#### LENOIR COMMUNITY COLLEGE

#### Dr. Brantley Briley, President

Telephone 252-527-6223

www.lenoircc.edu

#### 2013-2014 Catalog

Volume 45, Number 1

Announcement of Programs and Courses for 2013–2014 Comprehensive Educational Opportunities

#### VISION STATEMENT

Lenoir Community College aspires to be the community college of choice for a diverse, local, regional, and global community.

#### MISSION STATEMENT

Lenoir Community College, a member of the North Carolina Community College System, is a comprehensive two-year public institution. The College offers associate degrees, diplomas, or certificates through educational programs in college transfer, business, industry, public services, health sciences, and continuing education for the intellectual, economic, social, and cultural development of students and the community. Programs and support services are accessible through traditional and distance learning options.

#### VALUES

Through its policies, procedures, and daily operations in the fulfillment of its mission, Lenoir Community College exemplifies the following values:

- 1. The worth and dignity of all people;
- 2. Honesty, integrity, and excellence;
- 3. Exemplary teaching and effective learning;
- 4. Access and opportunity while maintaining quality;
- 5. Skill preparation to work and live in a global economy;
- 6. Diversity in every aspect of its culture;
- 7. A systematic and inclusive approach to decision making;
- 8. Community partnerships;
- 9. Continuous growth and improvement for personal and professional development.

#### ACCREDITATION

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

#### OTHER ACCREDITATION

The Lenoir Community College Associate Degree in Applied Science Medical Assisting Program, the Associate Degree in Applied Science Polysomnography Program, and the Diploma in Surgical Technology Program are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP at 1361 Park Street, Clearwater, FL 33756; Telephone Number 727-210-2350; www.caahep.org) upon the recommendation of these respective boards: Medical Assisting Education Review Board (MAERB at 20 N. Wacker Drive, Suite 1575, Chicago, IL 60606; Telephone Number 800-228-2262; www.maerb. org); the Committee on Accreditation for Polysomnographic Technologist Education (CoAPSG at 1711 Frank Avenue, New Bern, NC 28560; Telephone Number 252-626-3238; www.coapsg.org); and the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA, 6 West Dry Creek Circle, Suite 110, Littleton, CO 80120; Telephone Number 303-694-9262; www.arcstsa.org). The Associate Degree in Applied Science Radiography Program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT, 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182; Telephone Number 312-704-5300). The Automotive Systems Technology Program is accredited by the National Automotive Technicians Education Foundation (NATEF). The Associate Degree in Culinary Arts is accredited by the American Culinary Federation (ACT, 180 Center Place Way, St. Augustine, FL 32095; Telephone Number 904-824-4468). The Cosmetology Program is licensed by the North Carolina State Board of Cosmetic Art Examiners. The Basic Law Enforcement Program (BLET) is accredited by the North Carolina Department of Justice Criminal Justice Standards Division as required under 12 NCAC 9c.0401c for a five-year period.

#### APPROVAL

The following agencies accredit or approve specific programs: the Commission on Accreditation of Allied Health Education Programs (CAAHEP), the North Carolina State Board of Cosmetic Arts, North Carolina Board of Barbering, and the Federal Aviation Administration. Lenoir Community College is approved by the North Carolina Board of Nursing to offer the Associate Degree Nursing, the Practical Nursing, the LPN Refresher, and RN Refresher programs.

#### PERSONS WITH DISABILITIES

It is Lenoir Community College's intent to make reasonable accommodations for persons with disabilities. If special assistance is needed, please give the College prior notice by calling: 252-527-6223.

#### CATALOG CHANGES

The College reserves the right to make changes in the regulations, courses, fees, and matters of procedure announced in this publication.

500 copies of this public document were printed at a cost of \$2,132 or \$4.26 per copy (G.S. 143-170.1)

# LENCommunity college

Lenoir Community College is rich in history and is one of the oldest institutions in the North Carolina Community College System. Chartered April 3, 1958, LCC is one of 58 community colleges in the North Carolina Community College System. The system was established in 1963 under enactment of a general statute by the legislature and it serves nearly 850,000 citizens annually.

Located at the intersection of highways U.S. 70 and N.C. 58, LCC's primary service area is Lenoir, Greene, and Jones counties. The College offers both degree and non-degree programs serving approximately 5,500 curriculum students and 15,000 extension students annually.

Two years after the State Board of Education chartered LCC, it began operations as the Lenoir County Industrial Educational Center (IEC) with Daniel C. Wise as director. Approximately 80 students enrolled in classes that were held at Contentnea High School. The following year in 1961, the vocational and technical curricula were initiated with classes held at Stallings Field, a former air base.

In 1963, the center moved to its 18-acre permanent campus and a new facility, later named the Bullock Building, and held its first graduation in June. In the same year, the IEC was separated administratively from the Lenoir County Board of Education, and the first Board of Trustees was organized.

Soon after, the Board secured the status of technical institute for the center, and in November 1964, the institution attained community college status. The Board of Trustees appointed Daniel C. Wise, who served until the summer of 1965, as acting president. At that time, Dr. Benjamin E. Fountain became president and the College expanded to 58 acres beginning long-range planning of campus development.

The first year of the transfer program was offered in 1966 at Stallings Field. Two years later, the program was moved to the new Administration Building on the permanent campus. LCC was initially accredited by the Southern Association

of Colleges and Schools Commission on Colleges and has maintained accreditation ever since.

The '70s saw the expansion of the campus to 90 acres as well as a new president, Dr. Jesse L. McDaniel. He served in that capacity for 18 years. Seven new buildings were constructed, and the Jones County and Greene County Centers were opened.

Upon Dr. McDaniel's retirement, Dr. Lonnie H. Blizzard took the reigns as president in 1988. The following year, a new building for aviation education was built at the Kinston Regional Jetport, and the Health Sciences Building was completed on the main campus.

The campus continued to grow with the A. Forrest Waller Building completed on the main campus at a cost of \$4.5 million in 1998. The building included a 650-seat auditorium. After ten years as president, Dr. Blizzard retired; and in July 1998, Dr. Karin Pettit was named president.

New construction at the Greene County Center provided a 15,000 square foot facility at a cost of \$1.6 million. Two more acres were purchased in 1999 on the corner of highways 58 and 70.

In 2000, a state community college construction bond referendum was passed with LCC receiving more than \$12 million for renovations and new construction. The following year, Dr. Pettit left and the Board hired longtime LCC employee, Joyce Cherry, to serve as interim president. Mrs. Cherry provided the leadership necessary for the stability of the College during the time of transition. On April 22, 2002, Dr. Stephen Scott, former vice president of the North Carolina Community College System, took over as president. In 2003, Dr. Scott resigned to become president of Wake Technical Community College, and Mrs. Joyce Cherry was again named interim president until a new president was selected.

On May 10, 2004, Dr. Brantley Briley returned to his hometown and home college to become its seventh president. During the year, significant acquisitions and

construction began changing the landscape of the campus. Twenty-seven acres of land were purchased on the east boundary and nine acres to the south of the campus. These purchases increased total acreage on the main campus to 128.

In December, a \$5.4 million construction project began which included an addition to the Waller Building to house Culinary Arts and a \$3.9 million facility to house the Learning Assistance Program, science classrooms, and labs.

In 2005, nine acres of land were purchased in Jones County, and plans were initiated to construct a new Jones County Center. The \$1.1 million Jones County Center opened in its new location in April 2009. At the Greene County Center, a \$2.1 million addition was completed in 2008. In that same year, the College celebrated its 50th anniversary. A 278-page full color coffee table book was produced by the LCC Printing Department marking the College's 50-year history. During the yearlong celebration, LCC experienced record enrollments and a significant increase in its Foundation-endowed scholarships through a special program, "50 for 50", 50 new endowments to celebrate 50 years.

A new facility was built to house the College's maintenance operations in 2009. In that same year, the Greene County Center on Harper Street in Snow Hill, which houses a corrections training facility was remodeled, making it a more versatile community center.

In 2010, a facility was secured in downtown La Grange to become the new home of the LCC La Grange Center. The Center opened its doors in May 2011. The College also expanded its offerings in Pink Hill by offering classes at the Pink Hill Wellness and Education Center, the former Pink Hill Elementary School. A new south parking lot was built providing 175 new parking spaces. Phase two of the Jones County Center was completed and included a vocational shop and three additional classrooms, adding an additional 5,100 square feet.

In 2011, several renovation and construction projects were completed. The former Maintenance/Receiving Building was completely remodeled to become the new Construction Trades/Receiving

Facility, and the Grounds Maintenance Building was also remodeled. The College Bookstore, located in the Student Center, was completely remodeled in December 2011. The Automotive Customizing program received a new home after renovations were completed to the former Massey Body Shop in Kinston, an offcampus site. Extensive improvements have been made to the Lancer baseball facilities. The College Foundation purchased a custom-built bus for athletic and tour events. Detailed landscaping projects throughout campus have been completed. During the year, a long range plan was developed to include the construction of a new facility to house Health Sciences programs, an estimated \$13 to \$15 million project.

The College completed the construction and remodeling in 2012 of the former Greene Lamp/Head Start Building, which became home to the Basic Law Enforcement Training (BLET) and Early Childhood programs. The Administration Auditorium renovations were also completed.

To assist in traffic flow, a new driveway off of N.C. 58 South was completed in 2012, as well as the completion of a campus-wide exterior signage project featuring a three-panel digital sign with high-resolution color digital displays. Phase III of the Jones County Center was completed in 2013. The Technical Trades Center was made possible through a Golden LEAF Community Assistance. The completed project added 6,390 square feet to the Jones County Center for a total of 18,890 square feet.

The College is committed to quality education and student success and offers 63 associate degree programs, 34 diploma programs, and 91 certificate/skills certificate programs. Today, LCC serves more than 5,000 curriculum students and more than 15,000 continuing education students annually. LCC experienced record enrollment in its history during Fall 2010 with 3,793 curriculum students. The College ranks 15<sup>th</sup> in enrollment among the 58 community colleges in the state. As a world class community college, LCC continues to expand its programs and services to meet the needs of the citizens it serves.

# PRESIDENT'S Message Dr. Brantley Briley

Welcome to Lenoir Community College, a comprehensive North Carolina community college that has been providing accessible educational, cultural, and social opportunities since 1958. It is a great time to be part of Lenoir Community College. We offer excellent educational opportunities delivered by a well-qualified, professional faculty using state-of-the-art equipment. Our student-oriented support staff is committed to providing high quality support services to assist you in achieving your educational goals. Lenoir Community College is truly committed to providing you with a quality education at a very reasonable price.

To assist you in meeting your education and career goals, Lenoir Community College offers four degrees: The Associate in Arts Degree with 13 pre-majors, the Associate in Applied Science Degree with more than 40 programs, the Associate in Fine Arts Degree with one pre-major, the Associate in Science Degree with four pre-majors, and the 2+2 Engineering Degree. In addition, the College offers many certificate and diploma options requiring less than two years for completion. The College is accredited by the Southern Association of Colleges and Schools Commission on Colleges.



If your goal is to earn a four-year degree, our strong articulation agreement with the University of North Carolina System allows a seamless transition into all of the 16 universities in the system. Our college transfer graduates also experience a smooth and successful transition into most private colleges and universities. Upon completion of one of our many two-year programs, our graduates are equally as successful when moving directly into the workforce. Each degree, diploma, and certificate program offers a variety of classes at different times and in distance modes; we offer traditional day, evening, and weekend classes, as well as hybrid and Internet courses. This variety offers a degree of flexibility in establishing your own class schedules by selecting those classes that best suit your needs and learning style. Currently, more than 3,500 students are enrolled in one of 460 courses offered online at LCC. We also offer classes for high school students through Career and College Promise. These classes help teens enhance their study habits and critical thinking skills needed to succeed in college. Tuition is free. Eligible high school students may enroll in college level academic, career and technical education courses not otherwise available to them. These students receive college credit for classes successfully completed. Credits earned become part of their official college transcript.

Lenoir Community College makes significant contributions to economic development efforts in Lenoir, Greene, and Jones Counties. We are a partner in the recruitment of business and industry, and we train and retrain employees for the job market. LCC is involved in many other community economic and workforce development activities. Our Continuing Education Program can offer one class or many to assist in local efforts to support our community business and industry.

At Lenoir Community College, we have something for everyone. We are here to help you achieve your goals, to live your dreams. I hope that you will choose to enroll in Lenoir Community College. We offer you a world of opportunities and the promise that we will assist you in any way with this important decision. For more information, please contact our admissions office or any member of our faculty and staff.

My door is always open to you.

Brantley Briley, Ed.D.

south !

President

## **TABLE OF CONTENTS**

Gollege Galendar	8
NCCCS Performance Measures	10
General Information	11
Continuing Education	16
Admissions	21
Schedule of Fees and Charges	25
Tuition Refunds	27
Academic Regulations	28
Grading System	28
Credit by Examination	31
Attendance Policy	32
Satisfactory Progress Policy	34
Graduation Requirements	36
Transfer Credit	36
College-Level Student Competencies	37
Student Services	38
Financial Aid	
Scholarships	39
Student Employment	43
Veterans' Assistance	45
Students with Disabilities	47
Cooperative Education	49
Job Placement	49
Student Rights, Responsibilities, and Appeals	49
Standards of Conduct	49
Grade Appeal Process	52
Student Grievance Procedure	
Equal Opportunity	53
Family Educational Rights and Privacy Act	54
Emergency Messages	
Arts and Sciences	55
Transfer Responsibility	56

College Transfer Programs	
Associate in Arts A10100	61
Art Education A1010A	65
Business Administration A1010B	66
Criminal Justice A1010D	67
Elementary Education A1010R	68
English A1010E	69
Health Education A1010G	70
History A1010H	71
Nursing A1010I	72
Physical Education A1010J	73
Psychology A1010L	
Social Science Secondary Education A1010M	75
Social Work A1010Q	76
Sociology A1010N	77
Associate in Fine Arts A10200	78
Art A10200	78
Associate in Science A10400	79
Biology and Biology Education A1040A	83
Chemistry and Chemistry Education A1040B	84
Engineering A1040D	85
Mathematics A1040E	86
2+2 Engineering	
Associate in Applied Science Degrees, Diplomas and Certificates	87
Accounting A25100	
Aerostructure Manufacturing & Repair Technology A50450	
Agricultural Biotechnology A20110	95
Associate Degree Nursing (Non-Integrated) A45110	97
Automotive Customizing Technology A60190	
Automotive Systems Technology A60160	
Aviation Management and Career Pilot Technology A60180	
Basic Law Enforcement Training C55120	
Business Administration A25120	
Business Administration Marketing & Retailing Concentration A2512F	
Business Administration Public Administration A2512H	117
Computer Engineering Technology A40160	
Computer Information Technology A25260	124
Computer-Integrated Machining A50210	
Computer Programming A25130	133
Cosmetology A55140	135
Criminal Justice Technology A55180	139
Culinary Arts A55150	141
Dental Assisting D45240	
Dental Hygiene A45260	
Dietetic Technician A45310	
Early Childhood Education A55220	
Emergency Medical Science A45340	
Emergency Medical Science—Bridging A45340B	156

General Occupational Technology A55280157	
Global Logistics Technology A25170158	
Graphic Arts & Imaging Technology A30180162	
Gunsmithing A30200	
Healthcare Management Technology A25200	
Horticulture Technology A15240	
Human Services Technology A45380	
Human Services Technology Mental Health Concentration A4538C	
Human Services Technology Social Services Concentration A4538D182	
Industrial Engineering Technology A40240	
Industrial Management Technology A50260	
Lateral Entry C55430191	
Mechanical Engineering Technology A40320	
Medical Assisting A45400	
Medical Office Administration A25310	
Networking Technology A25340	
Occupational Education Associate A55320	
Office Administration A25370	
Polysomnography A45670210	
Practical Nursing (Diploma) D45660212	
Practical Nursing Refresher C45390213	
Radiography A45700	
Surgical Technology D45740	
Sustainability Technologies A40370216	
Therapeutic Massage A45750	
Welding Technology A50420222	
Course Numbering	
Course Substitutions	
Description of Courses	
Board of Trustees	
College Personnel	

## **CALENDAR 2013–2014**

### FALL SEMESTER 2013

August 12Professional Development Day (no classes)
August 14
August 14 No Classes. Registration until 7:00 p.m. Last day you may qualify for 100% refund
August 15
August 19
August 26
and Last day you may qualify for 75% refund*
September 2
September 11Last day to apply for Fall graduation
October 9
October 102nd 8 week registration 8:00 a.m5:00 p.m.
October 10
October 14–15 Semester Break
(administration and support staff report)
November 11–15 Early Registration for Spring Semester
(currently enrolled students only)
November 13–15 Early Registration for Spring Semester
(open to all students; ends 1:00 p.m. November 15)
November 27 Last day to process drop forms
November 27
November 28–29
December 9Last day of classes
December 10
December 11, 12, 13
December 13Semester ends (11:00 p.m.)
December 16–17Semester break
December 18–January 1
75% refund is based on the 10% point of the course
•
SPRING SEMESTER 2014
January 2
January 3Registration Day until 1:00 p.m. Last day you may qualify for 100% refund
January 6Courses begin (75% refund period begins) (8:00 a.m.)
January 8
January 1510% Point and Last day to drop without a grade;
and Last day you may qualify for 75% refund*
January 20
February 5 Last day to apply for Spring graduation
February 28
March 3 Semester break for all students
March 4
March 4 Professional Development Day (3:00 p.m. to 5:00 p.m.)
March 5

April 7–11	Early registration for Summer Semester
	(currently enrolled students only)
April 7–11	Pre-registration for Fall Semester
	(currently enrolled students only)
April 9–11	Early registration for Summer Semester
	(open to all students; ends 1:00 p.m. April 11)
April 9–11	Pre-registration for Fall Semester
	(open to all students; ends 1:00 p.m. April 11)
April 18	Last day to process drop forms
April 21	
April 22-25Semester	Break (administration and support staff report)
May 5	Last day of classes
May 6	Reading Day
May 7, 8, 9	Exams
May 9	Semester ends (11:00 p.m.)
May 12	
May 13	Graduation (7:00)
*75% refund is based on the 10% point of	the course

#### **SUMMER SEMESTER 2014**

#### Ten-Week Session (40 days) May 21–July 31 Note: Classes are held Monday through Thursday.

#### The College is closed on Fridays during the summer semester.

May 20Last day	you may qualify for 100% refund
May 21 Add period begins (75%	refund period begins) (7:30 a.m.)
May 21	Courses begin (8:00 a.m.)
May 22	Add period ends (7:00 p.m.)
May 26	
May 2810% Point and I	Last day to drop without a grade;
and Last day	you may qualify for 75% refund*
June 3Last day	to apply for Summer graduation
June 25	Midterm
June 26	
July 2	Holiday begins 6:00 p.m.
July 3	
July 17L	CC 2014–Freshmen Orientation
July 21–24E	arly registration for Fall Semester
	(currently enrolled students only)
July 23–24 Early registration	n for Fall Semester ends 5:00 p.m.
(open to al	l students; ends 5:00 p.m. July 24)
July 28	Last day to process drop forms
July 31	
July 31	Semester ends (11:00 p.m.)
*75% refund is based on the 10% point of the course	

#### NCCCS PERFORMANCE MEASURES 2010-2011

Please see www.lenoircc.edu for latest data

LCC Funding M	leasures -A, B, C, D, E, F, G, H			
Performance	Per	formance	System	LCC
Measures	St	andard	Average	Achievement
A-*Progress of	f Basic Skills Students—Measur	e not include	ed this year as aut	thorized by the
State Board of (	Community Colleges			
B—*Aggregate	Passing Rates for			
Licensure and (	Certificate Exams	80%	87%	78%
Individual Licensis	ng Boards and Program Exam Passing	g Rates:		
Basic Law Enf	orcement	70%	85%	$77^{\circ}/_{o}$
Cosmetic Arts	Apprentice	70%	96%	100%
Cosmetology		70%	94%	*
Instructor		70%	67%	**
Esthetician		70%	96%	*
Manicurist		70%	85%	62%
EMT	EMT	70%	82%	72%
	EMT-1	70%	66%	68%
	EMT-P	70%	90%	$88^{\circ}/_{\circ}$
Nursing	Practical	70%	94%	*
0	Registered	70%	90%	$92^{0}/_{0}$
	Radiography	70%	96%	*
Real Estate	Sales	70%	82%	**
C—*Performane (two cohorts)	ce of College Transfer Students	88%	88%	84%
A—transferred with A.A. & achieved GPA= or > 2.0		87%	89%	89%
B—transferred 24+ S. hrs. but no degree & achieved GPA= or > 2.0		83%	87%	81%
D—Passing Rates for Students in Developmental Courses		75%	80%	81%
Reading Pass	sing Rate	75%	86%	86%
Math Passing	g Rate	75%	76%	78%
English Passi	ing Rate	75%	83%	81%
E—Success Rate	e of Developmental Students in	Subsequent (	College Level Cou	ırses
	•	80%	87%	85%
Math Passing	g Rate	80%	88%	83%
English Passi	ing Rate	80%	85%	87%
F—*Overall Sat	isfaction Rate of Students			
Attending Co		90%	96%	94%
Non-comple	0	90%	93%	93%
Completers		90%	97%	95%
G—Curriculum	Student Retention and Graduation	65%	67%	64%
H—Client Satisf	action with Customized Training	90%	95%	96%
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Source: North Carolina Community College System. See June 2012 Critical Success Factors report for detailed analysis of these data & methodologies.

<sup>\*</sup>Number too small to report without violating students' privacy

<sup>\*\*</sup>Data Unavailable

#### **GENERAL INFORMATION**

#### PHYSICAL FACILITIES

Lenoir Community College—Main Campus P.O. Box 188 Kinston, NC 28502-0188 Telephone: 252-527-6223 Web Address: www.lenoircc.edu

The main campus of Lenoir Community College is located at the intersection of highways US 70 East and NC 58 South in Kinston, NC. The college, located on 128 acres, has modern buildings housing state-of-the-art equipment, an excellent learning resources center, technologically enhanced classrooms, and a student center gymnasium complex. Kinston is located in central eastern North Carolina, 80 miles east of Raleigh, 30 miles south of Greenville, and 60 miles north of Emerald Isle

Greene County Center 818 Highway 91 Snow Hill, NC 28580 Telephone: 252-747-3434

The Greene County Center is housed in a state-of the-art facility that was completed in 2000. This 31,000 square-foot facility has twelve classrooms, two shop areas and nine administrative offices. In addition, the Center is host to the JobLink Career Center.

The JobLink Career Center is a user-friendly facility that provides job seekers, education and training seekers, and employers' access to a variety of employment and training services in a convenient one-stop center.

The Greene Early College High School is also located at this location. Greene Early College High School is a collaborative effort between Lenoir Community College and Greene County Schools. The five-year program is designed to give rising freshman the opportunity to complete the requirements for both a high school diploma and an associate's degree.

The Center is staffed with a director, learning lab coordinator, prison program coordinator, occupational extension coordinator, college liaison, evening supervisor and part-time instructors. A variety of curriculum and extension courses are offered each semester at the Center and at other selected sites throughout Greene County. The Center is also an approved GED Testing site.

Lenoir Community College Workforce Development Center 602 West Harper Street Snow Hill, NC 28580 Telephone: 252-747-8800

Lenoir Community College Workforce Development Center is the site for various community agencies, as well as, the location for several community instructional programs. The College offers Compensatory Education, GED Testing for Greene County, Department of Corrections Annual In Service Training and Specialty Certifications for Correctional Officers, New Hire Training for Department of Corrections, and a variety of continuing education courses. The facility is also home to the State Office of the North Carolina Motorcycle Safety Training Program.

#### Jones County Center 509 Hwy 58 North Trenton, NC 28585

Telephone: 252-448-5021

The Jones County Center is housed in a modern facility that was completed in 2009. The Jones County Campus of Lenoir Community College currently has 18,890 square feet, consisting of three workshops for gunsmithing and construction trades, two state of the art computer labs, two nurse aid labs, five classrooms, and nine offices. The newest building, the Technical Trades Center, opened in 2013. The campus is also the host site for the Jones County JobLink Career Center. The JobLink Career Center provides career planning and job placement services to job seekers and provides employers with a variety of employment and training services. A variety of curriculum and continuing education courses are offered at the Center while other courses are offered throughout Jones County. Adult Basic Education/Adult High School/GED preparation classes are offered each semester. The Center is an approved GED testing site. The Jones County Center is owned by the Lenoir Community College Board of Trustees and the operating costs, other than instructional and partial administrative, are furnished by the Jones County Board of Commissioners.

La Grange Center 112 East Railroad Street La Grange, NC 28551 Telephone: 252-806-0522

The La Grange Center opened for students in 2011. The Center, located in downtown La Grange, is housed in a newly remodeled building that is owned by the Town of La Grange and leased to Lenoir Community College. Included in the facility are administrative offices, three classrooms, computer lab, and a general purpose meeting room. A variety of continuing education courses are offered at the Center. The La Grange Center is staffed with a director, instructional assistant, part-time night supervisors, and adjunct instructors.

#### LEARNING RESOURCES CENTER

The Learning Resources Center (LRC), consisting of both the main library and Heritage Place, provides a collection of books, periodicals, audiovisuals, Web-based resources, and other learning materials to support curricular needs as well as to inspire student and faculty interests. We have a small open lab of 30 computers available to patrons and students with internet access and multiple application software packages to support curriculum requirements. The main library collection of an estimated 50,000 titles is housed in open stacks where patrons have the opportunity to browse in areas of interest. The main library receives over 55 periodicals plus access to NC LIVE, an online database of hundreds of general periodicals and professional journals. Materials can also be obtained from other libraries via interlibrary loan. A student ID is required for any type of transaction in the main library. Additionally, from the Ask a Librarian page of the LRC web page, patrons have the ability to sign up for free research consultations, ask the librarians questions online through an instant message chat or from any mobile phone via text message. Heritage Place offers a special reserved collection of various genealogical and local/state historical materials including census records, church records, birth and death records, and other items of local interest. Heritage Place also displays many local artifacts from the surrounding area.

The main library is open Monday through Thursday from 7:45 a.m. until 7:30 p.m. and Friday from 7:45 a.m. until 3:00 p.m. except for holidays and planned meetings. Operating hours are subject to change, i.e. semester breaks and summer sessions. Time changes will be posted for patrons. The LRC email address is lrcinfo@lenoircc.edu.

#### DISTANCE EDUCATION

Distance Education (DE) expands learning opportunities by using nontraditional delivery methods to meet the needs of a growing, diverse population of learners with various learning styles and lifestyles. Distance learning occurs when the interaction of a student and instructor is separated by place and/or time. The mission of Lenoir Community College's (LCC) DE services is to provide accessible, comprehensive instructional programs for students. The purpose of DE is to meet the needs of a diverse student population through flexible, alternative delivery methods such as Internet courses, Hybrid courses, Web-assisted courses, and Information Highway/Two-way Video courses.

**INTERNET (IN)** courses are college credit or continuing education courses where 100% of the instruction is delivered through the Internet. Students work independently by utilizing Internet tools to complete course work. Students enrolled in Internet courses are guided by a qualified instructor and have access to the same resources as traditional on-campus students. It is vital that students enrolling in Internet courses have a working knowledge of the Internet with email and word processing skills.

**HYBRID** (**HY**) courses are college credit or continuing education courses where primary delivery is online with a requirement that students also meet in traditional face-to-face sessions. This combines traditional classroom-based instruction with the tools of online distance delivery.

**WEB-ASSISTED (WB)** courses are college credit or continuing education courses where primary delivery is via traditional face-to-face sessions with a requirement that students have Internet access as a supplemental part of the course.

**INFORMATION HIGHWAY/TWO-WAY VIDEO (IH)** courses are college credit or continuing education courses where instruction is delivered by two-or-more way video. Information Highway/Two-way video courses feature live video and audio interaction between the instructor and students at different sites. Students may interact with instructors and other students through monitors, microphones, and other technologies. LCC may offer courses on the North Carolina Information Highway (NCIH). This two-way interactive technology connects LCC and its students to students at other North Carolina community colleges, as well as to other sites.

DE students abide by the same guidelines for application and registration as traditional students. In addition, identical academic standards, criteria, content, quality, and student support services apply to DE courses as to all other college courses.

LCC uses the Learning Management System Moodle to deliver online course content in DE courses. It is vital that students taking Internet courses follow the Distance Education Course Enrollment Procedure: Students taking Internet (online) courses **MUST SUBMIT** an **ASSIGN-MENT** by the 10% date in each Internet course in Moodle to be fully enrolled in the course. Students who do NOT submit an assignment by the 10% date will be marked as "NEVER **ATTEND**" and **WITHDRAWN** from the course. **No Exceptions. No Refunds.** 

#### **HONORS PROGRAM**

The Honors Program is one example of how LCC meets the diverse needs of its students by offering them a wide variety of educational opportunities. The Honors Program includes a variety of curricular and extracurricular options to enhance the cultural and intellectual development of motivated and academically gifted students. In addition to designating enriched honors sections of the Arts and Sciences curriculum, the program offers other challenges to its students: special honors seminars, a study abroad opportunity, a student speakers bureau, and a scholars series of guest speakers. Acceptance into the Honors Program is subject to compliance with the established admissions requirements.

#### **BOOKSTORE**

The College bookstore is located on main campus in the Student Center. Operating hours are posted in the Student Center or can be found at the following link: http://www.lenoirbookstore.com. Students can purchase books, supplies, and many other items in the Lenoir Community College bookstore. The phone number is (252) 522-3964.

#### **EVENING AND WEEKEND COURSES**

The College offers a schedule of both credit and noncredit courses at night and during the weekends. In general, the courses are offered at the main campus in Kinston, Greene County Center, and the Jones County Center. Evening and weekend courses give students the flexibility to take curriculum and continuing education courses during non-traditional hours in a comfortable classroom setting. The availability of evening and weekend courses give students the opportunity to coordinate employment with college studies.

The dynamic class offerings of the evening and weekend programs allow students to request specific curriculum courses by contacting the Evening/Weekend Programs Office. Curriculum courses can be scheduled to provide flexibility to groups. Through dynamic class offerings, students are able to take advantage of several courses offered by the College.

Degree, diploma, and certificate programs can be completed by taking only evening and weekend courses; however, a student may take longer to complete the academic program requirements. Students can increase the rate of academic progress by enrolling in day, online, hybrid, and/or evening/weekend courses.

Students enrolled in evening courses enjoy some of the same services as day students. Student resource centers such as Admissions, Student Center, Learning Resources Center, and the Tutorial Lab are available for evening students. Trained security officers provide assistance 24 hours a day. Information about admission, registration, counseling, advising, financial aid, cashier services, and administration services are coordinated by the Evening/Weekend Programs Office in the Administration Building.

The Continuing Education Division of the College at the main campus and centers in Lenoir, Greene, and Jones counties offer noncredit community services and occupational extension courses. The division also offers basic skills classes in adult basic education and adult high school diploma, GED preparation, and new and expanding industry classes. These courses and programs are designed for the adult learner who is seeking knowledge and skills.

#### TUTORIAL LAB

The Tutorial Lab is located on the first floor of the Science/LAP Building. The lab has 30 state-of-the-art computers running Windows 7 with Internet access and multiple application software packages to support curriculum requirements. This lab provides students with opportunities to (1) increase their knowledge and skills through research and computer-assisted instruction, (2) receive tutorial assistance in mastering required standards of performance in a particular program, and (3) increase their knowledge and skills through use of enrichment activities. Peer tutors and lab assistants are available to support students with the use of equipment and software.

#### LEARNING ASSISTANCE PROGRAM

The purpose of the Learning Assistance Program (LAP) is to provide academic and interpersonal skills development to prepare the total person for post-secondary and lifelong learning. LAP fulfills its purpose by offering developmental courses, orientation courses, and support services to enable students to become proficient in reading, writing, math, and critical thinking skills needed to succeed in college level courses.

#### LENOIR COMMUNITY COLLEGE'S INDEBTEDNESS POLICY

No degree will be conferred, nor any diploma, certificate, or transcript of a record will be issued to students who have not made satisfactory settlement of all their indebtedness to the College. Students may not be permitted to attend classes, take final exams, nor register for any subsequent semesters if those students have delinquent indebtedness with the College.

#### RECORDS

Information contained in the student's permanent record is determined by the NCCCS office. The student's permanent record is composed of personal information including the student's name, address, student ID number, date of birth, and gender. Academic information included on the Permanent Student Record includes the title and number of courses taken, grades earned, hours attempted, hours earned, quality points, and grade point average by term and cumulatively. Other information includes secondary school attended, college major, graduation information, honors, membership in Phi Theta Kappa, and credits accepted from other colleges.

Student records are maintained in accordance with the <u>Community College System Public Records Retention and Disposition Schedule and the Students' Educational Records Policy</u> manual of this institution. Copies are located in the office of the Dean of Student Services. Refer to these publications for specific information regarding the retention, disposition, and security of records.

#### LENOIR COMMUNITY COLLEGE FOUNDATION, INC.

The Lenoir Community College Foundation was chartered in 1972 for the purpose of receiving funds for general college support. Gifts in support of the College may be made directly to the Foundation.

#### INCLEMENT WEATHER PLAN

In case of inclement weather, the College will make a decision and post it on the College website at www.lenoircc.edu as early as possible. Information regarding closings or delays will be placed on the College phone system and will be broadcasted using the College's Emergency Notification System. Please visit www.lenoircc.edu to learn more about the College's Emergency Notification System. Local television and radio stations will also be notified. When possible, the College will follow the county public school system. Decisions concerning closing the College are difficult to make based on predictions. Weather conditions can change in a short time. If Jones or Greene counties are more adversely affected by the weather than Lenoir county, the directors of those counties are authorized to close their campuses prior to the general announcement. The Dean of Health Sciences and Nursing is authorized to cancel clinicals at his/her discretion. Students will be notified as early as possible by college officials regarding the status of a particular clinical site. However, once an announcement is made by the administration, it is effective for the entire service area.

Class days that are lost due to inclement weather will be made up by utilizing days designated as no classes, professional development days, reading days, and semester breaks. The College, at its discretion, also may use Saturdays and/or may extend a semester to make up days. A modified calendar will be developed showing these changes.

When classes are missed due to weather conditions, division deans and the Vice President of Academic and Student Services will determine how much (if any) class time must be made up and will develop make-up plans for each class. Strategies for making up class time may include adding time to each class for the remainder of the term or adding an additional session or sessions at a time acceptable to students. Make-up time must not create conflicts with students' other classes and students must be allowed adequate time to get to subsequent classes on time. When it is impossible to make up time lost due to inclement weather, outside assignments may be required of students in lieu of class time. Make-up plans for each class, approved by the division dean and the Vice President of Academic and Student Services, will be submitted to the Registrar's Office prior to the end of the term.

#### TOBACCO-FREE COLLEGE

The use of tobacco products is strictly prohibited on all college property including personal vehicles located on college grounds. All property, including vehicles owned or controlled by the College is tobacco-free.

#### **IDENTIFICATION BADGES**

College identification (ID) badges are provided to all students and employees and are available in the LRC. ID badges must be displayed at all times while on College property. ID badges must be displayed to be admitted to athletic events and to check out books from the LRC. Possession, use, or knowingly creating false ID badges is a violation of College rules and regulations. A replacement fee will be charged for lost, stolen, or mutilated ID badges.

Visitors must obtain a pass. Visitor passes are available at designated areas in each building.

