explore various electronic instruments and devices. Emphasis is placed on fundamental MIDI applications and implementation, features and application of sequences, sound modules, and digital keyboards. Upon completion, students should be able to demonstrate proficiency by creation of appropriate musical projects using the equipment and techniques covered.

Prerequisites: MUS 111.

Corequisites: None.

When Offered: (On demand)

MUS 215 - Electronic Music II (Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 214. Emphasis is placed on advanced MIDI applications and implementation and continued work with sequencers, sound modules, and digital keyboards. Upon completion, students should be able to demonstrate proficiency by creation of appropriate musical projects using the equipment and techniques covered.

Prerequisites: MUS 214.

Corequisites: None.

When Offered: (On demand)

MUS 217 - Elementary Conducting (Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course introduces the basic patterns and skills for conducting instrumental and vocal groups. Emphasis is placed on conducting beat

patterns, expressive gestures, fermatas, accents, tempos, and rehearsal techniques. Upon completion, students should be able to demonstrate the above skills by conducting vocal and/or instrumental groups.

Prerequisites: MUS 111.

Corequisites: None.

When Offered: (S)

MUS 221 - Music Theory III (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course is a continuation of MUS 122. Emphasis is placed on altered and chromatic harmony, common practice era compositional techniques and forms, and continued studies in part-writing, ear training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above.

Prerequisites: MUS 122.

Corequisites: None.

When Offered: (S)

MUS 222 - Music Theory IV (Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course is a continuation of studies begun in MUS 221. Emphasis is placed on continued study of common practice era compositional techniques and forms, 20th century practices, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above.

Prerequisites: MUS 221.

Corequisites: None.

When Offered: (S)

MUS 231 - Chorus III (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 132. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.

Prerequisites: MUS 132.

Corequisites: None.

When Offered: (S,On demand)

MUS 232 - Chorus IV (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 231. Emphasis is placed on vocal techniques and the study of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.

Prerequisites: MUS 231.

Corequisites: None.

When Offered: (On demand)

MUS 233 - Band III (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 134. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

Prerequisites: MUS 134.

Corequisites: None.

When Offered: (On demand)

MUS 234 - Band IV (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 233. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

Prerequisites: MUS 233.

Corequisites: None.

When Offered: (On demand)

MUS 235 - Jazz Ensemble III (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 136. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

Prerequisites: MUS 136.

Corequisites: None.

When Offered: (On demand)

MUS 236 - Jazz Ensemble IV (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 235. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

Prerequisites: MUS 235.

Corequisites: None.

When Offered: (On demand)

MUS 237 - Orchestra III (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 138. Emphasis is placed on orchestral techniques and the study and performance of a variety of styles and periods of orchestral and string ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

Prerequisites: MUS 138.

Corequisites: None.

When Offered: (F,S)

MUS 238 - Orchestra IV (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 237. Emphasis is placed on orchestral techniques and the study and performance of a variety of styles and periods of orchestral and string ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

Prerequisites: MUS 237.

Corequisites: None

When Offered: (F,S)

MUS 241 - Ensemble III (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 142. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

Prerequisites: MUS 142.

Corequisites: None.

When Offered: (F,S)

MUS 242 - Ensemble IV (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 241. Emphasis is placed on the development of performance skills and the study of styles of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

Prerequisites: MUS 241.

Corequisites: None.

When Offered: (On demand)

MUS 251 - Class Music III (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 152. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 152.

Corequisites: None.

When Offered: (On demand)

MUS 252 - Class Music IV (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a continuation of MUS 251. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 251.

Corequisites: None.

When Offered: (On demand)

MUS 253 - Big Band (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course includes the Big Band instrumentation of five saxes, four trumpets, four trombones, and four-piece rhythm section (bass, piano, drums, and guitar). Emphasis is placed on learning the repertoire specifically written for Big Band instrumentation. Upon completion, students should be able to demonstrate skills needed to participate in performance of Big Band music.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

MUS 261 - Applied Music III (Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 162. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 162.

Corequisites: None.

When Offered: (S)

MUS 261B - Applied Music III-Brass

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 162B. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 162.

Corequisites: None.

When Offered: (S)

MUS 261D - Applied Music III-Percussion

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 162D. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon

completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 162.

Corequisites: None.

When Offered: (S)

MUS 261G - Applied Music III-Guitar

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 162G. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 162.

Corequisites: None.

When Offered: (S)

MUS 261P - Applied Music III-Piano

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 162P. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 162.

Corequisites: None.

When Offered: (S)

MUS 261V - Applied Music III-Voice

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 162V. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 162.

Corequisites: None.

When Offered: (S)

MUS 261W - Applied Music III-Woodwinds

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 162W. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 162.

Corequisites: None.

When Offered: (S)

MUS 262 - Applied Music IV (Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 261. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 261.

Corequisites: None.

When Offered: (S)

MUS 262B - Applied Music IV-Brass

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 261B. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 261.

Corequisites: None.

When Offered: (S)

MUS 262G - Applied Music IV-Guitar

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 261G. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 261.

Corequisites: None.

When Offered: (S)

MUS 262P - Applied Music IV-Piano

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 261P. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 261.

Corequisites: None.

When Offered: (S)

MUS 262V - Applied Music IV-Voice

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 261V. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 261.

Corequisites: None.

When Offered: (S)

MUS 262W - Applied Music IV-Woodwinds

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of MUS 261W. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

Prerequisites: MUS 261.

Corequisites: None.

When Offered: (S)

MUS 273 - Opera Production III (Coll/Tran)

Hours--Class: 0 Lab: 9 Clinic/Work Exp: 0 Credit: 3

This course provides an applied laboratory study of the processes involved in the production of an opera. Topics include fundamental practices, principles, and techniques associated with producing operas of various musical periods with an emphasis on stagecraft. Upon completion, students should be able to participate in an assigned position in a college opera production. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

Prerequisite: MUS 174.

Corequisites: None.

When Offered: (F,S)

MUS 274 - Opera Production IV (Coll/Tran)

Hours--Class: 0 Lab: 9 Clinic/Work Exp: 0 Credit: 3

This course provides an applied laboratory study of the processes involved in the production of an opera. Topics include fundamental practices, principles, and techniques associated with producing operas of various musical periods with an emphasis on rehearsal and performance techniques. Upon completion, students should be able to participate in an assigned position in a college opera production.

Prerequisites: MUS 273.

Corequisites: None.

When Offered: (F,S)

MUS 281 - Show Choir III (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides advanced training in dance/voice-based performance and in the nuances of preparation for such pop/jazz/theatre performances. Emphasis is placed on development of advanced skills necessary for professional group choral performance and the technical skills necessary for the execution of such performances. Upon completion, students should be able to demonstrate the advanced competencies necessary to perform the assigned literature in various venues and under various professional conditions.

Prerequisites: MUS 182.

Corequisites: None.

When Offered: (F,S)

MUS 282 - Show Choir IV (Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides advanced training in dance/voice-based pop/jazz/theatre performances and is the capstone course in a four-semester series. Emphasis is placed on refinement of advanced skills necessary for professional group choral performance and the technical skills necessary for the execution of such performances. Upon completion, students should be able to demonstrate a mastery of the skills necessary to plan and perform the assigned literature in various venues and under various professional conditions.

Prerequisites: MUS 281.

Corequisites: None.

When Offered: (F,S)

MUS 283 - Varied Cultures/Mus Perf (Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course provides an opportunity for music students to experience various musical cultures and to perform in public venues for audiences in these cultures. Emphasis is placed on the development of performance skills and on the musically historical information that characterizes the specific culture. Upon completion, students should be able to identify new culturally-based musical concepts and will have experiences in working with other cultures and in culturally-reflective environments.

Prerequisites: None.

Corequisites: MUS 181 or MUS 182 or MUS 281 or MUS 282.

When Offered: (S - Invitation only)

Networking Technology**NET 125 - Introduction to Networks**

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course introduces the architecture, structure, functions, components, and models of the Internet and computer networks. Topics include introduction to the principles of IP addressing and fundamentals of Ethernet concepts, media, and operations. Upon completion, students should be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

NET 126 - Routing Basics

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course focuses on initial router configuration, router software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). Emphasis will be placed on the fundamentals of router configuration, managing router software, routing protocol, and access lists. Upon completion, students should have an understanding of routers and their role in WANs, router configuration, routing protocols, TCP/IP, troubleshooting, and ACLs.

Prerequisites: NET 125.

Corequisites: None.

When Offered: (F,S)

NET 175 - Wireless Technology

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the student to wireless technology and interoperability with different communication protocols. Topics include Wireless Application Protocol (WAP), Wireless Mark-up language (WML), link manager, service discovery protocol, transport layer and frequency band. Upon completion, students should be able to discuss in written and oral form protocols and procedures required for different wireless applications.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

NET 225 - Routing & Switching I

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course focuses on advanced IP addressing techniques, intermediate routing protocols, command-line interface configuration of switches, Ethernet switching, VLANs, STP, and VTP. Emphasis will be placed on application and demonstration of skills acquired in pre-requisite courses. Upon completion, students should be able to perform tasks related to VLSM, routing protocols, switching concepts and configuration, STP, VLANs, and VTP

Prerequisites: NET 126.

Corequisites: None.

When Offered: (F,S)

NET 226 - Routing and Switching II

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course introduces WAN theory and design, WAN technology, PPP, Frame Relay, ISDN, and additional case studies. Topics include network congestion problems, TCP/IP transport and network layer protocols, advanced routing and switching configuration, ISDN protocols, PPP encapsulation operations on a router. Upon completion, students should be able to provide solutions for network routing problems, identify ISDN protocols, and describe the Spanning Tree protocol.

Prerequisites: NET 225.

Corequisites: None.

When Offered: (F,S)

NET 240 - Network Design

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the principles of the design of LANs and WANs. Topics include network architecture, transmission systems, traffic management, bandwidth requirements, Internet working devices, redundancy, and broad-band versus base-band systems. Upon completion, students should be able to design a network to meet specified business and technical requirements.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

NET 241 - Introduction to VOIP

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course introduces students to the terms and definitions of analog phone systems and voice over internet protocol (VOIP) networks and how to configure, maintain, and troubleshoot said networks. Topics include configuring and maintaining an internet protocol (IP) telephony system, provisioning phones and users, configuring call features, and establishing voicemail over VOIP networks. Upon completion, students should be able to discuss the terms and definitions of VOIP as well as configure and maintain an IP telephony system, provision phones and users, configure call features and voicemail.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

NET 289 - Networking Project

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course provides an opportunity to complete a significant networking project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, documentation, installation,

testing, presentation, and training. Upon completion, students should be able to complete a project from the definition phase through implementation.

Prerequisites: CTI 110, CTI 120, CTS 115, NET 226, and NET 240.

Corequisites: None.

When Offered: (S)

Networking Operating Systems**NOS 120 - Linux/UNIX Single User**

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course develops the necessary skills for students to develop both GUI and command line skills for using and customizing a Linux workstation. Topics include Linux file system and access permissions, GNOME Interface, VI editor, X Window System expression pattern matching, I/O redirection, network and printing utilities. Upon completion, students should be able to customize and use Linux systems for command line requirements and desktop productivity roles.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

NOS 130 - Windows Single User

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces operating system concepts for single-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating systems functions at the support level in a single-user environment.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

NOS 230 - Windows Administration I

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers the installation and configuration of a Windows Server operating system. Emphasis is placed on the basic configuration of core network services, Active Directory and group policies. Upon completion, students should be able to install and configure a Windows Server operating system.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

NOS 231 - Windows Administration II

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers implementing, managing, and maintaining a Windows Server network infrastructure. Topics include implementing, managing, and maintaining IP addressing, name resolution, network security, routing and remote access, and managing a network infrastructure. Upon completion, students should be able to manage and maintain a Windows Server environment

Prerequisites: NOS 230.

Corequisites: None.

When Offered: (S)

Nursing

NUR 111 - Intro to Health Concepts

Hours--Class: 4 Lab: 6 Clinic/Work Exp: 6 Credit: 8

This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including medication administration, assessment, nutrition, ethics, interdisciplinary teams, informatics, evidence-based practice, individual-centered care, and quality improvement. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

Prerequisites: None.

Corequisites: BIO 168.

When Offered: (On demand)

NUR 111AB - Intro to Health Concepts

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 3 Credit: 4

This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including medication administration, assessment, nutrition, ethics, interdisciplinary teams, informatics, evidence-based practice, individual-centered care, and quality improvement. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

Prerequisites: None.

Corequisites: BIO 168.

When Offered: (On demand)

NUR 111BB - Intro to Health Concepts

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 3 Credit: 4

This course is a continuation of NUR 111AB. This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including medication administration, assessment, nutrition, ethics, interdisciplinary teams, informatics, evidence-based practice, individual-centered care, and quality improvement. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

Prerequisites: None.

Corequisites: BIO 168.

When Offered: (On demand)

NUR 112 - Health-Illness Concepts

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 6 Credit: 5

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of acid-base, metabolism, cellular regulation, oxygenation, infection, stress/coping, health-wellness-illness, communication, caring interventions, managing care, safety, quality improvement, and informatics. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

Prerequisites: BIO 168, NUR 111, PSY 150.

Corequisites: BIO 169, PSY 241.