# CONTINUING EDUCATION DIVISION CONTINUING EDUCATION PROGRAMS

Lenoir Community College offers a comprehensive program based on the needs and interests of adults in Lenoir, Greene, and Jones Counties. Programs are designed to provide basic education for Grades 1-8 for adults; to provide high school courses of study opportunities in preparation for a high school equivalency certificate; to provide cultural and community service programs; and to provide upgrading and vocational courses designed to prepare students for new jobs or allow them to perform better in their present job. The Continuing Education Division is committed to providing programs and activities to enhance social, cultural, economic, and leadership growth, as well as enhance the quality of life of the citizens, the community, and the state. This mission is fulfilled in the following ways:

- 1. Providing education, training, and retraining for the workforce;
- 2. Maintaining effective and cooperative partnerships with businesses, industries, and various community agencies and organizations; and
- 3. Utilizing systematic assessment for planning and evaluation.

#### LOCATION

Classes are held on the main campus of Lenoir Community College, Jones County Center, Greene County Center, The Greene County Workforce Development Center, La Grange Center and at selected locations throughout Lenoir, Greene, and Jones Counties.

#### **ENROLLMENT**

Any person 18 years of age and not enrolled in a secondary school may register for classes. A person between the ages of 16 and 18 may be considered a person with special needs and be admitted to appropriate programs provided that he or she is classified as a "dropout" by the secondary school and the Board of Education. Proof of this status must be submitted on the special application, which is available from the program coordinator. A person 16 years of age or older and still enrolled in a secondary school may enroll in selected courses upon written permission by the school principal during the school months and by both the school principal and the superintendent during the summer months.

Some courses have special admission requirements. Also, for some courses, the number of students who may enroll is limited. The program coordinator should be contacted for additional information.

#### **ADMISSION OF MINORS**

An applicant who is a minor between the ages of 16 and 18 years may be considered a person with special needs and admitted to appropriate programs or to the learning lab. The applicant must be classified as a dropout by the public schools and must not have been in the public schools for six (6) calendar months preceding the last day of regular registration of the semester. A notarized petition of the minor's parent or legal guardian must accompany the application for admission.

#### WHEN CLASSES BEGIN

Classes will begin after enough prospective students express sufficient interest. However, most classes are scheduled when the regular college semester begins. Every effort is made to arrange courses for the convenience of the students.

#### REGISTRATION FEE

A registration fee is charged for each extension class. Refund of fees is based on the College's refund policy. No registration fee is charged for special extension training programs for volunteer fireman, fire department personnel, volunteer rescue and life-saving department personnel, local law enforcement officers, and full-time custodial employees or the Department of Corrections. Senoir citizens, persons who are 65 and older and are qualified as legal residents of North Carolina may take up to 6 hours of credit instruction and one course of non-credit instruction per academic semester. When a course is taught as self-supporting, a registration fee sufficient to cover all direct costs associated with the course is charged to every student.

#### OTHER COSTS

For a class in which a textbook is to be used, the student is responsible for acquiring a personal copy of the textbook. If a student wishes to construct a project in class which will become personal property when completed, the student is to supply all materials. Other fees, such as technology fee, liability insurance, or cost of printed materials, may be required for some courses.

#### TYPES OF PROGRAMS BASIC SKILLS

#### Adult Basic Education (ABE)

Success begins with the basics. Through Adult Basic Education, adults who lack basic literacy skills can learn the skills necessary to obtain jobs and promotions, help their children with homework, exercise their rights and responsibilities as citizens, manage their finances more effectively, and read notices of danger, invitation, and opportunity. ABE is open to any adult 18 years of age or older who has not completed high school and who functions below the ninth grade level. The ABE curriculum is competency-based and stresses reading, writing, and mathematics. Adults who master the ABE levels may enroll in GED or AHSD classes. Classes are conducted in various locations at times convenient to adult learners.

#### Adult High School Diploma Program (AHS)

The Adult High School Diploma Program provides adults with an opportunity to earn a high school diploma and consists of core courses required by the public school system along with electives offered by the community college. Students must have 22 units of credit to successfully complete the AHS program. Graduates may participate in Lenoir Community College's graduation ceremony. The College in conjunction with the Local Education Agency (LEA) awards the diploma.

#### **Compensatory Education (CED)**

The Compensatory Education Program is designed to serve adults with intellectual disabilities who are over the age of 17. Educational opportunities are centered on helping individuals become as independent and self-directed as possible through acquiring basic and life skills needed to function successfully in daily living.

#### General Educational Development (GED)

Lenoir Community College organizes classes across the service area to prepare individuals to pass the GED (high school equivalency) test. The GED test covers content that a graduating senior is expected to know in Language Arts-Writing, Social Studies, Science, Language Arts-Reading, and Mathematics. Students attend classes until they demonstrate proficiency and successfully complete the GED test battery. Upon attaining minimum standard scores of 410 on each of the 5 tests AND a total score of 2250, a high school equivalency diploma is awarded to the student by the State Board of Community Colleges. The fee for processing the GED test battery is \$25.00 (subject to change).

#### English as a Second Language (ESL)

English as a Second Language is designed to serve adult speakers of other languages. Adults study the English language through listening, speaking, reading, and writing. Knowledge necessary to become active and informed parents, workers, and community members is shared through resource toolkits. Additionally, students are offered a course of study to prepare for the establishment of permanent resident status or U.S. citizenship.

# Innovations in Basic Skills Family Literacy

Family Literacy addresses critical factors that limit a family's ability to rise to a level of economic independence and self-sufficiency by integrating four essential components: adult education, parent and child time (PACT), parenting education, and employability skills. The College and area LEAs work collaboratively to champion the causes of families through partnerships with other community agencies.

#### **Workplace Basic Skills**

Developing and maintaining a well-trained workforce is a high priority. Today's high-performance workplace requires different skills of employees than were needed in the past. The traditional definition of workplace literacy—the ability to read, write, and compute to meet job requirements—has changed. Workplace basic skills include literacy skills and other core skills, attitudes, and behaviors that are essential to workplace success and high performance.

#### OCCUPATIONAL EXTENSION

#### **Selected Occupational Extension Courses**

This program consists of single courses designed specifically for the purpose of training individuals for employment, upgrading the skills of persons presently employed, and retraining people for new employment in occupational fields.

#### Fire Service Training Program

Fire fighting techniques, pump operations, and fire control methods are taught by certified instructors in fire service training.

#### **Law Enforcement Program**

The Law Enforcement program is designed to upgrade the training of law enforcement departments throughout Lenoir, Greene, and Jones Counties. It consists of single courses selected to meet the needs of law enforcement.

#### **Healthcare Programs**

Lenoir Community College offers a variety of medical programs through Occupational Extension: Emergency Medical Services starting with the Medical Responder through EMT-Paramedic in preparation for state certification. The College offers credentialing and recertification courses in EMS for all level EMS providers as well as the following specialty courses: Advanced Cardiac Life Support, Basic Life Support, Phlebotomy, and Pediatric Life Support. In additional, the following health-related classes are available: Nurse Aide I & II, Nurse Aide Refresher, Pharmacy Technician, Health Unit Coordinator, Medical Terminology, Medical Coding and Billing, Geriatric Aide, Home Health Aide, RN Refresher, and Medical Assisting Refresher. The College continues to add offerings as courses become available and strives to keep up with the most updated information and equipment to ensure a quality education in the medical field.

# Other Extension Programs Customized Training Program

Customized Training Programs support the economic development efforts of the State by providing education and training opportunities for eligible businesses and industries. The programs were developed in recognition of the fact that one of the most important factors for a business or industry considering locating, expanding, or remaining in North Carolina is the ability of the State to ensure the presence of a well trained workforce. The programs are designed to react quickly to the needs of businesses and to respect the confidential nature of proprietary process and information within those businesses. The purpose is to provide customized training assistance in support of full-time production and direct customer service positions created in North Carolina.

#### **Small Business Center**

The Small Business Center was established at Lenoir Community College to serve small business owners, prospective owners, and employees of small businesses by providing counseling, a variety of seminars, workshops, and courses specifically geared to small business management. The Center works cooperatively with the Chamber of Commerce, the Small Business Administration, and the many other agencies that provide information and assistance to small businesses.

#### Microenterprise Loan Program

The Microenterprise Loan Program operates under the umbrella of the Small Business Center at Lenoir Community College. The primary goal of the program is to help entrepreneurs who may have trouble obtaining business loans from traditional lending sources by brokering professional technical assistance and by providing small loans for start-up and growth capital to small business owners in Lenoir, Jones, and Greene Counties.

#### Human Resources Development Program (HRD)

The Human Resources Development (HRD) Program is designed to train unemployed, underemployed, or dislocated adults with job seeking skills and to assist them in upgrading their vocational skills to secure employment. Training may consist of an introduction to basic computer skills, completing application forms, communication skills, letter writing, resume writing, career goal setting, and interviewing techniques. The ultimate goal of the HRD program is to train those who need help securing employment. Registration fees are waived for those who qualify. Pre- assessments prior to WorkKeys testing are recommended.

#### Workforce Investment Act (WIA)

WIA is a federally funded program that provides core, intensive, and training services through the local JobLink Career Center for youth, adult, or dislocated workers. WIA offers a mix of employment, training, and job placement services. Participants may access Individual Training Accounts to assist with tuition, fees, books, supplies, and accident insurance. Job attainment, job retention, and increased earnings for participants are goals of the WIA program.

#### **JobLink Career Center**

The JobLink Career Center is a user-friendly facility that provides job seekers, education and training seekers, and employers access to a variety of employment and training services in a convenient one stop center. Local agency representatives work together as a team to provide the most comprehensive and efficient services possible for the public. Local JobLink partners include representatives from Lenoir Community College, Division of Workforce Solutions, Workforce Investment Act (WIA), Vocational Rehabilitation, Greene Lamp, Telamon, Job Corps, Department of Social Services, Coastal Women's Shelter, and Coastal Community Action. The North Carolina Career Readiness Certification program information is available at the Lenoir, Greene, and Jones County JobLink Centers.

#### Career Readiness Certification (CRC)

North Carolina's Career Readiness Certificate is a portable credential that promotes skills and career development for individuals and confirms to employers that they possess basic workplace skills in applied mathematics, reading for information, and locating information. The CRC is based on the ACT WorkKeys system, a nationally recognized, EEOC-compliant industry-driven system of job profiling, assessment, and instructional support. The system awards three levels of certification - Bronze, Silver, and Gold.

#### CONTINUING EDUCATION UNITS

The Continuing Education Unit (CEU) is used as the basic means for recognizing the College's offering of noncredit classes, courses, workshops, seminars, and other programs. A unit is defined as 10 contact hours of participation in an organized continuing education experience. The two types of continuing education units are individual and institutional.

The following criteria are utilized for the awarding of individual CEUs:

- a. The noncredit activity is planned in response to an assessment of educational needs for a specific target population.
- b. There is a statement of objectives and rationale.
- c. Content is selected and organized in a sequential manner.

- d. There is evidence of pre planning which should include opportunity for input by a representative of the target group, the faculty, and continuing education personnel.
- e. The activity is of an instructional nature and is sponsored or approved by an academic or administrative unit of the College best qualified to determine quality and approve the resource personnel.
- f. There is a provision for registration for individual participants.
- g. Appropriate evaluation procedures are utilized and criteria are established for awarding CEUs to individual students prior to the beginning of the activity. This may include the evaluation of student performance, instructional procedures, and course effectiveness.

Noncredit offerings which do not meet the individual CEU criteria are accounted for only in terms of the institutional CEU. No individual CEUs are awarded. Normally, these noncredit offerings are less structured and more informal in nature. Institutional CEUs must meet the following criteria:

- a. The activity is a planned educational experience or a continuing educational experience.
- b. The activity is sponsored by an academic or administrative unit of the College best qualified to determine quality and approve the resource personnel.
- c. Record of attendance is required by the College and a file of program materials is maintained by the College for special activities. Neither individual nor institutional CEUs normally are used to recognize or account for participation in entertainment, social, or athletic activities.

#### **GRADING SYSTEM**

The grading system for extension classes when used is as follows:

- P—Pass, satisfactory completion of course work.
- F—Fail, unsatisfactory achievement in course work.
- I—Incomplete (If the student later completes the required work, the instructor may change the grade by completing a change of grade form.)
- W—Withdrew (The student has not participated in a course sufficiently to establish a position of passing or failing.)
- AU—Audit (No CEUs earned)
- S—Satisfactory, fulfilling course requirements

Certain occupational extension courses may require that students be tested for knowledge and/or competency. In those situations, the grading system for curriculum instruction may be substituted.

#### **COURSE REPEATS**

Students who take an occupational extension course more than twice within a five-year period shall pay their cost for the course based on the amount of funds generated by a student membership hour for occupational extension multiplied by the number of actual hours the class is to be taught. These students will not generate budget FTE. The funds collected from these students will be used by the College to offer additional educational courses. This policy does not apply to fire, rescue, or law enforcement training courses taken by fire, rescue, or law enforcement personnel. Students may repeat occupational extension courses more than once if the repetitions are required for certification, licensure, or recertification.

#### **ADMISSIONS**

#### **GENERAL**

Lenoir Community College operates an "open-door" admissions policy that accommodates all persons who are 18 years of age or older and able to benefit from post secondary education. The College serves all students without regard to race, color, national origin, religion, sex, age, or disability. There are restrictions, outlined in this section, on admission to specific programs. The College may refuse admission to an applicant who poses a safety threat.

#### WHEN TO APPLY

Applicants are encouraged to apply once the decision to enroll has been made. High school seniors should apply early in their senior year. The regular academic year begins with the Fall Semester; however, applicants may enter most programs at the beginning of any semester.

#### **APPLICATIONS**

Applications may be submitted in person, electronically at www.lenoircc.edu, or by mail to the following address:

Office of Admissions Lenoir Community College PO Box 188 Kinston, NC 28502-0188

#### PROCEDURES FOR APPLYING TO CURRICULUM PROGRAMS

#### 1. SUBMIT AN APPLICATION

- A. Applications are available in the Office of Admissions in the Administration Building of the College.
- B. Applications may be requested by calling 252-527-6223.
- C. Applications may be submitted online at www.lenoircc.edu.

#### 2. TRANSCRIPTS

Applicants are responsible for having official high school transcripts forwarded directly to the Office of Admissions. Final copies of high school graduating seniors' transcripts must be provided immediately after the work is completed and the graduation date has been posted. Applicants who possess high school equivalency certificates must present either the certificate or the official scores to the Office of Admissions. Applicants who have attended other colleges or universities are responsible for having official transcripts from each institution that was previously attended sent directly to the Office of Admissions. Applicants who attended high school in a country other than the United States are required to have an evaluation of their transcript(s) performed by an outside evaluation service to certify that the applicant has the equivalent of a high school diploma. Applicants should be sure to use an evaluation service not a translation service. Applicants presenting transcripts of a completed bachelor's degree will not be required to submit high school transcripts, except in the Health Science programs where all official transcripts are required. All official documents, such as transcripts (both high school and college), become the property of Lenoir Community College and will not be returned, released, or copied.

#### 3. PLACEMENT ASSESSMENT

All applicants to degree, diploma, and certificate programs must take the placement assessment or qualify for a waiver as indicated below. The purpose of the placement assessment is to provide additional information in planning students' programs and determining appropriate level of placement for classes. It is not an entrance examination and will not deny admission to the College for any student. Applicants may schedule an appointment to take the placement assessment by contacting the Office of Admissions at 252-527-6223. Students requesting testing accommodations may contact the ADA counselor. The placement assessment requirement may be waived by the Director of Admissions and Enrollment Management upon receipt of official documentation if the applicant:

A. Has satisfactorily completed one college level English and mathematics course at or above the developmental or vocational level at a regionally accredited college or university or

- B. Has a recent (within past five years) official transcript grade point average (GPA) of 2.6 or higher from a high school that is legally authorized to operate in North Carolina and who has a Future Ready Core Transcript (FRC) code of 1, 2, 3, or 4, or the equivalent of an FRC code of 1, 2, 3, or 4.
- C. Has made the following minimum scores on the SAT or ACT:

English: ACT Reading 20 OR ACT English 18 OR

SAT Writing 500 OR SAT Critical Reading 500

Math: ACT Math 22 OR SAT Math 500

D. Has taken the Accuplacer, Asset, Compass, or NC's custom diagnostic placement assessment at another regionally accredited college within the past five years.

#### RETESTING POLICY

Students may request a retake of the placement assessment based on the completion of additional study and preparation. An admissions counselor may administer a retest based on the student's educational plan. Once a student enrolls in a developmental course, further admissions placement testing is not allowed.

#### SPECIFIC PROGRAM ADMISSIONS REQUIREMENTS

#### 1. COLLEGE TRANSFER PROGRAMS

Applicants must be high school graduates or possess high school equivalency certificates.

#### 2. ASSOCIATE IN APPLIED SCIENCE DEGREE PROGRAMS

Applicants must be high school graduates or possess high school equivalency certificates.

#### 3. DIPLOMA PROGRAMS

Applicants must be high school graduates or possess high school equivalency certificates.

#### 4. CERTIFICATE PROGRAMS

- a. Technical certificate programs: Applicants must be high school graduates or possess high school equivalency certificates.
- b. Health science certificate programs: See health science admissions section.
- c. Basic Law Enforcement Training(BLET) Certificate program: Applicants must submit an official high school/GED transcript and official transcripts from any colleges previously attended. Applicants must provide a letter of sponsorship from a law enforcement agency. Applicants will be required to take a placement test specified by the BLET program chair.

#### 5. SKILLS CERTIFICATE PROGRAMS

Applicants must have a minimum of ten units of secondary school work and demonstrate the ability to succeed in the program. Students who earn certificates of attendance from high schools may be admitted to these programs. The complete list of skills certificates is as follows:

#### **SKILLS CERTIFICATES**

Automotive Customizing Technology	
Automotive Customizing Technology Skills Certificate	C60190K1
Automotive Bodyshop Skills Certificate	C60190K2
Automotive Systems Technology	
General Automotive Servicing Skills Certificate	C60160K1
Automotive Electronics Skills Certificate	C60160K2
Automotive Engine Performance Skills Certificate	C60160K3
Computer Information Technology	
Hardware/Software Applications Skills Certificate	C25260K1
Small Office Network Skills Certificate	C25260K2
Computer-Integrated Machining	
Computer-Integrated Machining Skills Certificate	C50120K
CNC Skills Certificate	C50120K1
Advanced CNC Skills Certificate	C50120K2

Cosmetology				
Cosmetology Skills Certificate	C55140K1			
Instructor Skills Certificate	C55160K			
Esthetics Skills Certificate	C55140K4			
Culinary Arts				
Culinary Arts Skills Certificate	C55150K1			
Early Childhood Associate				
Early Childhood Skills Certificate	C55220K1			
Administrator Skills Certificate	C55220K2			
Global Logistic Technology	000110111			
Global Logistic Technology Skills Certificate	C25170K			
Graphic Arts & Imaging Technology				
Graphic Arts & Imaging Technology Skills Certificate	C30180K			
Vehicle Outdoor Graphics Skills Certificate	C30180K1			
Gunsmithing				
Basic Gunsmithing Skills Certificate	C30200K1			
Advanced Gunsmithing Skills Certificate				
Horticulture Technology				
Horticulture Skills Certificate	C15240K			
Garden Center Skills Certificate	C15240K2			
Landscaping Skills Certificate	C15240K3			
Landscape Management Skills Certificate	C15240K4			
Mechanical Engineering Technology				
Mechanical Engineering Tech Robotics Skills Certificate	C40320K			
Mechanical Engineering Tech Electrical/Hydraulic Skills Cert.	C40320K1			
Mechanical Engineering Tech Mechanical Skills Certificate	C40320K2			
Mechanical Engineering Tech Industrial & Design Skills Cert.	C40320K3			
Networking Technology				
Router and Switching Skills Certificate	C25340K1			
Computer Forensics Skills Certificate	C25340K2			
Welding Technology				
SMAW (Stick) Welding Skills Certificate	C50420K1			
GTAW (Tig) Welding Skills Certificate	C50420K2			
GMAW (Mig) Welding Skills Certificate	C50420K3			

#### 6. CONTINUING EDUCATION PROGRAMS—See the continuing education section.

#### 7. HEALTH SCIENCE PROGRAMS

Students needing developmental work in reading, English, math, algebra and /or chemistry must complete these courses prior to the application deadline in order to be considered for Health Science programs. Applicants to the Health Science programs must compete for acceptance because of enrollment restrictions. The point system is used for selecting students for most of the programs. Interested students should contact a counselor in the Office of Admissions to obtain information about the programs and the application and selection process. Each program will have specific published deadlines for receiving applications and related documentation.

The following programs have a specific admissions process:

Associate Degree Nursing Dental Assisting
Dental Hygiene Dietetic Technician
LPN to ADN Transition Medical Assisting
Polysomnography Practical Nursing
Radiography Surgical Technology
Therapeutic Massage LPN Refresher

RN Refresher

#### PRE-ADMISSION COUNSELING

Counseling is provided immediately after the computerized placement assessment. This affords each applicant an opportunity to discuss the test score and to ask any questions about the College, its procedures, and the applicant's educational plans.

#### NOTIFICATION OF ACCEPTANCE

All applicants will receive a letter of acknowledgment upon receipt of application. A letter of acceptance will be sent upon completion of all admissions requirements. Students providing email addresses may receive electronic notification of admissions status.

#### READMISSION

Students applying for readmission to the College who have not attended for two or more years must submit a new application. Readmitted students will be enrolled under the current College catalog.

#### SPECIAL/VISITING STUDENTS

Applicants who do not complete all admissions requirements may be admitted as special students. The special student classification is designed for persons who want to enroll in courses without completing admissions requirements or declaring a major program of study. Special students may be permitted to accumulate fifteen (15) semester hours while completing the regular admission requirements. Special students must show evidence through official/ unofficial transcripts or assessment scores that they meet the prerequisites for any courses. Visiting students from other colleges are considered special students.

When a special student selects a major, appropriate credits earned as a special student are accepted toward meeting the requirements for graduation. Special students are not eligible for financial aid.

#### HIGH SCHOOL STUDENTS

Beginning January 1, 2012 the Career and College Promise program replaced all previous high school programs at Lenoir Community College. Career and College Promise is a partnership between the North Carolina Community College System and the North Carolina Department of Public Instruction. This program offers three pathways for high school students.

#### **Career Technical Education Pathway**

Designed for high school juniors and seniors in selected high school career cluster programs, this pathway allows students to enroll in college level courses that align with their high school career courses.

#### **College Transfer Pathway**

Designed for high school juniors and seniors in college-prep programs, this pathway allows students to enroll in college level courses that will transfer to a college or university.

#### Cooperative Innovative High School (Early College) Pathway

Designed for motivated students looking for a non-traditional high school experience, this pathway allows rising ninth graders the opportunity to earn their high school diploma and two years of college credit within five years.

#### ADMISSION OF TRANSFER STUDENTS

A student desiring to transfer to Lenoir Community College who has been a student attending another post-secondary institution must be able to meet the admission requirements and provide proof of eligibility to return to the institution last attended. Transfer students who are on academic suspension at their previous college or university must maintain a 2.00 GPA for their first semester of enrollment at LCC or they will be placed on academic probation. A visiting student must meet the transfer student admission requirements if the student decides to attend LCC as a regular student.

#### INTERNATIONAL STUDENTS

All International Students must meet the General Admission requirements for their program of study. International Student's application packets are available in the Office of Admissions in the Administration Building of the College and are available on the College website at www.lenoircc.edu.

#### ADVANCED STANDING IN HEALTH SCIENCE PROGRAMS

Advanced Standing may be requested by an individual who has successfully completed a minimum of one semester of a Health Science program at a regionally accredited institution and seeks entry into LCC's comparable program beyond the first semester. Before consideration is granted, the student must:

- 1. Meet general college admissions' requirements,
- 2. Meet current prerequisite courses for the desired program,
- 3. Submit a letter to the Dean of Health Sciences and Nursing requesting placement of advanced standing including:
  - a. Detailed syllabi and course outlines of successfully completed program core courses,
  - b. Clinical evaluation summaries of all core clinical courses, and
  - c. Two letters of recommendation: one from the program chair and one from a full-time faculty member where previously enrolled in the Health Science program.

Decisions for Advanced Standing are made on an individualized basis and provided there is space available in the program. After a careful evaluation of all information provided, the Advanced Standing applicant will be notified in writing by the Dean of Health Sciences and Nursing.

#### READMISSION TO HEALTH SCIENCE PROGRAMS

- Any student who withdraws or is dismissed from a specific health science program may be readmitted only once to the same program subject to program faculty recommendation and available space.
- 2. A student who wishes to re-enter a health science program must submit a written request to the Dean of Health Sciences and Nursing. This request for reentry must be received by the end of the next semester following the interruption of studies. There is no guarantee of readmission to Health Science programs.
- 3. Students who return after an absence of one semester or more (except summer)
  (a) must meet current admissions requirements, and (b) submit an updated health evaluation.
- 4. To assure retention of knowledge and skills, students are urged to return to the program at the earliest feasible time. The amount of time which has lapsed between withdrawal from the program and the readmission request must be considered by the program faculty. Auditing of previously completed program courses may be recommended by the program faculty if the student has been out of the program for an extended period of time.

Any student who after readmission does not receive a grade of "C" or better on all curriculum courses will not be eligible to re-enroll in the respective health science program.

#### SCHEDULE OF FEES AND CHARGES

Note: Tuition is set by the North Carolina General Assembly and is subject to change without notice. Please check www.lenoircc.edu for the most up-to-date tuition rates.

#### **RESIDENCY**

Under North Carolina law, a person may qualify as a resident for tuition purposes in North Carolina and thereby be eligible for a tuition rate lower than that for nonresidence. The North Carolina General Assembly, by and through its enactment, has determined that lower tuition rates be available **only** to NC **legal** residents. To be eligible for the in-state rate, the applicant must demonstrate each of the following:

- Capacity and Presence must be physically present in NC and able to make NC a
  permanent home.
- 2. **Intent** —must show evidence or actions of a permanent home in NC
- 3. **Duration** must show intent for 12 full months **prior** to the date application is submitted

In essence, the controlling North Carolina statute (G.S 116-143.1) requires that "To qualify as a resident for tuition purposes, a person must have established legal residence (domicile) in North Carolina and maintained that legal residence for at least 12 months immediately prior to his or her classification as a resident for tuition purposes. Statutory definitions, rules, and special provisions for determining residence status for tuition purposes are also set forth in the statute and include special rules with respect to persons who are minors, married persons, members of the armed forces, aliens, federal personnel, and prisoners. Exceptions are also made for emergency workers, and persons 65 years or older. Copies of the applicable law and of implementing regulations are available for inspection in the Office of Admissions and may be examined upon request.

#### **TUITION FOR CURRICULUM INSTRUCTION**

In accordance with the basic concepts of comprehensive community colleges, all fees are nominal and are held to a minimum. Tuition per semester is as follows:

IN-STATE FEE SCHEDULE						
Credit	Tuition	Activity	Technology	Access	Accident	Grand
Hours		Fee	Fee	Fee	Insurance	Total
1	\$71.50	\$0	\$2.00	\$10.00	\$1.65	\$85.15
2	\$143.00	\$8.00	\$4.00	\$10.00	\$1.65	\$166.65
3	\$214.50	\$8.00	\$6.00	\$10.00	\$1.65	\$240.15
4	\$286.00	\$8.00	\$8.00	\$10.00	\$1.65	\$313.65
5	\$357.50	\$8.00	\$10.00	\$10.00	\$1.65	\$387.15
6	\$429.00	\$8.00	\$12.00	\$10.00	\$1.65	\$460.65
7	\$500.50	\$19.00	\$14.00	\$10.00	\$1.65	\$545.15
8	\$572.00	\$19.00	\$16.00	\$10.00	\$1.65	\$618.65
9	\$643.50	\$19.00	\$16.00	\$10.00	\$1.65	\$690.15
10	\$715.00	\$19.00	\$16.00	\$10.00	\$1.65	\$761.65
11	\$786.50	\$19.00	\$16.00	\$10.00	\$1.65	\$833.15
12	\$858.00	\$32.00	\$16.00	\$10.00	\$1.65	\$917.65
13	\$929.50	\$32.00	\$16.00	\$10.00	\$1.65	\$989.15
14	\$1,001.00	\$32.00	\$16.00	\$10.00	\$1.65	\$1,060.65
15	\$1,072.50	\$32.00	\$16.00	\$10.00	\$1.65	\$1,132.15
16	\$1,144.00	\$32.00	\$16.00	\$10.00	\$1.65	\$1,203.65

#### **OUT-OF-STATE FEE SCHEDULE**

Credit	Tuition	Activity	Technology	Access	Accident	Grand
Hours		Fee	Fee	Fee	Insurance	Total
1	\$263.50	\$0	\$2.00	\$10.00	\$1.65	\$277.15
2	\$527.00	\$8.00	\$4.00	\$10.00	\$1.65	\$550.65
3	\$790.50	\$8.00	\$6.00	\$10.00	\$1.65	\$816.15
4	\$1,054.00	\$8.00	\$8.00	\$10.00	\$1.65	\$1,081.65
5	\$1,317.50	\$8.00	\$10.00	\$10.00	\$1.65	\$1,347.15
6	\$1,581.00	\$8.00	\$12.00	\$10.00	\$1.65	\$1,612.65
7	\$1,844.50	\$19.00	\$14.00	\$10.00	\$1.65	\$1,889.15
8	\$2,108.00	\$19.00	\$16.00	\$10.00	\$1.65	\$2,154.65
9	\$2,317.50	\$19.00	\$16.00	\$10.00	\$1.65	\$2,364.15
10	\$2,635.00	\$19.00	\$16.00	\$10.00	\$1.65	\$2,681.65
11	\$2,898.50	\$19.00	\$16.00	\$10.00	\$1.65	\$2,945.15
12	\$3,162.00	\$32.00	\$16.00	\$10.00	\$1.65	\$3,221.65
13	\$3,425.50	\$32.00	\$16.00	\$10.00	\$1.65	\$3,485.15
14	\$3,689.00	\$32.00	\$16.00	\$10.00	\$1.65	\$3,748.65
15	\$3,952.50	\$32.00	\$16.00	\$10.00	\$1.65	\$4,012.15
16	\$4,216.00	\$32.00	\$16.00	\$10.00	\$1.65	\$4,275.65

OTHER CHARGES: Books and supplies vary for different programs. Students should check with their advisors regarding approximate costs of books and supplies.

Note: No activity, technology, or access fee is charged during the summer semester.

Note: The College reserves the right to charge students additional costs associated with verification of student identity.

\*TUITION RATES MAY CHANGE PENDING FINAL LEGISLATIVE APPROVAL

#### FEES FOR NON-CURRICULUM EXTENSION INSTRUCTION

Fees for occupational courses are as follows: 0–24 hours: \$70.00; 25–50 hours: \$125.00; 50+ hours: \$180.00. The registration fee for Self Supporting Courses varies according to the direct costs of the course. The registration fee is waived by the State Board of Community Colleges for specific groups of students. These fees are listed under the Continuing Education section. These fees are subject to change without notice. There are no registration fees for basic skills courses.

#### \*TUITION RATES MAY CHANGE PENDING FINAL LEGISLATIVE APPROVAL

#### FLIGHT COST

The cost of flight instruction is not included in the schedule of fees and charges. This information is supplied by the Aviation Management and Career Pilot Technology Program Chair upon request. For further information call the Center for Aviation Education 252-522-1735.

#### TUITION REFUND PROCEDURE FOR CURRICULUM INSTRUCTION

- I. A tuition refund shall be made only under the following circumstances:
  - 1. A 100% tuition refund will be made if the student officially withdraws prior to the first day of class(es) of the academic semester as noted in the college calendar.
  - 2. A 75% tuition refund will be made if the student officially withdraws from a class(es) prior to or on the official 10 percent point of the semester.
  - A 100% tuition refund will be made if a student officially withdraws from off-cycle class(es) prior to the first day of class(es).
- II. To comply with applicable federal regulations regarding refunds to individuals or groups, federal regulations will supersede the state refund regulations.
- III. Where a student, having paid the required tuition for a semester, dies during that semester, (prior to or on the last day of examinations of the semester the student was attending) all tuition and fees for that semester may be refunded to the estate of the deceased.
- IV. The student's activity, technology fee, access fee, and the accident insurance fee will be refunded if the student's class(es) are cancelled or if the student officially withdraws prior to or on the official 10% point of the class(es).

# REGISTRATION FEE REFUND PROCEDURE FOR EXTENSION INSTRUCTION

- I. The refund policy for continuing education courses, as established by the N. C. State General Assembly, allows for a 75% refund, upon the request of the student if the student officially withdrawals prior to or on the 10% point of the class.
- II. A 100% refund shall be made if the student officially withdraws prior to the first day of the class Also, a student is eligible for a 100% refund if the class in which the student is officially registered is cancelled due to insufficient enrollment.
- III. Registration fees for self-supporting classes are non-refundable once the class begins.

#### FREE TUITION—SENIOR CITIZENS

#### \*TUITION RATES AND WAIVERS MAY CHANGE PENDING FINAL LEGISLATIVE APPROVAL

Senoir citizens, persons who are 65 and older and are qualified as legal residents of North Carolina may take up to 6 hours of credit instruction and one course of non-credit instruction per academic semester. Verification of eligibility must be provided. Certain fees may be charged to these persons, if necessary. When courses are offered as self-supporting, all students are required to pay the registration fee.

#### ACADEMIC REGULATIONS

#### CATALOG OF RECORD

Students have the option of graduating under the requirements of the catalog in effect at the time of initial enrollment following conversion to the semester system or any subsequent issue while enrolled, but students must complete requirements within ten (10) years of the catalog selected.

#### REGISTRATION

Students are urged to register on the days designated in the College calendar. Students who enter after classes have begun are at a disadvantage and are responsible for all work prior to their entrance. New and returning students should begin the process at the Office of Admissions. Continuing students should see their advisors. WebAdvisor online registration is available for admitted students to select and register for classes for the following semester. All students except special/visiting students are required to speak to their advisor before registering online.

#### SEMESTER HOURS

The unit of measurement for credit purposes is the semester hour. One semester hour represents the credit earned in a lecture course that is scheduled for one class hour per week for 16 weeks. For laboratory work, two class hours per week in the laboratory are required for a single semester hour of credit. For shop work or clinical hours, three hours in the shop or clinic per week are required for a single hour of credit. For cooperative education and internships, ten hours per week are required for a single hour of credit. Generally, a student should spend two clock hours in preparation for one class hour.

#### SEMESTER COURSE LOAD

Students taking 12 credit hours or more are considered full-time students; students with 9-11 credit hours are considered 3/4 time, and students with 6-8 credit hours are considered 1/2 time. Students with less than six credit hours are less than half time.

The maximum credit hours for students enrolled in AA, AS, AAS, diploma, or certificate programs is 18 hours. Students may enroll for more than the maximum hours with the approval of the division dean.

Special/visiting students normally will not be allowed to take more than 15 credit hours without declaring a major. Exceptions to this must be approved by the Dean of Student Services. Exceptions will be made only with sufficient justification and documentation.

#### GRADING SYSTEM AND QUALITY POINT AVERAGE

The 4.00 quality point system is used to calculate student grade point averages. Grade point averages are computed by dividing the total number of quality points earned by the total number of semester hours attempted. The letter grades used are as follows:

A	Excellent	4 quality points per semester hour credit attempted
В	Above Average	3 quality points per semester hour credit attempted
$\mathbf{C}$	Average	2 quality points per semester hour credit attempted
D	Below Average	1 quality point per semester hour credit attempted
F	Failed	0 quality points per semester hour credit attempted
WP	Withdrew Passing	Not considered credit hours attempted
WF	Withdrew Failing	0 quality point per semester hour credit attempted

SA	Satisfactory	Hours are applied toward graduation but are not used in calculating the student's grade point average.  This grade indicates clinical performance in health science courses, solely of a clinical nature, such as MED 113, SUR 123.
UN	Unsatisfactory	Hours are not applied toward graduation and are not used in calculating the student's grade point average. This grade indicates clinical performance in health science courses, solely of a clinical nature, such as MED 113, SUR 123.
AU	Audit	No credit
CR	Credit Accepted	Hours are applied toward graduation but are not used in calculating the student's grade point average.
NC	Non-Course Status	Given when credit is earned from some origin other than actual course work such as placement testing
W	Withdrew	Not considered credit hours attempted
NA	Never Attend	Given when a student registers but does not attend a course.
I	Incomplete	Given when a student has not completed the required course work but has made substantial progress and, in the opinion of the instructor, is able to fulfill the remaining requirements without reenrolling in the course. The "I" counts as credit hours attempted. Course requirements must be completed satisfactorily within the next semester (including the summer semester) or the "I" automatically becomes an "F," unless officially extended for one semester by the instructor.
P	Pass	Satisfactory completion of coursework
R	Reenroll	Has not met the objectives required for the course
IP	In Progress	Given in developmental courses (courses numbered less than 100) when a student, in the opinion of the instructor, has made progress but has not met the objectives required for the course, and has attended class in accordance with the instructor's attendance policy.  The "IP" does not count as credit hours attempted.
LA	Temporarily Late	An emergency symbol to be used by the registrar when grades are not reported on time through no fault of the student.
NF	Forgiveness Policy	The Forgiveness Policy—The grade is not included in the cumulative GPA.
S	Requirement Satisfied	Hours are applied toward graduation but not used in calculating the student's grade point average.
Vhen the	grade "F" "R " "W" "WP	""WF" or "IP" is received in a course, the student must reen-

When the grade "F," "R," "W," "WP," "WF," or "IP" is received in a course, the student must reenroll and satisfactorily complete the course requirements in order to receive credit for the course.

Developmental courses are numbered 0-99, and letter grades are required. Grades awarded include "A," "B," "C," "P," "IP," "R," "I," and "W." The hours attempted and grade points accumulated for developmental courses are counted in the semester and cumulative totals but do not count toward graduation requirements.

All grade changes other than "I" and "LA" must be approved by the Vice President of Academic and Student Services.

#### **DEVELOPMENTAL COURSES**

Designated developmental courses should be completed before advancing to certain college level courses and selected other developmental courses (see advisor for specific courses as they appear in the course description section of this catalog).

#### POSTING OF GRADES

As soon as the grades are recorded for each term, grades will be available through WebAdvisor. Faculty may also post grades in a non-identifiable form in convenient places so that students may view them.

#### **AUDITING COURSES**

Students who wish to audit courses must register through an advisor. Although students auditing a course receive no credit, at the discretion of the instructor, they may be required to attend classes regularly, participate in class discussions, and meet other course requirements. Any student auditing a class who does not meet requirements set by the instructor is subject to suspension from that class. Students auditing a course are charged the same fee as students taking courses for credit. Pre-requisite and co-requisite requirements must be met in order to audit a course.

Students wishing to audit class(es) must notify their advisors at the time of registration and their instructor(s) upon entry into the class(es). AUDIT CANNOT BE CHANGED TO CREDIT OR CREDIT TO AUDIT AFTER THE DEADLINE FOR ADDING COURSES.

# ADDING COURSES, DROPPING COURSES, AND WITHDRAWING FROM THE COLLEGE

Students who find it necessary to add or drop courses or withdraw from college should confer with their instructors and advisors. Forms are secured from the advisors or the Registrar's Office, and withdrawals must be signed by an advisor or the Dean of Student Services.

Courses may be added during the add period with advisor approval. Adding courses after the add period through the 10% point of the course requires the instructor's approval. However, after the 10% point of the semester, courses may be added with the recommendation of the instructor and the division dean and with the approval of the Vice President of Academic and Student Services.

For courses dropped or withdrawals from the College prior to or at the 10% point of the semester, no grade is awarded. The course does not appear on the student's permanent record.

After the 10% point, students who officially drop or withdraw receive a grade of "WP" or "WF" according to their academic performance in the courses, or at the discretion of the instructor, a "W." The "WF" is interpreted as an "F" in computing grade point averages.

Students who discontinue courses and/or leave the College after the 10% point of the semester without officially withdrawing are graded according to their academic performance in the courses.

#### CEEB ADVANCED PLACEMENT PROGRAM

Lenoir Community College participates in the Advanced Placement Program of the College Entrance Examination Board. Students who wish to present Advanced Placement Test Scores should have those scores sent directly to the Registrar from the College Board. Students entering a program who have demonstrated their achievement by meeting minimum scores upon taking the Advanced Placement Examinations may receive semester hour credit in the appropriate college course(s) as follows:

AP Course	Minimum	LCC Course	Semester
Title	Score	Equivalent	<b>Credit Hours</b>
Art History	3	ART 114 OR 115	3
Art (Studio Art Drawing)	3	ART 131	3
Biology	4	BIO 111	4
Calculus AB	3	MAT 271	4
Calculus BC	3	MAT 271 and MA	T 272 8
Chemistry I	3	CHM 151	4

Computer Science A	3	CIS 115	3
Economics (Micro)	3	ECO 251	3
Economics (Macro)	3	ECO 252	3
English Language	3	ENG 111	3
English Literature	3	ENG 111 and ENG 112	6
Government and Politics	3	POL 120	3
History (European)	3	HIS 121 and HIS 122	6
History (United States)	3	HIS 131 and HIS 132	6
Music Listening/Language	3	MUS 110	3
Music Theory	3	MUS 111	3
Physics B	3	PHY 151 and 152	8
Physics C (Part One)	3	PHY 151	4
Physics C (Part Two)	3	PHY 152	4
Psychology	3	PSY 150	3
Science (Environmental)	3	BIO 140 and BIO 140A	4
Spanish Language or Literature	3	SPA 111 and 112	6
Statistics	3	MAT 151	3

#### **CLEP PLACEMENT PROGRAM**

Lenoir Community College participates in the College Level Examination Program (CLEP). Contact the Registrar for information on tests accepted, scores, and course credit for CLEP. A CLEP transcript must be forwarded to the Registrar before any credit can be awarded.

#### CREDIT BY ARTICULATION

Lenoir Community College participates in the North Carolina High School to Community College Articulation Agreement. This is an agreement between the North Carolina Department of Public Instruction and the North Carolina Community College System. The agreement provides a seamless process that joins secondary and postsecondary Career and Technical Education(CTE) programs of study.

To receive articulated credit, students must enroll at the community college within two years of their high school graduation date and meet the following criteria:

- Final grade of B or higher in the course and
- A score of 93 or higher on the standardized CTE post assessment

High school students who enroll in a Career and College Promise pathway may earn articulated college credit as described in this agreement while enrolled in high school if the CTE articulated college credit is part of their Career and College Promise pathway.

Community college officials verify eligibility and acceptance of articulated courses listed on the high school transcript. Students may be asked to submit supporting documentation and/or demonstrate proficiency to receive credit. Colleges must follow the criteria of the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) in awarding credit.

#### CREDIT BY EXAMINATION

A curriculum student may petition the division dean for credit by examination. The dean coordinates with the instructor regarding the administration of the examination, which is administered in a manner appropriate to the course. The grade earned on the examination will be entered into the student's record and credits earned will be applied toward graduation requirements. A student must be currently enrolled at Lenoir Community College for credit by examination.

A student is limited to one attempt at credit by examination per course. No tuition is charged for the examination. A student may not attempt credit by examination if enrolled in the course for which the credit by examination is being attempted. This includes courses which have been dropped or withdrawn from during the current term or during the term in which the student is enrolled for the same course. Credit by examination for developmental courses is not permitted.

Exceptions to this policy may be recommended by the division dean and approved by the Vice President of Academic and Student Services.

#### **COURSE PREREQUISITES**

A prerequisite is a course or test score which must be met prior to entering the desired course. Students must comply with state and local requirements that courses may not be taken until all prerequisites have been met.

Exceptions to this requirement must be requested by the division dean and approved by the Vice President of Academic and Student Services. Students will be required to demonstrate appropriate knowledge and skills for admission to the course by meeting the following criteria: (1) successful completion of credit by exam, (2) successful completion of a higher level or similar course; or (3) possession of a relevant and current licensure or certification.

#### **COURSE COREQUISITES**

A corequisite is a course or test score which must be taken simultaneously with the desired course. If a student drops or withdraws from one part of the required corequisite, then both parts must be dropped or withdrawn. For example: CHM 131 and CHM 131A--a student dropping or withdrawing from CHM 131 is required to also drop or withdraw from CHM 131A since the state corequisite for CHM 131 is CHM 131A.

#### SIGNIFICANCE OF COURSE PREFIX AND NUMBERS

Courses with numbers of 0-99 are designed for students who have not demonstrated the necessary skills to enter the first year courses in a subject area. These courses give local credit only and do not count toward graduation.

Courses with numbers of 100-199 are freshman level; 200-299 are sophomore level. Courses are designated by a three-letter prefix which denotes the subject area. These courses are designed to fulfill requirements for the associate in arts, associate in science, associate in fine arts, associate in applied science degrees, diplomas, and/or certificates.

#### **ATTENDANCE**

Absences seriously disrupt students' progress in a course and diminish the quality of group interaction. Students are expected to attend punctually all lecture and laboratory sessions in the courses for which they are registered, beginning with the first session following registration for the courses. Three late arrivals and/or early departures count as one absence, and students must be in attendance for 50% of the class time to be counted for the day's attendance. Students should notify instructors of planned and emergency tardiness, absences, and early departures.

Although occasional absences may be unavoidable, they in no way excuse students from meeting the requirements of the courses. Absences (excused and/or unexcused) are calculated from the first class meeting following enrollment. "Excessive" absences are defined as absences totaling 15% of the scheduled class meetings. Fifteen percent translates into the following formula: for a 5 contact hour class, 15% =12 hours of absences; 4 contact hours = 9; 3 contact hours = 7; 2 contact hours = 4; and 1 contact hour =2. Excessive absences may, at the instructor's discretion, result in withdrawal from the class.

However, students who miss two consecutive weeks are withdrawn from class on the first day of the third week. Students with prolonged absences should either contact their instructors so that they are not suspended or officially drop the classes so that attendance is not factored into their final grades. Please refer to the course documents for specific attendance requirements.

Attendance/participation in Distance Education (DE) courses directly affects students' success in a course. LCC uses the Learning Management System Moodle to deliver online course content in DE courses. Students taking Internet courses must submit an assignment in each Internet course in Moodle by the 10% date to establish an initial enrollment date and to be fully enrolled in the course. Students who do not submit an assignment by the 10% date will be marked as "Never Attend" and withdrawn from the course. No exceptions. No refunds.

In DE courses, attendance is assessed by submitted assignments. Students not participating for two consecutive weeks or missing 15% of the assignments, as determined by the instructor, may be dropped from the course. It is important for students in a DE course to promptly inform their instructor of issues that may affect attendance/participation to minimize the chance of being dropped.

Dismissal for excessive or prolonged absences result in a grade of W (Withdrew), WP (Withdrew Passing), or WF (Withdrew Failing) based on the student's academic standing on the day of dismissal.

The classification of absences as excused requires verification and allows students to make up missed work, in accordance with the instructor's make-up procedures, but they are still computed as absences in the 15% tabulation. Excused absences are identified as follows:

- Personal illness or illness of dependents or spouse living in the household, if the illness requires a doctor's supervision
- 2. Death in the family
- 3. Participation in authorized college activities
- 4. Others at the discretion of the instructor

Students may have up to two days of absences excused by the College per academic year for the purpose of observing religious holidays that students are required by their faith to observe. In anticipation of such an event, students must contact the Dean of Student Services in writing at least two weeks prior to the expected absence. The Dean will work with the students and their instructors to ensure timely make up of class requirements missed because of the absence.

All instructors adhere to the established procedure as printed in the LCC Catalog, notify students in writing of their make-up procedures, and when possible, confer with students with excessive absences and/or refer those students to counselors. Students' grades, however, cannot be raised or lowered more than one letter grade based on excessive absences and/or attendance. This does not take into consideration the effects of students' failure to comply with instructors' make-up procedures.

It is recognized that there may be individual cases in which a student should be allowed to make a formal appeal related to attendance for particular courses taken at the College. Students must follow the student grievance procedure outlined in this catalog.

#### STUDENT CLASSIFICATION

Freshman—A student who has earned fewer than 32 semester hours of credit Sophomore—A student who has earned 32 or more semester hours of credit Full time Student—A student who is registered for 12 or more semester hours Part time Student—A student who is taking fewer than 12 semester hours Special/Visiting Student—A student who is not seeking a degree

#### **SOCIAL SECURITY NUMBERS**

Social security numbers are collected to comply with federal and state law and regulations. The College will not disclose a social security number for any purpose not required by law without the consent of the student.

#### ACADEMIC HONORS

**President's List**—Students who are enrolled for a minimum of 12 semester hours, have achieved a grade point average of 4.00, and are not enrolled in any class numbered below 100

**Dean's List**—Students who are enrolled for a minimum of 12 semester hours, have achieved a grade point average from 3.25 through 3.99, are not enrolled in any class numbered below 100, and have no grade lower than a "C"

**Graduation with Honors**—awarded to students with a major grade point average between 3.50 and 3.749 upon completion of any degree or diploma program

**Graduation with High Honors**—awarded to students with a major grade point average 3.75 and above upon completion of any degree or diploma program

To be eligible for honors or high honors, students must complete 50 percent of their course work at Lenoir Community College.

#### REPETITION OF COURSE WORK

The division dean's approval is required for students to repeat courses audited or passed with a grade of "C" or better. This includes courses taken at other institutions.

Students who repeat courses at Lenoir Community College will have all attempts shown on their official records, and all credit hours attempted will be computed in the cumulative grade point average. In no case will a Lenoir Community College student be allowed to enroll in the same or equivalent course(s) concurrently either here or at another institution. The required Permit to Repeat Course(s) form, available at the Registrar's Office, must be completed and returned to the Registrar's Office at the time of registration.

#### ACADEMIC FORGIVENESS

A student who has not been enrolled in curriculum courses for 36 consecutive months may request the Registrar to evaluate the student's academic record. Under this policy, the student may request that previous grades of "F" or "WF" not be used in calculating the cumulative grade point average. Prior to reevaluation, the student must be readmitted to the College and complete at least 12 credit hours of course work. The student must maintain at least a 2.50 GPA on those 12 credit hours. The Registrar, at the request of the student, will reevaluate the cumulative grade point average as appropriate. A reevaluation is provided only once for each student. **Note:** Recipients of financial aid or veteran's benefits may not be eligible for this forgiveness policy based on federal guidelines and regulations. The student should contact the Financial Aid Office for more information.

#### GRADE POINT AVERAGE CALCULATION FOR GRADUATION

Graduation from Lenoir Community College is based on major grade point average, which includes only courses used to meet graduation requirements in a student's major. Whenever courses are repeated, only the highest attempt is counted toward graduation.

Note: Where courses are repeated, all attempts are shown on the permanent student record.

#### SATISFACTORY PROGRESS POLICY

For the purpose of this policy, semester hours attempted are based upon all courses taken at Lenoir Community College including developmental. Grade point average is based only on courses taken at Lenoir Community College.

**Standards:** If students have earned a minimum GPA of 2.0 (excluding "I" grades) for the most recent semester of enrollment, they are considered for enrollment purposes to be making satisfactory progress. These students remain at this standing unless they fail to achieve a semester 2.0 GPA. At this time, the academic standing reverts to the standing of the semester immediately prior to that of satisfactory progress. To be eligible for financial aid, students must comply with the Satisfactory Academic Progress Standards as defined for financial aid.

**Academic Warning:** If students fail to maintain a 2.00 GPA, they are notified of "Academic Warning" status and required to attend a counseling session. Referral for learning assistance, reduced course load, and/or change of program may result from the session.

**Academic Probation:** If students fail to maintain a 2.00 GPA after two semesters of enrollment, they are notified of "Academic Probation" status and required to attend a counseling session. Referral for learning assistance, reduced course load, and/or change of program normally result(s) from this session.

**Academic Suspension:** If students fail to meet the requirements for satisfactory progress after one semester of academic probation, they are notified of "Academic Suspension" status and directed to a more appropriate program of study or suspended from attending classes for a period of one semester.

Students who wish to appeal their suspension must submit a written appeal to the Dean of Student Services. The dean, after reviewing the appeal, has the right to reinstate students in a probationary status.

**Reinstatement:** Students readmitted after academic suspension are placed on "Academic Probation" status and must meet the requirements set forth for academic probation.

#### **DISMISSAL FROM A PROGRAM**

If at any time during the semester, it is determined that a student is not a safe and dependable practitioner in the clinic, shop, lab, or similar area, and that the problem cannot be eliminated with reasonable accommodation, the student may be dismissed from the program with the concurrence of the Dean of Student Services. The student is afforded the right of due process. In addition, if at any time a health science faculty member determines that a student

- a. Presents problems in physical or emotional health which do not respond to appropriate treatment and/or counseling within a reasonable period of time or
- Demonstrates behavior which conflicts with safety essential to nursing practice and other health science programs, the student may be dismissed from the program.

Certain occupational programs enroll students as a "class" and require them to take all courses in sequential patterns. The courses are offered only once each year, and there is no opportunity for repeating a course or offering a substitution. Accordingly, a student who fails one or more courses within one of these programs is dismissed from the program at the end of the semester during which the failure occurs. All health science programs enroll students as a "class." All health science students must make grades of "A," "B," "C," or "SA" on all applicable course work to progress each semester and graduate from the program.

Students dismissed from an occupational program under this policy may petition the division dean for enrollment in a later class.

#### CHANGE OF NAME OR ADDRESS

It is the obligation of every student to notify the Office of Admissions of any change in name or address. Failure to do so can cause a serious delay in the processing of student records. Students must present a picture ID to make name and address changes.

#### **CHANGE OF MAJOR**

Students who wish to change majors must have the signature of a counselor/advisor. Applicants who wish to change majors prior to initial registration should contact the Office of Admissions. A change of major that is requested after the 10% point of the semester is not effective until the next term.

#### THE OFFICIAL ACADEMIC RECORD

A report of grades earned is available on WebAdvisor. Any disputes must be appealed through the instructor within two weeks of the official date of the end of the semester. Official records, of all students' courses, credits, and grades earned are kept in the Registrar's Office. Students should maintain a record of their courses, credits, and grades each term and check from time to time to see that their records agree with those of the College. The records may also help students determine their eligibility for any activity that requires them to meet specific scholastic standards. Copies of the official records are available to students upon written request.

#### ACCESS TO STUDENT EDUCATION RECORDS

Each student who is in attendance or who has been in attendance at the College or parents of a dependent student who claim the student as an exemption on their federal income tax return have the right to inspect and review the student education records maintained by the College or by any person acting on behalf of the College. The College does comply with a request to review an edu-

cation record within a reasonable time, but in any event not more than 45 days after the request is made. Any student or parent of a dependent child desiring to review the student education records should make the request directly to the official custodian responsible for maintaining that record. A list of the types, the location, and the names of the official custodians of student education records is maintained in the Registrar's Office and is readily available to the student or parent upon request.

The College makes available on a routine basis certain directory information on currently enrolled students without the prior written consent of the student. This policy is for the convenience of students, parents, other members of the college community, and the general public. However, such information is not to be released by the College if the student is not currently enrolled or if the student notifies the Registrar's Office within seven days after registration day of the current term of enrollment that such directory information should not be released to anyone by the College. Directory information related to a student is limited to the student's name, address, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, the most recent previous educational institution attended by the student, and other similar information as may be designated by the College.

#### REQUIREMENTS FOR GRADUATION

General requirements for graduation in any degree, diploma, or certificate program are as follows. Refer to curriculum standard page for specific requirements.

- 1. All college financial obligations must be met.
- A minimum of 25% of the credit hours or 9 credit hours (whichever is greater) required for completion of a program must have been earned through instruction offered by Lenoir Community College.
- 3. Required courses and electives must be completed in accordance with one of the programs listed in the catalog with a major grade point average of at least 2.00.
- 4. Application for graduation must be made by the deadline shown on the College calendar. Students should obtain a program evaluation (EVAL or PSPR) signed by their advisor. It is to be submitted along with an Application for Graduation to the Registrar.

#### **GRADUATION**

Students graduate at the close of any semester that requirements for graduation are fulfilled. Degrees, diplomas, and/or certificates for the spring semester are issued at formal commencement exercises held at the close of spring semester each year. Summer and fall graduates are mailed their degree, diplomas, and/or certificates as soon as possible following the end of the term and are encouraged to participate in the formal commencement exercises held at the close of the following spring semester.

A transcript certifying completion of the degree requirements is furnished upon request at the end of a student's final semester.

Student participation in commencement exercises is encouraged.

#### WAIVERS AND SUBSTITUTIONS

Waivers and substitutions of courses, other degree requirements, and academic regulations may be made only with adequate cause. Normally waivers and substitutions of major hours will not exceed 25% in any curriculum. Exemption from, or substitutions for, requirements established for a program of study must be recommended by the division dean and approved by the Vice President of Academic and Student Services. These requests must be entered on a waiver and substitution form and submitted to the Registrar.

#### ACCEPTANCE OF TRANSFER CREDIT

Credit is awarded for freshman and sophomore courses completed at regionally accredited community colleges and universities provided they parallel work offered at Lenoir Community College, are applicable towards the student's program of study, and carry adequate credit. No grade less than "C" will be acceptable in any program. The Vice President of Academic and Student Services must approve any credits from institutions that are not regionally accredited. The maximum transferable credit from another institution and the total allowable credit from all outside sources is 75 percent; 25 percent of the credit hours or 9 credit hours (whichever is greater) required for graduation must be earned through instruction offered by Lenoir Community College. Students are advised that transfer credits and grades accepted by Lenoir Community College do not infer acceptance by other educational institutions. Students will receive evaluations of all official records submitted before the end of the first semester of curriculum enrollment.

#### CREDIT FOR MILITARY TRAINING

Lenoir Community College may recognize and grant credit to active military personnel, reservists, and veterans for military training and experience completed in the armed forces and work taken through the United States Armed Forces Institute. Credit granted is in accord with recommendations of the American Council on Education. Persons desiring credit for military training and experience must petition the Registrar for such credit and present authentic training records.

Active military personnel, reservists, and veterans will be awarded two hours of physical education credit for basic training upon presentation of DD-214 or other documentation.

#### FOREIGN CREDENTIAL EVALUATION

Students who earned their high school or post-secondary degree(s) in a country other than the United States are required to have a "course by course" credential evaluation performed by an external evaluation service. Although many organizations perform this service, World Education Services (WES) is recommended. WES assists students with initiating the evaluation process and can be reached at www.wes.org or (800) 937-3895. Students may also call the WES office in Washington, D.C., at (202) 331-2925 where a local representative can assist them. The foreign credential evaluation must be sent from the external evaluation service directly to Lenoir Community College. Please allow four to six weeks for an official credential assessment to be completed and forwarded to the Registrar's Office.

# **COLLEGE-LEVEL STUDENT COMPETENCIES**

Students from Lenoir Community College's certificate programs will be able to:

- a. Perform entry-level technical skills appropriate to their areas of study and
- b. Demonstrate mathematical skills appropriate to their areas of study

In addition to these, students from Lenoir Community College's diploma programs will be able to:

- a. Communicate effectively in reading, writing, speaking, and listening;
- b. Demonstrate critical thinking and problem solving skills; and
- c. Apply scientific principles within their area of study.

In addition to these, students from Lenoir Community College's associate degree programs will be able to:

- a. Apply knowledge of basic information technologies;
- Demonstrate knowledge of the humanities or fine arts to achieve philosophical, literary, and artistic expressions that constitute cultural understanding; and
- Demonstrate knowledge of the social sciences to apply basic concepts involving relationships among individuals, groups, and social structures.

Program-level competencies have also been developed for all programs.

# STUDENT SERVICES

#### FINANCIAL AID

Lenoir Community College believes that no person should be deprived of the advantages of a college education because of a lack of funds. The College provides student financial assistance through grants, scholarships, loans, and student employment. Most financial aid awards are based on financial need which is defined as the difference between the cost of education and the amount of money the student and the student's family can contribute. Students and their families are expected to contribute to the cost of education to the extent they are able. Inquiries concerning student aid should be addressed to the Office of Financial Aid.

#### The eligibility requirements:

- 1. To be considered for financial aid at Lenoir Community College students must:
  - a. Have a high school diploma (not a certificate of attendance) or a GED certificate;
  - b. Be a United States citizen or eligible non-citizen;
  - c. Be enrolled or accepted for enrollment as at least a half-time student in an eligible program working toward a degree, diploma, or certificate;
  - d. Be enrolled or accepted for enrollment in an eligible program working toward a degree, diploma or certificate (An eligible program of study must have at least 16 credit hours); and
  - e. Be enrolled only in courses that count toward program(s) of study which will determine enrollment status (Students, who will be attending other accredited colleges/universities, must submit consortium agreements to Office of Financial Aid)

# PROCEDURES FOR APPLYING FOR STUDENT AID (ALLOW 3 WEEKS TO COMPLETE)

- Students complete the Free Application for Federal Student Aid (FAFSA) online at www.fafsa.gov. FAFSA on the Web worksheets are available in the Office of Financial Aid to assist students with this process.
- 2. Before beginning the FAFSA, students should apply for a PIN. A PIN is a 4-digit personal identification number that is used as an electronic signature.
- 3. Students can apply for a PIN on the web at www.pin.ed.gov. If the student is dependent and providing parental information on the FAFSA, the parent should also apply for a PIN.
- 4. If the student is a dependent student, then he/she will need proof of income such as a tax transcripts or tax information obtained from the IRS Data Retrieval system, and any untaxed income. Proof of income from parents is also needed such as a tax return, transcripts, child support, and other types of untaxed income.
- If the student is independent and single, then he/she will need proof of income such as tax transcripts or tax information obtained from the IRS Data Retrieval system and any untaxed income.
- 6. If the student is independent and married, then he/she will need proof of income from both the student and the spouse.
- 7. For Lenoir Community College to receive the information submitted on the FAFSA, students should include the Title IV code for the College 002940.
- 8. After the application is electronically submitted, students should print a Confirmation Page and save it for their records. Students will receive an email from the Department of Education once the application has been processed.
- 9. If there are corrections to be made after the application has been processed, then students should contact the Office of Financial Aid to have the corrections made.
- Selected students are chosen for verification which requires documentation for the information on the FAFSA. Students should submit all requested items to the Office of Financial Aid upon request.

- 11. Once a student's file has been completed, financial aid is awarded.
- Award letters are available for viewing on WebAdvisor at https://wa.lenoircc.edu/WA/WebAdvisor.

#### **GRANTS**

# Federal Pell Grant Program

The Federal Pell Grant is Title IV Federal Student Aid and is considered to be the basic source of aid to students. Eligibility is determined from information received in the FAFSA. For the 2013–2014 school year the Pell Grant ranges from \$582.00 to \$5,645.00 per year based on full time enrollment (12 credit/ 450 hours each semester). The amounts may be prorated for three-quarter time, half-time, and less than half-time enrollment.

# Federal Supplemental Educational Opportunity Grant (FSEOG)

The FSEOG is a grant to help students offset their educational expenses after high school. It is for under- graduates only with exceptional financial need (students with a very low Expected Family Contribution on their FAFSA), and it does not have to be paid back. Eligible students will receive an award amount determined by the Office of Financial Aid.

#### North Carolina Community College Grant

The North Carolina Community College Grant is a need-based grant designed to offset the tuition, fees, and bookstore charges of students receiving less than maximum Pell Grant awards. Applicants must meet all eligibility requirements for federal and state funding. They must also be taking at least a half- time course load—six credit hours—and they must be in a degree-seeking curriculum.

#### Child Care Grant

The Office of Financial Aid administers the Child Care Grant program funded through the North Carolina Community College System. Funds are to be used to assist student-parents with their child care needs. Funds are provided directly to approved child care providers for parents to attend classes.

#### North Carolina Education Lottery Scholarship

The North Carolina Education Lottery Scholarship was created to provide financial assistance to needy North Carolina resident students attending college and universities located in North Carolina. Students must have completed the FAFSA and have an EFC (Expected Family Contribution) that falls within a determined range set by the state of NC. Students must also be NC residents and enroll at least half-time (six credit hours).

#### North Carolina Less than Half-Time Grant

The North Carolina Less than Half-Time Grant is a need-based grant which is available for students who have completed the FAFSA and who are enrolled in one to five credit hours. The student's EFC must be from 801–4000. Eligible students may receive \$30-\$150 per credit hour.

#### **SCHOLARSHIPS**

Scholarships are awarded on a competitive basis by a selection committee. Applicants for scholarships must enroll, demonstrate academic promise, participate in school and community activities, and show some financial need. The scholarship application deadline is the last Friday in March each year. These scholarships are funded by the following gifts to the College and the Lenoir Community College Foundation, Incorporated.

#### **Other Scholarships**

Lenoir Community College Athletic Lenoir Community College Association of Educational Office Professionals

#### **Lenoir Community College Foundation Endowed Scholarships**

Alpha Kappa Alpha Sorority BB&T Eloise C. and Harvey E. Beech E. K. Best, Jr. Memorial

W. Robert and Suzanne S. Bizzell Health Sciences

Lonnie H. and Betty B. Blizzard

Mildred Dare Blizzard

Bojangles'/Tands

Jean P. and Peggy Booth Memorial

Bowen Family

John Hood Brewer Memorial

Brantley and Eugenia Casey Briley

Brody Brothers'

Frank and Sandra Brooks

Mildred Quinn Buchan Memorial

Henry H. and Vera F. Bullock Memorial

Bradlev Blair (Brad) Burmahl Memorial

Bruce Cannon Memorial

William T. and Imogene Sutton Casey

Glenn F. and Joyce Gilbert Cherry

Charles Coward/Al Sutton

Philip H. Crawford, Jr. and Persis Hodges Crawford Memorial

Nell and Ford Dabney Scholars

William H. and Clarice P. Davenport

Gretchen and Minerva Davis

Davis Wholesale Tire Company

Dr. Shirley L. Dove

Eastern North Carolina Bluegrass Association

E. Merle Edwards

Henry A. and Lucile Reed Edwards

Faculty Memorial

Dexter E. and Dorothy M. Floyd

Gregory E. and Jennifer Floyd

Ben and Norma Fountain Fund

Edward Earle Franck

Robert and Suzanne Gallaher

Albert Lionel Garner Memorial

Gail G. Grant Memorial

Andrew Oscar Greene Memorial

W. Foster and Mary L. Gurley Memorial

Gene Haas Foundation

Jack P. Hankins

Kathryne C. Hankins

C. Felix Harvey, Sr.

Margaret Blount Harvey Early Childhood Education

Harriet Taylor Herring LPN

Harriet Taylor Herring RN

William I. Herring, Sr. Memorial

Russell Curtis Hill Memorial

Fodie H. Hodges Memorial

Hodges Family

James R. and Carol M. Hood

John C. and Scarlett Howard

Irene Smith Howell

Gaines Barrett (Barry) Huneycutt, Jr.

George Dewey and Jessie Heath Jenkins Memorial

Jones County

Kenneth W. and Gracie Taylor Jones

Laura B. Jones

Roy E. and Brenda M. Jones

Stephanie M. Jones Memorial

Martha Wooten Kallam/Arc of Lenoir County

Kinston Business and Professional Women's Club

Kinston Exchange Club/Billy C. White Memorial

Kinston Jaycees

Kinston Rotary Club

Clayton G. Koonce Memorial

Richard Floyd (Rick) Lennon Memorial

Milton M. (Mac) Lovick Memorial

W. W. and Jeanette Lowery

Pat and Jim MacNeill

Graham W. and Jean M. Mallard

Christine Suggs Maroules

Christopher Maroules, Sr.

John Franklin and Lucy Wood Marston

George C. and Mildred Bonev Matthis

Helen McDaniel Memorial

Jesse L. and Joyce P. McDaniel

John and Mary Nicey Clements and Henry Dail (Dink) Meready

Montgomery's Math & Science

E. Fred and Louise D. Moore

Rena Ritch and Mark Norcross

Frances Carr Parker

Frances Carr Parker Culinary

Joseph C. and Eunice B. Parker

James M. and Erwin W. Parrott

Roland L. Paylor, Jr./Robert (R.L.) L. Joyner

Rickie Allen Pearson, Jr. Memorial

James and Rebecca Perry Foundation

Perry Family

Horace and Agnes Faye Phillips

Pink Hill Medical

Kathryn and Leroy Pittman

Poole Family Foundation

Rose Pully Memorial

Irma J. and Dr. C. B. Randall

Mary Mac Ritch

Mayor and Mrs. O. A. (Buddy) Ritch

Dr. Frank Rocker, Jr.

Rodriguez Family

Sarah Peedin Rose Memorial

Schechter

James C. and Angeline S. Shell

P. E. and Leta Shoulars

Leona Bryant Smith RN Memorial

Southwest Christian Church Memorial

Southwest Christian Church, Jerry Z. and Effie C. Sutton Memorial

Sparbel

Victor C. Spence Memorial

John (Jake) P. and Eugenia R. Strother Memorial

Ned M. and Elsie Croom Stroud Memorial

Richard Vance Surles Memorial

Robert James (Jimmy) Sutton, Jr. Memorial

Leroy and Blanche Taylor

Kenneth and Lou Ann Tetterton

Alice Starr Tingle Entrepreneur/Government Leadership

Dalton B. Tripp

Emily Brown Tripp Memorial

James (Jamie) H. Tripp Memorial

Shirley Jenkins Tripp Memorial

Lynwood C. and Grace J. Turner Memorial

Wachovia

Anne E. and William B. Wallace, Jr.

A. Forrest and Ruth King Waller Memorial

Charles Albert Waller

Robert Forrest and Marie Buchan Waller

West Pharmaceutical Services

Richard and Edna Whaley

Lester and Geraldine White-Richardson and Margaret Richardson Memorial

Isaac, Frances, Marietta, and Rachel Whitfield Memorial

Joseph Keith Williams Memorial

#### Lenoir Community College Foundation — Funds Held for Endowment

Charlie H. and Bille J. Albritton

Young H. Allen

Robert (Rock) Anderson Athletic

Eddie (Bug) Morton Banks

Barnes-St. John

Dr. Donald E. Becker Memorial

James E. and Annie J. Blue

Thomas Edward and Mozelle Hodges Briley

Ruby Boone and Vivian Brock

Violet R. Dawson/Champions Health & Fitness Memorial Athletic

Tharon Harper Deaver Memorial

Heather Richardson Gagnon Memorial

Joe D. and Marilynn Gay Memorial

Angela Whitfield Harper Memorial

Earl and Carol Harper

James R. (Doc) and Frances Petteway Harper Memorial

Dr. and Mrs. Jack Harrell

Maude and Bruce Heath Memorial

Whitford and Gladys Hill

Gloria Hill

Horticulture Club

Sue Marcom Jones Memorial

Jumping Run Church

Lawrence and Lois King

Harry L. and Grace W. Malone Memorial

Forest and Christine McCullen Memorial Psychology

Medical and/or Science Careers

John Wesley Rains/Machining Technology

Sale Auto Mall Fund

Edward T. and Mildred W. Sessoms
Selma Wells Skinner Memorial
Herbert (Herb) Ingram Spear, Sr. Memorial
W. Tyson Stewart Memorial
Dr. Patricia M. Stroud Memorial
Betty and Bill Stump Memorial
Paul and Frances Taylor Memorial
Shirley H. Taylor Memorial
Ronald and Ellen Turnage Memorial
Wilda Robinson Turner Memorial
Gordon and Linda Vermillion
George E. and Betsy P. Vick Memorial
Annie Julia Waller Memorial
Walter and Marie Williams

#### STUDENT EMPLOYMENT

On-campus jobs provide opportunity for students to work part-time to help pay for the expense of higher education. Students may be eligible to work under the Federal Work Study program or under the technical assistant program.