When Offered: (On demand)

NUR 113 - Family Health Concepts

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 6 Credit: 5

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of oxygenation, sexuality, reproduction, grief/loss, mood/affect, behaviors, development, family, health-wellness-illness, communication, caring interventions, managing care, safety, and advocacy. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

Prerequisites: BIO 168, BIO 169, ENG 111, NUR 111, NUR 112, NUR 114, PSY 150, PSY 241.

Corequisites: BIO 275.

When Offered: (On demand)

NUR 114 - Holistic Health Concepts

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 6 Credit: 5

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, inflammation, sensory perception, stress/coping, mood/affect, cognition, self, violence, health-wellness-illness, professional behaviors, caring interventions, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

Prerequisites: BIO 168, NUR 111, PSY 150.

Corequisites: BIO 169, PSY 241.

When Offered: (On demand)

NUR 211 - Health Care Concepts

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 6 Credit: 5

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, infection, immunity, mobility, comfort, behaviors, health-wellness-illness, clinical decision-making, caring interventions, managing care, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

Prerequisites: BIO 168, BIO 169, NUR 111, NUR 112, NUR 114, PSY 150, PSY 241.

Corequisites: ENG 111.

When Offered: (On demand)

NUR 212 - Health System Concepts

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 6 Credit: 5

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of grief/loss, violence, health-wellness-illness, collaboration, managing care, safety, advocacy, legal issues, policy, healthcare systems, ethics, accountability, and evidence-based practice. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

Prerequisites: BIO 168, BIO 169, NUR 111, NUR 112, NUR 114, PSY 150, PSY 241.

Corequisites: ENG 111.

When Offered: (On demand)

NUR 213 - Complex Health Concepts

Hours--Class: 4 Lab: 3 Clinic/Work Exp: 15 Credit: 10

This course is designed to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of fluid/electrolytes, metabolism, perfusion, mobility, stress/coping, violence, health-wellness-illness, professional behaviors, caring interventions, managing care, healthcare systems, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide quality, individualized, entry level nursing care.

Prerequisites: BIO 168, BIO 169, BIO 275, ENG 111, NUR 111, NUR 112, NUR 113, NUR 114, NUR 211, NUR 212, PSY 150, PSY 241.

Corequisites: ENG 112 or ENG 114.

NUR 213AB - Complex Health Concepts

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 7 Credit: 5

This course is designed to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of fluid/electrolytes, metabolism, perfusion, mobility, stress/coping, violence, health-wellness-illness, professional behaviors, caring interventions, managing care, healthcare systems, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide quality, individualized, entry level nursing care.

Prerequisites: BIO 168, BIO 169, BIO 275, ENG 111, NUR 111, NUR 112, NUR 113, NUR 114, NUR 211, NUR 212, PSY 150, PSY 241.

Corequisites: ENG 112 or ENG 114.

When Offered: (On demand)

NUR 213BB - Complex Health Concepts

Hours--Class: 2 Lab: 1 Clinic/Work Exp: 8 Credit: 5

This course is a continuation of NUR 213AB. This course is designed to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of fluid/electrolytes, metabolism, perfusion, mobility, stress/coping, violence, health-wellness-illness, professional behaviors, caring interventions, managing care, healthcare systems, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide quality, individualized, entry level nursing care.

Prerequisites: BIO 168, BIO 169, BIO 275, ENG 111, NUR 111, NUR 112, NUR 113, NUR 114, NUR 211, NUR 212, PSY 150, PSY 241.

Corequisites: ENG 112 or ENG 114.

When Offered: (On demand)

Office Systems Technology**OST 080 - Keyboarding Literacy**

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is designed to develop elementary keyboarding skills. Emphasis is placed on mastery of the keyboard. Upon completion, students should be able to demonstrate basic proficiency in keyboarding.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

OST 131 - Keyboarding

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course covers basic keyboarding skills. Emphasis is placed on the touch system, correct techniques, and development of speed and accuracy. Upon completion, students should be able to key at an acceptable speed and accuracy level using the touch system.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

OST 132 - Keyboard Skill Building

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is designed to increase speed and improve accuracy in keyboarding. Emphasis is placed on diagnostic tests to identify accuracy and speed deficiencies followed by corrective drills. Upon completion, students should be able to keyboard rhythmically with greater accuracy and speed.

Prerequisites: OST 080.

Corequisites: None.

When Offered: (F)

OST 136 - Word Processing

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course is designed to introduce word processing concepts and applications. Topics include preparation of a variety of documents and mastery of specialized software functions. Upon completion, students should be able to work effectively in a computerized word processing environment.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

OST 140 - Internet Comm/Research

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course provides a working knowledge of Internet usage and research for the modern office. Emphasis is placed on using search engines, email, Web sites, Web servers, communication services, and e-business to obtain

information vital to the current office environment. Upon completion, students would be able to use the Internet to research any office topics required for employment.

Prerequisites: HMT 110, must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

OST 148 - Med Ins & Billing

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces fundamentals of medical insurance and billing. Emphasis is placed on the medical billing cycle to include third party payers, coding concepts, and form preparation. Upon completion, students should be able to explain the life cycle of and accurately complete a medical insurance claim.

Prerequisites: HMT 110, must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S)

OST 149 - Medical Legal Issues

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the complex legal, moral, and ethical issues involved in providing health-care services. Emphasis is placed on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professional liabilities; and medical practice liability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S,SU)

OST 164 - Office Editing

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

OST 171 - Intro. to Virtual Office

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the skills and abilities needed to conduct a variety of office administration activities using the latest technology. Students will learn the proper etiquette of communicating electronically as well as the unique procedures and logistics for conducting business in the virtual office. Upon completion, students will know the vocabulary of the virtual office and will have a basic understanding of modern technical communication tools.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

OST 181 - Intro to Office Systems

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the skills and abilities needed in today's office. Topics include effectively interacting with co-workers and the public, processing simple financial and informational documents, and performing functions typical of today's offices. Upon completion, students should be able to display skills and decision-making abilities essential for functioning in the total office context.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

OST 184 - Records Management

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course includes the creation, maintenance, protection, security, and disposition of records stored in a variety of media forms. Topics include alphabetic, geographic, subject, and numeric filing methods. Upon completion, students should be able to set up and maintain a records management system.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

OST 233 - Office Publications Design

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course provides entry-level skills in using software with desktop publishing capabilities. Topics include principles of page layout, desktop publishing terminology and applications, and legal and ethical considerations of software use. Upon completion, students should be able to design and produce professional business documents and publications.

Prerequisites: OST-136.

Corequisites: None.

When Offered: (F,S)

OST 243 - Med Office Simulation

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces medical systems used to process information in the automated office. Topics include traditional and electronic information resources, storing and retrieving information, and the billing cycle. Upon completion, students should be able to use the computer accurately to schedule, bill, update, and make corrections.

Prerequisites: OST 148 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S)

OST 247 - Procedure Coding

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course provides in-depth coverage of procedural coding. Emphasis is placed on CPT and HCPCS coding systems. Upon completion, students should be able to properly code procedures and services performed in a medical facility.

Prerequisites: MED 121 and MED 122, must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S)

OST 248 - Diagnostic Coding

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course provides an in-depth study of diagnostic coding. Emphasis is placed on ICD coding system. Upon completion, students should be able to properly code diagnoses in a medical facility.

Prerequisites: MED 121 and MED 122, must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S)

OST 249 - Med Coding Certification Prep

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course provides instruction that will prepare students to sit for a national coding certification exam. Topics include diagnostic and procedural coding. Upon completion, students should be able to sit for various medical coding certification exams.

Prerequisites: OST 247 and OST 248, must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

OST 263 - Healthcare Customer Relations

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides the soft skills necessary for effective communication and maintaining customer satisfaction in healthcare. Emphasis is placed on the importance of positive attitudes, techniques for handling difficult/angry customers, rephrasing blunt communication for better results, and the communication skills required to discuss topics such as insurance and billing issues with the patient and other medical personnel. Upon completion, students should be able to communicate information in a professional manner.

Prerequisites: OST 148, must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S)

OST 271 - Office Web Technologies

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course provides a working knowledge of software tools used in the virtual office environment. Emphasis will be placed on using the Internet for research, planning and decision making by using various office software available through application service providers. Upon completion, students will be able to use current and emerging technologies to solve problems and complete projects in the virtual office environment.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

OST 280 - Electronic Health Records

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course focuses on the use of electronic health records in medical documentation and patient management. Emphasis is placed on creating and maintaining patient medical information, scheduling patient appointments, documenting patient encounters, and billing/insurance claim processing. Upon completion, students should be able to perform the required software tasks following a patient visit from start to finish.

Prerequisites: CIS 110, CIS 111, or OST 137.

Corequisites: None.

When Offered: (F,S)

OST 286 - Professional Development

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the personal competencies and qualities needed to project a professional image in the office. Topics include interpersonal skills, health lifestyles, appearance, attitude, personal and professional growth, multicultural awareness, and professional etiquette. Upon completion, students should be able to demonstrate these attributes in the classroom, office, and society.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

OST 288 - Medical Office Admin Capstone

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course is designed to be a capstone course for the medical office professional and provides a working knowledge of medical office procedures. Emphasis is placed on written and oral communication skills, practice management, electronic health records, medical office procedures, ethics, and professional development. Upon completion, students should be able to demonstrate the skills necessary to manage a medical office.

Prerequisites: OST 148 or HMT 210, with a grade of C or higher.

Corequisites: None.

When Offered: (S)

Physical Education

PED 110 - Fit and Well for Life (Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests.

Prerequisites: None.

Corequisites: None.

When Offered: (S,On demand)

PED 113 - Aerobics I (Coll/Tran)

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 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.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S,On demand)

PED 114 - Aerobics II (Coll/Tran)

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course provides a continuation of a program of cardiovascular fitness involving rhythmic exercise. Emphasis is placed on a wide variety of aerobic activities which include cardiovascular efficiency, strength, and flexibility. Upon completion, students should be able to participate in and design a rhythmic aerobic exercise routine.

Prerequisites: PED 113 or equivalent training or experience.

Corequisites: None.

When Offered: (On demand)

PED 117 - Weight Training I (Coll/Tran)

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 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.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S,On demand)

PED 118 - Weight Training II (Coll/Tran)

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 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.

Prerequisites: PED 117 or equivalent training or experience.

Corequisites: None.

When Offered: (F,S,On demand)

PED 120 - Walking for Fitness (Coll/Tran)

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course introduces fitness through walking. Emphasis is placed on stretching, conditioning exercises, proper clothing, fluid needs, and injury prevention. Upon completion, students should be able to participate in a recreational walking program.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 121 - Walk, Jog, Run (Coll/Tran)

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 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.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 122 - Yoga I (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course introduces the basic discipline of yoga. Topics include proper breathing, relaxation techniques, and correct body positions. Upon completion, students should be able to demonstrate the procedures of yoga.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S,On demand)

PED 123 - Yoga II (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course introduces more detailed aspects of the discipline of yoga. Topics include breathing and physical postures, relaxation, and mental concentration. Upon completion, students should be able to demonstrate advanced procedures of yoga.

Prerequisites: PED 122.

Corequisites: None.

When Offered: (On demand)

PED 124 - Run, Swim, Cycle (Coll/Tran)

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course introduces the sport of the triathlon. Topics include the rules, equipment, and skills necessary for the triathlon. Upon completion, students should be able to participate in a triathlon competition.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 125 - Self-Defense-Beginning (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is designed to aid students in developing rudimentary skills in self-defense. Emphasis is placed on stances, blocks, punches, and kicks as well as non-physical means of self-defense. Upon completion, students should be able to demonstrate basic self defense techniques of a physical and non-physical nature.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 128 - Golf-Beginning (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course emphasizes the fundamentals of golf. Topics include the proper grips, stance, alignment, swings for the short and long game, putting, and the rules and etiquette of golf. Upon completion, students should be able to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 129 - Golf-Intermediate (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course covers the more advanced phases of golf. Emphasis is placed on refining the fundamental skills and learning more advanced phases of the games such as club selection, trouble shots, and course management. Upon

completion, students should be able demonstrate the knowledge and ability to play a recreational round of golf.

Prerequisites: PED 128 or equivalent training or experience.

Corequisites: None.

When Offered: (On demand)

PED 130 - Tennis-Beginning (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis.

Prerequisites: None.

Corequisites: None.

When Offered: (F,SU,On demand)

PED 131 - Tennis-Intermediate (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

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.

Prerequisites: PED 130 or equivalent training or experience.

Corequisites: None.

When Offered: (On demand)

PED 137 - Badminton (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course covers the fundamentals of badminton. Emphasis is placed on the basics of serving, clears, drops, drives, smashes, and the rules and strategies of singles and doubles. Upon completion, students should be able to apply these skills in playing situations.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 138 - Archery (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course introduces basic archery safety and skills. Topics include proper techniques of stance, bracing, drawing, and releasing as well as terminology and scoring. Upon completion, students should be able to participate safely in target archery.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 139 - Bowling-Beginning (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course introduces the fundamentals of bowling. Emphasis is placed on ball selection, grips, stance, and delivery along with rules and etiquette. Upon completion, students should be able to participate in recreational bowling.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 142 - Lifetime Sports (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is designed to give an overview of a variety of sports activities. Emphasis is placed on the skills and rules necessary to participate in a variety of lifetime sports. Upon completion, students should be able to demonstrate an awareness of the importance of participating in lifetime sports activities.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 143 - Volleyball-Beginning (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 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.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 144 - Volleyball-Intermediate (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

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.

Prerequisites: PED 143.

Corequisites: None.