#### Federal Work-Study Program

Federal work study offers employment opportunities to eligible students who wish to earn money while attending college. Students work in various areas on campus. On average, students work approximately 12 hours per week at a rate of \$7.45 per hour. If you would like to be considered for the federal work-study program, students should visit the Office of Financial Aid and complete an Employment Interest Application.

#### **Technical Assistants**

The technical assistant program is a state funded, non need-based employment opportunity for students who wish to earn money while attending college. Students work in various areas on campus. Depending on departmental budgets, students can work between 10-20 hours per week at a rate of \$7.45 per hour. If you would like to be considered for the technical assistant program, students should visit the Office of Financial Aid and complete an Employment Interest Application

#### LOANS

# **Lenoir Community College Foundation Loans**

Students may seek alternative loans through entities that provide low-interest, long and shortterm loans to students with financial need. It is important to remember that all loans must be repaid. Before borrowing, students should consider carefully how much money is needed and the burden of a loan once repayment begins.

#### SATISFACTORY ACADEMIC PROGRESS STANDARDS

To be eligible to receive financial aid at Lenoir Community College, a student must meet the College's satisfactory progress policy (qualitative measurement). The following regulations also apply to financial aid eligibility:

- 1. Eligibility for financial aid is not affected by whether or not the student previously received aid. Aid is based on the cumulative academic record of each student.
- 2. Academic records will be reviewed at the end of each semester. Students must pass at least 67% of all credit hours attempted and have a cumulative GPA of 2.0 or higher. Attempted course work will include withdrawals after the drop period (W, WF, WP), incompletes (I), in progress (IP), and repeated courses. Credit by exam and courses which were by-passed will not count towards attempted course work.
- 3. Students who after a term of enrollment, fail to meet the college satisfactory academic progress policy or who do not pass 67% of all attempted credit hours and have a cumulative GPA of 2.0 or higher will be placed on FINANCIAL AID WARNING. Students in

this category may continue to receive financial aid for one additional semester. If, at the end of the financial aid warning period, students are able to reestablish satisfactory academic progress, the warning is lifted. If the requirements are not met at the end of this warning period, students will be placed on FINANCIAL AID SUSPENSION and financial aid will be terminated until the requirements are met.

- 4. Students who have mitigating circumstances may appeal their status with the Office of Financial Aid. Students should complete the Satisfactory Academic Progress Appeal form located at http://www.lenoircc.edu/pdf/finaid.sapappeal11-12.pdf. Documentation may be required for such circumstances. If an appeal is approved by the Office of Financial Aid, the student will be placed on FINANCIAL AID PROBATION. The student may also be required to follow an academic plan provided by the College.
- 5. Academic scholarship recipients must maintain a cumulative 2.00 grade point average.
- Athletic scholarship recipients must meet the satisfactory progress policy and NJCAA requirements in order to receive scholarships and/or participate in athletics.
- 7. Federal regulations require completion of a program of study within a maximum time frame (quantitative measurement) which cannot exceed 150% of the published length of the program. Quantitative evaluations are made at the end of each semester.
  - a. The time frame begins with the first term of enrollment and continues until the student completes a program of study. All terms are counted, even those where the student did not receive aid.
  - b. Credit hours for grades of F, W, WF, NF, IP, and repeated courses will be counted as hours attempted in the time frame. This could result in loss of aid before completing a program of study.
  - c. Remedial coursework up to 30 attempted semester hours will not count in the maximum time frame.
  - d. Transfer credits from other postsecondary schools are counted toward the maximum time frame.
- 8. If students are deemed not to be making satisfactory progress but later meet the standards, they may have their eligibility for financial aid reinstated.
- 9. Developmental coursework attempted in excess of 30 total credit hours cannot be counted toward enrollment status for federal and/or state aid.

#### STUDENT FINANCIAL AID OVERPAYMENTS

A student who withdraws from the College for any reason during a semester may owe the College a prorated overpayment of the student financial aid received for that semester. It is the policy of the College that if a student repeatedly drops below the enrollment status (full-time, three-fourths time, or one-half time) for which the student has received a Pell Grant payment, that student may have to repay all or part of the Pell Grant payment that was received for that semester. Student financial aid is not awarded for courses never attended, audited, attended after the 10% census date, and/or cancelled. If aid is awarded and it is discovered at a later date that aid was awarded for courses never attended, audited, attended after the 10% census date, and/or cancelled, the student will owe an overpayment. The Director of Financial Aid will compute the amount of overpayment and notify the student of the amount of overpayment. If the student does not reply to the overpayment notice promptly, then the student shall be in violation of the Indebtedness Policy of the College.

# REFUND POLICY FOR RECIPIENTS OF FINANCIAL AID Withdrawals

When students withdraw from the College up to the 10% point of the semester, three-quarters of the students' tuition and all of their student activity fee, technology fee, access fee, and accident insurance fee are refunded to the appropriate financial aid sources. Withdrawing prior to the 60% point of the semester will result in having to repay financial aid (Federal Pell Grant and Federal Supplemental Educational Opportunity Grant). The Office of Financial Aid will calculate the over-

payment from students who withdraw either officially or unofficially (dropped out or are dismissed). Once the calculation is made and the student has an overpayment, the student should contact the Office of Financial Aid or the Cashier's Office to make arrangements to repay the balance.

#### Cancellations

When a cancelled course reduces a student's enrollment status, all of the student's tuition is refunded on a prorated basis to the appropriate financial aid sources. In these cases the student's Pell Grant overpayment, if any, is reduced by the amount of the refund to the Pell Grant account. When the enrollment status is not reduced, the refund is made to the student.

#### **SPECIAL NOTE**

Financial aid recipients should register each semester during early registration.

#### APPLICATION

Students wishing to apply for student financial aid or students having questions regarding financial aid can contact the Director of Financial Aid at the following address/telephone:

Office of Financial Aid Lenoir Community College PO BOX 188 Kinston NC 28502-0188 Telephone: 252-527-6223

#### VETERANS EDUCATIONAL ASSISTANCE

Individuals who have served in the U.S. Armed Forces and their survivors and dependents may be eligible for educational benefits. Questions regarding veterans' educational benefits should be directed to the Office of the Veterans Coordinator located in the Office of Financial Aid.

#### PROCEDURES FOR APPLYING FOR VETERANS ACADEMIC BENEFITS

Veterans or eligible dependents placed on academic probation for unsatisfactory progress in their programs of study will be referred to counselors for academic and vocational counseling. Students who do not make sufficient improvement in their academic standing to remove the probationary status will be placed on "academic suspension" status and decertified to the Veterans Administration for unsatisfactory progress. Recertification will be dependent upon students achieving status of satisfactory academic progress.

#### **VETERANS SEEKING GED OR AHS**

GED and AHS programs are directed by the NC Community College System and the State Board of Community Colleges, and are managed by individual colleges. The College has approval for both programs.

To insure the programs comply with standards established for the Department of Veterans Affairs, GI Bill educational benefits contained in CFR 38, 21.4253 & 4254, the following procedures are administered by this institution:

- A. This institution complies with requirements outlined in NCCCS AHS Procedures Manual, GED Testing Procedures Manual, and agreements with the County Boards of Educational Records for clock-hour programs and semester-hour programs are complete and adequate to ensure compliance with DVA reporting requirements (attendance, progress, and rate of pursuit).
- B. Attendance—For students receiving GI Bill benefits while enrolled in this program, three (3) unauthorized absences in a calendar month will result in probation. Students who do not maintain an 85% attendance rate will be terminated (institutional standard may be used when above 85%).
- C. Standards of progress—For students receiving GI Bill benefits while enrolled in this program, progress will be measured monthly and against state or institutional test results (minimum grade equivalent to 70%). Student's progress will be classified as satisfactory or unsatisfactory at the end of the month. When progress is determined to be unsatisfactory, students will be placed on probation.

- D. Probation—The following probation standards will be administered for students eligible for DVA benefits:
  - a. For attendance, two (2) months probation, maximum
  - b. For standards of progress, two (2) months maximum probation for clock-hour or semester-hour programs
  - c. At the end of probation when students have not attained standards, school officials will de-certify students for DVA educational benefits.
  - d. Recertified—Officials will manage recertification using school standards; however, students may be recertified only after supervisors determine conditions have returned to satisfactory status.
  - After two interruptions for benefits, students may not be recertified to VA for these programs.

#### ACADEMIC ADVISING

To assist students in their academic programs, the College has established a system of academic advising wherein each student is assigned to a faculty member or counselor who serves as the student's advisor. The advisor helps to plan the student's academic program, particularly during early registration and registration periods; keeps a record of academic progress; and is available throughout the year for additional counseling.

Advisors make every attempt to give effective guidance to students in academic matters and refer students to those qualified to help them in other matters, but the final responsibility for meeting all academic requirements for a selected program rests with the student.

#### **CAREER PLANNING**

Career planning services are provided to students and graduates in their search for rewarding careers. Information and guidance are available to aid in career decisions and in job selection. The services are available to all graduates of Lenoir Community College and current curriculum students.

The computerized guidance systems, "CHOICES," and "DISCOVER" are available to help students select occupations that meet their needs. The system requires its users to thoughtfully consider their needs, interests, values, and abilities and enter their choices into the computer. This is a mechanism to empower major choice and career direction. Students receive printouts of possible career choices along with specific career information. These computerized career guidance programs are available to all students through www.cfnc.org. We also utilize various other paper, pencil, and online assessment instruments to match the needs of our students. Educational and career resources are available and include information on educational requirements, personal qualities, job prospects, locations, details on the nature of the work, and salary ranges, as well as area job opportunities listings. In addition, a variety of workshops and events are offered throughout the year to cater to LCC's student needs.

Students may also access career information and guidance in the JobLink Career Center through printed materials, various software packages, and Internet web sites.

#### **COUNSELING SERVICES**

Lenoir Community College offers a variety of counseling services to assist students in making the most of their opportunities for academic and personal development. Counseling and guidance services are available at no charge to every student from pre-admissions through graduation. Students may schedule an appointment for counseling sessions, or they may be seen on a walk-in basis. Counselors are available Monday through Thursday from 8:00 a.m. to 7:00 p.m. and Fridays from 8:00 a.m. to 3:00 p.m. The Counseling Department is located in the Administration Building, Room 140. The telephone number is 252-527-6223. Counselors use case history data and personal interviews to explore life goals and educational goals. When necessary, assessments are used to help students ascertain their interests and abilities, to help select educational programs, or to gain insight into their personal adjustment.

#### EARLY ALERT PROGRAM

Lenoir Community College is committed to providing assistance to students to help them achieve their educational goals. The Early Alert Program is designed to identify students who are having difficulty at any point during the semester. Once identified, the referral to Early Alert will link the student with a counselor who can provide timely feedback and initiate measures to increase the likelihood of the student's success. While strong efforts are made to provide intervention within the first six to eight weeks of the semester, a student may be referred at any time.

For more information, please contact the Counseling Department at 252-527-6223.

#### COLLEGE SUCCESS

Curriculum students seeking a degree or diploma are required to take ACA 111, College Student Success or ACA 122, College Transfer Success. These courses are designed to eliminate many of the problems normally faced by new students when they first enroll at the College. Students are acquainted with the College's environment, policies, courses, and staff.

- 1. Students enrolled in certificate programs are not required to take ACA 111 or ACA 122.
- Students who have earned a degree or a diploma from an accredited post-secondary institution are not required to take ACA 111 or ACA 122. However, students must make up the required one credit hour for ACA 111 or ACA 122.
- Students enrolled in D10100D and D10400D (Transfer Core Diplomas) are not required to take ACA 111 or ACA 122.
- 4. Students who have transferred from another post secondary institution with less than twenty-four (24) semester credit hours, and who have not completed a course equivalent to ACA 111 or ACA 122, are required to take either ACA 111 or ACA 122.

#### SERVICES FOR STUDENTS WITH DISABILITIES

The missions of the Disability Services Office is to provide equal access to students with disabilities, including all opportunities, services, and facilities offered by the College.

Student Services addresses the specialized needs of students with disabilities by integrating them into the life of the College and to help them participate in and benefit from the activities enjoyed by all students. Services for students with disabilities include comprehensive academic support, accessibility services, and parking. These reasonable accommodations are in compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. The College does not discriminate against students, employees, or applicants on the basis of race, color, religion, age, gender, national origin, or disability. This policy of non-discrimination covers participation in all programs, services, and activities. Referrals are made as needed to other campus-based programs and community agencies. Complete confidentiality is assured to students. Services are provided in accordance with the specific needs of the student based on documentation of disability. Anyone with questions regarding the services for students with disabilities should contact the disability services counselor or call 252-527-6223.

#### HOUSING

The College does not have dormitory facilities. Students wishing to live away from home must arrange their own living accommodations. The College does not assume responsibility for the supervision of such housing.

#### STUDENT HEALTH SERVICES

The Student Handbook lists various student health services.

The College does not provide medical, hospital, or surgical services or assume responsibility for injuries incurred by students when taking part in intramural sports, intercollegiate sports, physical activity courses, class, or student activities. Medical services are available at the Emergency Room of Lenoir Memorial Hospital.

Students are covered by accident insurance through the College while on campus or involved in College functions. This coverage is included in student fees.

#### STUDENT ACTIVITIES

The College encourages student participation in student organizations and activities. Although student activities are viewed as secondary to the central purpose of academic preparation, they are nevertheless an important phase of student growth and development. Participation in the Student Government Association and on college committees assures students of an opportunity to express their views on college affairs. A number of clubs appeal to the special interests of students. A newspaper, intramural sports, intercollegiate athletics, concerts, lectures, and diversity programs afford students an opportunity for a well-rounded college experience.

#### INTRAMURAL SPORTS

The purpose of intramural sports is to provide all students at Lenoir Community College an opportunity for wholesome recreation through participation in a variety of selected and properly supervised activities.

#### **CULTURAL ARTS**

The College sponsors a variety of cultural arts programs including the performing and visual arts. Concerts and exhibits by local, state, and national artists may be included in the program. The College also works closely with the Community Council for the Arts in sponsoring additional art exhibitions.

#### **PUBLICATIONS**

A College newspaper, *The Javelin*, is published by student staff. Students also publish an online Student Handbook annually. *The Neuse River Anthology*, an annual publication, is a collection of short stories, essays, and poems and may include student written works. The College also publishes a newsletter, 360°, highlighting programs and services.

#### **CAMPUS LIFE**

A series of programs is provided throughout the year for the cultural, educational, and social enrichment of students. Any student who pays the student activity fee may attend activities sponsored by the College at no additional or reduced cost.

#### INTERCOLLEGIATE ATHLETICS

The College is committed to providing comprehensive, quality education to adults in its primary service area and strives to provide programs and activities that enhance the social, cultural, economic, and leadership development of the community.

One way the College meets these needs is through intercollegiate athletics. Intercollegiate athletics offer students an opportunity to develop self-discipline, physical and emotional well-being, and leadership skills which are pertinent to academic success.

Lenoir Community College participates in men's baseball, men's basketball, women's basketball, and women's volleyball under National Junior College Athletic Association (NJCAA) Guidelines. Eligibility of athletes to participate in these sports is predicated upon their making satisfactory academic progress. Academic suspension results in ineligibility to participate regardless of reinstatement.

#### RECRUITMENT OF ATHLETES

Student athletes are recruited based on their athletic ability and academic potential. Recruitment procedures are based on NJCAA guidelines located in the office of each coach.

#### STUDENT GOVERNMENT ASSOCIATION

The Student Government Association (SGA) is designed to promote the general welfare of students in a democratic fashion and to facilitate communication between the student body, the faculty, and the administration. The student government provides a means through which students can promote interest in student activities both on and off campus.

#### CAMPUS TRAFFIC REGULATIONS

Students, faculty, and staff members who operate a vehicle on campus are subject to traffic rules and regulations. These rules and regulations are printed in the Student Handbook, which are available online and enforced by the campus security officers.

The main campus is located within the city limits of Kinston; therefore, the Kinston police routinely patrol the campus and issue citations for moving traffic violations as well as enforce parking restrictions, particularly regarding illegal parking in fire lanes or spaces reserved for the handicapped.

#### VEHICLE REGISTRATION

Each motor vehicle driven or parked on any Lenoir Community College campus by students, faculty, or staff members must be registered and must display a valid official vehicle registration permit.

After a vehicle has been registered, the vehicle registration permit must be placed only on the vehicle for which it was registered.

Vehicles may be registered at the beginning of each semester or during regular office hours in the Cashier's Office, in the Evening and Weekend Programs Office in the Administration Building, or any off campus location.

## COOPERATIVE EDUCATION AND JOB PLACEMENT SERVICES

Cooperative education is designed to enable students to receive college credit for working on jobs that are learning experiences and that are related to the curriculum in which they are enrolled. The on-the-job training is a vital component of the total learning experience, supplementing theory learned in the classroom. Job sites become laboratories where classroom concepts can be utilized and tested.

Cooperative education is open to students in certain programs. College personnel will assist the student in securing a job that meets the criteria for eligibility. A student may also use the job in which presently employed if this job meets the criteria. Numerous advantages accrue from such an approach to learning: career direction and financial assistance for participating students, a skilled workforce for employers, and an avenue to better relate the College to the community. A student may earn cooperative education credit according to approved curriculum standards for the student's curriculum. Students should check with their advisors for information regarding those guidelines. Additional information may be secured from the Cooperative Education Office.

Assistance in obtaining part-time and full-time employment is given by the Director of Cooperative Education and Job Placement. A list of employment opportunities is maintained at all times and students seeking employment are encouraged to familiarize themselves with this list. An effort will be made to place students in the jobs and locales of their choice, but employment cannot be guaranteed. In addition to the College's job placement office, comprehensive employment services are available through the JobLink Career Center located on the LCC's main campus and on the campuses of the Jones and Greene County centers.

# STUDENT RIGHTS, RESPONSIBILITIES, AND APPEALS

#### **DUE PROCESS**

The College affords all persons involved in appeals due process. This includes the right to confront the person alleging the violation(s), the right to present evidence, and the right to be represented by counsel at their own expense.

#### STANDARDS OF CONDUCT

The College expects all students to conduct themselves with dignity and to maintain high standards of responsible citizenship. Students are subject to civil authority both on and off campus. The College files criminal charges in appropriate cases and cooperates with public officials in their prosecution.

The following student standards of conduct prescribing unsatisfactory conduct were formulated by the administration. Students are expected to conduct themselves accordingly and to be legally accountable for conduct that is prohibited.

#### PROHIBITED CONDUCT

Prohibited conduct shall include but not be limited to the items listed below:

- A. Academic dishonesty including cheating, taking or acquiring possession of any academic material (test information, research papers, notes, etc.) from a member of the College staff or student body without permission; receiving or giving help during tests; submitting papers or reports prepared or written by others as one's own (i.e plagiarism); and failure to abide by any other academic regulation established by the instructor that appears on the individual course syllabus addendum (Note: The syllabus serves as a contract between the instructor and the student.)
- B. Theft, misuse, or damage to College property, the property of a member of the College community or the property of a visitor on College premises or at College functions; unauthorized entry upon the property of the College or into a College facility or a portion which has been restricted in use and placed off limits; unauthorized presence in a College facility after closing hours
- C. Possession or the use of alcoholic beverages on property owned or controlled by the College or at College sponsored events is prohibited unless approved in writing by the President. Possession of alcohol in College owned vehicles and other places prohibited by law is not allowed at any time. Possession or the use of a substance in an illegal manner is prohibited. Being in a state of intoxication on the College campuses or College-sponsored events is prohibited. Any influence that may be attributed to the use of alcohol or other substances does not limit in any way the responsibility of the individual for the consequences of his/her actions.
- D. Lewd or indecent conduct, including public physical action, openly vulgar or profane language or the distribution of pornographic material
- E. Mental or physical abuse of any person on College premises or at college-sponsored activities, or at college-supervised functions, including verbal or physical actions which threaten or endanger the health or safety of any persons or which promote hatred or prejudice
- F. Any act, comment, or behavior which is sexually suggestive or harassing nature and which in any way interferes with a student and/or employee performance or creates an intimidating, hostile, or offensive environment
- G. Intentional obstruction or disruption of teaching, research, administration or disciplinary proceedings, or at other College activities including public service functions, and other duly authorized activities on College premises.
- H. Occupation or seizure in any manner of College property, a College facility or any portion thereof, for a use inconsistent with prescribed, customary, or authorized use.
- I. Participating in or conducting an assembly, demonstration, or gathering in a manner that threatens or causes injury to persons or property, which interferes with free access to ingress or egress of College facilities, which is harmful, obstructive, or disruptive to the educational process or institutional functions of the College.
- J. Possession or use of a firearm, incendiary device, explosive or unauthorized use of any instrument designed to inflict serious bodily injury to any person. Possession of a firearm on campus is classified as a felony.
- K. Setting off a fire alarm or using or tampering with any fire safety equipment, except with reasonable belief in the need for such alarm or equipment.
- L. Gambling.
- M. The use of tobacco products is prohibited on all campuses.
- N. Littering which includes disposing of paper, bottles, cans, or any other form of litter on campus grounds or in any building.
- Violation of College regulations regarding the operation and parking of motor vehicles.
- P. Forgery, alteration, or misuse of College documents, records, or instruments of identification.
- Q. Failure to comply with instructions of College officials who are acting in performance of their duties.
- R. Violation of the terms of disciplinary probation or any College regulation during the period of probation.
- S. Fiscal irresponsibility such as failure to pay college-levied fines and foundation loans or the passing of worthless checks to college officials.
- T. Violation of a local, state, or federal criminal law on college premises.
- U. Furnishing false or incomplete information to the College.

- V. Beepers and/or cell phones must be turned off or placed on vibrate during classes. This restriction does not apply to emergency personnel, but emergency personnel should notify their instructors in advance.
- W. Use of College computers or networking resources to engage in any behavior that violates any federal, state, or local laws, on College regulations including downloading of copyrighted material or any unauthorized software.
- X. Engage in any activity that might be purposefully harmful to systems or to any information stored thereon, such as creating or propagating viruses, disrupting services, damaging files, or making unauthorized modifications to college data.
- Y. Failure to properly display College ID and/or update College ID.

# **Procedures For Reporting Violations**

When a violation of the student standards of conduct is suspected, the observer should immediately report the individual and the circumstances to the nearest faculty member. The faculty member should notify the Dean of Student Services for investigation and follow-up action.

# **Disciplinary Proceedings and Appeals**

The administration of student discipline is flexible and essentially consistent with the philosophy and educational objectives of Lenoir Community College. The Dean of Student Services shall have primary responsibility for the administration of student discipline and may impose varying degrees of disciplinary action.

A student who is alleged to have violated one or more of the standards of conduct may admit the violation and accept disciplinary action as prescribed by the Dean of Student Services or may request a hearing before the Student Services Committee. The Committee shall conduct closed proceedings that guarantee procedural fairness.

When a notice of appeal by a student is received by the Dean of Student Services, a written copy of the allegations shall be provided to the student.

The committee may recommend that the student be exonerated or disciplined. If discipline is recommended, the Committee may advocate an official written reprimand, probation, or one of the following penalties:

- A. Suspension from the College for a specified time, not to exceed two semesters, or until a condition is met
- B. Dismissal from the College for an unspecified period of time
- C. Permanent expulsion from the College

The Student Services Committee shall present its findings and recommendations to the President of the College within five working days of conclusion of the hearing. The President, after a full and complete review, will notify the student of the results of the hearing. The President's decision shall be final.

#### INTERIM SUSPENSION

As a general rule, the status of a student accused of violating the standards of conduct will not be changed until appeals have been heard. The student may be permitted, at the discretion of the Dean of Student Services, to continue classes and to participate in College activities pending a review of the disciplinary committee's action by the President of the College.

Prompt and decisive disciplinary action will be taken in extreme cases before there is an opportunity to conduct a hearing, as in cases in which the student's continued presence on campus constitutes an immediate threat to members of the College community, or to the property, or the orderly function of the College.

When cases arise requiring disciplinary action, the Dean of Student Services will inform the appropriate dean and the Vice President of Academic and Student Services of action taken. In all cases, the rights of the students and the College should be protected.

#### GRADE APPEAL PROCESS

It is recognized that there may be individual cases in which a student should be allowed to make a formal appeal related to grades assigned for particular courses taken at the College. The following procedure will enable a student to exercise this right:

- Any appeal of grades should be initiated prior to the end of the next regular term. Student should not be allowed to return to any lab or clinical area during the appeal process.
- The student should confer with the instructor to determine that there has been no mistake and to present his or her case.
- 3. If the case is not resolved by the instructor, the student may make an appointment with the department head who will hear his or her appeal.
- If the case cannot be resolved at the department level, the student may make an appointment with the dean within whose area the protested grade was awarded.
- Any case not resolved by the above steps may be appealed to the Vice President of Academic and Student Services who may convene the Academic Affairs Committee. Appeals to the Academic Affairs Committee must be in writing.
- Recommendations of this Committee regarding the appeal will be made to the President of the College within five (5) working days. The decision of the President will be final.

#### STUDENT GRIEVANCE PROCEDURE

The purpose of the student grievance procedure is to provide a system to channel student concerns about faculty and staff. The following procedure will enable a student to exercise this right:

- The student should first present the grievance to the instructor or staff member involved.
   An attempt will be made to resolve the matter informally at this level. Generally the conference must take place within ten (10) working days of the incident which generated the complaint.
- If the grievance is not resolved at the informal conference, the student may present the grievance to the division dean for academic concerns or the Dean of Student Services for nonacademic concerns.
- If the course or class involves clinical participation, the student will not be allowed to return to any clinical area during the grievance process.
- If satisfactory resolution is not achieved after meeting with the division dean or Dean
  of Student Services, concerns should be forwarded to the Vice President of Academic
  and Student Services.
- 5. Any cases not resolved by the above steps may be appealed in writing to the appropriate appeals committee:
  - a. Academic concerns Academic Affairs Committee
  - b. Nonacademic concerns Student Services Committee
- Recommendations of these committees regarding an appeal will be made to the President of the College within five working days. The decision of the President will be final.

#### STUDENTS' DISCLOSURE OF CRIMINAL RECORDS

Students entering or who wish to enter programs that require practicums, internships, or clinical experiences are advised that prior criminal records may result in the inability to complete selected programs. Some participating agencies require background checks before students are allowed at their facilities. If prior criminal records exist, students may not be allowed at the participating agencies. Once college officials are aware of criminal records, the information must be shared with those participating agencies at which placement is being sought. If participating agencies will not accept the students because of the records, the students will be unable to fulfill the program requirements. Students are urged to disclose and discuss prior criminal records with program heads. Programs that require such experience include, but are not limited to, Health Science programs, Cosmetology, Criminal Justice, Culinary Arts, Early Childhood Associate, Emergency Medical Science, Human Services Technology.

National certification of licensing examination boards may not allow felons to sit for national examinations. A student convicted of a felony who completes a health science program may not be eligible for the national examination. For example, effective March 2, 2000, felons will not be eligible for the certification examination administered by the American Association of Medical Assistants (AAMA). The Certifying Board for AAMA could grant a waiver based on one or more of the mitigating circumstances listed in the Disciplinary Standards published by AAMA (available upon request at 312-899-1500).

The North Carolina Board of Massage and Bodyworks Therapy will not grant a license to a person who has a criminal charge (other than minor traffic violation) or occupational disciplinary action pending or who has not completed all conditions of an imposed sentence. If a graduate has a criminal record involving a charge or conviction beyond a minor traffic offense, and the graduate applies to the Board, the graduate is not guaranteed a license regardless of having obtained a certificate of completion from Lenoir Community College and/or by passing the National Certification Exam. Pursuant to NCGS 90-633 and Rule .0306(a), the Board may deny an applicant a license or refuse to license an applicant for any of the reasons set forth in NCGS 90-633.

#### CRIMINAL RECORDS AND DRUG TESTING

Clinical sites may require students' criminal background checks and/or drug testing prior to or during participation in the clinical component of a program. Please be aware that progress to graduation will be limited by any inability to complete the clinical portion of the program.

#### STUDENT RIGHT TO KNOW

Information regarding the persistence rate to degree completion of students at Lenoir Community College is available in the Office of Admissions.

## **EQUAL OPPORTUNITY**

The College is an Equal Opportunity Employer. The College complies with existing federal, state, and local laws and regulations regarding nondiscrimination. The College prohibits discrimination against and/or exclusion from the participation in any benefits or activities by any person, either on the staff and faculty or in the student body, on the grounds of race, color, creed, religion, national origin, gender, age, political affiliation, or disability. The College supports all federal laws, including, but not limited to, Title VI and VII of the Civil Rights Act of 1964 and 1991, Title IX of the Education Amendments of 1972, Sections 799A and 845 of the Public Health Services Act, the Equal Pay and Age Discrimination Acts, the Rehabilitation Act of 1973, the Family and Medical Leave Act, the Fair Labor Standards Act, Drug-Free Workplace Act and Drug Testing, the Americans with Disabilities Act 1990, and Executive Order 11375. The Vice President of Administrative Services should be contacted regarding Equal Opportunity matters.

#### SEXUAL HARASSMENT

The College is committed to providing employees and students with an environment free from harassment of any type. Sexual harassment is a violation of both state and federal law, and the College does not tolerate any employee or student, male or female, sexually harassing another individual in any way.

- A. Sexual harassment is defined as unwelcome advances, requests or offers of sexual favors, or other verbal or physical conduct of sexual nature by either a male or female or group, when any of the following occurs:
  - 1. Submission to such conduct is made, either explicitly or implicitly, a term or condition of an individual's employment or status in a course, program, or activity
  - 2. Submission to or rejection of such conduct is used as a basis for employment or educational decisions affecting and individual
  - Such conduct has the purpose or effect of unreasonably interfering with an individual's
    work or educational performance or of creating an intimidating, hostile, or offensive
    working/learning environment
- B. Sexual harassment refers to behavior that is not welcome, that is personally offensive, that fails to respect the rights of others, and that, therefore, interferes with the individual's work/learn ing effectiveness. Sexual harassment may take different forms. One specific form is the

demand for sexual favors. Other forms of harassment include, but are not limited to, the following:

- Verbal-Comments of a sexual nature, including innuendos, suggestive statements, jokes, propositions, threats, and degrading/discriminating/stereotypical words; comments directed primarily at one's sex
- 2. Nonverbal- Sexually suggestive objects or pictures, graphic commentaries, suggestive or insulting sounds, leering, whistling, and obscene gestures
- 3. Physical-Unwanted physical contact, including touching, pinching, bruising the body, and pushing
- C. All employees are responsible for maintaining an environment that is free from sexual harassment. Students, as well, are expected to comply with this policy and to take appropriate measures to ensue that such conduct does not occur. Employees or students who violate this policy are subject to appropriate disciplinary action up to and including employee termination or student expulsion. Employees experiencing harassment are encouraged to report any incidences to their supervisors, Human Resources, or the Vice President of Administrative Services. Students experiencing harassment are encouraged to report any incidences to the Dean of Student Services or the Vice President of Academic and Student Services.

#### ACADEMIC FREEDOM

The College is dedicated to free rational investigation, instruction, and publication by the faculty in the accomplishment of the mission of the College. Students are assured the right of free inquiry and learning. It is recognized that the College has an interest in providing efficient, quality academic programs to the community. Employees must exercise all rights and privileges with discretion and with due consideration of the effect upon the College's interest. Academic freedom will not contain arbitrary or unreasonable provisions and will not be in conflict with statutory provisions. The College protects academic freedom from political and other influences.

#### OWNERSHIP OF INTELLECTUAL PROPERTY

The College encourages the development, writing, invention, or production of intellectual property designed to improve the productivity of the College or to enhance the teaching/learning environment.

College employees and students own all rights to copyrightable or patentable independent works which they create without College support, e.g., equipment, supplies, monetary compensation, or release time. Unless otherwise stated in a signed contractual agreement, the College owns all rights to copyrightable or patentable work created by the employees and students with College support.

#### **PROCEDURE**

Communication between the developer of material and the immediate supervisor is encouraged prior to the development of the material(s) to ensure an understanding is reached concerning the ownership of a created work. Contractual agreements are to be entered prior to the development of the work.

#### LICENSING OF GRADUATES

Lenoir Community College is an educational institution and assumes no responsibility for the licensing of its graduates. Students convicted of a felony or any other crimes involving moral turpitude may not be recognized by the proper licensing agency.

#### FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT

Any student who believes that any right pursuant to the Family Educational Rights and Privacy Act has been violated or that the college policy is not in compliance with the Act, may file a complaint directly with the Family Educational Rights and Privacy Act Office (FERPA), Department of Health, Education and Welfare (HEW), 330 Independence Avenue S.W., Washington, D.C. 20201. Though it is not required as a condition to filing any complaint with HEW, the student is requested to discuss the grievance with the Dean of Student Services, Administration Building 140C, phone 252-527-6223, prior to filing a complaint with HEW. Strict compliance with the provisions of FERPA is the stated policy of the College. The College, through the Dean of Student Services, takes appropriate action in all cases involving a violation of the Privacy Act.

#### **EMERGENCY MESSAGES**

# Call 252-527-6223, ext. 318 (day), ext. 369 (night)

Students will not be allowed to receive telephone messages while at the College unless an emergency situation exists. Messages will normally be screened by the Dean of Student Services or the Evening and Weekend Programs Coordinator's Office in order to determine the nature of the emergency. If it is apparent that an emergency situation exists, the staff will make every effort to relay the message. Callers must identify themselves and the number from which they are calling. Students should ask relatives and associates not to contact them at the College unless an emergency exists.

If a person on campus requests the location of a student concerning an emergency situation, the person will normally be referred to the Dean of Student Services or the Evening and Weekend Programs Coordinator's Office to determine the nature of the emergency. If it is apparent that an emergency situation exists, a short message will be delivered to the student stating the name of the person and where the person will be waiting.

If a law enforcement officer asks to see a student, the officer will be referred to the Dean of Student Services, or the Evening and Weekend Programs Coordinator.

## ARTS AND SCIENCES

#### COLLEGE TRANSFER PROGRAMS

Lenoir Community College offers a wide range of college transfer programs. These programs include two years of courses paralleling the freshman and sophomore years at most senior colleges and universities.

Students desiring to pursue an academic transfer program at Lenoir Community College will, through guidance and program advisement, enroll in courses in which they have interest and ability. By maintaining a 2.0 GPA and completing two years of a planned program, students will be able to transfer as juniors to most senior institutions without loss of time or credit. See the Comprehensive Articulation Agreement between the North Carolina Community College System and the University of North Carolina System in this section for further information.