When Offered: (On demand)

PED 145 - Basketball-Beginning (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 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.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 146 - Basketball-Intermediate (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

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.

Prerequisites: PED 145.

Corequisites: None.

When Offered: (On demand)

PED 147 - Soccer (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course introduces the basics of soccer. Emphasis is placed on rules, strategies, and fundamental skills. Upon completion, students should be able to participate in recreational soccer.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 148 - Softball (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 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.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 150 - Baseball – Beginning (Coll/Tran)

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course covers the fundamentals of baseball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational baseball.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 152 - Swimming-Beginning (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is designed for non-swimmers and beginners. Emphasis is placed on developing confidence in the water, learning water safety, acquiring skills in floating, and learning elementary strokes. Upon completion, students should be able to demonstrate safety skills and be able to tread water, back float, and use the crawl stroke for 20 yards.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 153 - Swimming-Intermediate (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is designed for those who have mastered basic swimming skills. Emphasis is placed on refining basic skills and learning new swim strokes. Upon completion, students should be able to demonstrate the four basic strokes, the scissors kick, the underwater swim, and other related skills.

Prerequisites: PED 152 or proficiency in swimming.

Corequisites: None.

When Offered: (On demand)

PED 154 - Swimming for Fitness (Coll/Tran)

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course introduces lap swimming, aquacises, water activities, and games. Emphasis is placed on increasing cardiovascular efficiency through aquatic exercise. Upon completion, students should be able to develop an individualized aquatic fitness program.

Prerequisites: PED 152.

Corequisites: None.

When Offered: (On demand)

PED 160 - Canoeing-Basic (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 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.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 161 - Canoeing-Rivers (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides practice in the basic skills of river and whitewater canoeing. Emphasis is placed on river running, safety, and care of equipment. Upon completion, students should be able to demonstrate navigation in a moving current, canoe safety, and self-rescue skills.

Prerequisites: PED 160.

Corequisites: None.

When Offered: (On demand)

PED 163 - Kayaking-Basic (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is designed to teach the basic skills of kayaking. Topics include forward and reverse strokes, sweeps, Eskimo roll, and self-rescue skills. Upon completion, students should be able to maneuver and demonstrate safe kayaking practices.

Prerequisites: PED 152.

Corequisites: None.

When Offered: (On demand)

PED 171 - Nature Hiking (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 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. Much of this course involves travel to and participation on nearby mountain trails.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 181 - Snow Skiing-Beginning (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course introduces the fundamentals of snow skiing. Topics include basic techniques, safety, and equipment involved in snow skiing. Upon completion, students should be able to ski a down slope, enter and exit a ski lift, and perform basic maneuvers on skis.

Prerequisites: None.

Corequisites: None.

When Offered: (S,On demand)

PED 212 - Snowboarding-Beginning (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is designed to develop the basic knowledge and skills of snowboarding. Topics include equipment, conditioning exercises, terminology, safety, rules, fundamental skills, and the use of lifts. Upon completion, students should be able to snowboard downhill, enter and exit a ski lift, and perform basic maneuvers on a snowboard.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 217 - Pilates I (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an introduction to the pilates method of body conditioning exercise. Topics include instruction in beginning and intermediate pilates exercises using a mat or equipment, history of pilates method, and relevant anatomy and physiology. Upon completion, students should be able to perform beginning and intermediate exercises, and possess an understanding of the benefits of conditioning the body's core muscles.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 218 - Pilates II (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides continued instruction to the pilates method of body conditioning exercise. Topics include instruction in intermediate and advanced pilates exercises using a mat or equipment, relevant anatomy and physiology, and further discussion of related concepts. Upon completion, students should be able to perform intermediate and advanced exercises, and possess the autonomy to maintain their own personal pilates practice.

Prerequisites: PED 217.

Corequisites: None.

When Offered: (On demand)

PED 220 - Exer for Phys Challenged (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is designed to improve physical strength, endurance, and range of motion while focusing on individual needs. Emphasis is placed on exercises which are designed and adapted to serve those with special needs. Upon completion, students should be able to show improved physical fitness, body awareness, and an appreciation for their physical well-being.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 252 - Officiating/Bsball/Sfbal (Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course introduces the rules and techniques for sports officiating in baseball and softball. Emphasis is placed on officiating fundamentals and responsibilities. Upon completion, students should be able to demonstrate

proper mechanics and knowledge of officiating procedures in baseball and softball.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 254 - Coaching Basketball (Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course introduces the theory and methods of coaching basketball. Emphasis is placed on rules, game strategies, and selected techniques of coaching basketball. Upon completion, students should be able to demonstrate competent coaching skills in basketball.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 256 - Coaching Baseball (Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course introduces the theory and methods of coaching baseball. Emphasis is placed on rules, game strategies, and selected techniques of coaching baseball. Upon completion, students should be able to demonstrate competent coaching skills in baseball.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PED 259 - Prev & Care Ath Injuries (Coll/Tran)

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course provides information on the prevention and care of athletic injuries. Topics include safety devices, taping, therapeutic techniques, and conditioning exercises. Upon completion, students should be able to demonstrate proper preventive measures and skills in caring for athletic injuries.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

Philosophy

PHI 210 - History of Philosophy (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces fundamental philosophical issues through an historical perspective. Emphasis is placed on such figures as Plato, Aristotle, Lao-Tzu, Confucius, Augustine, Aquinas, Descartes, Locke, Kant, Wollstonecraft, Nietzsche, and Sartre. Upon completion, students should be able to identify and distinguish among the key positions of the philosophers studied. Primary sources are examined to understand the key philosophical ideas that have shaped the way we think.

Prerequisites: ENG 111.

Corequisites: None.

When Offered: (On demand)

PHI 215 - Philosophical Issues (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critically evaluate the philosophical components of an issue.

Prerequisite: ENG 111.

Corequisites: None.

When Offered: (On demand)

PHI 240 - Introduction to Ethics (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on utilitarianism, rule-based ethics, existentialism, relativism versus objectivism, and egoism. Upon completion, students should be able to apply various ethical theories to individual moral issues such as euthanasia, abortion, crime and punishment, and justice. Primary sources are examined to better understand the background of ethical theories.

Prerequisites: ENG 111.

Corequisites: None.

When Offered: (On demand)

Photography

PHO 110 - Fund of Photography

Hours--Class: 3 Lab: 6 Clinic/Work Exp: 0 Credit: 5

This course covers the basic technical aspects of photography, including camera controls, light and optics, flash, exposure, and processing. Emphasis is placed on principles of camera design and the relationship between subject and photographic image, with hands-on experience. Upon completion, students should be able to consistently produce technically excellent images.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

PHO 113 - History of Photography

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the history of photography from its inception through contemporary times. Emphasis is placed on technical and aesthetical developments in artistic and commercial photography. Upon completion, students should be able to identify significant photographers and procedures, trace the development of the medium, and discuss current trends in photography.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

PHO 115 - Basic Studio Lighting

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 0 Credit: 4

This course covers the basic principles of studio lighting. Topics include basic lighting techniques and application of lighting ratios to product illustration/portraiture using tungsten/electronic strobe sources, with emphasis on equipment maintenance and safety. Upon completion, students should be able to select and set up the best lights and lighting applications for a wide variety of photographic subjects.

Prerequisites: PHO 110.

Corequisites: None.

When Offered: (S)

PHO 120 - Intermediate Photography

Hours--Class: 2 Lab: 4 Clinic/Work Exp: 0 Credit: 4

This course expands the coverage of photographic materials and provides an opportunity to experiment. Emphasis is placed on additional techniques and processes, including solarization, multiple-imaging, infrared toning, and other non-traditional uses of photography. Upon completion, students should be able to demonstrate how the choice of technique enhances the photographic subject and influences content.

Prerequisites: PHO 110.

Corequisites: None.

When Offered: (S)

PHO 131 - View Camera

Hours--Class: 2 Lab: 4 Clinic/Work Exp: 0 Credit: 4

This course is a comprehensive hands-on study of the large-format camera, including capabilities, movements, and applications in studio and architectural photography. Topics include camera systems, camera controls, perspective

correction, plane of sharp focus, depth-of-field, image shape modification, and sheet film handling and processing. Upon completion, students should be able to demonstrate competence in using the view camera and its various controls.

Prerequisites: PHO 110 and PHO 115.

Corequisites: None.

PHO 139 - Intro to Digital Imaging

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course introduces digital images by exploring the effect hardware and software have on the reproduction process. Topics include basic imaging tools and vocabulary, calibration, density, contrast, and color. Upon completion, students should be able to demonstrate a basic understanding of the digital imaging process and be able to capture and output images.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

PHO 150 - Portfolio Development I

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides an opportunity to develop a thematically related portfolio of photographic images that are consistent in print quality. Emphasis is placed on subject/content development, choice of materials, and archival processing controls; organizing and sequencing images; editing; print finishing; and portfolio presentation. Upon completion, students should be able to edit and exhibit a consistent body of photographic prints in a portfolio presentation.

Prerequisites: PHO 120.

Corequisites: None.

When Offered: (F)

PHO 180 - Creative Problem Solving

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course encourages the development of innovative photographic solutions to instructor-assigned tasks. Emphasis is placed on identifying components necessary to complete the task and applying creative solutions. Upon completion, students should be able to solve problems in a variety of photographic areas, combining media where needed to achieve the desired results.

Prerequisites: PHO 110 and permission of instructor.

Corequisites: None.

When Offered: (On demand)

PHO 216 - Documentary Photography

Hours--Class: 2 Lab: 4 Clinic/Work Exp: 0 Credit: 4

This course introduces the practical, historical, and contemporary applications of documentary photography. Emphasis is placed on understanding the various approaches to creating a photographic documentary and how a documentary project can affect society. Upon completion, students should be able to produce a documentary project on a topic of interest to them.

Prerequisites: PHO 110.

Corequisites: None.

When Offered: (S)

PHO 217 - Photojournalism I

Hours--Class: 1 Lab: 6 Clinic/Work Exp: 0 Credit: 4

This course covers logistics and techniques used in current professional newspaper photography. Topics include detailed study of spot and general news, sports, and feature photography along with basic newspaper layout, advanced photographic techniques, and legal issues. Upon completion, students should be able to demonstrate an understanding of basic aspects of news, sports, and feature photography.

Prerequisites: PHO 110.

Corequisites: None.

When Offered: (F)

PHO 219 - Digital Applications

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course provides additional experience in digital photography including input/output and computer manipulation of images. Topics include legal and ethical issues and commonly used hardware and software packages, including their basic controls and imaging tools. Upon completion, students should be able to input/output images and manipulate images.

Prerequisites: PHO 139.

Corequisites: None.

When Offered: (S)

PHO 220 - Business of Photography

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the business practices of photography with emphasis on freelance photography. Topics include copyright, payment fees, client relations, licenses, insurance, assignments, stock sales, and usage rates. Upon completion, students should be able to demonstrate an understanding of the photographic business, including billing, clients, copyright protection, and obtaining assignments.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

PHO 224 - Multimedia Production

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course covers various aspects of computer based multimedia production. Topics include sound recording and editing techniques and software, multimedia software, control of image and continuity and pacing, script writing, copyright laws and ethics. Upon completion, students should be able to use computer hardware and software for multimedia production.

Prerequisites: PHO 110.

Corequisites: None.

When Offered: (S)

PHO 226 - Portraiture

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course covers the techniques of contemporary studio and location portraiture. Topics include lighting techniques, lighting ratios, available light to multiple light setups, posing techniques, and styles of glamour, fashion, corporate, and public relations portraiture. Upon completion, students should be able to choose the appropriate lighting, accessories, and posing style to produce a successful portrait. Formal and candid wedding photography will also be a part of the course of study.

Prerequisites: PHO 115.

Corequisites: None.

When Offered: (F)

PHO 235 - Commercial Photography

Hours--Class: 2 Lab: 4 Clinic/Work Exp: 0 Credit: 4

This course covers the techniques of advertising photography used in the print media. Emphasis is placed on the conception, lighting, and creation of photographic illustration used for food, fashion, and product photography. Upon completion, students should be able to produce advertising photographs for professional photographic illustration.

Prerequisites: PHO 115.

Corequisites: None.

When Offered: (F)

PHO 250 - Portfolio Development II

Hours--Class: 2 Lab: 4 Clinic/Work Exp: 0 Credit: 4

This course provides an opportunity to develop a diversified professional portfolio of photographs. Emphasis is placed on the development of a portfolio exhibiting technical excellence, consistency of vision, and professional presentation. Upon completion, students should be able to present a diversified portfolio of professional quality photographs to potential employers.

Prerequisites: PHO 217, PHO 226, PHO 235.

Corequisites: None.

When Offered: (S)

PHO 275 - Travel/Outdoor Photo

Hours--Class: 1 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course explores the growing market for travel and outdoor photography. Emphasis is placed on photography in foreign environments, including travel arrangements and restrictions; protection of cameras, accessories, and filters; and identification of markets for travel photography. Upon completion, students should be able to photograph people in cross-cultural situations, photograph outdoor environments, and market travel photography.

Prerequisites: PHO 110.

Corequisites: None.

Physical Science**PHS 130 - Earth Science**

(Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course is a survey of the forces that impact the earth. Topics include geology, oceanography, and meteorology. Upon completion, students should be able to explain and identify the forces within, on, and around the earth as they influence the earth's dynamics.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

Physics**PHY 110 - Conceptual Physics**

(Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050; DRE 098 or appropriate placement test scores.

Corequisites: PHY 110A.

When Offered: (F,S,On demand)

PHY 110A - Conceptual Physics Lab

(Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110.

Prerequisites: None.

Corequisites: PHY 110.

When Offered: (F,S,On demand)

PHY 121 - Applied Physics I

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This algebra-based course introduces fundamental physical concepts as applied to industrial and service technology fields. Topics include systems of units, problem-solving methods, graphical analyses, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied in industrial and service fields.

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050; DRE 098 or appropriate placement test scores.

Corequisites: ENG 111.

When Offered: (On demand)

PHY 131 - Physics-Mechanics

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This algebra/trigonometry-based course introduces fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces,

Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields. MAT 122 or MAT 172 is recommended prior to or concurrently with this course.

Prerequisites: MAT 121 or MAT 171 or MAT 271 must pass with a grade of C or higher; DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S,On demand)

PHY 151 - College Physics I

(Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. MAT 172 is recommended prior to or concurrently with this course.

Prerequisites: MAT 171 or MAT 271 must pass with a grade of C or higher; DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S,On demand)

PHY 152 - College Physics II

(Coll/Tran)

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

Prerequisites: PHY 151 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

PHY 251 - General Physics I

(Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

Prerequisites: MAT 271 must pass with a grade of C or higher; DRE 098 or appropriate placement test score.

Corequisites: MAT 272.

When Offered: (F)

PHY 252 - General Physics II

(Coll/Tran)

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

Prerequisites: MAT 272, PHY 251 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (S)

Political Science

POL 110 - Intro Political Science (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces basic political concepts used by governments and addresses a wide range of political issues. Topics include political theory, ideologies, legitimacy, and sovereignty in democratic and non-democratic systems. Upon completion, students should be able to discuss a variety of issues inherent in all political systems and draw logical conclusions in evaluating these systems.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

POL 120 - American Government (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S)

POL 130 - State & Local Government (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course includes state and local political institutions and practices in the context of American federalism. Emphasis is placed on procedural and policy differences as well as political issues in state, regional, and local governments of North Carolina. Upon completion, students should be able to identify and discuss various problems associated with intergovernmental politics and their effect on the community and the individual.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

Printing

PRN 155 - Screen Printing I

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course covers screen printing techniques and materials. Topics include methods, materials, design, and image and stencil preparation techniques. Upon completion, students should be able to produce single- or multi-color projects.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

PRN 156 - Screen Printing II

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of PRN 155. Emphasis is placed on advanced techniques and current industry practices. Upon completion, students should be able to produce multi-color projects utilizing various photographic stencil methods and substrates.

Prerequisites: PRN 155.

Corequisites: None

Polysomnography

PSG 110 - Intro to Polysomnography

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course introduces the polysomnography profession. Topics include the history of the profession and role of the polysomnographic technologist, communication, time management, infection control, basic patient assessment, and medical gas therapy. Upon completion, students should be able to demonstrate competence in concepts through written and laboratory evaluations.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

PSG 111 - Neuro/Cardiopulmonary A&P

Hours--Class: 4 Lab: 0 Clinic/Work Exp: 0 Credit: 4

This course provides a concentrated study of anatomy and physiology essential to the practice of polysomnography. Emphasis is placed on the physiology of the nervous, cardiovascular, and pulmonary systems and basic pharmacological principles. Upon completion, students should be able to demonstrate competence in concepts through written evaluation.

Prerequisites: BIO 163; or BIO 168 and BIO 169.

Corequisites: None.

When Offered: (S)

PSG 112 - PSG Fundamentals

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides the knowledge and skills necessary to manage/ function in a polysomnographic laboratory. Topics include recordkeeping, scheduling techniques, creation/implementation of departmental policies, reimbursement, the technologist's role as sleep advocate, and case management/ patient education. Upon completion, students should be able to demonstrate competence in concepts through written evaluation.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

PSG 189 - Polysomnog Transition

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 3 Credit: 3

This course introduces the basic fundamentals for polysomnography. Emphasis is placed on cardiopulmonary assessment and monitoring, medical gas therapy, principles of case management, wellness promotion, recordkeeping, reimbursement, and exposure to the clinical setting. Upon completion, students should be prepared to apply the above concepts to the field of polysomnography.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PSG 210 - Polysomnography I

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 9 Credit: 7

This course provides entry-level didactic, laboratory, and clinical training in polysomnography. Emphasis is placed on medical terminology, instrumentation setup and calibration, recording and monitoring techniques, and patient technologist interactions. Upon completion, students should be able to demonstrate competence in concepts and procedures through written, laboratory and clinical evaluations.

Prerequisites: PSG 111 or PSG 189.

Corequisites: None.

When Offered: (F)

PSG 211 - Polysomnography II

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 9 Credit: 7

This course provides advanced-level didactic, laboratory, and clinical training in polysomnography. Emphasis is placed on the knowledge and skills necessary to obtain and evaluate high quality sleep recordings. Upon

completion, students should be able to demonstrate competence in concepts and procedures through written, laboratory and clinical evaluations

Prerequisites: PSG 210.

Corequisites: None.

When Offered: (S)

PSG 212 - Infant/Pediatric PSG

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course provides the knowledge and skills to perform and score polysomnographic procedures on infants and pediatric patients. Emphasis is placed on infant/pediatric assessment, monitoring, and sleep disorders. Upon completion, students should be able to demonstrate competence in concepts through written and laboratory evaluations.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

PSG 213 - Case Study/Exam Review

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to review clinical cases and prepare for the polysomnography credentialing exam. Emphasis is placed on case management and review for the Registered Polysomnographic Technologist Exam. Upon completion, students should be able to successfully complete practice exams.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

PSG 214 - PSG Clinical Apps I

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides practical application of theories covered in previous PSG courses. Emphasis is placed on polysomnography testing and procedures. Upon completion, students should be able to demonstrate competence through laboratory evaluation.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

Psychology

PSY 110 - Life Span Development

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an introduction to the study of human growth and development. Emphasis is placed on the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span and apply this knowledge to their specific field of study.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

PSY 150 - General Psychology (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S,SU)

PSY 211 - Psychology of Adjustment (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the study of the adjustment process focusing on contemporary challenges individuals must deal with in everyday life. Topics

include theories of behavior, career choices, self-understanding, coping mechanisms, human relationships, intimacy, sociocultural factors influencing healthy personal adjustment, and other related topics. Upon completion, students should be able to demonstrate an awareness of the processes of adjustment.

Prerequisites: PSY 150 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (On demand)

PSY 231 - Forensic Psychology (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces students to concepts which unite psychology and the legal system. Topics include defining competency, insanity, involuntary commitment as well as introducing forensic assessment techniques, such as interviewing process, specialized assessments, and collecting collateral information. Upon completion, students should be able to demonstrate knowledge in areas of forensic psychology: risk assessment, criminal competencies, insanity, psychopathology, and mentally disordered offenders.

Prerequisites: PSY 150 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (On demand)

PSY 237 - Social Psychology (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the study of individual behavior within social contexts. Topics include affiliation, attitude formation and change, conformity, altruism, aggression, attribution, interpersonal attraction, and group behavior. Upon completion, students should be able to demonstrate an understanding of the basic principles of social influences on behavior.

Prerequisites: PSY 150 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S)

PSY 239 - Psychology of Personality (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers major personality theories and personality research methods. Topics include psychoanalytic, behavioristic, social learning, cognitive, humanistic, and trait theories including supporting research. Upon completion, students should be able to compare and contrast traditional and contemporary approaches to the understanding of individual differences in human behavior.

Prerequisites: PSY 150 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (On demand)

PSY 241 - Developmental Psych (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span.

Prerequisites: PSY 150 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S,On demand)

PSY 243 - Child Psychology (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an overview of physical, cognitive, and psychosocial development from conception through adolescence. Topics include theories and research, interaction of biological and environmental factors, language development, learning and cognitive processes, social relations, and moral development. Upon completion, students should be able to identify typical and atypical childhood behavior patterns as well as appropriate strategies for interacting with children.

Prerequisites: PSY 150 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (On demand)

PSY 244 - Child Development I

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an introduction to the study of child development and examines the growth and development of children from conception through early childhood. Topics include historical and theoretical perspectives, terminology, research and observation techniques as well as physical, cognitive, and psychosocial growth and change. Upon completion, students should be able to demonstrate an understanding of the early stages of child development.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PSY 245 - Child Development II

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course examines the growth and development of children during early and middle childhood. Emphasis is placed on factors influencing physical, cognitive, and psychosocial growth and change. Upon completion, students should be able to demonstrate an understanding of early and middle child development.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

PSY 246 - Adolescent Psychology (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an overview of the behavior patterns, life changes, and social issues that accompany the developmental stage of adolescence. Topics include developmental theories; physical, cognitive and psychosocial growth; transitions to young adulthood; and sociocultural factors that influence adolescent roles in home, school and community. Upon completion, students should be able to identify typical and atypical adolescent behavior patterns as well as appropriate strategies for interacting with adolescents.

Prerequisites: PSY 150 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (On demand)

PSY 263 - Educational Psychology (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course examines the application of psychological theories and principles to the educational process and setting. Topics include learning and cognitive theories, achievement motivation, teaching and learning styles, teacher and learner roles, assessment, and developmental issues. Upon completion, students should be able to demonstrate an understanding of the application of psychological theory to educational practice.

Prerequisites: PSY 150 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (On demand)

PSY 275 - Health Psychology (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the biopsychosocial dynamics of stress and the maintenance of good health. Topics include enhancing health and well-being, stress management, lifestyle choices and attitudes, the mind-body relationship, nutrition, exercise, and fitness. Upon completion, students should be able to demonstrate an understanding of the psychological factors related to health and well-being.

Prerequisite: PSY 150 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (On demand)

PSY 281 - Abnormal Psychology (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students

should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques.

Prerequisites: PSY 150 must pass with a grade of C or higher.

Corequisites: None.

When Offered: (F,S)

Radiography**RAD 110 - Rad Intro & Patient Care**

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course provides an overview of the radiography profession and student responsibilities. Emphasis is placed on basic principles of patient care, radiation protection, technical factors, and medical terminology. Upon completion, students should be able to demonstrate basic skills in these areas.

Prerequisites: Admission to Radiography program.

Corequisites: RAD 111, RAD 151.

When Offered: (F)

RAD 111 - RAD Procedures I

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the chest, abdomen, extremities, spine, and pelvis. Upon completion, students should be able to demonstrate competence in these areas.

Prerequisites: Admission to Radiography program.

Corequisites: RAD 110, RAD 151.

When Offered: (F)

RAD 112 - RAD Procedures II

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the skull, bony thorax, and gastrointestinal, biliary, and urinary systems. Upon completion, students should be able to demonstrate competence in these areas.

Prerequisites: RAD 110, RAD 111, RAD 151.

Corequisites: RAD 121 and RAD 161.

When Offered: (S)

RAD 121 - Radiographic Imaging I

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course provides the principles of conventional film-screen radiography. Emphasis is placed on the factors that impact density, contrast, recorded detail, and distortion. Upon completion, students should be able to demonstrate an understanding of conventional film-screen radiographic imaging.

Prerequisites: RAD 110, RAD 111, RAD 151.

Corequisites: RAD 112 and RAD 161.

When Offered: (S)

RAD 122 - Radiographic Imaging II

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course provides advanced principles of imaging including digital radiography. Emphasis is placed on the factors that impact brightness, contrast, recorded detail, and distortion. Upon completion, students should be able to demonstrate an understanding of advanced principles of imaging.

Prerequisites: RAD 112, RAD 121, RAD 161.

Corequisites: RAD 131, RAD 171.

When Offered: (SU)

RAD 131 - Radiographic Physics I

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course introduces the principles of radiation characteristics and production. Emphasis is placed on imaging equipment. Upon completion,

students should be able to demonstrate a basic understanding of radiation characteristics and production.

Prerequisites: Admission to the Radiography Program and RAD 121.

Corequisites: RAD 122 and RAD 171.

When Offered: (SU)

RAD 151 - RAD Clinical Ed I

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 6 Credit: 2

This course introduces patient management and basic radiographic procedures in the clinical setting. Emphasis is placed on mastering positioning of the chest and extremities, manipulating equipment, and applying principles of ALARA. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

Prerequisites: Admission to Radiography program.

Corequisites: RAD 110, RAD 111.

When Offered: (F)

RAD 161 - RAD Clinical Ed II

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 15 Credit: 5

This course provides additional experience in patient management and in more complex radiographic procedures. Emphasis is placed on mastering positioning of the spine, pelvis, head and neck, and thorax and adapting procedures to meet patient variations. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

Prerequisites: RAD 110, RAD 111, RAD 151.

Corequisites: RAD 112, RAD 121.

When Offered: (S)

RAD 171 - RAD Clinical Ed III

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 12 Credit: 4

This course provides experience in patient management specific to fluoroscopic and advanced radiographic procedures. Emphasis is placed on applying appropriate technical factors to all studies and mastering positioning of gastrointestinal and urological studies. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

Prerequisites: RAD 112, RAD 121, RAD 161.

Corequisites: RAD 122, RAD 131.

When Offered: (SU)

RAD 211 - RAD Procedures III

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course provides the knowledge and skills necessary to perform standard and specialty radiographic procedures. Emphasis is placed on radiographic specialty procedures, sectional anatomy, and advanced imaging. Upon completion, students should be able to demonstrate competence in these areas.

Prerequisites: RAD 122, RAD 131, RAD 171.