Students who successfully complete a college transfer program are awarded one of three degrees by Lenoir Community College: the associate in arts degree, the associate in science degree, or the associate in fine arts degree. To receive a degree, the student enrolls in either the general associate in arts program or in one of the pre-professional programs offered by the college.

#### THE ASSOCIATE IN ARTS PROGRAM

The Associate in Arts Program is the first two years of the basic program of most four-year colleges and universities. The program is designed to give students a broad exposure to communications, humanities, sciences, and social sciences.

#### PRE-PROFESSIONAL PROGRAMS

The pre-professional programs are designed for students who have chosen the profession they wish to enter upon the completion of all their college work. A large component of the pre-professional programs at Lenoir Community College and at other institutions is general study in English, social sciences, mathematics, sciences, and humanities. Students interested in any of these programs should consult the general studies and transfer counselor concerning suggested curricula of professional schools.

# WELLS FARGO PARTNERSHIP EAST CONSORTIUM FOR EDUCATION MAJORS

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

Students graduate with a four-year degree from East Carolina University by completing the first two years of the program at Lenoir Community College followed by taking East Carolina University courses online or through face-to-face instruction at the consortium hub site, Wayne Community College. For more information, please contact the Dean of Arts and Sciences.

#### FOREIGN LANGUAGE ELECTIVES FOR TRANSFER DEGREES

Students who graduate from LCC and who plan to transfer to any of the 17 UNC constituent institutions must have two units of a language other than English. These must be two units of the same second language (e.g. Spanish I and Spanish II). If these units have not been completed in high school, students will need to complete six (6) semester hours of the same language other than English at LCC or another institution of higher learning before being admitted to the UNC system. Students whose high school class graduated before 1990, students who are at least 24 years of age, and students already fluent in a second language or in American Sign Language may have these requirements waived by the UNC system. Students who plan to transfer should check the requirements of the receiving institution to determine if an intermediate sequence of a foreign language will be required for a particular major. The requirement may be waived if students transfer after completing the 44 semester hours of core competency or if they graduate with an associate degree.

# SPECIAL PROVISIONS FOR ACTIVE MILITARY PERSONNEL, RESERVISTS, AND VETERANS

Active military personnel, reservists, and veterans will be awarded two semester hours of physical education credit for basic training upon presentation of DD-214 or other official documentation.

#### TRANSFER STUDENT RESPONSIBILITY

Courses should be selected on the basis of the recommended course of study of the senior institution to which the student intends to transfer. Students should review the online catalogs and transfer equivalencies from transfer institutions and work carefully with advisors in designing programs of study. If a senior institution requires additional courses which are not offered at LCC, students should consult with the Dean of Arts and Sciences (general studies/transfer programs) early in their programs of study.

The college staff cooperates with each student in planning a transfer program. However, it is the responsibility of the student to determine what courses and credits transfer to the receiving institution. The acceptance of courses taken at Lenoir Community College is determined solely by the institution to which the student transfers.

Lenoir Community College students have little difficulty in completing their transfer satisfactorily if they follow these steps:

- Decide early which senior college to attend. Contact the college for recommendations concerning appropriate courses.
- Review online catalog and transfer equivalencies for the prospective college and study its admissions requirements.
- 3. Confer with Lenoir Community College academic advisors about transfer plans.
- 4. Check carefully at least two semesters before transferring to be sure that all necessary requirements are being met and all necessary steps have been taken.

Changes in the student's major field of study or in the choice of senior institution may delay transfer. Such changes should be made only after careful study and consultation with a counselor or advisor.

# COLLEGE TRANSFER DEGREE REQUIREMENTS

General Requirements for graduation for the associate in arts, associate in fine arts, and associate in science degrees are as follows:

- To qualify for a degree, specific course requirements must be met. However, when a student
  can demonstrate that specific requirements at a senior institution are in conflict with the
  associate degree requirements at Lenoir Community College, substitutions may be recommended by the Dean of Arts and Sciences.
- 2. All college financial obligations must be met.
- 3. A minimum of 64 semester hours with a program grade point average of at least 2.00 is required. Grade point average is computed as outlined in the Academic Regulations. Required courses and electives must be completed in accordance with the programs as listed in the catalog.
- 4. A minimum of 25% of the credit hours required for completion of a degree must be earned at Lenoir Community College.
- Application for graduation must be made in accordance with the dates listed in the college catalog.

#### **COLLEGE TRANSFER COURSES**

**ACA** 122 **ACC** 120, 121 **ART** 111, 113, 114, 115, 121, 122, 131,132, 135, 171, 212, 213, 214, 222, 223, 235, 240, 241, 243, 244, 245, 246, 247, 248, 260, 261, 262, 263, 264, 265, 266, 267, 271, 283, 284, 288 **AST** 111, 111A, 151, 151A, 152 152A **BIO** 111, 112, 120, 140, 140A, 163, 168, 169 250, 271, 275, 280 **BUS** 110, 115 **CHM** 131, 131A 132, 151, 152, 251, 252 **CIS** 110, 115 CIC 111, 121, 141 COM 110, 231 **CSC** 134, 139, 151, 239 **CTS** 115 **ECO** 251, 252 **EDU** 216 **EGR** 150, 210, 211, 212, 213, 220, 225, 228,

**EGR** 150, 210, 211, 212, 213, 220, 225, 228, 230

**ENG** 111, 112, 113, 114, 125, 134, 231, 232, 235, 241, 242, 253, 272, 273

**GEO** 111 **HEA** 110, 112, 120

**HIS** 111, 112, 121, 122, 131, 132, 145, 211, 231

**HUM** 110, 115, 120, 122, 220

**MAT** 141, 142, 151, 155, 155A, 161, 162, 175,

175A, 263, 271, 272, 273, 280, 285

**MUS** 110, 111, 113, 121, 122, 131, 132, 151, 152, 161, 162, 170, 212, 217, 221, 222, 231, 232,

261, 262, 270, 280

**PED** 110, 111, 112, 113, 114, 117, 118, 119, 120, 121, 125, 126, 128, 130, 131, 137, 139, 143, 144, 145, 146, 150, 151, 187, 254, 256

**PHI** 215, 240

**PHY** 110, 110A, 151, 152, 251, 252

**POL** 120, 220

**PSY** 150, 241, 246, 249, 263, 281

**REL** 110, 111, 112, 211, 212

**SOC** 210, 213, 220, 225, 230

**SPA** 111, 112, 141, 151, 181, 182, 211, 212, 281, 282

ACA 122 is required for graduation in all associate in arts, associate in fine arts, and associate in science curriculums.

ART 193, Selected Topics in Art, may be used to fulfill elective requirements toward graduation but may not transfer.

# COMPREHENSIVE ARTICULATION AGREEMENT BETWEEN THE NORTH CAROLINA COMMUNITY COLLEGE SYSTEM AND THE UNIVERSITY OF NORTH CAROLINA SYSTEM

The Comprehensive Articulation Agreement between the University of North Carolina and the North Carolina Community College System rests upon several assumptions common to successful statewide comprehensive articulation agreements. The primary assumption is the institutions recognize the professional integrity of other public post-secondary institutions which are regionally accredited for college transfer programs. All courses designated as approved for college transfer under this agreement will be taught by faculty who meet the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) credential requirements. A secondary assumption is that there is sufficient commonality in the lower-division general education requirements currently offered among all universities to develop a common general education component at the community colleges for the purpose of transfer. The general education transfer core is similar to each institution's lower-division general education requirements but is not identical in that specific courses may differ. The underlying concept is that competencies and understandings developed by general education programs as a whole are more important than individual courses. Therefore, the block transfer of a core is important. The general education requirements of the receiving institutions remain in effect for all students not participating in this comprehensive articulation agreement; any upper-division general education requirements and graduation requirements remain unaffected by this plan. Institution-wide, lower-division general education requirements serve as the starting point for determining specific general education courses in each baccalaureate major. The specific lower level courses required for each major are the subject of the pre-major transfer articulation agreements developed by joint discipline committees.

The Comprehensive Articulation Agreement (CAA) addresses the transfer of credits between institutions in the North Carolina Community College System and from that system to constituent institutions of the University of North Carolina. The CAA does not address admission to an institution nor to a specific major within an institution. The CAA was developed jointly by faculty and administrators of the North Carolina Community College System and the University of North Carolina based on the proposed transfer plan approved by both governing boards in February 1996. The CAA applies to all North Carolina Community Colleges and all constituent institutions of the University of North Carolina. The components described below are included in the CAA.

# Transfer in associate in arts and associate in science degree programs in the community college system.

The CAA enables North Carolina Community College graduates of two-year associate in arts and associate in science degree programs who are admitted to constituent institutions of the University of North Carolina to transfer with junior status.

Universities cannot place requirements on students transferring under the CAA which are not required of their native students.

Transfer students will be considered to have satisfied the UNC Minimum Course Requirements (MCR) in effect at the time of their graduation from high school if they have the following:

- Received the associate in arts, the associate in science, the associate in fine arts, the baccalaureate or any higher degree, or,
- 2. Completed the 44 hour CAA general education transfer core, or
- 3. Completed at least six (6) semester hours in degree-credit in each of the following subjects: English, mathematics, the natural sciences, and social and behavioral sciences, and (for students who graduate from high school in 2003-04 and beyond) a second language. Community College students who have completed the general education transfer core (outlined below) will be considered to have fulfilled the institution-wide, lower division general education requirements of the receiving institution.

To be eligible for inclusion in this policy, a student must have an overall GPA of at least a 2.0 on

a 4.0 scale and a grade of "C" or better in all CAA courses.

Community college graduates of these programs who have earned 64 semester hours in approved transfer courses with a grade of "C" or better and an overall GPA of at least 2.0 on a 4.0 scale will receive at least 64 semester hours of academic credit upon admission to a university. Under special circumstances, a university may choose to accept additional credit hours.

The CAA does not guarantee admission to a university; admission to a university does not constitute admission to a professional school or a specific program.

Requirements for admission to some major programs may require additional pre-specialty courses beyond the general education transfer core courses taken at the community college. Students entering such programs may need more than two academic years of course work to complete the baccalaureate degree, depending on requirements of the program.

All courses approved for transfer in the Comprehensive Articulation Agreement are designated as fulfilling general education, pre-major, or elective requirements. While general education and pre-major courses may also be used as electives, elective courses may not be used to fulfill general education requirements.

#### General Education Transfer Core (44 semester hours credit)

The associate in arts and associate in science degree programs in the NC Community College System require a total of 64-65 semester hours credit for graduation.

Within the overall total, the community college system and the university have developed a general education core transfer component. This curriculum reflects the distribution of discipline areas commonly included in institution-wide, lower-division general education requirements for the baccalaureate degree. The general education transfer 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, community colleges must include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers. 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. The semester hours credit (SHC) distribution of the general education core by area is as follows:

#### English Composition (6 Semester Hours Credit)

#### Humanities/Fine Arts (12 Semester Hours Credit)

Four courses are to be selected from at least three of the following discipline areas: music, art, drama, dance, French, German, Italian, Russian, Spanish, interdisciplinary humanities, literature, philosophy, and religion. At least one course must be a literature course. (3 SHC in Speech/Communication may be substituted for 3 SHC in Humanities/Fine Arts. Speech/Communication may not substitute for the literature requirement.)

#### Social/Behavioral Sciences (12 Semester Hours Credit)

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

#### Natural Sciences/Mathematics (14 Semester Hours Credit)

Natural Sciences (8 SHC): Two courses, including accompanying laboratory work, must be selected from among the biological and physical science disciplines.

*Mathematics* (6 SHC): At least one introductory mathematics course (college algebra, trigonometry, calculus, etc.) must be selected; the other unit may be selected from among other quantitative subjects, such as computer science and statistics.

#### Transfer of general education core courses for non-graduates

Upon admission to another public two-year institution or to a constituent institution of the University of North Carolina, students who have completed the general education core with the proper distribution of hours, but who have not completed the associate degree, will be considered to have

fulfilled the institution-wide, lower-division general education requirements of the receiving institution. To be eligible for inclusion in this policy, a student must have an overall Grade Point Average (GPA) of 2.0 on a 4.0 scale at the time of transfer and a grade of "C" or better in all core courses. Upon transfer at the sophomore level, a non-graduate who has completed the general education core should be advised at the University to take pre-major or cognate courses based on his or her chosen major.

The transcripts of students who transfer before completing the general education core will be evaluated on a course-by course basis by the receiving universities. The transferring student who has not completed the core must meet the receiving institution's general education requirement.

#### Assurance of admission to a UNC institution

The CAA assures the admission to one of the 17 UNC institutions with the following stipulations:

- 1. Admission is not assured to a specific campus or specific program or major.
- 2. A student must have graduated from a North Carolina Community College with an associate in arts or associate in science degree.
- 3. A student must meet all requirements of the Comprehensive Articulation Agreement.
- 4. A student must have an overall GPA of at least 2.0 on a 4.0 scale, as calculated by the college from which he or she graduated, and a grade of "C" or better in all CAA courses.
- 5. A student must be academically eligible for re-admission to the last institution attended.
- 6. A student must meet judicial requirements of the institution to which he/she applies.
- 7. A student must meet all application requirements at the receiving institution including the submission of all required documentation by stated deadlines.

If a student is denied admission to a UNC institution, he or she will receive a letter from that institution directing the student to the College Foundation of North Carolina (CFNC) website. At the CFNC website (CFNC.org), the student will be presented with the conditions of the TAAP (specified above), and if these conditions are met, the student will be given information regarding space availability and contacts within the UNC system. The student should contact those institutions to get specific information about admissions and available majors.

#### **CAA Grievance Procedure**

A student may file a grievance within the first six weeks of the beginning of the term for which admission was offered at the college or university. The student may terminate the grievance procedure at any point.

**Step 1:** Student obtains a CAA Student Grievance Form (form) from the Admissions Office of the college or university to which he/she was admitted.

Step 2: On the form, the student will specify the nature of the complaint, citing specific language of the CAA which is in contention, and will submit the form with any relevant supporting documents to his/her transfer counselor or advisor at the community college. This individual will route the form to the community college's designated grievance official (CCDGO) for signature and comments. Depending on the structure at the community college, this will likely be either the Chief Student Affairs Officer or Chief Academic Affairs Officer. The CCDGO will complete the appropriate section with signature and comments and forward the form along with any relevant supporting documents back to the Director of Admissions at the college or university (copy to the Chief Academic Affairs Officer at the university).

**Step 3:** Upon receipt of the form, the Director of Admissions will conduct a thorough investigation to include contacting the student and the CCDGO.

**Step 4:** The Director will forward the form with a consensus interpretation and recommendation for action to the Associate Vice President for Academic and Student Affairs of the UNC (AVP-UNC).

The complete Comprehensive Articulation Agreement is available in the Office of the Dean of Arts and Sciences.

# ASSOCIATE IN ARTS A10100

(65 Semester Hours Credit Required)
ASSOCIATE IN ARTS DEGREE

(Revised 2012\*03) Course and Hour Requirements

# I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112, 113, or 114

B. Humanities/Fine Arts (12 SHC)

Select **one** course from the following:

ENG 231, 232, 241, 242

Select **three** courses from at least **two** of the following discipline areas:

ART 111, 114, 115 HUM 110, 115, 120, 122, 220

ENG 231, 232, 241, 242 PHI 215, 240

MUS 110, 113 SPA 111, 112, 211, 212

REL 110, 111, 112, 211, 212

C. Social/Behavioral Sciences (12 SHC)

Select **one** course from the following:

HIS 111, 112, 121, 122, 131, 132

Select **three** courses from at least **two** of the following discipline areas:

ECO 251, 252 GEO 111

HIS 111, 112, 121, 122, 131, 132 POL 120, 220

PSY 150, 241, 281 SOC 210, 213, 220

D. Natural Sciences/Mathematics (14 SHC)

Mathematics (6 SHC)

Select at least one course from the following (one math course must be introductory level):

MAT 161, 162, 175, 263, 271, 272, 273

The other course may be selected from the following:

CIS 110, 115 MAT 151, 155

Natural Sciences (8 SHC)

Select from the following courses:

AST 111 and 111A, 151 and 151A, 152 and 152A

BIO 111, 112, 120, 140 and 140A

CHM 131 and 131A, 132, 151, 152

PHY 110 and 110A, 151, 152, 251, 252

# II. OTHER REQUIRED HOURS (21 SHC)\*

ACA 122

**HEA 120** 

Physical Education (2 SHC) Select from physical education activity courses.

Electives (15 SHC) Select from the list of College Transfer courses.

\*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.

\*\*3 SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

Upon completion of the AA degree, students may apply for admission as a junior to the following universities: ASU, ECU, ECSU, FSU, NCA&T, NCCU, NCSU, UNC-A, UNC-CH, UNC-C, UNC-G, UNC-P, UNC-W, WCU, WSSU.

The following programs are Health Science pre-major program codes used to indicate that a student is interested in applying for a health science program in the future. However, students in these programs are still active in the A10100 major:

 $A10100\mathrm{EM,\,A10100AD,\,A10100DA,\,A10100DT,\,A10100DH,\,A10100PN,\,A10100RA,\,A10100SU,\,A10100PS,\,A10100MT,\,A10100RB$ 

# TRANSFER CORE DIPLOMA—ARTS D10100D

(44 Semester Hours Credit Required) (Revised 2012\*03) Course and Hour Requirements

# I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112, 113, or 114

B. Humanities/Fine Arts (12 SHC)

Select **one** course from the following:

ENG 231, 232, 241, 242

Select **three** courses from at least **two** of the following discipline areas:

ART 111, 114, 115 HUM 110, 115, 120, 122, 220

ENG 231, 232, 241, 242 PHI 215, 240

MUS 110, 113 SPA 111, 112, 211, 212

REL 110, 111, 112, 211, 212

C. Social/Behavioral Sciences (12 SHC)

Select **one** course from the following:

HIS 111, 112, 121, 122, 131, 132

Select **three** courses from at least **two** of the following discipline areas:

ECO 251, 252 GEO 111 HIS 111, 112, 121, 122, 131, 132 POL 120, 220

PSY 150, 241, 281 SOC 210, 213, 220

D. Natural Sciences/Mathematics (14 SHC)

Mathematics (6 SHC)

Select at least one course from the following (one math course must be introductory level):

MAT 161, 162, 175, 263, 271, 272, 273

The other course may be selected from the following:

CIS 110, 115 MAT 151, 155

Natural Sciences (8 SHC)

Select from the following courses:

AST 111 and 111A, 151 and 151A, 152 and 152A

BIO 111, 112, 120, 140 and 140A

CHM 131 and 131A, 132, 151, 152

PHY 110 and 110A, 151, 152, 251, 252

<sup>\*</sup>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.

<sup>\*\*3</sup> SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

# College Transfer Pathway Humanities and Social Science P1012A

(32 Semester Hours Credit Required)
COLLEGE TRANSFER PATHWAY\*
(Revised 2012\*01) Course and Hour Requirements

	Hours		Work		
Title	Class	Lab	Exp.	Credits	
I. GENERAL EDUCATION (32 SHC)*					
A. Composition (6 SHC)					
ENG 111 Expository Writing	3	0	0	3	
ENG 112 Argument-Based Research	3	0	0	3	
B. Humanities/Fine Arts (6 SHC)					
ENG 232 American Literature II	3	0	0	3	
ART 111 Art Appreciation	3	0	0	3	
C. Social/Behavioral Sciences (6 SHC)					
HIS 121 Western Civilization I	3	0	0	3	
PSY 150 General Psychology	3	0	0	3	
D. Natural Sciences/Mathematics (7 SHC)					
BIO 140 Environmental Biology	3	0	0	3	
BIO 140A Environmental Biology Lab	0	3	0	1	
MAT 161 College Algebra	3	0	0	3	
E. Other Required General Education (6 SHC)					
HUM 115 Critical Thinking	3	0	0	3	
SPA 111 Elem Spanish I	3	0	0	3	
II. OTHER REQUIRED HOURS (1 SHC)					
ACA 122 College Transfer Success	1	0	0	1	

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

# College Transfer Pathway Business and Economics P1012B

(32 Semester Hours Credit Required)
COLLEGE TRANSFER PATHWAY\*
(Revised 2012\*01) Course and Hour Requirements

	Hours	Work		
Title	Class	Lab	Exp.	Credits
I. GENERAL EDUCATION (32 SHC)*				
A. Composition (6 SHC)				
ENG 111 Expository Writing	3	0	0	3
ENG 112 Argument-Based Research	3	0	0	3
B. Humanities/Fine Arts (3 SHC)				
ENG 232 American Literature II	3	0	0	3
C. Social/Behavioral Sciences (9 SHC)				
HIS 121 Western Civilization I	3	0	0	3
SOC 210 Intro to Sociology	3	0	0	3
ECO 251 Prin of Microeconomics	3	0	0	3
D. Natural Sciences/Mathematics (7 SHC)				
BIO 140 Environmental Biology	3	0	0	3
BIO 140A Environmental Biology Lab	0	3	0	1
MAT 161 College Algebra	3	0	0	3
E. Other Required General Education (6 SHC)				
CIS 110 Intro to Computers	3	0	0	3
ECO 252 Prin of Macroeconomics	3	0	0	3
II. OTHER REQUIRED HOURS (1 SHC)				
ACA 122 College Transfer Success	1	0	0	1
1551				

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

# ART EDUCATION A1010A

(65 Semester Hours Credit Required)
ASSOCIATE IN ARTS DEGREE

(Revised 2012\*03) Course and Hour Requirements

# I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111 ENG 112, 113, or 114

B. Humanities/Fine Arts (12 SHC)

ART 114 ART 115

Select **one** course from the following:

ENG 231, 232, 241, 242

Select one course from following discipline areas:

ART 111 MUS 110, 113

HUM 110, 115, 120, 122, 220 REL 110, 111, 112, 211, 212

PHI 215, 240

SPA 111, 112, 211, 212

C. Social/Behavioral Sciences (12 SHC)

Select **one** course from the following:

HIS 111, 112, 121, 122, 131, 132

Select **three** courses from at least **two** of the following discipline areas:

ECO 251, 252 GEO 111

HIS 111, 112, 121, 122, 131, 132 POL 120, 220

PSY 150, 241, 281 SOC 210, 213, 220

D. Natural Sciences/Mathematics (14 SHC)

Mathematics (6 SHC)

Select at least one course from the following (one math course must be introductory level):

MAT 161, 162, 175, 263, 271, 272, 273

The other course may be selected from the following:

CIS 110, 115 MAT 151, 155

Natural Sciences (8 SHC)

Select from the following courses:

AST 111 and 111A, 151 and 151A, 152 and 152A

BIO 111, 112, 120, 140 and 140A

CHM 131 and 131A, 132, 151, 152

PHY 110 and 110A, 251, 252

# II. OTHER REQUIRED HOURS (21 SHC)\*

Academic Related (1 SHC)

ACA 122

Pre-Major Courses (20 SHC)

ART 121, 122, 131

Select 11 hours from the college transfer ART course list.

To satisfy this requirement, two of the following courses are recommended:

ART 132 Drawing II (3 SHC)

ART 283 Ceramics I (3 SHC)

ART 264 Digital Photography I (3 SHC)

ART 247 Jewelry I (3 SHC) or ART 245 Metals I (3 SHC)

ART 261 Photography I (3 SHC) or ART 266 Videography I (3 SHC)

\*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.

\*\*3 SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

Upon successful completion of the Associate in Arts degree, students who meet the requirements outlined in this pre-major articulation agreement for Art Education will be eligible to be considered for admission as juniors to the following universities: ASU, ECU, ECSU, FSU, NCA&T, NCCU, UNC-A, UNC-G, UNC-P WCU, WSSU.

# BUSINESS ADMINISTRATION, ACCOUNTING, ECONOMICS, FINANCE, AND MARKETING A1010B

(65 Semester Hours Credit Required)
ASSOCIATE IN ARTS DEGREE
(Revised 2012\*03) Course and Hour Requirements

# I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112, 113, or 114

B. Humanities/Fine Arts (12 SHC)

Select **one** course from the following:

ENG 231, 232, 241, 242

Select **three** courses from at least **two** of the following discipline areas:

ART 111, 114, 115 HUM 110, 115, 120, 122, 220

ENG 231, 232, 241, 242 PHI 215, 240

MUS 110, 113 SPA 111, 112, 211, 212

REL 110, 111, 112, 211, 212

C. Social/Behavioral Sciences (12 SHC)

ECO 251

Select one course from the following:

HIS 111, 112, 121, 122, 131, 132

Select two courses from at least two of the following discipline areas:

GEO 111 POL 120, 220

PSY 150, 241, 281 SOC 210, 213, 220

The following courses are recommended

POL 220 PSY 150

SOC 210

D. Natural Sciences/Mathematics (14 SHC)

Mathematics (6 SHC)

MAT 161 or 175 MAT 263 or 271

Natural Sciences (8 SHC)

Select from the following courses:

AST 111 and 111A, 151 and 151A, 152 and 152A

BIO 111, 112, 120, 140 and 140A (recommended for ECU)

CHM 131 and 131A, 132, 151, 152

PHY 110 and 110A, 151, 152

# II. OTHER REQUIRED HOURS (21 SHC)\*

ACA 122

Pre-major courses (17 SHC)

ACC 120, 121 CIS 110

ECO 252 MAT 151 or 155

Electives (3 SHC) Select from the list of College Transfer courses.

\* 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.

<sup>\*\*3</sup> SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

Upon successful completion of the Associate in Arts degree, students who meet the requirements outlined in this pre-major articulation agreement for Art Education will be eligible to be considered for admission as juniors to the following universities: ASU, ECU, ECSU, FSU, NCA&T, NCCU, UNC-A, UNC-G, UNC-P WCU, WSSU.

# **CRIMINAL JUSTICE A1010D**

(65 Semester Hours Credit Required)
ASSOCIATE IN ARTS DEGREE

(Revised 2012\*03) Course and Hour Requirements

# I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112, 113, or 114

B. Humanities/Fine Arts (12 SHC)

Select **one** course from the following:

ENG 231, 232, 241, 242

Select **three** courses from at least **two** of the following discipline areas:

ART 111, 114, 115 HUM 110, 115, 120, 122, 220

ENG 231, 232, 241, 242 PHI 215, 240

MUS 110, 113 SPA 111, 112, 211, 212

REL 110, 111, 112, 211, 212

C. Social/Behavioral Sciences (12 SHC)

POL 120 PSY 150

SOC 210

Select one course from the following: HIS 111, 112, 121, 122, 131, 132

D. Natural Sciences/Mathematics (14 SHC)

Mathematics (6 SHC)

MAT 151 or 155

Select at least **one** course from the following:

MAT 161, 162, 175, 271

Natural Sciences (8 SHC)

Select from the following courses:

AST 111 and 111A, 151 and 151A, 152 and 152A

BIO 111, 112, 120, 140 and 140A CHM 131 and 131A, 132, 151, 152

PHY 110 and 110A, 151, 152

# II. OTHER REQUIRED HOURS (21 SHC)\*

ACA 122 HEA 120

Physical Education (2 SHC) Select from physical education activity courses.

Pre-major courses (9 SHC)

CJC 111, 121, 141

Electives (6 SHC) Select from the list of College Transfer courses.

\*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.

\*\*3 SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

Upon completion of the AA degree, students may apply for admission as a junior to the following universities: ASU, ECU, ECSU, FSU, NCSU, UNC-C, UNC-P, UNC-W, WCU.

# ELEMENTARY EDUCATION A1010R

(65 Semester Hours Credit Required)
ASSOCIATE IN ARTS DEGREE

(Revised 2012\*03) Course and Hour Requirements

# I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111 ENG 112 or 113

B. Humanities/Fine Arts (12 SHC)

ART 111, 114, 115 or MUS 110 COM 231 (required substitution for 3 SHC

Humanities/Fine Arts)

Select **one** course from the following:

ENG 231, 232

Select **one** course from following discipline areas:

ART 111, 114, 115 HUM 110, 115, 120, 122, 220

ENG 231, 232, 241, 242 PHI 215, 240

MUS 110, 113 SPA 111, 112, 211, 212

REL 110, 111, 112, 211, 212

C. Social/Behavioral Sciences (12 SHC)

GEO 111 or POL 120 HIS 121 or 122 PSY 150 SOC 210 or 225

D. Natural Sciences/Mathematics (14 SHC)

Mathematics (6 SHC)

Select two of the following:

CIS 110, MAT 141, 142, 161

Natural Sciences (8 SHC)

BIO 111

Select one of the following: +

AST 111 and AST 111A

CHM 131 and 131A CHM 151 PHY 110 and 110A PHY 151

# II. OTHER REQUIRED HOURS (21 SHC)\*

ACA 122 HEA 120

Physical Education (2 SHC) Select from physical education activity courses.

Electives (15 SHC)

Select from the list of College Transfer courses. ECU suggests the following:

EDU 216 HIS 131 or 132 MAT142 PSY 241

Upon completion of the Associate in Arts degree, students who meet the requirements outlined in this pre-major articulation agreement for Elementary Education will be eligible to be considered for admission as juniors to the universities offering the baccalaureate degree. Elementary Education: ASU, ECU, ECSU, FSU, NCA&T, NCCU, UNC-A, UNC-G, UNC-G, UNC-G, UNC-P, UNC-W, WCU, WSSU.

At certain UNC institutions, EDU 216 may fulfill major requirements; at a majority of institutions the course will transfer only as a free elective. Students should check with the university for the local transfer policy regarding EDU 216.

<sup>\*</sup> 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.

<sup>+</sup>Students transferring to ECU may substitute AST 151 and AST 151A for Chemistry or Physics.

# **ENGLISH A1010E**

# (65 Semester Hours Credit Required) ASSOCIATE IN ARTS DEGREE

(Revised 2012\*03) Course and Hour Requirements

## I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111 ENG 112 or 113

B. Humanities/Fine Arts (12 SHC)

Select **one** course from the following:

ENG 231, 232, 241, 242

Select **three** courses from at least **two** of the following discipline areas: One foreign language sequence is recommended.

ART 111, 114, 115 HUM 110, 115, 120, 122, 220

ENG 231, 232, 241, 242 PHI 215, 240

MUS 110, 113 SPA 111, 112, 211, 212

REL 110, 111, 112, 211, 212

C. Social/Behavioral Sciences (12 SHC)

Select **one** course from the following:

HIS 111, 112, 121, 122, 131, 132

Select **three** courses from at least **two** of the following discipline areas:

ECO 251, 252 GEO 111

HIS 111, 112, 121, 122, 131, 132 POL 120, 220

PSY 150, 241, 281 SOC 210, 213, 220

D. Natural Sciences/Mathematics (14 SHC)

Mathematics (6 SHC)

Select at least one course from the following (one math course must be introductory level):

MAT 161, 162 175, 263, 271, 272, 273

The other course may be selected from the following:

CIS 110, 115 MAT 151, 155

Natural Sciences (8 SHC)

BIO 111

Select at least **one** course from the following

AST 111 and AST 111A

CHM 131 and 131A CHM 151 PHY 110 and 110A PHY 151

# II. OTHER REQUIRED HOURS (21 SHC)\*

ACA 122 HEA 120

Physical Education (2 SHC) Select from physical education activity courses.

Pre-major courses (3 SHC) Choose 3 hours from the following.

ENG 231, 232, 241, 242

Electives (12 SHC) Select from the list of College Transfer courses (one HIS course and an intermediate foreign language sequence are recommended).

Upon successful completion of the Associate in Arts degree, students who meet the requirements outlined in this pre-major articulation agreement for English will be eligible to be considered for admission as juniors to the universities offering the baccalaureate degree: ASU, ECU, ECSU, FSU, NCA&T, NCCU, NCSU, UNC-A, UNC-CH, UNC-C, UNC-P, UNC-W, WCU, WSSU.

<sup>\*</sup> 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.

<sup>\*\*3</sup> SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

# **HEALTH EDUCATION A1010G**

(65 Semester Hours Credit Required)
ASSOCIATE IN ARTS DEGREE

(Revised 2012\*03) Course and Hour Requirements

# I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112, 113, or 114

B. Humanities/Fine Arts (12 SHC)

Select **one** course from the following:

ENG 231, 232, 241, 242

Select **three** courses from at least **two** of the following discipline areas:

ART 111, 114, 115 HUM 110, 115, 120, 122, 220

ENG 231, 232, 241, 242 PHI 215, 240

MUS 110, 113 SPA 111, 112, 211, 212

REL 110, 111, 112, 211, 212

COM 231 (recommended Substitute)

C. Social/Behavioral Sciences (12 SHC)

PSY 150

Select **one** course from the following:

HIS 111, 112, 121, 122, 131, 132

Select two courses from two different discipline areas.

ECO 251, 252

POL 120, 220 PSY 241, 281

SOC 210, 213, 220

D. Natural Sciences/Mathematics (14 SHC)

Mathematics (6 SHC)

CIS110

Select **one** course from the following:

MAT 161, 162, 175, 263, 271, 272, 273

Natural Sciences (8 SHC)

Select **one** of the following sequences:

BIO 111, 112

CHM 151, 152

**GEO 111** 

# II. OTHER REQUIRED HOURS (21 SHC)\*

ACA 122

Physical Education (1 SHC) Select from physical education activity courses.

Pre-major courses (19 SHC)

BIO 168, 169

HEA 110, 112, 120

MAT 151 or 155

Upon successful completion of the Associate in Arts degree, students who meet the requirements outlined in this pre-major articulation agreement for Art Education will be eligible to be considered for admission as juniors to the following universities: ASU, ECU, ECSU, FSU, NCA&T, NCCU, UNC-A, UNC-G, UNC-P, WCU, WSSU. Admission to teacher licensure programs requires satisfactory scores on PRAXIS I and II.

<sup>\*</sup>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.

<sup>\*\*3</sup> SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

# **HISTORY A1010H**

(65 Semester Hours Credit Required)
ASSOCIATE IN ARTS DEGREE

(Revised 2012\*03) Course and Hour Requirements

# I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112 or 113

B. Humanities/Fine Arts (12 SHC)

Select one course from the following:

ENG 231, 232, 241, 242

Select **three** courses from at least **two** of the following discipline areas:

ART 111, 114, 115 HUM 110, 115, 120, 122, 220

ENG 231, 232, 241, 242 PHI 215, 240

MUS 110, 113 SPA 111, 112, 211, 212

REL 110, 111, 112, 211, 212

C. Social/Behavioral Sciences (12 SHC)

Select **one** course from the following:

HIS 111, 112, 121, 122, 131, 132

Select **three** courses from at least **two** of the following discipline areas:

ECO 251, 252 GEO 111

HIS 111, 112, 121, 122, 131, 132 POL 120, 220

PSY 150, 241, 281 SOC 210, 213, 220

D. Natural Sciences/Mathematics (14 SHC)

Mathematics (6 SHC)

Select at least one course from the following (one math course must be introductory level):

MAT 161, 162, 175, 263, 271, 272, 273

The other course may be selected from the following:

CIS 110, 115 MAT 151, 155

Natural Sciences (8 SHC)

AST 111 and 111A, 151 and 151A, 152 and 152A

BIO 111, 112, 120, 140 and 140A

CHM 131 and 131A, 132, 151, 152

PHY 110 and 110A, 151, 152, 251, 252

# II. OTHER REQUIRED HOURS (21 SHC)\*

ACA 122

HEA 120

Physical Education (2 SHC) Select from physical education activity courses.