Corequisites: RAD 231, RAD 241, RAD 251.

When Offered: (F)

RAD 231 - Radiographic Physics II

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course provides advanced principles of radiation characteristics and production including digital imaging and Computed Tomography (CT). Emphasis is placed on imaging equipment. Upon completion, students should be able to demonstrate an understanding of radiation characteristics and production.

Prerequisites: RAD 131 or RAD 171.

Corequisites: RAD 211, RAD 241, and RAD 251.

When Offered: (F)

RAD 241 - Radiobiology/Protection

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course covers the principles of radiation protection and radiobiology. Topics include the effects of ionizing radiation on body tissues, protective measures for limiting exposure to the patient and personnel, and radiation

monitoring devices. Upon completion, students should be able to demonstrate an understanding of the effects and uses of radiation in diagnostic radiology.

Prerequisites: RAD 122, RAD 131, RAD 171.

Corequisites: RAD 211, RAD 231, RAD 251.

When Offered: (F)

RAD 245 - Image Analysis

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course provides an overview of image analysis and introduces methods of quality management. Topics include image evaluation, pathology, quality control, and quality assurance. Upon completion, students should be able to demonstrate a basic knowledge of image analysis and quality management.

Prerequisites: RAD 211, RAD 231, RAD 241, RAD 251.

Corequisites: RAD 261 and RAD 271.

When Offered: (S)

RAD 251 - RAD Clinical Ed IV

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 21 Credit: 7

This course provides the opportunity to continue mastering all basic radiographic procedures and to attain experience in advanced areas. Emphasis is placed on equipment operation, pathological recognition, pediatric and geriatric variations, and a further awareness of radiation protection requirements. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

Prerequisites: RAD 122, RAD 131, RAD 171.

Corequisites: RAD 211, RAD 231, RAD 241.

When Offered: (F)

RAD 261 - RAD Clinical Ed V

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 21 Credit: 7

This course is designed to enhance expertise in all radiographic procedures, patient management, radiation protection, and image production and evaluation. Emphasis is placed on developing an autonomous approach to the diversity of clinical situations and successfully adapting to those procedures. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

Prerequisites: RAD 251.

Corequisites: RAD 245 and RAD 271.

When Offered: (S)

RAD 271 - Radiography Capstone

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to exhibit problem-solving skills required for certification. Emphasis is placed on critical thinking and integration of didactic and clinical components. Upon completion, students should be able to demonstrate the knowledge required of any entry-level radiographer.

Prerequisites: RAD 211, RAD 231, RAD 241, RAD 251.

Corequisites: RAD 245, RAD 261.

When Offered: (S)

Respiratory Therapy

RCP 110 - Intro to Respiratory Care

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course introduces the respiratory care profession. Topics include the role of the respiratory care practitioner, medical gas administration, basic patient assessment, infection control, and medical terminology. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations. Competencies in the following procedures will prepare the students for clinical practice: aerosol/humidity, bronchial hygiene, hyperinflation, and airway management.

Prerequisites: Enrollment in the Respiratory Therapy program.

Corequisites: None.

When Offered: (F)

RCP 111 - Therapeutics/Diagnostics

Hours--Class: 4 Lab: 3 Clinic/Work Exp: 0 Credit: 5

This course is a continuation of RCP 110. Emphasis is placed on entry level therapeutic and diagnostic procedures used in respiratory care. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations. Competencies in the following procedures will prepare the students for clinical practice: electrocardiography, pulmonary function testing, blood gases, bedside monitoring, and introduction to mechanical ventilation.

Prerequisites: RCP 110.

Corequisites: None.

When Offered: (S)

RCP 113 - RCP Pharmacology

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course covers the drugs used in the treatment of cardiopulmonary diseases. Emphasis is placed on the uses, actions, indications, administration, and hazards of pharmacological agents. Upon completion, students should be able to demonstrate competence through written evaluations. This course includes in-depth study of the following drug classifications: bronchodilators, surface active agents, corticosteroids, antibiotics, CNS agents, cardiovascular drugs, and neonatal/pediatric drugs.

Prerequisites: Enrollment in the Respiratory Therapy program.

Corequisites: None.

When Offered: (F)

RCP 114 - C-P Anatomy & Physiology

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a concentrated study of cardiopulmonary anatomy and physiology essential to the practice of respiratory care. Emphasis is placed on cardiovascular and pulmonary physiology, acid/base balance, and blood gas interpretation. Upon completion, students should be able to demonstrate competence in these concepts through written evaluation. This course includes an overview of the effects of renal failure, aging, exercise, high-altitude and high-pressure environments on the cardiopulmonary system.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

RCP 115 - C-P Pathophysiology

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course introduces the etiology, pathogenesis, and physiology of cardiopulmonary diseases and disorders. Emphasis is placed on clinical signs and symptoms along with diagnoses, complications, prognosis, and management. Upon completion, students should be able to demonstrate competence in these concepts through written evaluations. Case study evaluation will be used to emphasize clinical practice guideline implementation in care plan development.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

RCP 122 - Special Practice Lab

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides additional laboratory learning opportunities in respiratory care. Emphasis is placed on therapeutic procedures and equipment management. Upon completion, students should be able to demonstrate competence in concepts and procedures through laboratory evaluations.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

RCP 123 - Special Practice Lab

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course provides additional laboratory learning opportunities in respiratory care. Emphasis is placed on therapeutic procedures and equipment

management. Upon completion, students should be able to demonstrate competence in concepts and procedures through laboratory evaluations.

Prerequisites: None.

Corequisites: None.

When Offered: (SU)

RCP 145 - RCP Clinical Practice II

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 15 Credit: 5

This course provides entry-level clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

Prerequisites: RCP 110.

Corequisites: RCP 111.

When Offered: (S)

RCP 152 - RCP Clinical Practice III

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 6 Credit: 2

This course provides entry-level clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

Prerequisites: RCP 111.

Corequisites: None.

When Offered: (SU)

RCP 210 - Critical Care Concepts

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course provides further refinement of acute patient care and underlying pathophysiology. Topics include a continuation in the study of mechanical ventilation, underlying pathophysiology, and introduction of critical care monitoring. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations. Specific topics include: prevention of lung injury, independent lung ventilation, high frequency techniques, and infant mechanical ventilation.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

RCP 211 - Adv Monitoring/Procedures

Hours--Class: 3 Lab: 3 Clinic/Work Exp: 0 Credit: 4

This course includes advanced information gathering and decision making for the respiratory care professional. Topics include advanced cardiac monitoring and special procedures. Upon completion, students should be able to evaluate, design, and recommend appropriate care plans through written and laboratory evaluations. This course prepares the student for ACLS certification.

Prerequisites: RCP 210.

Corequisites: None.

When Offered: (S)

RCP 214 - Neonatal/Ped's RC

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course provides in-depth coverage of the concepts of neonatal and pediatric respiratory care. Emphasis is placed on neonatal and pediatric pathophysiology and on the special therapeutic needs of neonates and children. Upon completion, students should be able to demonstrate competence in these concepts through written and laboratory evaluations. This course includes preparation for PALS and NRP certification.

Prerequisites: RCP 111.

Corequisites: None.

When Offered: (F)

RCP 215 - Career Prep-Adv Level

Hours--Class: 0 Lab: 3 Clinic/Work Exp: 0 Credit: 1

This course provides preparation for employment and the advanced-level practitioner credentialing exam. Emphasis is placed on review of the NBRC Advanced-Level Practitioner Exam and supervision and management. Upon

completion, students should be able to successfully complete the appropriate self-assessment examinations and meet the requirements for employment.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

RCP 236 - RCP Clinical Practice IV

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 18 Credit: 6

This course provides advanced practitioner clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

Prerequisites: RCP 111.

Corequisites: RCP 210.

When Offered: (F)

RCP 246 - RCP Clinical Practice V

Hours--Class: 0 Lab: 18 Clinic/Work Exp: 0 Credit: 6

This course provides advanced practitioner clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

Prerequisites: RCP 210.

Corequisites: RCP 211.

When Offered: (S)

Religion

REL 110 - World Religions (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the world's major religious traditions. Topics include Primal religions, Hinduism, Buddhism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. Attention will also be given to current practices and historical influences.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S,SU)

REL 211 - Intro to Old Testament (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is a survey of the literature of the Hebrews with readings from the law, prophets, and other writings. Emphasis is placed on the use of literary, historical, archeological, and cultural analysis. Upon completion, students should be able to use the tools of critical analysis to read and understand Old Testament literature.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

REL 212 - Intro to New Testament (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is a survey of the literature of first-century Christianity with readings from the gospels, Acts, and the Pauline and pastoral letters. Topics include the literary structure, audience, and religious perspective of the writings, as well as the historical and cultural context of the early Christian community. Upon completion, students should be able to use the tools of critical analysis to read and understand New Testament literature.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

REL 221 - Religion in America (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is an examination of religious beliefs and practice in the United States. Emphasis is placed on mainstream religious traditions and non-

traditional religious movements from the Colonial period to the present. Upon completion, students should be able to recognize and appreciate the diversity of religious traditions in America. Some attention will be given to religious beliefs and practices in the South.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S,SU)

Real Estate

RLS 112 - Broker Prelicensing

Hours--Class: 5 Lab: 0 Clinic/Work Exp: 0 Credit: 5

This course provides basic instruction in real estate principles and practices. Topics include law, finance, brokerage, closing, valuation, management, taxation, mathematics, construction, land use, property insurance, and NC License Law and Commission Rules. Upon completion, students should be able to demonstrate basic knowledge and skills necessary for real estate sales.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

Information Systems Security

SEC 110 - Security Concepts

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the concepts and issues related to securing information systems and the development of policies to implement information security controls. Topics include the historical view of networking and security, security issues, trends, security resources, and the role of policy, people, and processes in information security. Upon completion, students should be able to identify information security risks, create an information security policy, and identify processes to implement and enforce policy.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

SEC 150 - Secure Communications

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course provides an overview of current technologies used to provide secure transport of information across networks. Topics include data integrity through encryption, Virtual Private Networks, SSL, SSH, and IPSec. Upon completion, students should be able to implement secure data transmission technologies.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

SEC 160 - Security Administration I

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course provides an overview of security administration and fundamentals of designing security architectures. Topics include networking technologies, TCP/IP concepts, protocols, network traffic analysis, monitoring, and security best practices. Upon completion, students should be able to identify normal network traffic using network analysis tools and design basic security defenses.

Prerequisites: NET 125.

Corequisites: None.

When Offered: (F)

SEC 180 - Info Assurance Principles

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces students to the concepts of layered and comprehensive Information Assurance best practices. Topics include user defensive measures, edge defensive measures, along with confidentiality, integrity and availability of enterprise data with the business continuity concepts of: redundancy, disaster recovery, incident handling, compliance and auditing.

Upon completion, students should be able to plan effective information assurance strategies.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

SEC 210 - Intrusion Detection

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the student to intrusion detection methods in use today. Topics include the types of intrusion detection products, traffic analysis, and planning and placement of intrusion detection solutions. Upon completion, students should be able to plan and implement intrusion detection solution for networks and host-based systems.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

SEC 285 - Systems Security Project

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course provides the student the opportunity to apply the skills and competencies acquired in the program that focus on systems security. Emphasis is placed on security policy, process planning, procedure definition, business continuity, compliance, auditing, testing procedures and systems security architecture. Upon completion, students should be able to design and implement comprehensive information security architecture from the planning and design phase through implementation.

Prerequisites: CTI 110, CTI 120, CTS 115, and SEC 160.

Corequisites: None.

When Offered: (S)

Sociology

SOC 210 - Introduction to Sociology (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S,SU)

SOC 213 - Sociology of the Family (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course covers the institution of the family and other intimate relationships. Emphasis is placed on mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S,SU)

SOC 215 - Group Processes (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces group processes and dynamics. Emphasis is placed on small group experiences, roles and relationships within groups, communication, cooperation and conflict resolution, and managing diversity within and among groups. Upon completion, students should be able to demonstrate the knowledge and skills essential to analyze group interaction and to work effectively in a group context.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

SOC 220 - Social Problems (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (F,S)

SOC 225 - Social Diversity (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a comparison of diverse roles, interests, opportunities, contributions, and experiences in social life. Topics include race, ethnicity, gender, sexual orientation, class, and religion. Upon completion, students should be able to analyze how cultural and ethnic differences evolve and how they affect personality development, values, and tolerance.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

SOC 230 - Race and Ethnic Relations (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course includes an examination of the various aspects of race and ethnicity and how these lead to different experiences, opportunities, problems, and contributions. Topics include prejudice, discrimination, perceptions, myths, stereotypes, and intergroup relationships. Upon completion, students should be able to identify and analyze relationships among racial and ethnic groups within the larger society.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

SOC 234 - Sociology of Gender (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course examines contemporary roles in society with special emphasis on recent changes. Topics include sex role socialization, myths and stereotypes, gender issues related to family, work, and power. Upon completion, students should be able to analyze modern relationships between men and women.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

SOC 242 - Sociology of Deviance (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an overview of deviant behavior and the processes involved in its definition, causation, prevention, control, and treatment. Topics include theories of causation, social control, delinquency, victimization, criminality, the criminal justice system, punishment, rehabilitation, and restitution. Upon completion, students should be able to identify and analyze issues surrounding the nature and development of social responses to deviance.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

SOC 244 - Soc of Death & Dying (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course presents sociological perspectives on death and dying. Emphasis is placed on analyzing the different death rates among various groups, races, and societies, as well as various types of death. Upon completion, students should be able to discuss the rituals of death, both cultural and religious, and examine current issues relating to death and dying.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

SOC 250 - Sociology of Religion (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course examines religion from a sociological perspective as part and product of human society. Topics include the origins, development, and functions of belief systems; religious organizations; conversion; and interactions with politics, the economy, science, and the class system. Upon completion, students should be able to describe and analyze religious systems.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

SOC 254 - Rural and Urban Sociology (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course applies sociological concepts to a comparative study of major social issues facing contemporary rural and urban America. Emphasis is placed on growth and development patterns, ecological factors, social organizations, social controls, and processes of change. Upon completion, students should be able to illustrate the differences and similarities that exist between urban and rural environments as they resolve contemporary issues.

Prerequisites: DRE 098 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

Spanish**SPA 111 - Elementary Spanish I** (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness.

Prerequisites: None.

Corequisites: SPA 181.

When Offered: (F,S,SU)

SPA 112 - Elementary Spanish II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness.

Prerequisites: SPA 111 must pass with a grade of C or higher.

Corequisites: SPA 182.

When Offered: (F,S,SU)

SPA 120 - Spanish for the Workplace

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course offers applied Spanish for the workplace to facilitate basic communication with people whose native language is Spanish. Emphasis is placed on oral communication and career-specific vocabulary that targets health, business, and/or public service professions. Upon completion, students should be able to communicate at a functional level with native speakers and demonstrate cultural sensitivity.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

SPA 141 - Culture and Civilization (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an opportunity to explore issues related to the Hispanic world. Topics include historical and current events, geography, and customs.

Upon completion, students should be able to identify and discuss selected topics and cultural differences related to the Hispanic world.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

SPA 161 - Cultural Immersion (Coll/Tran)

Hours--Class: 2 Lab: 3 Clinic/Work Exp: 0 Credit: 3

This course explores Hispanic culture through intensive study on campus and field experience in a host country or area. Topics include an overview of linguistic, historical, geographical, sociopolitical, economic, and/or artistic concerns of the area visited. Upon completion, students should be able to exhibit first-hand knowledge of issues pertinent to the host area and demonstrate understanding of cultural differences.

Prerequisites: SPA 111.

Corequisites: None.

When Offered: (On demand)

SPA 181 - Spanish Lab 1 (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness.

Prerequisites: None.

Corequisites: SPA 111.

When Offered: (F,S,SU)

SPA 182 - Spanish Lab 2 (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate cultural awareness.

Prerequisites: SPA 111, SPA 181 must pass both with a grade of C or higher.

Corequisites: SPA 112.

When Offered: (F,S,SU)

SPA 211 - Intermediate Spanish I (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future.

Prerequisites: SPA 112 must pass with a grade of C or higher.

Corequisites: SPA 281.

When Offered: (F)

SPA 212 - Intermediate Spanish II (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a continuation of SPA 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication.

Prerequisites: SPA 211 must pass with a grade of C or higher.

Corequisites: SPA 282.

When Offered: (S)

SPA 221 - Spanish Conversation (Coll/Tran)

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides an opportunity for intensive communication in spoken Spanish. Emphasis is placed on vocabulary acquisition and interactive communication through the discussion of media materials and authentic texts. Upon completion, students should be able to discuss selected topics, express ideas and opinions clearly, and engage in formal and informal conversations.

Prerequisites: SPA 212.

Corequisites: None.

When Offered: (On demand)

SPA 281 - Spanish Lab 3 (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts through the use of various supplementary learning media and materials. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future.

Prerequisites: SPA 182 must pass with a grade of C or higher.

Corequisites: SPA 211.

When Offered: (F)

SPA 282 - Spanish Lab 4 (Coll/Tran)

Hours--Class: 0 Lab: 2 Clinic/Work Exp: 0 Credit: 1

This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts through the use of various supplementary learning media and materials. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication.

Prerequisites: SPA 281 must pass with a grade of C or higher.

Corequisites: SPA 212.

When Offered: (S)

Surgical Technology**SUR 110 - Intro to Surg Tech**

Hours--Class: 3 Lab: 0 Clinic/Work Exp: 0 Credit: 3

This course provides a comprehensive study of peri-operative care, patient care concepts, and professional practice concepts within the profession of surgical technology. Topics include: introductory concepts, organizational structure and relationships, legal, ethical and moral issues, medical terminology, pharmacology, anesthesia, wound healing management concepts, and the technological sciences. Upon completion, students should be able to apply theoretical knowledge of the course topics to the practice of surgical technology.

Prerequisites: Enrollment in the Surgical Technology program.

Corequisites: ACA 111, BIO 163, ENG 111, SUR 111.

When Offered: (F)

SUR 111 - Periop Patient Care

Hours--Class: 5 Lab: 6 Clinic/Work Exp: 0 Credit: 7

This course provides the surgical technology student the theoretical knowledge required to function in the pre-operative, intra-operative, and postoperative role. Topics include asepsis, disinfection and sterilization, physical environment, instrumentation, equipment, peri-operative patient care, and peri-operative case management. Upon completion, students should be able to apply the principles and practice of the peri-operative team member to the operative environment.

Prerequisites: Enrollment in the Surgical Technology program.

Corequisites: ACA 111, BIO 163, ENG 111, SUR 110

When Offered: (F)

SUR 122 - Surgical Procedures I

Hours--Class: 5 Lab: 3 Clinic/Work Exp: 0 Credit: 6

This course provides an introduction to selected basic and intermediate surgical specialties that students are exposed to in the first clinical rotation. Emphasis is placed on related surgical anatomy, pathology, and procedures that enhance theoretical knowledge of patient care, instrumentation, supplies, and equipment. Upon completion, students should be able to correlate, integrate, and apply theoretical knowledge of the course topics to the clinical operative environment.

Prerequisites: BIO 163, ENG 111, SUR 110, SUR 111.

Corequisites: BIO 175, PSY 150, SUR 123.

When Offered: (S)

SUR 123 - SUR Clinical Practice I

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 21 Credit: 7

This course provides clinical experience with a variety of perioperative assignments to build upon skills learned in SUR 111. Emphasis is placed on the scrub and circulating roles of the surgical technologist including aseptic technique and basic case preparation for selected surgical procedures. Upon completion, students should be able to prepare, assist with, and dismantle basic surgical cases in both the scrub and circulating roles.

Prerequisites: SUR 110, SUR 111.

Corequisites: SUR 122.

When Offered: (S)

SUR 134 - Surgical Procedures II

Hours--Class: 5 Lab: 0 Clinic/Work Exp: 0 Credit: 5

This course provides a comprehensive study of intermediate and advanced surgical specialties that students are exposed to in the second clinical rotation. Emphasis is placed on related surgical anatomy, pathology, and procedures that enhance theoretical knowledge of patient care, instrumentation, supplies, and equipment. Upon completion, students should be able to correlate, integrate, and apply theoretical knowledge of the course topics to the clinical operative environment.

Prerequisites: SUR 123.

Corequisites: None.

When Offered: (SU)

SUR 135 - SUR Clinical Practice II

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 12 Credit: 4

This course provides clinical experience with a variety of perioperative assignments to build skills required for complex perioperative patient care. Emphasis is placed on greater technical skills, critical thinking, speed, efficiency, and autonomy in the operative setting. Upon completion, students should be able to function in the role of an entry-level surgical technologist.

Prerequisites: BIO 175, PSY 150, SUR 123.

Corequisites: SUR 134, SUR 137.

When Offered: (SU)

SUR 137 - Prof Success Prep

Hours--Class: 1 Lab: 0 Clinic/Work Exp: 0 Credit: 1

This course provides employability skills and an overview of theoretical knowledge in preparation for certification. Topics include test-taking strategies, resume preparation, interviewing strategies, communication skills, and teamwork concepts. Upon completion, students should be able to prepare a resume, demonstrate appropriate interview techniques, and identify strengths and weaknesses in preparation for certification.

Prerequisites: SUR 123.

Corequisites: SUR 134, SUR 135.

When Offered: (SU)

Turfgrass Management

TRF 110 - Intro Turfgrass Cult & ID

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course covers the principles of reproduction, growth development, species characteristics, establishment and maintenance of golf courses and sports fields, and lawns. Topics include principles of reproduction, growth development, species characteristics, establishment and maintenance of golf courses and sports fields, and lawn applications. Upon completion, students should be able to identify turfgrass species and develop an establishment and maintenance plan for high quality turf areas in accordance with sustainable practices.

Prerequisites: None.

Corequisites: None.

When Offered: (F,SU)

TRF 120 - Turfgrass Irrigat & Design

Hours--Class: 2 Lab: 4 Clinic/Work Exp: 0 Credit: 4

This course covers the basic techniques involved in the design, layout, installation, and use of water-wise turfgrass irrigation systems. Topics include types of irrigation systems, components of the systems, materials available for use, and economic considerations. Upon completion, students should be able to complete a functional design for a turfgrass irrigation system according to sustainable practices.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

TRF 130 - Native Flora ID

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course covers identification of selected native ground covers and woodland trees by summer and/or winter characteristics. Emphasis is placed on mature age, fall colors, site adaptability, and habit of growth for special turf-related areas. Upon completion, students should be able to identify native plants by size and leaf, bud, twig, and limb formation.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

TRF 140 - Turfgrass Mgmt Safety

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the dangers and problems that may be faced in the turfgrass management profession. Emphasis is placed on the possible prevention and treatment that may be necessary as well as basic first aid treatment. Upon completion, students should be able to demonstrate effective leadership skills in various professional emergency scenarios.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

TRF 150 - Landscape Drafting

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course introduces the equipment, software, and skills involved in landscape drafting. Emphasis is placed on creating geometrical constructions and visualizing and drawing scaled profile views of various turfgrass-related sites. Upon completion, students should be able to produce competent landscape drawings.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

TRF 152 - Landscape Maintenance

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the tasks of landscape maintenance. Emphasis is placed on lawns, shrubs, trees, flowers, and ground covers. Upon completion, students should be able to maintain a landscape area on a year-round schedule.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

TRF 210 - Turfgrass Eqmt Mgmt

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course covers the operation and maintenance of specialized turfgrass management equipment. Topics include small engine use and repair; operation, maintenance, and repair of turfgrass management equipment; organization of shop areas; and safety considerations. Upon completion, students should be able to operate and maintain turfgrass management equipment.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

TRF 220 - Turfgrass Calculations

Hours--Class: 2 Lab: 0 Clinic/Work Exp: 0 Credit: 2

This course introduces the specific math concepts and calculations necessary in the turfgrass industry. Emphasis is placed on calibration of equipment used in the application of fertilizers and pesticides and calculation of solid materials used in construction. Upon completion, students should be able to correctly perform basic calculations and calibrations and estimate materials needed in specific professional turfgrass management situations.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

TRF 230 - Turfgrass Mgmt Apps

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course introduces specific sports field design, installation, and maintenance. Topics include natural grass croquet courts and baseball, soccer, and football fields. Upon completion, students should be able to perform specific tasks in layout, field marking, and preparing for tournament play.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

TRF 240 - Turfgrass Pest Control

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers detection and identification of turfgrass pests with emphasis on methods of sustainable management. Topics include pest identification with an understanding of pesticides used, application procedures, and costs involved in sustainable management programs. Upon completion, students should be able to identify turfgrass pests, select the proper pesticide, develop pest management programs, and/or use integrated pest management.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

TRF 250 - Golf /Sport Field Const

Hours--Class: 2 Lab: 4 Clinic/Work Exp: 0 Credit: 4

This course provides information for layout, materials, and construction of special recreational applications. Emphasis is placed on site selection, equipment, safety regulations, drainage, turfgrass species, and irrigation

needs. Upon completion, students should be able to locate construction reference sites and develop drainage and irrigation plans from their own blueprints and topo map designs.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

TRF 260 - Adv Turfgrass Mgmt

Hours--Class: 3 Lab: 2 Clinic/Work Exp: 0 Credit: 4

This course covers the principles and practices involved in turfgrass management. Topics include choosing the best management practice in mowing, pest control, fertilization, irrigation, traffic control, air control, budgeting, and materials procurement. Upon completion, students should be able to demonstrate knowledge of the principles covered and select and apply the best practices in turfgrass management.

Prerequisites: TRF 110.

Corequisites: None.

When Offered: (S)

Transportation Technology

TRN 110 - Intro to Transport Tech

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course covers workplace safety, hazardous materials, environmental regulations, hand tools, service information, basic concepts, vehicle systems, and common transportation industry terminology. Topics include familiarization with major vehicle systems, proper use of various hand and power tools, material safety data sheets, and personal protective equipment. Upon completion, students should be able to demonstrate appropriate safety procedures, identify and use basic shop tools, and describe government regulations regarding transportation repair facilities.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: TRN 120.

When Offered: (F,S)

TRN 120 - Basic Transp Electricity

Hours--Class: 4 Lab: 3 Clinic/Work Exp: 0 Credit: 5

This course covers basic electrical theory, wiring diagrams, test equipment, and diagnosis, repair and replacement of batteries, starters, and alternators. Topics include Ohm's Law, circuit construction, wiring diagrams, circuit testing, and basic troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair basic wiring, battery, starting, charging, and electrical concerns.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: TRN 110.