History Courses (6 SHC) Select two courses from the following:

HIS 111, 112, 121, 122, 131, 132

Electives (9 SHC) Select from the list of College Transfer courses.

\*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.

\*\*3 SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement. Students intending to major in a history program at a UNC institution are advised to take no more than 12 SHC in history at a community college. Upon completion of the Associate in Arts degree, students may apply for admission as juniors to the following universities: ASU, ECU, ECSU, FSU, NCA&T, NCCU, NCSU, UNC-A, UNC-CH, UNC-C, UNC-G, UNC-P, UNC-W, WCU, WSSU.

# **NURSING A1010I**

# (65 Semester Hours Credit Required) ASSOCIATE IN ARTS DEGREE

(Revised 2012\*03) Course and Hour Requirements

# I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112, 113, or 114

B. Humanities/Fine Arts (12 SHC)

Select one course from the following:

ENG 231, 232, 241, 242

Select **three** courses from at least **two** of the following discipline areas:

ART 111, 114, 115 HUM 110, 115, 120, 122, 220

ENG 231, 232, 241, 242 PHI 215, 240

MUS 110, 113 SPA 111, 112, 211, 212

REL 110, 111, 112, 211, 212

C. Social/Behavioral Sciences (12 SHC)

HIS 121 or 122 or 131 or 132 PSY 150, 241

SOC 210

D. Natural Sciences/Mathematics (14 SHC)

Mathematics (6 SHC)

MAT 151 or 155

Select **one** course from the following:

MAT 161, 162, 175, 263, 271, 272, 273

Natural Sciences (8 SHC)

Select **one** of the following sequences:

CHM 131 and 131A, 132 CHM 151, 152

# II. OTHER REQUIRED HOURS (21 SHC)\*

ACA 122

Pre-major courses (18 SHC)

BIO 168, 169, 275

PSY 281

SOC 213

Electives (2 SHC) Select from the list of College Transfer courses.

Upon completion of the Associate in Arts degree, students may apply for admission as juniors to the following universities: ECU, NCA&T, NCCU, UNC-CH, UNC-C, UNC-G, UNC-W, WCU, WSSU.

<sup>\*</sup> 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.

<sup>\*\*3</sup> SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

# PHYSICAL EDUCATION A1010J

(65 Semester Hours Credit Required)
ASSOCIATE IN ARTS DEGREE

(Revised 2012\*03) Course and Hour Requirements

#### I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112, 113, or 114

B. Humanities/Fine Arts (12 SHC)

Select one course from the following:

ENG 231, 232, 241, 242

Select **three** courses from at least **two** of the following discipline areas:

ART 111, 114, 115

HUM 110, 115, 120, 122, 220

ENG 231, 232, 241, 242

PHI 215, 240

MUS 110, 113

SPA 111, 112, 211, 212

REL 110, 111, 112, 211, 212

C. Social/Behavioral Sciences (12 SHC)

Select **one** course from the following:

HIS 111, 112, 121, 122, 131, 132

Select **three** courses from at least **two** of the following discipline areas:

ECO 251, 252

GEO 111

HIS 111, 112, 121, 122, 131, 132 POL 120, 220 PSY 150 (recommended), 241, 281 SOC 210, 213, 220

D. Natural Sciences/Mathematics (14 SHC)

Mathematics (6 SHC) (one math course must be introductory level)

MAT 161 (recommended), 162, 175, 263, 271, 272, 273

Select **one** course from the following:

**CIS 110** 

MAT 151, 155

Natural Sciences (8 SHC)

Select **one** of the following sequences:

BIO 111, 112 (recommended)

CHM 151, 152

PHY 151, 152

(ECU requires BIO 111 and PHY 151)

## II. OTHER REQUIRED HOURS (21 SHC)\*

ACA 122

HEA 120

Physical Education (4 SHC)

PED 110

Select **two** physical education activity courses.

Electives (13 SHC) Select from the list of College Transfer courses.

\*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.

\*\*3 SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

Upon successful completion of the Associate in Arts degree, students who meet the requirements outlined in this pre-major articulation agreement for Art Education will be eligible to be considered for admission as juniors to the following universities: ASU, ECU, ECSU, FSU, NCA&T, NCCU, UNC-A, UNC-G, UNC-P WCU, WSSU. Admission to teacher licensure programs requires satisfactory scores on PRAXIS I and II.

#### PSYCHOLOGY A1010L

(65 Semester Hours Credit Required)
ASSOCIATE IN ARTS DEGREE

(Revised 2012\*03) Course and Hour Requirements

#### I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112, 113, or 114

B. Humanities/Fine Arts (12 SHC)

Select one course from the following:

ENG 231, 232, 241, 242

Select **three** courses from at least **two** of the following discipline areas:

ART 111, 114, 115

HUM 110, 115, 120, 122, 220

ENG 231, 232, 241, 242

PHI 215, 240

MUS 110, 113

SPA 111, 112, 211, 212

REL 110, 111, 112, 211, 212

C. Social/Behavioral Sciences (12 SHC)

PSY 150

Select **one** course from the following:

HIS 111, 112, 121, 122, 131, 132

Select two courses from two different discipline areas.

ECO 251, 252

GEO 111

POL 120, 220

PSY 241, 281

SOC 210, 213, 220

D. Natural Sciences/Mathematics (14 SHC)

Mathematics (6 SHC)

Select at least **one** course from the following:

MAT 161, 162, 175, 263, 271, 272, 273

The other course may be selected from the following:

CIS 110, 115

MAT 151, 155

Natural Sciences (8 SHC)

BIO 111

Select **one** course from the following:

AST 111 and 111A, 151 and 151A

PHY 110 and 110A, 151

BIO 112, 120, 140 and 140A

CHM 131 and 131A, 151

## II. OTHER REQUIRED HOURS (21 SHC)\*

ACA 122

**HEA 120** 

Physical Education (2 SHC) Select from physical education activity courses.

Electives (15 SHC) Select from the list of College Transfer courses

\*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.

\*\*\*3 SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

Upon completion of the AA degree, students may apply for admission as juniors to the following universities: ASU, ECU, ECSU, FSU, NCA&T, NCCU, NCSU, UNC-A, UNC-CH, UNC-C, UNC-G, UNC-P, UNC-W, WCU, WSSU.

#### SOCIAL SCIENCE SECONDARY EDUCATION A1010M

# (65 Semester Hours Credit Required) ASSOCIATE IN ARTS DEGREE

(Revised 2012\*03) Course and Hour Requirements

#### I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112 or 113

B. Humanities/Fine Arts (12 SHC)

Select one course from the following:

ENG 231, 232, 241, 242

Select **three** courses from at least **two** of the following discipline areas:

ART 111, 114, 115 HUM 110, 115, 120, 122, 220

ENG 231, 232, 241, 242 PHI 215, 240

MUS 110, 113 SPA 111, 112, 211, 212

REL 110, 111, 112, 211, 212

C. Social/Behavioral Sciences (12 SHC)

HIS 121 and 122 POL 120

SOC 210

D. Natural Sciences/Mathematics (14 SHC)

Mathematics (6 SHC)

Select at least **one** course from the following:

MAT 161, 162, 175, 263, 271, 272, 273

The other course may be selected from the following:

CIS 110, 115 MAT 151, 155

Natural Sciences (8 SHC)

AST 111 and 111A, 151 and 151A, 152 and 152A

BIO 111, 112, 120, 140 and 140A CHM 131 and 131A, 132, 151, 152

PHY 110 and 110A, 251, 252

#### II. OTHER REQUIRED HOURS (21 SHC)\*

ACA 122

HEA 120

Physical Education (2 SHC) Select from physical education activity courses.

Pre-major Courses (15 SHC)

ECO 251 and 252

GEO 111

HIS 131 and 132

Upon completion of the Associate in Arts degree, students may apply for admission as juniors to the following universities: ASU, FSU, NCSU, UNC-CH, WCU. Admission to teacher licensure programs requires satisfactory scores on PRAXIS I AND II.

<sup>\*</sup>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.

<sup>\*\*3</sup> SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

## **SOCIAL WORK A1010Q**

(65 Semester Hours Credit Required)
ASSOCIATE IN ARTS DEGREE

(Revised 2012\*03) Course and Hour Requirements

#### I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112, 113, or 114

B. Humanities/Fine Arts (12 SHC)

Select one course from the following:

ENG 231, 232, 241, 242

Select **three** courses from at least **two** of the following discipline areas:

ART 111, 114, 115 HUM 110, 115, 120, 122, 220

ENG 231, 232, 241, 242 PHI 215, 240

MUS 110, 113 SPA 111, 112, 211, 212

REL 110, 111, 112, 211, 212

C. Social/Behavioral Sciences (12 SHC)

POL 120 PSY 150

SOC 210

Select **one** course from the following:

HIS 111, 112, 121, 122, 131, 132

D. Natural Sciences/Mathematics (14 SHC)

Mathematics (6 SHC)

Select at least **one** course from the following:

MAT 161, 162, 175, 263, 271, 272, 273

The other course may be selected from the following:

CIS 110, 115 MAT 151

Natural Sciences (8 SHC)

Select from the following courses:

AST 111 and 111A, 151 and 151A, 152 and 152A

BIO 111 and 112 (recommended), 120, 140 and 140A

CHM 131 and 131A, 132, 151, 152

PHY 110 and 110A, 251, 252

## II. OTHER REQUIRED HOURS (21 SHC)\*

ACA 122 HEA 120

Physical Education (2 SHC) Select from physical education activity courses.

Electives (15 SHC) Select from the list of College Transfer courses.

The following are recommended:

ECO 251,252 HIS 122, 132 PSY 241, 281 SPA 111, 112

\*\*\*SWK 110, 113

\*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.

\*\*3 SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

\*\*\*SWK 110 and SWK 113 are required courses for students accepted into ECU's School of Social Work.

Upon completion of the Associate in Arts degree, students who meet the requirements outlined in this pre-major articulation agreement for Social Work will be eligible to be considered for admission as juniors to the universities offering the baccalaureate degree: ASU, ECU, NCA&T, NCCU, NCSU, UNC-C, UNC-G, UNC-P, UNC-P, WCU.

#### **SOCIOLOGY A1010N**

# (65 Semester Hours Credit Required) ASSOCIATE IN ARTS DEGREE

(Revised 2012\*03) Course and Hour Requirements

#### I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112 (recommended), 113, or 114

B. Humanities/Fine Arts (12 SHC)

Select one course from the following:

ENG 231, 232, 241, 242

Select **three** courses from at least **two** of the following discipline areas:

ART 111, 114, 115 HUM 110, 115, 120, 122, 220

ENG 231, 232, 241, 242 PHI 215, 240

MUS 110, 113 SPA 111, 112, 211, 212

REL 110, 111, 112, 211, 212

C. Social/Behavioral Sciences (12 SHC)

SOC 210 (3 SHC)

Select **one** of the following:

SOC 213, 220, or 225

Select **one** of the following:

HIS 111, 112, 121, 122, 131, or 132

Select **one** of the following:

ECO 251, 252 POL 120, 220 GEO 111 PSY 150

D. Natural Sciences/Mathematics (14 SHC)

Mathematics (6 SHC)

MAT 151 or 155

Select one course from the following:

MAT 161, 162, 175, 263, 271, 272, 273

Natural Sciences (8 SHC)

Select from the following courses:

AST 111 and 111A, 151 and 151A, 152 and 152A

BIO 111, 112, 120, 140 and 140A

CHM 131 and 131A, 132, 151, 152

PHY 110 and 110A, 151, 152, 251, 252

## II. OTHER REQUIRED HOURS (21 SHC)\*

ACA 122

HEA 120

Physical Education (2 SHC) Select from physical education activity courses. Electives (15 SHC) Select from the list of College Transfer courses.

\*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.

\*\*3 SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

Upon successful completion of the Associate in Arts degree, students who meet the requirements outlined in this pre-major articulation agreement for Art Education will be eligible to be considered for admission as juniors to the following universities: ASU, ECU, ECSU, FSU, NCA&T, NCCU, UNC-A, UNC-G, UNC-P WCU, WSSU.

#### **ART A10200**

# (65 Semester Hours Credit Required) ASSOCIATE IN FINE ARTS DEGREE

(Revised 2012\*03) Course and Hour Requirements

#### I. GENERAL EDUCATION (28 SHC)

A. Composition (6 SHC)

ENG 111 ENG 112 or 113

B. Humanities/Fine Arts (6 SHC)

Select one course from the following:

ENG 231, 232, 241, 242

Select **one** course from the following:

ART 111, 114, 115

MUS 110, 113

HUM 110, 115, 120, 122, 220

REL 110, 111, 112, 211, 212

PHI 215, 240

SPA 111, 112, 211, 212

C. Social/Behavioral Sciences (9 SHC)

Select **one** course from the following:

HIS 111, 112, 121, 122, 131, 132

Select two courses from two different discipline areas.

ECO 251, 252

GEO 111

POL 120, 220

PSY 150, 241, 281

SOC 210, 213, 220

D. Natural Sciences/Mathematics (7 SHC)

Mathematics (3 SHC)

MAT 161, 175

Natural Science (4 SHC)

AST 111 and 111A, 151 and 151A

BIO 111, 120, 140 and 140A

CHM 151

PHY 110 and 110A

## II. OTHER REQUIRED HOURS (37 SHC)\*

ACA 122

HEA 120

Physical Education (2 SHC) Select from physical education activity courses. Pre-major courses (31 SHC) Select from College Transfer art courses.

Speech/Communication may not substitute for the literature requirement.

<sup>\*</sup>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.

<sup>\*\*3</sup> SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts.

## **ASSOCIATE IN SCIENCE A10400**

(65 Semester Hours Credit Required)
ASSOCIATE IN SCIENCE DEGREE

(Revised 2012\*03)Course and Hour Requirements

#### I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112, 113, or 114

B. Humanities/Fine Arts (9 SHC)

Select **one** course from the following:

ENG 231, 232, 241, 242

Select **two** courses from **two** of the following discipline areas:

ART 111, 114, 115

MUS 110, 113

HUM 110, 115, 120, 122, 220

REL 110, 111, 112, 211, 212

PHI 215, 240

SPA 111, 112, 211, 212

C. Social/Behavioral Sciences (9 SHC)

Select **one** course from the following:

HIS 111, 112, 121, 122, 131, or 132

Select two courses from two of the following discipline areas:

ECO 251, 252

**GEO 111** 

POL 120, 220

PSY 150, 241, 281

SOC 210, 213, 220

D. Natural Sciences/Mathematics (20 SHC)

Mathematics (8 SHC) (credit will not be awarded for both MAT 263 and MAT 271)

Select **one** course from the following:

MAT 175, 263, 271

The other courses may be selected from the following:

**CIS 110** 

MAT 151, 271, 272

Natural Sciences (12 SHC)

Select **three** courses from the following (one two course sequence is required):

BIO 111, 112

CHM 151, 152

PHY 151, 152

PHY 251, 252

## II. OTHER REQUIRED HOURS (21 SHC)\*

ACA 122

**HEA 120** 

Physical Education (2 SHC) Select from physical education activity courses.

Pre-major courses (14 SHC) Select from the list of College Transfer Courses in mathematics, natural sciences, or computer science.

Electives (1 SHC) Select from the list of College Transfer Courses

Upon successful completion of Associate in Science degree, students who meet the requirements outlined in this pre-major articulation agreement will be eligible to be considered for admission as juniors to the following universities: ASU, ECU, ECSU, FSU, NCA&T, NCCU, NCSU, UNC-A, UNC-CH, UNC-C, UNC-G, UNC-P, UNC-W, WCU, WSSU.

<sup>\*</sup>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.

<sup>\*\*3</sup> SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

## TRANSFER CORE DIPLOMA—SCIENCE D10400D

(44 Semester Hours Credit Required) (Revised 2012\*03)Course and Hour Requirements

#### I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112, 113, or 114

B. Humanities/Fine Arts (9 SHC)

Select **one** course from the following:

ENG 231, 232, 241, 242

Select **two** courses from **two** of the following discipline areas:

ART 111, 114, 115

MUS 110, 113

HUM 110, 115, 120, 122, 220

REL 110, 111, 112, 211, 212

PHI 215, 240

SPA 111, 112, 211, 212

C. Social/Behavioral Sciences (9 SHC)

Select **one** course from the following:

HIS 111, 112, 121, 122, 131, or 132

Select two courses from two of the following discipline areas:

ECO 251, 252

POL 120, 220

PSY 150, 241, 281

SOC 210, 213, 220

D. Natural Sciences/Mathematics (20 SHC)

Mathematics (8 SHC) (credit will not be awarded for both MAT 263 and MAT 271)

Select **one** course from the following:

MAT 175, 263, 271

The other courses may be selected from the following:

MAT 151, 271, 272

Natural Sciences (12 SHC)

Select **three** courses from the following (one two course sequence is required):

BIO 111, 112

CHM 151, 152

PHY 151, 152

PHY 251, 252

<sup>\*</sup>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.

<sup>\*\*3</sup> SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/ Communication may not substitute for the literature requirement.

# College Transfer Pathway Life and Health Sciences P1042A

(33 Semester Hours Credit Required)
COLLEGE TRANSFER PATHWAY\*
(Revised 2012\*03) Course and Hour Requirements

		Hours		Work	
Title	Class	Lab	Exp.	Credits	
I. GENERAL EDUCATION (32 SHC)*					
A. Composition (6 SHC)					
ENG 111 Expository Writing	3	0	0	3	
ENG 112 Argument-Based Research	3	0	0	3	
B. Humanities/Fine Arts (3 SHC)					
ENG 232 American Literature II	3	0	0	3	
C. Social/Behavioral Sciences (3 SHC)					
HIS 121 Western Civilization I	3	0	0	3	
D. Natural Sciences/Mathematics (20 SHC)					
BIO 111 General Biology	3	3	0	4	
BIO 112 General Biology II	3	3	0	4	
CHM 151 General Chem I	3	3	0	4	
CHM 152 General Chem II	3	3	0	4	
MAT 175 Precalculus	4	0	0	4	
II. OTHER REQUIRED HOURS (1 SHC)					
ACA 122 College Transfer Success	1	0	0	1	

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

# College Transfer Pathway Engineering and Mathematics P1042B

(32 Semester Hours Credit Required)
COLLEGE TRANSFER PATHWAY\*
(Revised 2012\*03) Course and Hour Requirements

			Work		
Title	Class	Lab	Exp.	Credits	
I. GENERAL EDUCATION (31 SHC)*					
A. Composition (6 SHC)					
ENG 111 Expository Writing	3	0	0	3	
ENG 112 Argument-Based Research	3	0	0	3	
B. Humanities/Fine Arts (3 SHC)					
ENG 232 American Literature II	3	0	0	3	
C. Social/Behavioral Sciences (6 SHC)					
HIS 121 Western Civilization I	3	0	0	3	
ECO 251 Prin of Microeconomics	3	0	0	3	
D. Natural Sciences (4 SHC)					
CHM 151 General Chem I	3	3	0	4	
E. Mathematics (12 SHC)					
MAT 175 Precalculus	4	0	0	4	
MAT 271 Calculus I	3	2	0	4	
MAT 272 Calculus II	3	2	0	4	
II. OTHER REQUIRED HOURS (1 SHC)					
ACA 122 College Transfer Success	1	0	0	1	

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

#### **BIOLOGY AND BIOLOGY EDUCATION A1040A**

(65 Semester Hours Credit Required) ASSOCIATE IN SCIENCE DEGREE

(Revised 2012\*03) Course and Hour Requirements

#### I. GENERAL EDUCATION (46 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112, 113, or 114

B. Humanities/Fine Arts (9 SHC)

Select **one** course from the following:

ENG 231, 232, 241, 242

Select **two** courses from **two** of the following discipline areas:

ART 111, 114, 115

MUS 110, 113

HUM 110, 115, 120, 122, 220 REL 110, 111, 112, 211, 212

PHI 215, 240

SPA 111, 112, 211, 212

C. Social/Behavioral Sciences (9 SHC)

Select **one** course from the following:

HIS 111, 112, 121, 122, 131, or 132

Select **two** courses from **two** of the following discipline areas:

ECO 251, 252

GEO 111

POL 120, 220

PSY 150, 241, 281

SOC 210, 213, 220

D. Natural Sciences/Mathematics (22 SHC)

Mathematics (6 SHC)

Select **one** course from the following:

MAT 175, 263, 271, 272, 273

The **second** course may be selected from the following:

CIS 110, 115

MAT 151, 155

Natural Sciences (16 SHC)

BIO 111, CHM 151, 152

Select **one** course from the following:

BIO 112 or 120

## II. OTHER REQUIRED HOURS (19 SHC)

Electives (18 SHC) Select 14 hours from the list of College Transfer Mathematics, Natural Sciences or Computer Science courses.

Select 4 hours from the list of College Transfer courses.
4 hours of approved Biology College Transfer courses is recommended.

One of the following sequences is recommended: CHM 251 and 252, PHY 151 and 152, PHY 251 and 252.

\*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 consult with senior institutions before selecting the sequence of biology courses for transfer. \*\*\*3 SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

Upon successful completion of Associate in Science degree, students who meet the requirements outlined in this pre-major articulation agreement will be eligible to be considered for admission as juniors to the universities offering the baccalaureate degree. Biology: ASU, ECU, ECSU, FSU, NCA&T, NCCU, NCSU, UNC-A, UNC-CH, UNC-C, UNC-G, UNC-P, UNC-W, WCU, WSSU. Biology Education, Secondary Education: ASU, ECSU, FSU, NCA&T, NCCU, UNC-A\*, UNC-P, UNC-W, WCU, WSSU.

<sup>\*</sup> Certification for Grades K-4; Middle Grades (4-6); Grades 6-9; Secondary Level.

## **CHEMISTRY AND CHEMISTRY EDUCATION A1040B**

(65 Semester Hours Credit Required)
ASSOCIATE IN SCIENCE DEGREE

(Revised 2012\*03) Course and Hour Requirements

#### I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112, 113, or 114

B. Humanities/Fine Arts (9 SHC)

COM 231 (required substitution for 3 SHC Humanities/Fine Arts)

Select **one** course from the following:

ENG 231, 232, 241, 242

Select **one** course from the following:

ART 111, 114, 115

MUS 110, 113

HUM 110, 115, 120, 122, 220 RI

REL 110, 111, 112, 211, 212

PHI 215, 240

SPA 111, 112, 211, 212

C. Social/Behavioral Sciences (9 SHC)

Select **one** course from the following:

HIS 111, 112, 121, 122, 131, or 132

Select **two** courses from at least two of the following discipline areas:

ECO 251, 252

GEO 111

POL 120, 220

PSY 150 (recommended), 241, 281

SOC 210, 213, 220

D. Natural Sciences/Mathematics (20 SHC)

Mathematics (8 SHC)

MAT 271, 272

Natural Sciences (12 SHC)

CHM 151, 152

PHY 251

## II. OTHER REQUIRED HOURS (21 SHC)

ACA 122

Pre-major courses (15 SHC)

CHM 251, 252

PHY 252

3 SHC selected from the following:

CIS 110, 115

CSC 134, 151

Electives (5 SHC) Select from the list of College Transfer Courses.

MAT 273 (recommended)

Upon successful completion of Associate in Science degree, students who meet the requirements outlined in this pre-major articulation agreement will be eligible to be considered for admission as juniors to the following universities: ASU, ECU, ECSU, FSU, NCA&T, NCCU, NCSU, UNC-A, UNC-CH, UNC-C, UNC-G, UNC-P, UNC-W, WCU, WSSU.

Admission to teacher licensure programs requires satisfactory scores on PRAXIS I and II.

<sup>\*</sup>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.

<sup>\*</sup>Certification for grades K-4; Middle Grades (4-6); Grades 6-9: Secondary Level.

## **ENGINEERING A1040D**

(65 Semester Hours Credit Required) ASSOCIATE IN SCIENCE DEGREE

(Revised 2012\*03) Course and Hour Requirements

#### I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112, 113, or 114

B. Humanities/Fine Arts (9 SHC)

Select **one** course from the following:

ENG 231, 232, 241, 242

Select **two** courses from **two** of the following discipline areas:

ART 111, 114, 115

MUS 110, 113

HUM 110, 115, 120, 122, 220

REL 110, 111, 112, 211, 212

PHI 215, 240

SPA 111, 112, 211, 212

C. Social/Behavioral Sciences (9 SHC)

HIS 111, 112, 121, 122, 131, or 132

Select two courses from two discipline areas (ECO 251 or 252 recommended).

ECO 251, 252

GEO 111

POL 120 PSY 150, 241, 281

SOC 210, 213, 220

D. Natural Sciences/Mathematics (20 SHC)

CHM 151, MAT 271, 272

PHY 251, 252

#### II. OTHER REQUIRED HOURS (21 SHC)

ACA 122

**MAT 273** 

Pre-MajorElectives (10 SHC)

Select 10 hours from the list of college transfer courses below

BIO 111, 275

CSC 134, 151

CIS 115

MAT 280, 285

EGR 150, 213, 220, 225, 230 Electives (6 SHC)

Select 6 hours from the list of college transfer courses.

<sup>\*</sup>Articulation agreement with the UNC system requires students to take as many as 44 hours in the General Education core.

<sup>\*\*</sup>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.

<sup>\*\*\* \*3</sup> SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

<sup>\*\*\*\*\*</sup>Upon completion of the Associate in Science degree, students may apply for admission as juniors to the following universities: ECU, NCA&T, NCSU, UNC-C. Students wishing to transfer should meet with the engineering advisor early in their studies.

#### **MATHEMATICS A1040E**

(65 Semester Hours Credit Required)
ASSOCIATE IN SCIENCE DEGREE

(Revised 2012\*03) Course and Hour Requirements

#### I. GENERAL EDUCATION (44 SHC)\*

A. Composition (6 SHC)

ENG 111

ENG 112, 113, or 114

B. Humanities/Fine Arts (9 SHC)

Select **one** course from the following:

ENG 231, 232, 241, 242

Select two courses from two of the following discipline areas:

ART 111, 114, 115

MUS 110, 113

HUM 110, 115, 120, 122, 220

REL 110, 111, 112, 211, 212

PHI 215, 240

SPA 111, 112, 211, 212

C. Social/Behavioral Sciences (9 SHC)

Select **one** course from the following:

HIS 111, 112, 121, 122, 131, or 132

Select **two** courses from **two** of the following discipline areas:

ECO 251, 252

GEO 111

POL 120, 220

PSY 150, 241, 281

SOC 210, 213, 220

D. Natural Sciences/Mathematics (20 SHC)

Mathematics (12 SHC)

MAT 175, 271, 272

Natural Sciences (8 SHC)

PHY 251, 252

## II. OTHER REQUIRED HOURS (21 SHC)

ACA 122

Pre-major courses (10 SHC)

CSC 134 or 151

MAT 273

MAT 280 or 285

Electives (10 SHC)

Select 4 hours from the list of College transfer Mathematics, Natural Sciences or Computer Science courses.

Select 3 hours from the list of College Transfer Humanities courses.

Select 3 hours from the list of College Transfer Social/Behavioral Sciences Courses

Upon successful completion of the Associate in Science degree, students may apply for admission as juniors to the following universities: ASU, ECU, ECSU, FSU, NCA&T, NCCU, NCSU, UNC-A, UNC-CH, UNC-C, UNC-G, UNC-P, UNC-W, WCU, WSSU.

<sup>\*</sup>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.

<sup>\*\*3</sup> SHC in speech/communication may be substituted for 3 SHC in humanities/fine arts. Speech/Communication may not substitute for the literature requirement.

#### 2+2 ENGINEERING

2+2 Engineering is a partnership between Lenoir Community College and the state-supported Colleges of Engineering in North Carolina. Students complete their first two years at Lenoir Community College and then apply for admission as juniors in engineering to East Carolina University, NC A&T State University, NC State University, or UNC-Charlotte.

Students wishing to pursue 2+2 Engineering should enroll in the Engineering program at Lenoir Community College (A1040D). This curriculum is composed of English, Humanities, Mathematics, Social Science, Natural Sciences, and Computer Science. 2+2 Engineering can prepare students for engineering degrees in Aerospace, Biological, Civil, Construction, Electrical, Mechanical, Textile, and other engineering disciplines. Upon completion of the first two years of coursework, students are awarded an Associate in Science in Engineering.

#### ASSOCIATE IN APPLIED SCIENCE DEGREE, DIPLOMA AND CERTIFICATE PROGRAMS

To qualify for the Associate in Applied Science Degree a student must complete requirements as listed for a particular program.

ENG 111, 112 or 113 or 114 6 semester hours READING 0 semester hours

Prior to graduation, students must demonstrate satisfactory reading skills by placement assessment scores or completion of RED 090. Students who need to complete any portion or portions of the reading sequence (RED 080, 090) should complete this requirement as early in their program as possible.

Social/behavioral sciences courses acceptable for A.A.S. degree programs: ECO 251, 252; GEO 111; HIS 111, 112, 121, 122, 131, 132; POL 120, 220; PSY 150; SOC 210, 213, 220, 225. (Some programs may require specific courses from this group.)

Humanities/fine arts courses acceptable for A.A.S. degree programs: ART 111, 114, 115; ENG 231, 232 or 241, 242; HUM 110, 120, 122; MUS 110; PHI 215; REL 110, 211, 212. (Some programs may require specific courses from this group.)

Natural sciences/mathematics courses acceptable for A.A.S. degree programs: AST 111 and 111A, 151 and 151A, 152 and 152A; BIO 111, 112, 120, 140 and 140A, 161; CHM 151, 152; MAT 115, 161, 162; PHY 110 and 110A, 151, 152. (Some programs may require specific courses from this group.)

Electives: Students in Associate in Applied Science Degree programs may select any associate degree level course(s) to meet elective requirements. These electives should be chosen from disciplines outside the students' area of specialization.

#### SPECIAL PROVISIONS FOR THE A.A.S. DEGREE

Students may use cooperative education internship credit under the work experience and free elective categories but may use no more than eight (8) semester hours toward graduation. Students should refer to the specific requirements of their programs as listed in the College catalog.

#### ASSOCIATE IN APPLIED SCIENCE DEGREE PROGRAMS

Technological developments have helped to produce increasingly complex and sophisticated jobs in business, health, industry, agriculture, and public service. Teamwork by workers has contributed to further technological progress and to a high level of productivity in goods and services. Technicians, as paraprofessional workers, are key members of work teams in modern society.

The College provides a wide variety of opportunities in two year programs for students to engage in technical training.

The programs offered are designed to provide a solid foundation in general education and in the specialized knowledge and skills needed for employment after graduation.

Students are awarded an Associate in Applied Science degree upon completion of these programs of study.

87

#### **DIPLOMA PROGRAMS**

Diploma programs have been established to prepare students for entry-level employment in fields ranging from semiprofessional to semiskilled. These programs are usually of one year or less in duration and courses are generally offered day and evening for part-time and full-time students. When the diploma program is a subpart of an associate degree program, the required courses will be credited to the degree program. Placement assessment and general education are required in these programs.

#### CERTIFICATE PROGRAMS

Certificate programs have been established to prepare students for entry-level employment in fields ranging from semiprofessional to skilled. These programs are from one semester to two semesters in duration and require placement assessment and demonstration of general education competencies. Courses are generally offered day or evening for part-time and full-time students. When the certificate program is a subpart of an associate degree or diploma program, the required courses will, in most cases, be credited to the parent program.

#### SKILLS CERTIFICATE PROGRAMS

Skills certificate programs consist of a series of courses that prepare students for skilled or semiskilled employment opportunities. Study is primarily oriented to the development of manipulative skills and related competencies for use in securing entry-level employment. These programs do not require placement testing or completion of general education courses. To be eligible for enrollment, students must meet the admission requirements; however, to progress academically to certificate, diploma, and degree programs, students must meet the admission and enrollment requirements for certificate, diploma, and degree programs.

#### **ACCOUNTING A25100**

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.

# Accounting Associate in Applied Science Degree A25100 (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	ork	
Title	Class	Lab	Exp.	Credits	
I. General Education Courses: 15 Hours					
A. English: 6 Hours					
ENG 111 Expository Writing	3	0	0	3	
ENG 112 Argument-Based Research	3	0	0	3	
or ENG 114 Professional Research & Reporting	3	0	0	3	
B. Social/Behavioral Sciences: 3 Hours					
ECO 251 Principles of Microeconomics		0	0	3	
C. Humanities/Fine Arts: 3 Hours					
Selected from the list of humanities/fine arts electives for	the Associat	e in Applied	l		
Science degree appearing in the current catalog.					
D. Math/Natural Sciences: 3 Hours					
MAT 115 Mathematical Models	2	2	0	3	
or MAT 161 College Algebra	3	0	0	3	
II. Major Courses: 49 Hours					
A. Core: 23 Hours					
ACC 120 Prin of Financial Acct	3	2	0	4	
ACC 121 Prin of Managerial Acct	3	2	0	4	
ACC 131 Federal Income Taxes	2	2	0	3	
ACC 220 Intermediate Accounting I	3	2	0	4	
BUS 115 Business Law I	3	0	0	3	
CIS 111 Basic PC Literacy	1	2	0	2	
ECO 252 Principles of Macroeconomics	3	0	0	3	

# Accounting A25100 (Continued)

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	Hours		Work	
Title	Class	Lab	Exp.	Credits
B. Other Major Courses: 26 Hours				
1. Required: 20 Hours				
ACC 140 Payroll Accounting	1	2	0	2
ACC 150 Acct Software Appl	1	2	0	2
ACC 221 Intermediate Acct II	3	2	0	4
ACC 225 Cost Accounting	3	0	0	3
BUS 121 Business Math	2	2	0	3
BUS 270 Professional Development	3	0	0	3
CTS 130 Spreadsheet	2	2	0	3
2. Select 6 hours from the following (a maximum of 3	hours of CC	E are allo	wed):	
ACC 240 Gov & Not-for-Profit Acct	3	0	0	3
BUS 110 Introduction to Business	3	0	0	3
BUS 125 Personal Finance	3	0	0	3
BUS 137 Principles of Management	3	0	0	3
BUS 153 Human Resource Management	3	0	0	3
BUS 230 Small Business Management	3	0	0	3
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
COE 131 Co-op Work Experience III	0	0	10	1
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				65

# Accounting Diploma D25100D (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 6 Hours				
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
ECO 251 Principles of Microeconomics	3	0	0	3
II. Major Courses: 32 Hours				
A. Core: 16 Hours				
ACC 120 Prin of Financial Acct	3	2	0	4
ACC 121 Prin of Managerial Acct	3	2	0	4
ACC 131 Federal Income Taxes	2	2	0	3
BUS 115 Business Law I	3	0	0	3
CIS 111 Basic PC Literacy	1	2	0	2

# **Accounting D25100D (Continued)**

	Hours		Work	
Title	Class	Lab	Exp.	Credits
B. Other Major Courses: 16 Hours				
ACC 140 Payroll Accounting	1	2	0	2
ACC 150 Acct Software Appl	1	2	0	2
ACC 225 Cost Accounting	3	0	0	3
ACC 240 Gov & Not-for-Profit Acct	3	0	0	3
BUS 121 Business Math	2	2	0	3
CTS 130 Spreadsheet	2	2	0	3
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				39

Accounting
Small Business Accounting Certificate C25100C1 (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
A. Core: 11 Hours				
ACC 120 Prin of Financial Acct	3	2	0	4
ACC 121 Prin of Managerial Acct	3	2	0	4
ACC 131 Federal Income Taxes	2	2	0	3
B. Other Major Courses: 7 Hours				
ACC 140 Payroll Accounting	1	2	0	2
ACC 150 Acct Software Appl	1	2	0	2
BUS 121 Business Math	2	2	0	3
Total Credits				18

# Accounting

Accounting Essential Certificate\* C25100C2 (Revised 2012\*01) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 14 Hours				
A. Core: 11 Hours				
ACC 120 Prin of Financial Acct	3	2	0	4
ACC 121 Prin of Managerial Acct	3	2	0	4
ACC 131 Federal Income Taxes	2	2	0	3
ECO 252 Prin of Macreconomics	3	0	0	3
Total Cuadita				1.4

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

# AEROSTRUCTURE MANUFACTURING & REPAIR TECHNOLOGY A50450

The Aerostructure Manufacturing & Repair Technology curriculum prepares individuals to fabricate, manufacture, assemble, repair, inspect, test, and manage the construction of aerostructures in an industrial setting. Students will learn about materials, production procedures, planning, costing, plant layout, software, quality control, aviation standards, and aerostructure assemblies. Emphasis will be placed on aerostructure construction techniques, manufacturing processes, composite manufacturing and repair, and Computerized Numerical Control (CNC) machining processes. Employment opportunities for graduates may be found in aerostructure manufacturing and other similar industries as project assembly and repair technicians, quality testers and inspectors, tooling technicians, composites specialist, fabricators, CNC machinists, project managers, and CAD technicians.

# Aerostructure Manufacturing & Repair Technology Associate in Applied Science Degree A50450 (Revised 2010\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Course: 15 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
and ENG 114 Prof. Research & Reporting	3	0	0	3
B. Social/Behavioral Science: 3 Hours				
PSY 150 General Psychology	3	0	0	3
or SOC 210 Introduction to Sociology	3	0	0	3
C. Humanities/Fine Arts: 3 Hours				
3 SHC Selected from the list of humanities and fine of	arts electives fo	or the Assoc	riate	
in Applied Science Degree appearing in the college cat	alog.			
D. Math/Natural Science: 3 Hours				
MAT 121 Algebra/Trigonometry	2	2	0	3
or MAT 161 College Algebra	3	0	0	3
II. Major Courses: 53 Hours				
A. Core: 32 Hours				
ASM 110 Aerostructure Shop Prac	2	2	0	3
ASM 111 Aero Industry Standards	3	0	0	3
ASM 112 Aero Assembly Methods I	1	3	0	2
ASM 113 Aero Assembly Methods II	1	3	0	2
ASM 114 Aerostructure Composites	3	0	0	3
ASM 115 Composite Repair Proc	2	6	0	4
ASM 116 Composite Material Test	2	3	0	3
ASM 210 Computer-Aided 3D Appl	2	3	0	3
ASM 212 Aerostructure Join Mthds	2	3	0	3
ISC 112 Industrial Safety	2	0	0	2
MEC 128 CNC Machining Processes	2	4	0	4
B. Other Major Course: 21 Hours				
1. Required Courses: 12 Hours				
BPR 111 Blue Print Reading	1	2	0	2
BPR 121 Blue Print Reading: Mech	1	2	0	2
ISC 170 Problem Solving Skills	3	0	0	3
MEC 172 Intro to Metallurgy	2	2	0	3
MEC 181 Introduction to CIM	2	0	0	2

# Aerostructure Manufacturing & Repair Technology A50450 (Continued)

·	Hours		Work	
Title	Class	Lab	Exp.	Credits
2. 9 Hours selected from the following				
CIS 110 Introduction to Computers	2	2	0	3
CTS 130 Spreadsheet	2	2	0	3
COE 111-112 Co-op Work Experience	I 0	0	10-20	1-2
COE 121-122 Co-op Work Experience	II 0	0	10-20	1-2
COE 131-132 Co-op Work Experience	III 0	0	10-20	1-2
ISC 136 Productivity Analysis	2	3	0	3
ISC 225 Facility Layout	3	2	0	4
PHY 131 Physics-Mechanics	3	0	0	3
III. Other Required Courses: 1 Hour	•			
ACA 111 College Student Success	1	0	0	1
Total Credits				69

# Aerostructure Manufacturing & Repair Technology Diploma D50450D (Revised 2012\*03) Course and Hour Requirements

(Revised 2012*03)	Course	and	Hour	Kequiremer	ıts
				Hou	ire

	Hours			Work	
Title	Class	Lab	Exp.	Credits	
I. General Education Courses: 6 Hours					
A. English: 3 Hours					
ENG 111 Expository Writing	3	0	0	3	
B. Math/Natural Science: 3 Hours					
MAT 121 Algebra/Trigonometry	2	2	0	3	
or MAT 161 College Algebra	3	0	0	3	
II. Major Courses: 32 Hours					
A. Core:32 Hours					
ASM 110 Aerostructure Shop Prac	2	2	0	3	
ASM 111 Aero Industry Standards	3	0	0	3	
ASM 112 Aero Assembly Methods I	1	3	0	2	
ASM 113 Aero Assembly Methods II	1	3	0	2	
ASM 114 Aerostructure Composites	3	0	0	3	
ASM 115 Composite Repair Proc	2	6	0	4	
ASM 116 Composite Material Test	2	3	0	3	
ASM 210 Computer-Aided 3D Appl	2	3	0	3	
ASM 212 Aerostructure Join Mthds	2	3	0	3	
ISC 112 Industrial Safety	2	0	0	2	
MEC 128 CNC Machining Processes	2	4	0	4	
III. Other Required Courses: 1 Hour					
ACA 111 College Student Success	1	0	0	1	
Total Credits				39	

# Aerostructure Manufacturing & Repair Technology

Composites Specialist Certificate C50450C1 2012\*03 Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 13 Hours				
ASM 110 Aerostructure Shop Prac	2	2	0	3
ASM 114 Aerostructure Composites	3	0	0	3
ASM 115 Composite Repair Proc	2	6	0	4
ASM 116 Composite Material Test	2	3	0	3
Total Credits				13

# Aerostructure Manufacturing & Repair Technology

Assembly Specialist Certificate C50450C2 (Revised 2012\*03) Course and Hour Requirements

		Hours		Work
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 13 Hours				
ASM 110 Aerostructure Shop Prac	2	2	0	3
ASM 111 Aero Industry Standards	3	0	0	3
ASM 112 Aero Assembly Methods I	1	3	0	2
ASM 113 Aero Assembly Methods II	1	3	0	2
ASM 212 Aerostructure Join Mthds	2	3	0	3
<b>Total Credits</b>				13

#### AGRICULTURAL BIOTECHNOLOGY A20110

Program Under Review - Students Are Not Currently Being Accepted

The Agricultural Biotechnology curriculum, which has emerged from molecular biology and chemical engineering, is designed to meet the increasing demands for skilled laboratory technicians in various fields of biological, chemical, and agricultural technology. The curriculum objectives are designed to prepare graduates to serve as a research assistant to a biologist or chemist; as a laboratory technician/ instrumentation technician; or as a quality control/quality assurance technician. The curriculum will also serve to identify/create new areas of opportunity for farmers and other potential clients in rural North Carolina.

Course work emphasizes biology, plant tissue culturing, biotechnology, agriculture, chemistry, horticulture, mathematics, and technical communication.

Graduates may find employment in various areas of industry and government, including research and development, manufacturing, sales, customer services, and production of alternative (bioengineered) crops.

#### Agricultural Biotechnology Associate in Applied Science Degree A20110 (Revised 2010\*03) Course and Hour Requirements

Hours

Work

		nours		VVOIK		
Title		Class	Lab	Exp.	Credits	
I. Ge	neral Education Courses: 15 Ho	ours				
	A. English: 6 Hours					
	ENG111 Expository Writing	3	0	0	3	
	ENG 112 Argument-Based Research	3	0	0	3	
	or ENG 113 Literature-Based Research	3	0	0	3	
	or ENG114 Prof. Research & Report.	3	0	0	3	
	B. Social/Behavioral Sciences: 3 Hours  Selected from the list of social/behavioral scie  Science Degree appearing in the college catalog		ves for the	Associate in	ı Applied	
	C. Humanities/Fine Arts: 3 Hours  Selected from the list of humanities and fine a  Science Degree appearing in the college catalog		s for the A	ssociate in 2	Applied	
	D. Math/Natural Sciences: 3 Hours					
	MAT 161 College Algebra	3	0	0	3	
II. M	lajor Courses: 56 Hours					
	A. Core: 21 Hours					
	BIO 280 Biotechnology	2	3	0	3	
	BTC 150 Bioethics	3	0	0	3	
	BTC 285 Cell Culture	2	3	0	3	
	BTC 286 Immunological Techniques	3	3	0	4	
	BTC 288 Biotech Lab Experience	0	6	0	2	
	HOR 166 Soils & Fertilizers	2	0	0	2 3	
	HOR 168 Plant Propagation	2	0	0	3	

# **Agriculture Biotechnology A20110 (Continued)**

3,		`		,		
		Hours		Work		
Title		Class	Lab	Exp.	Credits	
B. Other Major Courses: 35 Hours						
BIO 111 General Biology I		3	3	0	4	
BIO 112 General Biology II		3	3	0	4	
BIO 120 Introductory Botany		3	3	0	4	
BIO 275 Microbiology		3	3	0	4	
BTC 181 Basic Lab Techniques		3	3	0	4	
BTC 250 Principles of Genetics		3	3	0	3	
CIS 110 Introduction to Compute	ers	2	2	0	3	
*CHM 151 General Chemistry I		3	3	0	4	
*CHM 152 General Chemistry II		3	3	0	4	
COE 111 Co-op Work Experience	e I	0	0	10	1	
III. Other Required Courses: 1 H	lour					
ACA 111 College Student Success		1	0	0	1	
Total Credits					72	

<sup>\*</sup>May substitute CHM 131, 131A, 132 for sequence CHM 151, 152. ECU requires CHM 151, 152.

The 2+2 Agricultural Biotechnology Program is a partnership between Lenoir Community College and East Carolina University in which students complete two years at Lenoir Community College and receive an A.A.S. degree in Agriculture Biotechnology, and then they complete two years at East Carolina University and receive a B.S. in Industrial Technology. Students wanting to pursue a 2+2 in Agricultural Biotechnology must take CHM 151 and CHM 152 in lieu of CHM 131, 131A, and 132. Students must also complete MAT 162 in addition to the required courses in the Agricultural Biotechnology Program.

<sup>\*\*</sup>MAT 162 is required for ECU as an additional course.

#### ASSOCIATE DEGREE NURSING A45110

The Associate Degree Nursing curriculum provides knowledge, skills, and strategies to integrate safety and quality into nursing care, to practice in a dynamic environment, and to meet individual needs which impact health, quality of life, and achievement of potential.

Course work includes and builds upon the domains of healthcare, nursing practice, and the holistic individual. Content emphasizes the nurse as a member of the interdisciplinary team providing safe, individualized care while employing evidence-based practice, quality improvement, and informatics.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN). Employment opportunities are vast within the global health care system and may include positions within acute, chronic, extended industrial, and community health care facilities.

# Associate Degree Nursing Associate in Applied Science Degree A45110\*\* (Revised 2013\*03) Course and Hour Requirements

,	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Course: 26 Hours				
A. English: 6 hours				
ENG 111 Expository Writing	3	0	0	3
ENG 112 Argument-Based Research	3	0	0	3
B. Social/Behavioral Sciences: 6 hours				
PSY 150 General Psychology	3	0	0	3
PSY 241 Developmental Psychology	3	0	0	3
C. Humanities/Fine Arts: 6 Hours				
COM 231 Public Speaking	3	0	0	3
and 3 hours selected from the list of humanities/fine	arts electives	for the Asse	ociate in A	pplied
Science degree appearing in the current catalog.				
D. Natural Science/Mathematics: 8 hours				
BIO 168 Anatomy and Physiology I	3	3	0	4
BIO 169 Anatomy and Physiology II	3	3	0	4
AND		CITI C	004 1	. 1
Students are required to demonstrate con equivalent of MAT 080 or DMA 010–080 p	npetency i	n CHM ( ollmant	194 and	the
curriculum.	rior io eni	oumeni	in inis	
II. Major Courses: 49 Hours A. Core: 43 Hours				
	4	6	6	8
*NUR 111 Intro to Health Concepts	3	0	6	5
*NUR 112 Health-Illness Concepts	3	0	6	5
NUR 113 Family Health Concepts NUR 114 Holistic Health Concepts	3	0	6	5
NUR 211 Health Care Concepts	3	0	6	5
NUR 211 Health Gare Concepts	3	0	6	5
NUR 212 Health System Concepts  NUR 213 Complex Health Concepts	4	3	15	10
B. Other Major Courses: 6 Hours	1	3	13	10
BIO 275 Microbiology	3	3	0	4
*NUR 117 Pharmacology	1	3	0	2
	•	3	Ü	4
III. Other Required Courses: 1 I		0	0	1
ACA 111 College Student Success	1	0	0	1

<sup>\*</sup>LPN Transition students are given credit for these courses. A copy of their current unrestricted license to practice in North Carolina must be on file in Registrar's Office. All health science students must make grades of "A," "B," "C," or "SA" on all applicable course work to prog-

**Total Credits** 

ress each semester and graduate from the program.

<sup>\*\*</sup>A45110RB indicates student is participating in the Regionally Increasing Baccalaureate Nurses (RIBN) Project.

## **AUTOMOTIVE CUSTOMIZING TECHNOLOGY A60190**

The Automotive Customizing Technology curriculum is designed to provide individuals with the competencies needed to work in the automotive industry as entry-level customizing and/or repair technicians. The course work includes multiple skills used to modify existing automotive vehicle components, fabrication techniques to create custom vehicle components, non-structural damage repair, custom painting and refinishing techniques, custom upholstery and glass removal/replacement/custom modifications, and other automotive technology related systems.

Graduates of the curriculum should qualify for entry-level employment opportunities in the automotive customizing and/or repair industry.

# **Automotive Customizing Technology**

Associate in Applied Science Degree A60190 (Revised 2012\*03) Course and Hour Requirements

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	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 15 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 112 Argument-Based Research	3	0	0	3
or ENG 114 Prof Research & Reporting	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
Selected from the list of social/behavioral sciences elect	ives for the As.	sociate in $A$	pplied Scie	ence degree
appearing in the current catalog	_			
C. Humanities/Fine Arts: 3 Hours				
Selected from the list of humanities/fine arts electives f	or the Associat	e in Applie	d Science d	legree
appearing in the current catalog				
D. Math/Natural Sciences: Select 3 Hours from the	e following:			
MAT 121 Algebra/Trigonometry I	2	2	0	3
MAT 161 College Algebra	3	0	0	3
II. Major Courses: 57 Hours				
A. Core: 20 Hours				
AUB 121 Non-Structural Damage I	1	4	0	3
AUC 110 Intro to Auto Customizing	2	2	0	3
AUC 111 Auto Customizing Research	3	0	0	3
AUC 112 Auto Custom Fabrication	2	4	0	4
AUC 115 Glass Customizing Methods	2	4	0	4
AUT 141 Suspension & Steering Systems	2	3	0	3
B. Other Major Courses: 37 Hours				
1. Required Courses: 33 Hours				
AUB 111 Painting & Refinishing I	2	6	0	4
AUB 112 Painting & Refinishing II	2	6	0	4
AUB 114 Special Finishes	1	2	0	2
AUB 122 Non-Structural Damage II	2	6	0	4
AUB 134 Autobody MIG Welding	1	4	0	3
AUC 113 Custom Auto Upholstery	2	6	0	4
AUC 114 Custom Fiberglass Skills	2	4	0	4
AUT 151 Brake Systems	2	3	0	3
AUT 161 Basic Auto Electricity	4	3	0	5

# **Automotive Customizing Technology A60190 (Continued)**

	Hours		Work	
Title	Class	Lab	Exp.	Credits
2. Select 4 Hours from the following:				
AUC 116 Custom Mobile Electronics	2	3	0	3
AUC 117 Custom Airbrushing	2	6	0	4
AUC 285 Auto Custom Design Proj	1	6	0	3
AUT 116 Engine Repair	2	3	0	3
AUT 171 Auto Climate Control	2	4	0	4
AUT 181 Engine Performance 1	2	3	0	3
CIS 110 Introduction to Computers	2	2	0	3
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
MEC 111 Machine Processes I	1	4	0	3
WLD 131 GTAW (TIG) Plate	2	6	0	4
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>				73

# Automotive Customizing Technology Automotive Customizing Technology Diploma D60190D

(Revised 2009\*03) Course and Hour Requirements

(Revised 2005 05) Course and 1100	Hours	cincing	Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 6 Hour	S		•	
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Math/Natural Sciences: Select 3 Hours from the following	owing:			
MAT 121 Algebra/Trigonometry I	2	2	0	3
MAT 161 College Algebra	3	0	0	3
II. Major Courses: 32 Hours				
A. Core: 20 Hours				
AUB 121 Non-Structural Damage I	1	4	0	3
AUC 110 Intro to Auto Customizing	2	2	0	3
AUC 111 Auto Customizing Research	3	0	0	3
AUC 115 Glass Customizing Methods	2	4	0	4
AUC 112 Auto Custom Fabrication	2	4	0	4
AUT 141 Suspension & Steering Systems	2	3	0	3
B. Other Major Courses: 12 Hours selected from the following	llowing:			
AUB 111 Painting & Refinishing I	2	6	0	4
AUB 112 Painting & Refinishing II	2	6	0	4
AUB 114 Special Finishes	1	2	0	2
AUB 122 Non-Structural Damage II	2	6	0	4
AUC 113 Custom Auto Upholstery	2	6	0	4
AUC 114 Custom Fiberglass Skills	2	4	0	4
AUT 161 Basic Auto Electricity	4	3	0	5
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>				39

## **Automotive Customizing Technology**

Automotive Customizing Technology Skills Certificate C60190K1 (Revised 2008\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours			-	
II. Major Courses: 14 Hours				
A. Core: 14 Hours				
AUC 110 Intro to Auto Customizing	2	2	0	3
AUC 111 Auto Customizing Research	3	0	0	3
AUC 112 Auto Custom Fabrication	2	4	0	4
AUC 115 Glass Customizing Methods	2	4	0	4
B. Other Major Courses: 4 Hours				
AUC 114 Custom Fiberglass Skills	2	4	0	4
Total Credits				18

# **Automotive Customizing Technology**

Automotive Bodyshop Skills Certificate C60190K2 (Revised 2008\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours			•	
II. Major Courses: 14 Hours				
A. Core: 3 Hours				
AUB 121 Non-Structural Damage I	1	4	0	3
B. Other Major Courses: 15 Hours				
AUB 111 Painting & Refinishing I	2	6	0	4
AUB 112 Painting & Refinishing II	2	6	0	4
AUB 122 Non-Structural Damage II	2	6	0	4
AUB 134 Autobody MIG Welding	1	4	0	3
Total Credits				18

# **Automotive Customizing Technology**

Automotive Customizing Technology Skills Certificate\* C60190K3 (Revised 2012\*01) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 14 Hours				
A. Core: 14 Hours				
AUC 110 Intro to Auto Customizing	2	2	0	3
AUC 111 Auto Customizing Research	3	0	0	3
AUC 112 Auto Custom Fabrication	2	4	0	4
AUC 115 Glass Customizing Methods	2	4	0	4
Total Credits				14

<sup>\*</sup> This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

#### **AUTOMOTIVE SYSTEMS TECHNOLOGY A60160**

The Automotive Systems Technology curriculum prepares individuals for employment as Automotive Service Technicians. It provides an introduction to automotive careers and increases student awareness of the challenges associated with this fast and ever-changing field.

Classroom and lab experiences integrate technical and academic course work. Emphasis is placed on theory, servicing and operation of brakes, electrical/electronic systems, engine performance, steering/suspension, automatic transmission/transaxles, engine repair, climate control, and manual drive trains.

Upon completion of this curriculum, students should be prepared to take the ASE exam and be ready for full-time employment in dealerships and repair shops in the automotive service industry.

# **Automotive Systems Technology**

Associate in Applied Science Degree A60160 (Revised 2009\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 15 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 112 Argument-Based Research	3	0	0	3
or ENG 114 Prof Research & Reporting	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
Selected from the list of social/behavioral scien	nces electives j	for the Assa	ociate in A	pplied
Science degree appearing in the current catalog.				
C. Humanities/Fine Arts: 3 Hours				
Selected from the list of humanities/fine arts e	lectives for the	e Associate	in Applied	d Science
degree appearing in the current catalog.				
D. Math/Natural Sciences: Select 3 Hours from		_		
MAT 121 Algebra/Trigonometry I	2	2	0	3
or MAT 161 College Algebra	3	0	0	3
II. Major Courses: 55 Hours				
A. Core: 18 Hours				
AUT 141 Suspension & Steering Sys	2	3	0	3
AUT 151 Brake Systems	2	3	0	3
AUT 161 Basic Auto Electricity	4	3	0	5
AUT 181 Engine Performance 1	2	3	0	3
AUT 183 Engine Performance 2	2	6	0	4
B. Other Major Courses: 37 Hours				
1. Required Courses: 29 Hours				
AUT 116 Engine Repair	2	3	0	3
AUT 116A Engine Repair Lab	0	3	0	1
AUT 123 Powertrain Diagn & Serv	1	3	0	2
AUT 141A Suspension & Steering Lab		3	0	1
AUT 151A Brake Systems Lab	0	3	0	1
AUT 163 Adv Auto Electricity	2	3	0	3
AUT 171 Auto Climate Control	2	4	0	4
AUT 221 Auto Transm/Transaxles	2	3	0	3
AUT 221A Auto Transm/Transax Lab AUT 231 Man Trans/Axles/Drtrains	0 2	3 3	0	1 3
AUT 231 Man Trans/Axies/Drtrains AUT 231A Man Trans/Ax/Drtrains L		3	0	3 1
AUT 251A Maii 11ans/AX/ DITIAIIS L	au U	5	U	1

# **Automotive Systems Technology A60160 (Continued)**

	Hours		Work	-
Title	Class	Lab	Exp.	Credits
AUT 283 Adv Auto Electronics	2	2	0	3
			-	-
AUT 285 Intro to Alternative Fuels	2	2	0	3
2. Select 4 Hours from the following:				
AUT 113 Automotive Servicing 1	0	6	0	2
or COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
AUT 213 Automotive Servicing 2	1	3	0	2
or COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
3. Select 4 Hours from the following:				
AUT 110 Intro to Auto Technology	2	2	0	3
AUT 212 Auto Shop Management	3	0	0	3
AUT 281 Adv Engine Performance	2	2	0	3
CIS 110 Introduction to Computers	2	2	0	3
CIS 111 Basic PC Literacy	1	2	0	2
COE 131-132 Co-op Work Experience II	I 0	0	10-20	1-2
COE 211 Co-op Work Experience IV	0	0	10	1
PHY 131 Physics-Mechanics	3	2	0	4
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				71

## Automotive Systems Technology Diploma D60160D

(Revised 2012\*03) Course and Hour Requirements

Title	Hours Class	Lab	Work Exp.	Credits
I. General Education Courses: 6 Hours				
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Math/Natural Sciences: Select 3				
MAT 121 Algebra/Trigonometry I	2	2	0	3
or MAT 161 College Algebra	3	0	0	3
II. Major Courses: 38 Hours				
A. Core: 18 Hours				
AUT 141 Suspension & Steering Sys	2	3	0	3
AUT 151 Brake Systems	2	3	0	3
AUT 161 Basic Automotive Electricity	4	3	0	5
AUT 181 Engine Performance 1	2	3	0	3
AUT 183 Engine Performance 2	2	6	0	4

# **Automotive Systems Technology D60160D (Continued)**

]	Hours		Work	
Title	Class	Lab	Exp.	Credits
B. Other Major Courses: 20 Hours				
1. Required Courses 18 Hours				
AUT 116 Engine Repair	2	3	0	3
AUT 116A Engine Repair Lab	0	3	0	1
AUT 141A Suspension & Steering Lab	0	3	0	1
AUT 151A Brake Systems Lab	0	3	0	1
AUT 171 Auto Climate Control	2	4	0	4
AUT 221 Auto Transm/Transaxles	2	3	0	3
AUT 221A Auto Transm/Transax Lab	0	3	0	1
AUT 231 Man Trans/Axles/Drtrains	2	3	0	3
AUT 231A Man Trans/Ax/Drtrains Lab	0	3	0	1
2. Select 2 Hours from the following:				
AUT 113 Automotive Servicing 1	0	6	0	2
AUT 213 Automotive Servicing 2	1	3	0	2
COE 112 Co-op Work Experience I	0	0	20	2
COE 122 Co-op Work Experience II	0	0	20	2
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>				45

#### Automotive Systems Technology General Automotive Servicing Skills Certificate\* C60160K1

#### (Revised 2012\*01) Course and Hour Requirements

,	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours			•	
II. Major Courses: 16 Hours				
A. Core: 14 Hours				
AUT 141Suspension & Steering Sys	2	4	0	3
AUT 151 Brake Systems	2	2	0	3
AUT 161 Basic Auto Electricity	4	3	0	5
AUT 181 Engine Performance	2	3	0	3
B. Other Major Courses: 2 Hours				
AUT 141A Suspension & Steering Lab	0	3	0	1
AUT 151A Brake Systems Lab	0	3	0	1
Total Credits				15

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

# Automotive Systems Technology Automotive Electronics Skills Certificate

#### (Revised 2008\*03) Course and Hour Requirements

	Hours		V	Vork
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 14 Hours				
A. Core: 4 Hours				
AUT 161 Basic Automotive Electricity	2	6	0	5
B. Other Major Courses: 9 Hours				
AUT 110 Intro to Auto Technology	2	2	0	3
AUT 163 Adv Auto Electricity	2	3	0	3
AUT 283 Adv Auto Electronics	2	2	0	3
Total Credits				14

# Automotive Systems Technology Automotive Engine Performance Skills Certificate C60160K3

#### (Revised 2008\*03) Course and Hour Requirements

	Hours		V	Vork
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours			•	
II. Major Courses: 13 Hours				
A. Core: 6 Hours				
AUT 181 Engine Performance 1	2	3	0	3
AUT 183 Engine Performance 2	2	6	0	4
B. Other Major Courses: 6 Hours				
AUT 110 Intro to Automotive Tech	2	2	0	3
AUT 281 Adv Engine Performance	2	2	0	3
Total Credits				13

# AVIATION MANAGEMENT AND CAREER PILOT TECHNOLOGY A60180

The Aviation Management and Career Pilot Technology curriculum prepares individuals for a variety of aviation and aviation-related careers including the commercial airlines, general aviation, the aerospace industry, the military, and state and federal aviation organizations.

Course work includes fundamentals of flight, aerodynamics, aircraft performance, meteorology, navigation, federal regulations, aviation management, and instrument and commercial ground training. Optional course work includes flight and simulator training or business management training.

Graduates will hold a commercial pilot certificate with an instrument rating or specialize in aviation management.

Graduates may find employment as commercial, corporate, and military pilots, fixed base operators and airport managers, flight instructors, and flight dispatchers.

# Aviation Management and Career Pilot Technology Associate in Applied Science A60180

(Revised 2013\*03) Course and Hour Requirements

(======================================	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 18 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 113 Literature-Based Research	3	0	0	3
or ENG 114 Professional Research & Rep	orting3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
Selected from the list of social/behavioral scien	nces electives for	the Associ	ate in App	lied Science
degree appearing in the current catalog.				
C. Humanities/Fine Arts: 3 Hours				
Selected from the list of humanities/fine arts e	electives for the 2	Associate in	Applied S	Science
degree appearing in the current catalog.				
D. Math/Natural Sciences: 6 Hours				
MAT 121 Algebra/Trigonometry I	2	2	0	3
MAT 122 Algebra/Trigonometry II	2	2	0	3
II. Major Courses: 50 Hours				
A. Core: 22 Hours				
AER 110 Air Navigation	2	2	0	3
AER 111 Aviation Meteorology	3	0	0	3
AER 112 Aviation Law & FARs	2	0	0	2 2 3 3
AER 113 History of Aviation	2	0	0	2
AER 114 Aviation Management	3	0	0	3
AER 150 Private Pilot Flt Theory	2	2	0	
AER 160 Instrument Flight Theory	2	2	0	3
AER 170 Commercial Flight Theory	3	0	0	3
B. Other Major Courses: 28 Hours				
1. Required Courses: 18 Hours				
AER 213 Avionics	2	0	0	2
AER 215 Flight Safety	3	0	0	3
AER 216 Engines & Systems	2	2	0	3
AER 217 Air Transportation	3	0	0	3
CIS 110 Intro to Computers	2	2	0	3
PHY 131 Physics–Mechanics	3	2	0	4

# **Aviation Management and Career Pilot Technology A60180 (Continued)**

	Hours		Work	
Title	Class	Lab	Exp.	Credits
2. At least 6 hours selected from the following:				
* Flight Option				
AER 151 Flight-Private Pilot	0	3	0	1
AER 161 Flight-Instrument Pilot	0	6	0	2
AER 171 Flight-Commercial Pilot	0	6	0	3
* Management Option				
BUS 137 Principles of Management	3	0	0	3
BUS 153 Human Resource Management	3	0	0	3
BUS 230 Small Business Management	3	0	0	3
3. 4 hours selected from the following:				
AER 115 Flight Simulator	0	2	0	1
AER 211 Air Traffic Control	2	0	0	2
AER 218 Human Factors in Aviation	2	0	0	2
AER 285 Flight-Multi-Engine	0	3	0	1
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
COE 131-132 Co-op Work Experience III	2	2	0	3
CTS 130 Spreadsheet	2	2	0	3
DBA 110 Database Concepts	2	3	0	3
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				69

# **Aviation Management and Career Pilot Technology**

Aviation Management Diploma D60180D1

(Revised 2009\*03) Course and Hour Requirements

	Hours		Work		
Title	Class	Lab	Exp.	Credits	
I. General Education Courses: 6 Hours					
English: 3 Hours					
ENG 111 Expository Writing	3	0	0	3	
Math/Natural Sciences: 3 Hours					
MAT 121 Algebra/Trigonometry I	2	2	0	3	
II. Major Courses: 34 Hours					
A. Core: 22 Hours					
AER 110 Air Navigation	2	2	0	3	
AER 111 Aviation Meteorology	3	0	0	3	
AER 112 Aviation Law and FARs	2	0	0	2	
AER 113 History of Aviation	2	0	0	2	
AER 114 Aviation Management	3	0	0	3	
AER 150 Private Pilot Flt Theory	2	2	0	3	
AER 160 Instrument Flight Theory	2	2	0	3	
AER 170 Commercial Flight Theory	3	0	0	3	

# Aviation Management and Career Pilot Technology D60180D1 (Continued)

	Hours		Work	
Title	Class	Lab	Exp.	Credits
B. Other Major Courses: 12 Hours selected from the	ne followin	ng		
(a maximum of 4 hours of COE is allowed):				
BUS 137 Principles of Management	3	0	0	3
BUS 153 Human Resource Management	3	0	0	3
BUS 230 Small Business Management	3	0	0	3
CIS 110 Introduction to Computers	2	2	0	3
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
COE 131-132 Co-op Work Experience III	0 1	0	10-20	1-2
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				41

# **Aviation Management and Career Pilot Technology**

Career Pilot Technology Diploma D60180D2

(Revised 2009\*03) Course and Hour Requirements

•	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 6 Hours				
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Math/Natural Sciences: 3 Hours				
MAT 121 Algebra/Trigonometry I	2	2	0	3
II. Major Courses: 34 Hours				
A. Core: 22 Hours				
AER 110 Air Navigation	2	2	0	3
AER 111 Aviation Meteorology	3	0	0	3
AER 112 Aviation Law and FARs	2	0	0	2
AER 113 History of Aviation	2	0	0	2
AER 114 Aviation Management	3	0	0	3
AER 150 Private Pilot Flt Theory	2	2	0	3
AER 160 Instrument Flight Theory	2	2	0	3
AER 170 Commercial Flight Theory	3	0	0	3
B. Other Major Courses: 12 Hours				
AER 151 Flight-Private Pilot	0	3	0	1
AER 161 Flight-Instrument Pilot	0	6	0	2
AER 171 Flight-Commercial Pilot	0	6	0	3
AER 215 Flight Safety	3	0	0	3
AER 216 Engines & Systems	2	2	0	3
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				41

# **Aviation Management and Career Pilot Technology**

Private Pilot Certificate C60180C1

(Revised 2012*03	Course and Hour	Requirements
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(				
	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 13 Hours				
A. Core: 9 Hours				
AER 110 Air Navigation	2	2	0	3
AER 111 Aviation Meteorology	3	0	0	3
AER 150 Private Pilot Flt Theory	2	2	0	3
B. Other Major Courses: 4 Hours				
AER 151 Flight-Private Pilot	0	3	0	1
AER 215 Flight Safety	3	0	0	3
Total Credits				13

# **Aviation Management and Career Pilot Technology**

**Commercial Pilot Certificate C60180C2** 

(Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 17 Hours				
A. Core: 8 Hours				
AER 111 Aviation Meteorology	3	0	0	3
AER 112 Aviation Law and FARs	2	0	0	2
AER 170 Commercial Flight Theory	3	0	0	3
B. Other Major Courses: 9 Hours				
AER 151 Flight-Private Pilot	0	3	0	1
AER 161 Flight-Instrument Pilot	0	6	0	2
AER 171 Flight-Commercial Pilot	0	6	0	3
AER 215 Flight Safety	3	0	0	3
Total Credits				17

## **Aviation Management and Career Pilot Technology**

Instrument Pilot Certificate C60180C3

(Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 14 Hours				
A. Core: 8 Hours				
AER 111 Aviation Meteorology	3	0	0	3
AER 112 Aviation Law and FARs	2	0	0	2
AER 160 Instrument Flight Theory	2	2	0	3
B. Other Major Courses: 6 Hours				
AER 151 Flight-Private Pilot	0	3	0	1
AER 161 Flight-Instrument Pilot	0	6	0	2
AER 215 Flight Safety	3	0	0	3
Total Credits				14

### Aviation Management and Career Pilot Technology Private Pilot Essentials\* C60180C4

(Revised 2012\*01) Course and Hour Requirements

,	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 14 Hours				
AER 110 Air Navigation	2	2	0	3
AER 111 Aviation Meteorology	3	0	0	3
AER 112 Aviation Law & FARs	2	0	0	2
AER 114 Aviation Management	3	0	0	3
AER 150 Private Pilot Flt Theory	2	2	0	3
Total Credits				14

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

#### **Aviation Management and Career Pilot Technology**

**Aviation Management Certificate C60180C5** 

(Revised 2013\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 13 Hours				
A. Core: 7 Hours				
AER 112 Aviation Law and FARs	2	0	0	2
AER 113 History of Aviation	2	0	0	2
AER 114 Aviation Management	3	0	0	3
B. Other Major Courses: 6 Hours				
AER 215 Flight Safety	3	0	0	3
AER 217 Air Transportation	3	0	0	3
Total Credits				13

#### **BASIC LAW ENFORCEMENT TRAINING C55120**

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

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

Students must successfully complete and pass all units of study which include the certification examination mandated by the North Carolina Criminal Justice Education and Training Standards Commission and the North Carolina Sheriffs' Education and Training Standards Commission to receive a certificate.