When Offered: (F)

TRN 140 - Transp Climate Control

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course covers the theory of refrigeration and heating, electrical/electronic/pneumatic controls, and diagnosis and repair of climate control systems. Topics include diagnosis and repair of climate control components and systems, recovery/recycling of refrigerants, and safety and environmental regulations. Upon completion, students should be able to diagnose and repair vehicle climate control systems.

Prerequisites: DRE 097 or appropriate placement test score, TRN 110, TRN 120.

Corequisites: TRN 140A.

When Offered: (F)

TRN 140A - Transp Climate Cont Lab

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course provides experiences for enhancing student skills in the diagnosis and repair of transportation climate control systems. Emphasis is placed on reclaiming, recovery, recharging, leak detection, climate control components,

diagnosis, air conditioning equipment, tools and safety. Upon completion, students should be able to describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information.

Prerequisites: None.

Corequisites: TRN 140.

When Offered: (F)

TRN 170 - Pc Skills for Transp

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course introduces students to personal computer literacy and Internet literacy with an emphasis on the transportation service industry. Topics include service information systems, management systems, computer-based systems, and PC-based diagnostic equipment. Upon completion, students should be able to access information pertaining to transportation technology and perform word processing.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (F)

Work-Based Learning

WBL 110 - World of Work

Hours--Class: 1 Lab: 0 Clinic/Work Exp: 0 Credit: 1

This course covers basic knowledge necessary for gaining and maintaining employment. Topics include job search skills, work ethic, meeting employer expectations, workplace safety, and human relations. Upon completion, students should be able to successfully make the transition from school to work.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (On Demand)

WBL 111 - Work-Based Learning I

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 10 Credit: 1

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

Prerequisites: None.

Corequisites: None.

When Offered: (F,S,SU)

WBL 112 - Work-Based Learning I

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 20 Credit: 2

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

Prerequisites: None.

Corequisites: None.

When Offered: (F,S,SU)

WBL 113 - Work-Based Learning I

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 30 Credit: 3

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

Prerequisites: None.

Corequisites: None.

When Offered: (F,S,SU)

WBL 114 - Work-Based Learning I

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 40 Credit: 4

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

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

WBL 115 - Work-Based Learning Seminar I

Hours--Class: 1 Lab: 0 Clinic/Work Exp: 0 Credit: 1

This course provides information for career development through emphasis on self-exploration and awareness of the world of work. Upon completion, students are capable of career decision making and planning.

Prerequisites: None.

Corequisites: WBL 111 or WBL 112 or WBL 113 or WBL 114.

When Offered: (On Demand)

WBL 121 - Work-Based Learning II

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 10 Credit: 1

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

Prerequisites: WBL 111 or WBL 112 or WBL 113 or WBL 114.

Corequisites: None.

When Offered: (F,S,SU)

WBL 122 - Work-Based Learning II

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 20 Credit: 2

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

Prerequisites: WBL 111 or WBL 112 or WBL 113 or WBL 114.

Corequisites: None.

When Offered: (F,S,SU)

WBL 123 - Work-Based Learning II

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 30 Credit: 3

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

Prerequisites: WBL 111 or WBL 112 or WBL 113 or WBL 114.

Corequisites: None.

When Offered: (F,S,SU)

WBL 124 - Work-Based Learning II

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 40 Credit: 4

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

Prerequisites: WBL 111 or WBL 112 or WBL 113 or WBL 114.

Corequisites: None.

When Offered: (F,S)

WBL 125 - Work-Based Learning Seminar II

Hours--Class: 1 Lab: 0 Clinic/Work Exp: 0 Credit: 1

This course provides information for career development through emphasis on self-exploration and awareness of the world of work. Upon completion, students are capable of career decision making and planning.

Prerequisites: WBL 115.

Corequisites: WBL 121 or WBL 122 or WBL 123 or WBL 124.

When Offered: (On Demand)

WBL 131 - Work-Based Learning III

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 10 Credit: 1

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

Prerequisites: Select one (1) required course from WBL 111, WBL 112, WBL 113, WBL 114; and Select one (1) required course from WBL 121, WBL 122, WBL 123, WBL 124.

Corequisites: None.

When Offered: (F,S,SU)

WBL 132 - Work-Based Learning III

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 20 Credit: 2

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

Prerequisites: Select one (1) required course from WBL 111, WBL 112, WBL 113, WBL 114; and Select one (1) required course from WBL 121, WBL 122, WBL 123, WBL 124.

Corequisites: None.

When Offered: (F,S,SU)

WBL 133 - Work-Based Learning III

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 30 Credit: 3

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

Prerequisites: Select one (1) required course from WBL 111, WBL 112, WBL 113, WBL 114; and Select one (1) required course from WBL 121, WBL 122, WBL 123, WBL 124.

Corequisites: None.

When Offered: (F,S,SU)

WBL 134 - Work-Based Learning III

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 40 Credit: 4

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

Prerequisites: Select one (1) required course from WWBL 111, WBL 112, WBL 113, WBL 114; and Select one (1) required course from WBL 121, WBL 122, WBL 123, WBL 124.

Corequisites: None.

When Offered: (F,S)

WBL 135 - Work-Based Learning Seminar III

Hours--Class: 1 Lab: 0 Clinic/Work Exp: 0 Credit: 1

This course provides information for career development through emphasis on self-exploration and awareness of the world of work. Upon completion, students are capable of career decision making and planning.

Prerequisites: WBL 115, WBL 125.

Corequisites: WBL 131 or WBL 132.

When Offered: (On Demand)

WBL 211 - Work-Based Learning IV

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 10 Credit: 1

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

Prerequisites: Select one (1) required course from WBL 111, WBL 112, WBL 113, or WBL 114; and Select one (1) required course from WBL 121, WBL 122, WBL 123, WBL 124; and Select one (1) required course from WBL 131, WBL 132, WBL 133, WBL 134.

Corequisites: None.

When Offered: (F,S,SU)

WBL 212 - Work-Based Learning IV

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 20 Credit: 2

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

Prerequisites: Select one (1) required course from WBL 111, WBL 112, WBL 113, WBL 114; and Select one (1) required course from WBL 121, WBL 122, WBL 123, WBL 124; and Select one (1) required course from WBL 131, WBL 132, WBL 133, WBL 134.

Corequisites: None.

When Offered: (F,S,SU)

WBL 213 - Work-Based Learning IV

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 30 Credit: 3

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

Prerequisites: Select one (1) required course from WBL 111, WBL 112, WBL 113, WBL 114; and Select one (1) required course from WBL 121, WBL 122, WBL 123, WBL 124; and Select one (1) required course from WBL 131, WBL 132, WBL 133, WBL 134.

Corequisites: None.

When Offered: (F,S,SU)

WBL 214 - Work-Based Learning IV

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 40 Credit: 4

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

Prerequisites: Select one (1) required course from WBL 111, WBL 112, WBL 113, or WBL 114; and Select one (1) required course from WBL 121, WBL 122, WBL 123, WBL 124; and Select one (1) required course from WBL 131, WBL 132, WBL 133, WBL 134.

Corequisites: None.

When Offered: (F,S)

WBL 221 - Work-Based Learning V

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 10 Credit: 1

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

Prerequisites: Select one (1) required course from WBL 111, WBL 112, WBL 113, or WBL 114; and Select one (1) required course from WBL 121, WBL 122, WBL 123, WBL 124; and Select one (1) required course from WBL 131, WBL 132, WBL 133, WBL 134; and Select one (1) required course from WBL 211, WBL 212, WBL 213, WBL 214.

Corequisites: None.

When Offered: (F,S,SU)

WBL 222 - Work-Based Learning V

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 20 Credit: 2

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

Prerequisites: Select one (1) required course from WBL 111, WBL 112, WBL 113, or WBL 114; and Select one (1) required course from WBL 121, WBL 122, WBL 123, WBL 124; and Select one (1) required course from WBL 131, WBL 132, WBL 133, WBL 134; and Select one (1) required course from WBL 211, WBL 212, WBL 213, WBL 214.

Corequisites: None.

When Offered: (F,S,SU)

WBL 223 - Work-Based Learning V

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 30 Credit: 3

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

Prerequisites: Select one (1) required course from WBL 111, WBL 112, WBL 113, or WBL 114; and Select one (1) required course from WBL 121, WBL 122, WBL 123, WBL 124; and Select one (1) required course from WBL 131, WBL 132, WBL 133, WBL 134; and Select one (1) required course from WBL 211, WBL 212, WBL 213, WBL 214.

Corequisites: None.

When Offered: (F,S,SU)

WBL 224 - Work-Based Learning V

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 40 Credit: 4

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

Prerequisites: Select one (1) required course from WBL 111, WBL 112, WBL 113, or WBL 114; and Select one (1) required course from WBL 121, WBL 122, WBL 123, WBL 124; and Select one (1) required course from WBL 131, WBL 132, WBL 133, WBL 134; and Select one (1) required course from WBL 211, WBL 212, WBL 213, WBL 214.

Corequisites: None.

When Offered: (F,S)

WBL 231 - Work-Based Learning VI

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 10 Credit: 1

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

selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

Prerequisites: Select one (1) required course from WBL 111, WBL 112, WBL 113, or WBL 114; and Select one (1) required course from WBL 121, WBL 122, WBL 123, WBL 124; and Select one (1) required course from WBL 131, WBL 132, WBL 133, WBL 134; and Select one (1) required course from WBL 211, WBL 212, WBL 213, WBL 214; and Select one (1) required course from WBL 221, WBL 222, WBL 223, WBL 224.

Corequisites: None.

When Offered: (F,S,SU)

WBL 232 - Work-Based Learning VI

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 20 Credit: 2

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

Prerequisites: Select one (1) required course from WBL 111, WBL 112, WBL 113, or WBL 114; and Select one (1) required course from WBL 121, WBL 122, WBL 123, WBL 124; and Select one (1) required course from WBL 131, WBL 132, WBL 133, WBL 134; and Select one (1) required course from WBL 211, WBL 212, WBL 213, WBL 214; and Select one (1) required course from WBL 221, WBL 222, WBL 223, WBL 224.

Corequisites: None.

When Offered: (F,S,SU)

WBL 233 - Work-Based Learning VI

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 30 Credit: 3

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

Prerequisites: Select one (1) required course from WBL 111, WBL 112, WBL 113, or WBL 114; and Select one (1) required course from WBL 121, WBL 122, WBL 123, WBL 124; and Select one (1) required course from WBL 131, WBL 132, WBL 133, WBL 134; and Select one (1) required course from WBL 211, WBL 212, WBL 213, WBL 214; and Select one (1) required course from WBL 221, WBL 222, WBL 223, WBL 224.

Corequisites: None.

When Offered: (F,S,SU)

WBL 234 - Work-Based Learning VI

Hours--Class: 0 Lab: 0 Clinic/Work Exp: 40 Credit: 4

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

Prerequisites: Select one (1) required course from WBL 111, WBL 112, WBL 113, or WBL 114; and Select one (1) required course from WBL 121, WBL 122, WBL 123, WBL 124; and Select one (1) required course from WBL 131, WBL 132, WBL 133, WBL 134; and Select one (1) required course from WBL 211, WBL 212, WBL 213, WBL 214; and Select one (1) required course from WBL 221, WBL 222, WBL 223, WBL 224.

Corequisites: None.

When Offered: (F,S)

Web Technologies

WEB 115 - Web Markup and Scripting

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces client-side Internet programming using the current W3C recommended presentation markup language and supporting elements. Topics include site management and development, markup elements, stylesheets, validation, accessibility, standards, browsers, and basic

JavaScripting. Upon completion, students should be able to hand-code web pages with various media elements according to current markup standards and integrate them into websites.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

WEB 140 - Web Development Tools

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course provides an introduction to web development software suites. Topics include the creation of websites and applets using web development software. Upon completion, students should be able to create entire websites and supporting applets.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

WEB 151 - Mobile Application Dev I

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces students to programming technologies, design and development related to mobile applications. Topics include accessing device capabilities, industry standards, operating systems, and programming for mobile applications using an OS Software Development Kit (SDK). Upon completion, students should be able to create basic applications for mobile devices.

Prerequisites: None.

Corequisites: None.

When Offered: (F)

WEB 180 - Active Server Pages

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces active server programming. Topics include HTML forms processing and other issues related to developing active web applications. Upon completion, students should be able to create and maintain a dynamic website.

Prerequisites: WEB 115.

Corequisites: None.

When Offered: (S)

WEB 210 - Web Design

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces intermediate to advanced web page design techniques. Topics include effective use of graphics, fonts, colors, navigation tools, advanced markup language elements, as well as a study of bad design techniques. Upon completion, students should be able to employ advanced design techniques to create high impact and highly functional web pages.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

WEB 214 - Social Media

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces students to social media for organizations. Topics include social media, marketing strategy, brand presence, blogging, social media analytics and technical writing. Upon completion, students should be able to utilize popular social media platforms as part of a marketing strategy, and work with social media analytics tools.

Prerequisites: None.

Corequisites: None.

When Offered: (S)

WEB 215 - Adv Markup and Scripting

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course covers advanced programming skills required to design Internet applications. Emphasis is placed on programming techniques required to support Internet applications. Upon completion, students should be able to

design, code, debug, and document Internet-based programming solutions to various real-world problems using an appropriate programming language.

Prerequisites: WEB 115.

Corequisites: None.

When Offered: (S)

WEB 250 - Database Driven Websites

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces dynamic (database-driven) website development. Topics include the use of basic database CRUD statements (create, read, update and delete) incorporated into web applications, as well as in software architecture principles. Upon completion, students should be able to design and develop database driven web applications according to industry standards.

Prerequisites: WEB 115.

Corequisites: None.

When Offered: (F)

WEB 289 - Internet Technologies Project

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course provides an opportunity to complete a significant Web technologies project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, documentation, installation, testing, presentation, and training. Upon completion, students should be able to complete an Internet project from the definition phase through implementation.

Prerequisites: CTI 110, CTI 120, CTS 115, WEB 210, WEB 215, and WEB 250.

Corequisites: None.

When Offered: (S)

Welding

WLD 110 - Cutting Processes

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thickness.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

WLD 112 - Basic Welding Processes

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers, and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes.

Prerequisites: None.

Corequisites: None.

When Offered: (F,S)

WLD 115 - SMAW (Stick) Plate

Hours--Class: 2 Lab: 9 Clinic/Work Exp: 0 Credit: 5

This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes.

Prerequisites: None.

Corequisites: WLD 110 or WLD 112.

When Offered: (F,S)

WLD 115AB - SMAW (Stick) Plate-AB

Hours--Class: 2 Lab: 4 Clinic/Work Exp: 0 Credit: 3

This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in the flat and horizontal positions with SMAW electrodes. Upon completion, students should be able to perform groove welds on carbon plate with prescribed electrodes.

Prerequisites: None.

Corequisites: WLD 110 or WLD 112.

When Offered: (F,S)

WLD 115BB - SMAW (Stick) Plate-BB

Hours--Class: 0 Lab: 5 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of WLD 115AB, the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in the vertical and overhead positions with SMAW electrodes. Upon completion, students should be able to perform groove welds on carbon plate with prescribed electrodes.

Prerequisites: None.

Corequisites: WLD 110 or WLD 112, WLD 115AB.

When Offered: (F,S)

WLD 116 - SMAW (Stick) Plate/Pipe

Hours--Class: 1 Lab: 9 Clinic/Work Exp: 0 Credit: 4

This course is designed to enhance skills with the shielded metal arc (stick) welding process. Emphasis is placed on advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be able to perform groove welds on carbon steel with prescribed electrodes in the flat, horizontal, vertical, and overhead positions.

Prerequisites: WLD 115.

Corequisites: None.

When Offered: (F,S)

WLD 116AB - SMAW (Stick) Plate/Pipe-AB

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 2

This course is designed to enhance skills with the shielded metal arc (stick) welding process. Emphasis is placed on advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be able to perform groove welds on carbon steel with prescribed electrodes in the flat, and horizontal positions.

Prerequisites: WLD 115.

Corequisites: None.

When Offered: (F,S)

WLD 116BB - SMAW (Stick)Plate/Pipe-BB

Hours--Class: 0 Lab: 5 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of WLD 116AB, the shielded metal arc (stick) welding process. Emphasis is placed on advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be able to perform groove welds on carbon steel with prescribed electrodes in the flat, horizontal, vertical and overhead positions without backing plates.

Prerequisites: WLD 115.

Corequisites: WLD 116AB.

When Offered: (F,S)

WLD 121 - GMAW (MIG) FCAW/Plate

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 0 Credit: 4

This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions.

Prerequisites: None.

Corequisites: WLD 110 or WLD 112.

When Offered: (F,S)

WLD 122 - GMAW (MIG) Plate/Pipe

Hours--Class: 1 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course is designed to enhance skills with the gas metal arc (MIG) welding process. Emphasis is placed on advancing skills with the GMAW process making groove welds on carbon steel plate and pipe in various positions. Upon completion, students should be able to perform groove welds with prescribed electrodes on various joint geometry.

Prerequisites: WLD 121.

Corequisites: None.

WLD 131 - GTAW (TIG) Plate

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 0 Credit: 4

This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials.

Prerequisites: None.

Corequisites: WLD 110 or WLD 112.

When Offered: (F,S)

WLD 132 - GTAW (TIG) Plate/Pipe

Hours--Class: 1 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course is designed to enhance skills with the gas tungsten arc (TIG) welding process. Topics include setup, joint preparation, and electrode selection with emphasis on manipulative skills in all welding positions on plate and pipe. Upon completion, students should be able to perform GTAW welds with prescribed electrodes and filler materials on various joint geometry.

Prerequisites: WLD 131.

Corequisites: None.

WLD 141 - Symbols & Specifications

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces the basic symbols and specifications used in welding. Emphasis is placed on interpretation of lines, notes, welding symbols, and specifications. Upon completion, students should be able to read and interpret symbols and specifications commonly used in welding.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

WLD 143 - Welding Metallurgy

Hours--Class: 1 Lab: 2 Clinic/Work Exp: 0 Credit: 2

This course introduces the concepts of welding metallurgy. Emphasis is placed on basic metallurgy, effects of welding on various metals, and metal classification and identification. Upon completion, students should be able to understand basic metallurgy, materials designation, and classification systems used in welding.

Prerequisites: DRE 097 or appropriate placement test score.

Corequisites: None.

When Offered: (On demand)

WLD 151 - Fabrication I

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 0 Credit: 4

This course introduces the basic principles of fabrication. Emphasis is placed on safety, measurement, layout techniques, cutting, joining techniques, and the use of fabrication tools and equipment. Upon completion, students should be able to perform layout activities and operate various fabrication and material handling equipment.

Prerequisites: None.

Corequisites: WLD 110, WLD 121.

When Offered: On Demand

WLD 215 - SMAW (Stick) Pipe

Hours--Class: 1 Lab: 9 Clinic/Work Exp: 0 Credit: 4

This course covers the knowledge and skills that apply to welding pipe. Topics include pipe positions, joint geometry, and preparation with emphasis placed on bead application, profile, and discontinuities. Upon completion, students should be able to perform SMAW welds to applicable codes on carbon steel pipe with prescribed electrodes in various positions.

Prerequisites: WLD 115 and WLD 116.

Corequisites: None.

When Offered: (F,S)

WLD 215AB - SMAW (Stick) Pipe-AB

Hours--Class: 1 Lab: 4 Clinic/Work Exp: 0 Credit: 2

This course covers the knowledge and skills that apply to welding pipe. Topics include pipe positions, joint geometry, and preparation with emphasis placed on bead application, profile, and discontinuities. Upon completion, students should be able to perform SMAW welds to applicable codes on carbon steel pipe with prescribed electrodes in the 2G and 5G positions.

Prerequisites: WLD 115 and WLD 116.

Corequisites: None.

When Offered: (F)

WLD 215BB - SMAW (Stick) Pipe-BB

Hours--Class: 0 Lab: 5 Clinic/Work Exp: 0 Credit: 2

This course is a continuation of WLD 215AB. Topics include pipe positions, joint geometry, and preparation with emphasis on making welds in the 2G and 5G positions without backing, and testing in the 6G position with carbon steel electrodes and making pipe welds with stainless steel electrodes. Upon completion, students should be able to perform SMAW welds to applicable codes on carbon steel pipe with carbon steel electrodes in various positions.

Prerequisites: WLD 115 and WLD 116.

Corequisites: WLD 215AB.

When Offered: (F,S)

WLD 251 - Fabrication II

Hours--Class: 1 Lab: 6 Clinic/Work Exp: 0 Credit: 3

This course covers advanced fabrication skills. Topics include advanced layout and assembly methods with emphasis on the safe and correct use of fabrication tools and equipment. Upon completion, students should be able to fabricate projects from working drawings.

Prerequisites: WLD 151.

Corequisites: WLD 141.

When Offered: (F,S)

WLD 261 - Certification Practices

Hours--Class: 1 Lab: 3 Clinic/Work Exp: 0 Credit: 2

This course covers certification requirements for industrial welding processes. Topics include techniques and certification requirements for prequalified joint geometry. Upon completion, students should be able to perform welds on carbon steel plate and/or pipe according to applicable codes.

Prerequisites: WLD 115, WLD 116, WLD 121, WLD 131.

Corequisites: WLD 122, WLD 132.

When Offered: (On demand)

WLD 262 - Inspection & Testing

Hours--Class: 2 Lab: 2 Clinic/Work Exp: 0 Credit: 3

This course introduces destructive and non-destructive testing methods. Emphasis is placed on safety, types and methods of testing, and the use of testing equipment and materials. Upon completion, students should be able to understand and/or perform a variety of destructive and non-destructive testing processes.

Prerequisites: None.

Corequisites: None.

When Offered: (On demand)

WLD 265 - Automated Welding/Cutting

Hours--Class: 2 Lab: 6 Clinic/Work Exp: 0 Credit: 4

This course introduces automated welding equipment and processes. Topics include setup, programming, and operation of automated welding and cutting equipment. Upon completion, students should be able to set up, program, and operate automated welding and cutting equipment.

Prerequisites: WLD 110 and WLD 121.

Corequisites: None.

When Offered: (On demand)

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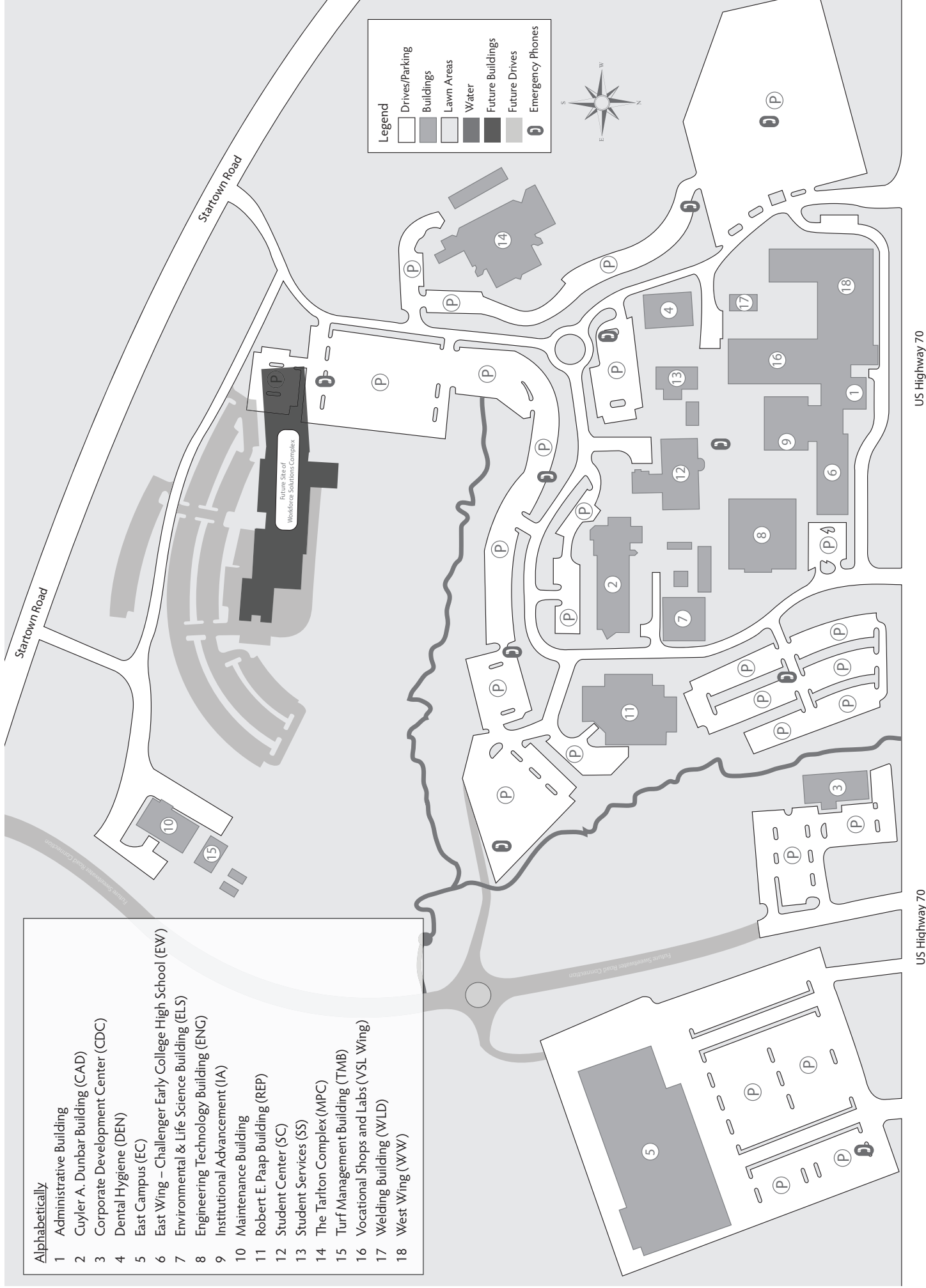
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- 1 Administrative Building
- 2 Cuyler A. Dunbar Building (CAD)
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- 4 Dental Hygiene (DEN)
- 5 East Campus (EC)
- 6 East Wing – Challenger Early College High School (EW)
- 7 Environmental & Life Science Building (ELS)
- 8 Engineering Technology Building (ENG)
- 9 Institutional Advancement (IA)
- 10 Maintenance Building
- 11 Robert E. Paap Building (REP)
- 12 Student Center (SC)
- 13 Student Services (SS)
- 14 The Tarlton Complex (MPC)
- 15 Turf Management Building (TMB)
- 16 Vocational Shops and Labs (VSL Wing)
- 17 Welding Building (WLD)
- 18 West Wing (WW)



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