#### **Basic Law Enforcement Training**

Certificate C55120

(Revised 2006\*01) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
CJC 100 Basic Law Enforcement Trn	9	30	0	19
Total Credits				19

Students successfully completing a Basic Law Enforcement Training course since 1985 accredited by the North Carolina Criminal Justice Education and Training Standards Commission and the North Carolina Sheriffs' Education and Training Standards Commission will receive credit for CJC 131 (Criminal Law), CJC 132 (Court Procedures & Evidence), CJC 221 (Investigative Principles), and CJC 231 (Constitutional Law) toward the Associate in Applied Science degree in Criminal Justice Technology. Each student must have successfully passed the Commissions' comprehensive certification examination.

#### **BUSINESS ADMINISTRATION A25120**

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.

# Business Administration Associate in Applied Science Degree A25120 (Revised 2012\*03) Course and Hour Requirements

		Hours		Work	
Title		Class	Lab	Exp.	Credits
I. Gener	ral Education Courses: 15 Hours				
1	A. English: 6 Hours				
	ENG 111 Expository Writing	3	0	0	3
	ENG 112 Argument-Based Research	3	0	0	3
	or ENG114 Professional Research & Reporti	ng 3	0	0	3
]	B. Social/Behavioral Sciences: 3 Hours				
	ECO 252 Principles of Macroeconomics	3	0	0	3
(	C. Humanities/Fine Arts: 3 Hours				
	Selected from the list of humanities/fine arts electives for	the Associate	e in Applie	d	
	Science degree appearing in the current catalog.				
]	D. Math/Natural Sciences: 3 Hours				
	MAT 115 Mathematical Models	2	2	0	3
	or MAT 161 College Algebra	3	0	0	3
II. Majo	or Courses: 49 Hours				
•	A. Core: 18 Hours				
	ACC 120 Prin of Financial Acct	3	2	0	4
	BUS 115 Business Law I	3	0	0	3
	<b>BUS 137 Principles of Management</b>	3	0	0	3
	CIS 111 Basic PC Literacy	1	2	0	2
	ECO 251 Principles of Microeconomics	3	0	0	3
	MKT 120 Principles of Marketing	3	0	0	3
]	B. Other Major Courses: 31 Hours				
	1. Required: 25 Hours				
	ACC 121 Prin of Managerial Acct	3	2	0	4
	ACC 131 Federal Income Taxes	2	2	0	3
	BUS 116 Business Law II	3	0	0	3
	BUS 121 Business Math	2	2	0	3
	BUS 153 Human Resource Management		0	0	3
	BUS 225 Business Finance	2	2	0	3
	BUS 270 Professional Development	3	0	0	3
	LOG 110 Introduction to Logistics	3	0	0	3

# Business Administration A25120 (Continued)

	Hours		Work	
Title	Class	Lab	Exp.	Credits
2. Select 6 hours from the following				
(a maximum of 3 hours of COE are allowed):				
ACC 140 Payroll Accounting	1	2	0	2
BUS 110 Introduction to Business	3	0	0	3
BUS 125 Personal Finance	3	0	0	3
BUS 135 Principles of Supervision	3	0	0	3
BUS 152 Human Relations	3	0	0	3
BUS 230 Small Business Management	3	0	0	3
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
COE 131 Co-op Work Experience III	0	0	10	1
CTS 130 Spreadsheet	2	2	0	3
MKT 121 Retailing	3	0	0	3
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				65

#### **Business Administration**

Human Resource Management Certificate C25120C1 (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
A. Core: 3 Hours				
BUS 137 Principles of Management	3	0	0	3
B. Other Major Courses: 15 Hours				
BUS 115 Business Law I	3	0	0	3
BUS 152 Human Relations	3	0	0	3
BUS 153 Human Resource Management	3	0	0	3
BUS 230 Small Business Management	3	0	0	3
BUS 270 Professional Development	3	0	0	3
Total Credits				18

#### **Business Administration**

#### **Small Business Certificate C25120C2**

(Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours II. Major Courses: 18 Hours				
A. Core: 10 Hours				
ACC 120 Prin of Financial Acct	3	2	0	4
BUS 115 Business Law I	3	0	0	3
MKT 120 Principles of Marketing	3	0	0	3
B. Other Major Courses: 8 Hours				
ACC 140 Payroll Accounting	1	2	0	2
BUS 153 Human Resource Management	3	0	0	3
BUS 230 Small Business Management	3	0	0	3
Total Credits				18

#### **Business Administration**

Business Administration Essential Certificate\* C25120C3 (Revised 2012\*01) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 16 Hours				
A. Core: 13 Hours				
ACC 120 Prin of Financial Accounting	3	2	0	4
BUS 115 Business Law	3	0	0	3
BUS 137 Principles of Management	3	0	0	3
MKT 120 Intro to Marketing	3	0	0	3
B. Other Major Courses: 3 Hours				
BUS 110 Intro to Business	3	0	0	3
Total Credits				16

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

#### BUSINESS ADMINISTRATION MARKETING AND RETAILING CONCENTRATION A2512F

Marketing and Retailing is a concentration under the curriculum title of Business Administration. This curriculum is designed to provide students with fundamental skills in marketing and retailing.

Course work includes marketing, retailing, merchandising, selling, advertising, computer technology, and management.

Graduates should qualify for marketing positions within manufacturing, retailing, and service organizations.

### **Business Administration Marketing and Retailing Concentration**

Associate in Applied Science Degree A2512F (Revised 2013\*03) Course and Hour Requirements

(1001304 1010 00) 304130 4144 11041	Hours	011101105	Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 15 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 112 Argument-Based Research	3	0	0	3
or ENG114 Professional Research & Reporti	ng 3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
ECO 252 Principles of Macroeconomics	3	0	0	3
C. Humanities/Fine Arts: 3 Hours				
Selected from the list of humanities/fine arts elected	ives for the	Associate in	Applied	
Science degree appearing in the current catalog.				
D. Math/Natural Sciences: 3 Hours				
MAT 115 Mathematical Models	2	2	0	3
or MAT 161 College Algebra	3	0	0	3
II. Major Courses: 51 Hours				
A. Core: 18 Hours				
ACC 120 Prin of Financial Acct	3	2	0	4
BUS 115 Business Law I	3	0	0	3
BUS 137 Principles of Management	3	0	0	3
CIS 111 Basic PC Literacy	1	2	0	2
ECO 251 Principles of Microeconomics	3	0	0	3
MKT 120 Principles of Marketing	3	0	0	3
B. Concentration: 15 Hours				
MKT 122 Visual Merchandising	3	0	0	3
MKT 123 Fundamentals of Selling	3	0	0	3
MKT 220 Advertising and Sales Promotion		0	0	3
MKT 225 Marketing Research	3	0	0	3
MKT 227 Marketing Applications	3	0	0	3
C. Other Major Courses: 18 Hours				
1. Required: 15 Hours				
BUS 116 Business Law II	3	0	0	3
BUS 121 Business Math	2	2	0	3
BUS 270 Professional Development	3	0	0	3
LOG 110 Introduction to Logistics	3	0	0	3
MKT 121 Retailing	3	0	0	3

#### **Business Administration Marketing and Retailing Concentration A2512F (Continued)**

Title	Hours Class	Lab	Work Exp.	Credits
2. Select 3 hours from the following:				
BUS 110 Introduction to Business	3	0	0	3
BUS 135 Principles of Supervision	3	0	0	3
BUS 152 Human Relations	3	0	0	3
BUS 230 Small Business Management	3	0	0	3
COE 111-112 Co-op Work Experience	e I 0	0	10-20	1-2
COE 121-122 Co-op Work Experience	e II 0	0	10-20	1-2
COE 131 Co-op Work Experience III	0	0	10	1
CTS 130 Spreadsheet	2	2	0	3
LOG 125 Transportation Logistics	3	0	0	3
MKT 232 Social Media Marketing	3	2	0	4
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				67

### **Business Administration** Marketing and Retailing Concentration Marketing and Retailing Concentration Certificate C2512FC

(Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 17 Hours				
A. Core: 5 Hours				
CIS 111 Basic PC Literacy	1	2	0	2
MKT 120 Principles of Marketing	3	0	0	3
B. Concentration: 6 Hours				
MKT 123 Fundamentals of Selling	3	0	0	3
MKT 220 Advertising and Sales Promotion	ı 3	0	0	3
C. Other Major Courses: 6 Hours				
BUS 121 Business Math	2	2	0	3
MKT 121 Retailing	3	0	0	3
Total Credits				17

### **Business Administration** Marketing and Retailing Concentration Marketing Essential Certificate\* C2512FC2

(Revised 2012\*01) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 16 Hours				
A. Core: 13 Hours				
ACC 120 Prin of Financial Accounting	3	2	0	4
BUS 137 Prin of Management	3	0	0	3
ECO 251 Prin of Microeconomics	3	0	0	3
MKT 120 Principles of Marketing	3	0	0	3
B. Other Major Courses: 3 Hours				
MKT 121 Retailing	3	0	0	3
<b>Total Credits</b>				16

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

#### Business Administration Public Administration A2512H

Public Administration is a concentration under the curriculum title of Business Administration. This curriculum prepares students for entry into management positions in state/local government and not-for-profit organizations, provides education for current employees, and informs citizens of governmental functions.

Course work includes studies and practical application in personnel administration, decision making, ethics, organizational theories, and budgetary and other governmental issues. Emphasis is placed on building analytical skills, stimulating moral imagination, and recognizing the discretionary power of the administrator's role. Through acquisition of knowledge and skills, individuals should be able to perform governmental activities. By developing personal competencies and qualities, graduates will be eligible for employment in the public administration profession.

### **Business Administration Public Administration**

Associate in Applied Science Degree A2512H (Revised 2012\*03) Course and Hour Requirements

Title	Hours Class	Lab	Work Exp.	Credits
I. General Education Courses: 15 Hours				
A. English (6 Hours)				
ENG 111 Expository Writing	3	0	0	3
ENG 112 Argument-Based Research	3	0	0	3
or ENG 114 Prof Research & Reporting	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
ECO 252 Principles of Macroeconomics	3	0	0	3
C. Humanities/Fine Arts: 3 Hours				
Selected from the list of humanities/fine arts elec	tives for the 1	Associate in	Applied	
Science degree appearing in the current catalog.				
D. Math/Natural Sciences: Select 3 Hours from t	he followin	ıg:		
MAT 115 Mathematical Models	2	2	0	3
or MAT 161 College Algebra	3	0	0	3
II. Major Courses: 49 Hours				
A. Core: 18 Hours				
ACC 120 Prin of Financial Acct	3	2	0	4
BUS 115 Business Law I	3	0	0	3
BUS 137 Principles of Management	3	0	0	3
CIS 111 Basic PC Literacy	1	2	0	2
ECO 251 Principles of Microeconomics	3	0	0	3
MKT 120 Principles of Marketing	3	0	0	3
B. Concentration Courses: 12 Hours				
PAD 151 Intro to Public Admin	3	0	0	3
PAD 152 Ethics in Government	3	0	0	3
PAD 251 Public Finance & Budgeting	3	0	0	3
PAD 252 Public Policy Analysis	3	0	0	3
C.Other Major Courses: 19 Hours				
1. Required: 13 Hours				
ACC 121 Prin of Managerial Acct	3	2	0	4
ACC 240 Gov & Not-for-Profit Acct	3	0	0	3
BUS 270 Professional Development	3	0	0	3
POL 120 American Government	3	0	0	3

## Business Administration Public Administration A2512H (Continued)

	Hours		Work	
Title	Class	Lab	Exp.	Credits
2. Select 6 hours from the following (maximum of	3 hours from	m COE)		
BUS 110 Introduction to Business	3	0	0	3
BUS 116 Business Law II	3	0	0	3
BUS 152 Human Relations	3	0	0	3
BUS 153 Human Resource Management	3	0	0	3
LOG 110 Intro to Logistics	3	0	0	3
PAD 253 Intro to Urban Planning	3	0	0	3
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>				65

### **Business Administration Public Administration Concentration**

Public Administration and Workplace Certificate\* C2512HC1 (Revised 2013\*01) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 15 Hours				
B. Concentration: 12 Hours				
PAD 151 Intro to Public Administration	3	0	0	3
PAD 152 Ethics in Government	3	0	0	3
PAD 251 Public Finance and Budgeting	3	0	0	3
PAD 252 Public Policy Analysis	3	0	0	3
C. Other Major Hours: 3 Hours				
PAD 253 Intro to Urban Planning	3	0	0	3
<b>Total Credits</b>				15

### **Business Administration Public Administration Concentration**

Public Administration Essential Certificate\* C2512HC2 (Revised 2012\*01) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 16 Hours				
A. Core: 13 Hours				
ACC 120 Prin of Financial Accounting	3	2	0	4
BUS 115 Business Law	3	0	0	3
BUS 137 Princ of Management	3	0	0	3
ECO 251 Prin of Microeconomics	3	0	0	3
B. Other Major Courses: 3 Hours				
PAD 151 Intro to Public Administration	3	0	0	3
Total Credits				16

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

#### **COMPUTER ENGINEERING TECHNOLOGY A40160**

#### Pathway: Engineering and Technology

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.

#### **Computer Engineering Technology**

Associate in Applied Science Degree A40160 (Revised 2013\*03) Course and Hour Requirements

Hours

Work

Credits
3
3
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3
3 3 4 4 4 4 4

# Computer Engineering Technology A40160 (Continued)

			Hours		Work	
Title			Class	Lab	Exp.	Credits
В.	Other Maj	or Hours: 26 hours				
	1. Re	equired Courses: 20 Hours				
		CET 110 Intro to CET	0	3	0	1
		CET 211 Computer Upgrade/Repair II	2	3	0	3
		ELC 128 Intro to PLC	2	3	0	3
		MAT 122 Algebra/Trigonometry II	2	2	0	3
	or	MAT 162 College Trigonometry	3	0	0	3
		PHY 131 Physics-Mechanics	3	2	0	4
		NET 125 Networking Basics	1	4	0	3
		NET 126 Routing Basics	1	4	0	3
	2.6 l	nours selected from the following (maximum	n of 3 hou	rs from N	ET):	
		CET 150 Computer Forensics I	2	3	0	3
		CET 250 Computer Forensics II	2	3	0	3
		COE 111-112 Co-op Work Exp. I	0	0	10-20	1-2
		COE 121-122 Co-op Work Exp II	0	0	10-20	1-2
		COE 131-132 Co-op Work Exp III	0	0	10-20	1-2
		COE 211 Co-op Work Exp IV	0	0	10	1
		CSC 134 C++ Programming	2	3	0	3
		CSC 151 JAVA Programming	2	3	0	3
		ELN 231 Industrial Controls	2	3	0	3
		NET 113 Home Automation Sys	2	2	0	3
		NET 225 Routing & Switching I	1	4	0	3
		NET 226 Routing & Switching II	1	4	0	3
III. C	ther Re	quired Courses: 1 Hour				
		ACA 111 College Student Success	1	0	0	1
		<b>Total Credits</b>				67

## Computer Engineering Technology Diploma D40160D

(Revised 2013\*03) Course and Hour Requirements

ricquir	CILICITES		
Hours		Work	
Class	Lab	Exp.	Credits
3	0	0	3
ne followir	ng:		
2	2	0	3
3	0	0	3
2	3	0	3
3	3	0	4
3	3	0	4
3	3	0	4
3	3	0	4
2	2	0	3
	Hours Class 3 ne followir 2 3 3 3 3 3 3	Class Lab  3 0 one following: 2 2 3 0  2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Hours Class Lab Exp.  3 0 0 ne following: 2 2 0 3 0 0  2 3 0 0  2 3 0 0  2 3 0 0  3 3 0 0  3 3 0 0  3 3 0 0  3 3 0 0

# Computer Engineering Technology D40160D (Continued)

	Hours		Work	
Title	Class	Lab	Exp.	Credits
B. Other Major Courses: 13 Hours				
1. Required: 17				
CET 110 Intro to CET	0	3	0	1
CET 211 Computer Upgrade/Repair II	2	3	0	3
NET 125 Networking Basics	1	4	0	3
NET 126 Routing Basics	1	4	0	3
2. Select 3 hours from the following:				
ATR 211 Robotic Programming	2	3	0	3
CET 150 Computer Forensics I	2	3	0	3
CET 250 Computer Forensics II	2	3	0	3
COE 111-112 Co-op Work Exp. I	0	0	10-20	1-2
COE 121-122 Co-op Work Exp II	0	0	10-20	1-2
COE 131-132 Co-op Work Exp III	0	0	10-20	1-2
COE 211 Co-op Work Exp IV	0	0	10	1
CSC 134 C++ Programming	2	3	0	3
CSC 151 JAVA Programming	2	3	0	3
ELC 128 Intro to PLC	2	3	0	3
ELN 231 Industrial Controls	2	3	0	3
NET 113 Home Automation Sys	2	2	0	3
NET 225 Routing & Switching I	1	4	0	3
NET 226 Routing & Switching II	1	4	0	3
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				42

#### **Computer Engineering Technology**

Personal Computer Specialist Certificate C40160C1 (Revised 2013\*03) Course and Hour Requirements

, , ,	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
A. Core: 14 Hours				
CET 111 Computer Upgrade/Repair I	2	3	0	3
ELN 133 Digital Electronics	3	3	0	4
ELN 232 Intro to Microprocessors	3	3	0	4
NOS 110 Operating Systems Concepts	2	2	0	3
B. Other Major Course: 4 Hours				
CET 110 Intro to CET	0	3	0	1
CET 211 Computer Upgrade/Repair II	2	3	0	3
<b>Total Credits</b>				18

#### **Computer Engineering Technology**

Networking Specialist Certificate C40160C2 (Revised 2013\*03) Course and Hour Requirements

,	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
A. Core: 6 Hours				
CET 111 Computer Upgrade/Repair I	2	3	0	3
NOS 110 Operating System Concepts	2	2	0	3
B. Other Major Course: 12 Hours				
NET 125 Networking Basics	1	4	0	3
NET 126 Routing Basics	1	4	0	3
NET 225 Routing & Switching I	1	4	0	3
NET 226 Routing & Switching II	1	4	0	3
Total Credits				18

#### **Computer Engineering Technology**

Electronics Technician Specialist Certificate C40160C3 (Revised 2013\*03) Course and Hour Requirements

,	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 17 Hours				
A. Core: 6 Hours				
ELC 131 Circuit Analysis	3	3	0	4
ELN 131 Analog Electronics I	3	3	0	4
ELN 133 Digital Electronics	3	3	0	4
ELN 232 Intro to Microprocessors	3	3	0	4
B. Other Major Courses: 1 Hour				
CET 110 Intro to CET	0	3	0	1
Total Credits				17

#### **Computer Engineering Technology**

Programmable Logic Controller Certificate C40160C4 (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 17 Hours				
A. Core: 11 Hours				
CET 111 Computer Upgrade/Repair I	2	3	0	3
ELC 131 Circuit Analysis	3	3	0	4
ELN 133 Digital Electronics	3	3	0	4
B. Other Major Courses: 6 Hours				
ELC 128 Intro to PLC	2	3	0	3
ELN 231 Industrial Controls	2	3	0	3
Total Credits				17

#### **Computer Engineering Technology**

Computer Hardware Certificate\* C40160C5
(Revised 2013\*01) Course and Hour Requirements

,	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 16 Hours				
A. Core: 15 Hours				
CET 111 Computer Upgrade/Repair I	2	3	0	3
ELC 131 Circuit Analysis	3	3	0	4
ELN 133 Digital Electronics	3	3	0	4
ELN 232 Intro to Microprocessors	3	3	0	4
B. Other Major Courses: 1 Hours				
CET 110 Intro to CET	0	3	0	1
<b>Total Credits</b>				16

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

#### **Computer Engineering Technology**

Electronics Certificate\* C40160C6 (Revised 2013\*01) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 13 Hours				
A. Core: 12 Hours				
ELC 131 Circuit Analysis	3	3	0	4
ELN 131 Analog Electronics I	3	3	0	4
ELN 133 Digital Electronics	3	3	0	4
B. Other Major Courses: 1 Hour				
CET 110 Intro to CET	0	3	0	1
<b>Total Credits</b>				13

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

#### **COMPUTER INFORMATION TECHNOLOGY A25260**

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

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.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to manage information. Graduates should be prepared to sit for industry-recognized certification exams.

#### **Computer Information Technology**

Associate in Applied Science Degree A25260 (Revised 2013\*03) Course and Hour Requirements

XA7. ..1

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 15 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 112 Argument-Based Research	3	0	0	3
or ENG 113 Literature-Based Research	3	0	0	3
or ENG 114 Professional Research and Report	ing 3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
Selected from the list of social/behavioral science	s electives for	r the Associ	ate in App	lied Science
degree appearing in the current catalog.				
C. Humanities/Fine Arts: 3 Hours				
Selected from the list of humanities/fine arts elec	tives for the 1	Associate in	Applied S	Science
degree appearing in the current catalog.				
D. Math/Natural Sciences: 3 Hours				
MAT 161 College Algebra	3	0	0	3
II. Major Courses: 53 Hours				
A. Core: 35 Hours				
CIS 110 Introduction to Computers	2	2	0	3
or CIS 111 Basic PC Literacy	1	2	0	2
CIS 115 Intro to Programming and Logic		3	0	3
CTS 115 Info Sys Business Concepts	3	0	0	3
CTS 120 Hardware/Software Support	2	3	0	3
CTS 285 Systems Analysis & Design	3	0	0	3
CTS 289 System Support Project	1	4	0	3
DBA 110 Database Concepts	2	3	0	3
NET 110 Networking Concepts	2	2	0	3
NOS 110 Operating System Concepts	2	3	0	3
NOS 130 Windows Single User	2	2	0	3
NOS 230 Windows Admin I	2	2	0	3
SEC 110 Security Concepts	2	2	0	3

### **Computer Information Technology A25260 (Continued)**

		Hours		Work	
Title		Class	Lab	Exp.	Credits
	Major Courses: 18 Hours				
	uired: 12 Hours	0	0	0	0
	CSC 139 Visual BASIC Programming	2	3	0	3
	CTS 125 Presentation Graphics	2	2	0	3
	CTS 130 Spreadsheet	2	2	0	3
	NOS 120 Linux/UNIX Single User	2	2	0	3
	ct 6 hours from the following	0	0	10.20	1.0
	COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
	COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
	COE 131-132 Co-op Work Experience III		0	10-20	1-2
	CSC 134 C++ Programming	2	3	0	3
	CSC 151 Java Programming	2	3	0	3
	NET 111 Internetwk Arch & Design	2	2	0	3
	NOS 220 Linux/UNIX Admin I	2	2	0	3
	WEB 110 Internet/Web Fundamentals	2	2 2	0	3
	WEB 115 Web Markup and Scripting	2	2	0	3
	uired Courses: 1 Hour				
	ACA 111 College Student Success	1	0	0	1
	Total Credits				69
(	Computer Information	<b>Techn</b>	ology	7	
	Diploma D25260D		10105)		
	(Revised 2013*03) Course and Hour	Requir	ements		
	(	Hours		Work	
Title		Class	Lab	Exp.	Credits
	ucation Courses: 6 Hours			1	
A. Englis	h: 3 Hours				
	ENG 111 Expository Writing	3	0	0	3
	Behavioral Sciences: 3 Hours	al action as fo	u tha Assasi	ato in 166	liad Caiamaa
	Selected from the list of social/behavioral sciences degree appearing in the current catalog	etectives jo	r ine Associa	ue ın App	nea Science
	rses: 35 Hours				
	29 Hours				
	CIS 110 Introduction to Computers	2	2	0	3
	CIS 111 Basic PC Literacy	1	2	0	2
	CIS 115 Intro to Programming and Logic	2	3	0	3
	CTS 115 Info Sys Business Concepts	3	0	0	3
	CTS 120 Hardware/Software Support	2	3	0	3
	DBA 110 Database Concepts	2	3	0	3
	NET 110 Networking Concepts	2 2	2 3	0	3
	NOS 110 Operating System Concepts			0	
	NOS 130 Windows Single User NOS 230 Windows Admin I	2 2	2 2	0	3 3
	SEC 110 Security Concepts	2	2	0	3
	Major Courses: 6 Hours	-	-	Ü	,
	CSC 139 Visual BASIC Programming	2	3	0	3
III Other Rec	NOS 120 Linux/UNIX Single User	2	2	0	3
m. Omer neg	uired Courses: 1 Hour				
•	NOS 120 Linux/UNIX Single User [uired Courses: 1 Hour ACA 111 College Student Success Total Credits	2 1	0	0	3 1 <b>42</b>

#### **Computer Information Technology**

Basic Computer Programming Certificate C25260C1 (Revised 2012\*03) Course and Hour Requirements

,	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
A. Core: 6 Hours				
CIS 110 Introduction to Computers	2	2	0	3
CIS 115 Intro to Prog & Logic	2	3	0	3
B. Other Major Courses: 12 Hours				
CSC 134 C++ Programming	2	3	0	3
CSC 139 Visual Basic Programming	2	3	0	3
CSC 151 Java Programming	2	3	0	3
WEB 115 Web Markup & Scripting	2	2	0	3
Total Credits				18

#### **Computer Information Technology**

Basic Web Design Certificate\* C25260C3

(Revised 2013\*01) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
A. Core: 12 Hours				
CIS 110 Introduction to Computers	2	2	0	3
CIS 115 Intro to Prog & Logic	2	3	0	3
DBA 110 Database Concepts	2	3	0	3
SEC 110 Security Concepts	2	2	0	3
B. Other Major Courses: 6 Hours				
WEB 110 Internet and Web Fundamentals	s 2	2	0	3
WEB 115 Web Markup & Scripting	2	2	0	3
Total Credits				18

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

#### **Computer Information Technology**

Hardware/Software Applications Skills Certificate C25260K1 (Revised 2006\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 17 Hours				
A. Core: 11 Hours				
CIS 110 Introduction to Computers	2	2	0	3
or CIS 111 Basic PC Literacy	1	2	0	2
CTS 120 Hardware/Software Support	2	3	0	3
DBA 110 Database Concepts	2	3	0	3
NOS 110 Operating System Concepts	2	3	0	3
B. Other Major Courses: 6 Hours				
CTŠ 125 Presentation Graphics	2	2	0	3
CTS 130 Spreadsheet	2	2	0	3
Total Credits				17

#### Computer Information Technology Small Office Network Skills Certificate C25260K2

#### Small Office Network Skills Certificate C2526OK2 (2011\*03) Course and Hour Requirements

,	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
A. Core: 15 Hours				
CIS 110 Introduction to Computers	2	2	0	3
NET 110 Networking Concepts	2	2	0	3
NOS 110 Operating Systems Concepts	2	3	0	3
NOS 130 Windows Single User	2	2	0	3
SEC 110 Security Concepts	2	2	0	3
B. Other Major Courses: 3 Hours				
NET 111 Internetwork Arch. & Design	2	2	0	3
Total Credits				18

#### **COMPUTER-INTEGRATED MACHINING A50210**

The Computer-Integrated Machining Curriculum prepares students with 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 emerging industries such as aerospace, aviation, medical, and renewable energy, and to sit for machining certification examinations.

#### **Computer-Integrated Machining**

Associate in Applied Science Degree A50210 (Revised 2011\*03) Course and Hour Requirements

Hours

Work

			110015		TTOTE	
Title			Class	Lab	Exp.	Credits
I. Gene	eral E	ducation Courses: 15 Hours				
	A. Eng	glish: 6 Hours				
		ENG 111 Expository Writing	3	0	0	3
		ENG 112 Argument-Based Research	3	0	0	3
	or	ENG 113 Literature-Based Research	3	0	0	3
	or	ENG 114 Professional Research and Report	ing 3	0	0	3
	B. Soci	ial/Behavioral Sciences: 3 Hours	Ü			
		Selected from the list of social/behavioral science.	s electives for	r the Associ	ate in App	lied Science
		degree appearing in the current catalog.	v		1.1	
	C. Hu	manities/Fine Arts: 3 Hours				
		Selected from the list of humanities/fine arts elect	tives for the 1	Associate in	Applied S	cience
		degree appearing in the current catalog.	Ü		11	
	D. Mai	th/Natural Sciences: 3 Hours selected from	the follow	ing:		
		MAT 121 Algebra and Trigonometry	2	2	0	3
		MAT 161 College Algebra	3	0	0	3
II. Mai	or Co	ourses: 55 Hours				
	•	re: 16 Hours				
		BPR 111 Blueprint Reading	1	2	0	2
		MAC 112 Machining Technology II	2	12	0	6
	or	MAC 112AB Machining Technology IIA	1	6	0	3
		and				
		MAC 112BB Machining Technology IIB	1	6	0	3
		MAC 121 Intro to CNC	2	0	0	2
		MAC 171 Measure/Materials & Safety	0	2	0	1
		MAC 172 Job Plan, Bench & Layout	0	2	0	1
		MAC 173 Manual Milling/Drilling	1	3	0	2
		MAC 174 Manual Turning	1	3	0	2
		3				

#### **Computer-Integrated Machining (Continued)**

	Hours		Work	
Title	Class	Lab	Exp.	Credits
B. Other Major Courses: 39 Hours				
1. Required Courses: 30 Hours				
MAC 113 Machining Technology III	2	12	0	6
MAC 122 CNC Turning	1	3	0	2
MAC 124 CNC Milling	1	3	0	2
MAC 151 Machining Calculations	1	2	0	2
MAC 152 Adv Machining Calculations	1	2	0	2
MAC 222 Advanced CNC Turning	1	3	0	2
MAC 224 Advanced CNC Milling	1	3	0	3
MAC 231 CNC Graphics Program: Turning	1	4	0	3
MAC 232 CNC Graphics Program: Milling	1	4	0	3
MAC 233 APPL in CNC Machining	2	12	0	6
2. Select 9 Hours selected from the following (max	imum o	f 8 hours	from CO	E):
CIS 110 Introduction to Computers	2	2	0	3
CIS 111 Basic PC Literacy	1	2	0	2
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
COE 131-132 Co-op Work Experience III	0	0	10-20	1-2
COE 212 Co-op Work Experience IV	0	0	20	2
DFT 119 Basic CAD	1	2	0	2
DFT 120 Advanced CAD	1	2	0	2
MAC 160 Coordinate Measuring Machine	2	2	0	3
MAC 234 Adv Multi-Axis Machining	2	3	0	3
MAC 247 Production Tooling	2	0	0	2
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				71

### Computer-Integrated Machining Diploma D50210

(Revised 2011\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 6 Hours				
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Math/Natural Sciences: 3 Hours selected from	n the follow	ing:		
MAT 121 Algebra and Trigonometry	2	2	0	3
MAT 161 College Algebra	3	0	0	3

#### **Computer-Integrated Machining D50210 (Continued)**

• 0	T.T	`	XA71	,
T'd.	Hours	T . I.	Work	C 1'
Title	Class	Lab	Exp.	Credits
II. Major Courses: 30 Hours				
A. Core: 16 Hours				
BPR 111 Blueprint Reading	1	2	0	2
MAC 112 Machining Technology II	2	12	0	6
or MAC 112AB Machining Technology IIA	. 1	6	0	3
and				
MAC 112BB Machining Technology IIB	1	6	0	3
MAC 121 Intro to CNC	2	0	0	2
MAC 171 Measure/Materials & Safety	0	2	0	1
MAC 172 Job Plan, Bench & Layout	0	2	0	1
MAC 173 Manual Milling/Drilling	1	3	0	2
MAC 174 Manual Turning	1	3	0	2
B. Other Major Courses: Select 14 Hours				
1. Required Courses: 12 Hours				
MAC 113 Machining Technology III	2	12	0	6
MAC 122 CNC Turning	1	3	0	2
MAC 151 Machining Calculations	1	2	0	2
MAC 152 Adv Machining Calculations	1	2	0	2
2. Select 2 hours from the following:				
CIS 110 Introduction to Computers	2	2	0	3
CIS 111 Basic PC Literacy	1	2	0	2
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
DFT 119 Basic CAD	1	2	0	2
DFT 120 Advanced CAD	1	2	0	2
MAC 222 Advanced CNC Turning	1	3	0	2
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>				37

Computer-Integrated Machining
Computer-Integrated Machining Essentials Diploma\* D50210D2 (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 6 Hours				
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B.Humanities/ Fine Arts: 3 Hours				
MUS 110 Music Appreciation	3	0	0	3

# Computer-Integrated Machining D50210D2 (Continued)

		Hours		Work	
Title		Class	Lab	Exp.	Credits
II. Major Co	urses: 30 Hours				
A. Core	e: 16 Hours				
	BPR 111 Blueprint Reading	1	2	0	2
	MAC 112 Machining Technology II	2	12	0	6
or	MAC 112AB Machining Technology IIA	1	6	0	3
	and				
	MAC 112BB Machining Technology IIB	1	6	0	3
	MAC 121 Intro to CNC	2	0	0	2
	MAC 171 Measure/Materials & Safety	0	2	0	1
	MAC 172 Job Plan, Bench & Layout	0	2	0	1
	MAC 173 Manual Milling/Drilling	1	3	0	2
	MAC 174 Manual Turning	1	3	0	2
B. Other Major C	ourses: 14 Hours				
	MAC 122 CNC Turning	1	3	0	2
	MAC 124 CNC Milling	1	3	0	2
	MAC 222 Advanced CNC Turning	1	3	0	2
	MAC 224 Advanced CNC Milling	1	3	0	2
	MAC 231 CNC Graphics Prog: Turning	1	4	0	3
	MAC 232 CNC Graphics Prog. Milling	1	4	0	3
III. Other Required Courses: 1 Hour					
	ACA 111 College Student Success	1	0	0	1
	Total Credits				37

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

#### **Computer-Integrated Machining**

Computer-Integrated Machining Skills Certificate\* C50210K (Revised 2012\*01) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 16 Hours				
A. Core: 16 Hours				
BPR 111 Blueprint Reading	1	2	0	2
MAC 112 Machining Technology II	2	12	0	6
MAC 121 Intro to CNC	2	0	0	2
MAC 171 Measure/Materials & Safety	2	0	0	1
MAC 172 Job Plan, Bench & Layout	0	2	0	1
MAC 173 Manual Milling/Drilling	1	3	0	2
MAC 174 Manual Turning	1	3	0	2
<b>Total Credits</b>				16

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

## Computer-Integrated Machining CNC Skills Certificate C50210K1

(Revised 2011*03	<b>Course and Hour</b>	Requirements

(Revised 2011*03) Course and Hou	_	ements	Monle	
Title	Hours Class	Lab	Work Exp.	Credits
I. General Education Courses: 0 Hours			Р-	
II. Major Courses: 13 Hours				
A. Core: 13 Hours				
DFT 119 Basic CAD	1	2	0	2
MAC 121 Intro to CNC	2	0	0	2
MAC 122 CNC Turning	1	3	0	2
MAC 124 CNC Milling	1	3	0	2
MAC 160 Coordinate Measuring Machin	ne 2	2	0	3
MAC 247 Production Tooling	2	0	0	2
Total Credits				13
Computer-Integrated  Advanced CNC Skills Certifica (Revised 2011*03) Course and Hou	te C50210	0K2	Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours	Citass	Цио	пар.	Circuits
II. Major Courses: 12 Hours				
A. Core: 12 Hours DFT 120 Advanced CAD	1	0	0	0
MAC 122 CNC Turning	1 1	2 3	0	2 2
MAC 124 CNC Milling	1	3	0	2
MAC 231 CNC Graphics Program: Turi	-	4	0	3
MAC 232 CNC Graphics Program: Mill		4	0	3
Total Credits	ing i	4	U	12
				14
Computer-Integrated  Machining Workforce Readiness Cer (Revised 2012*03) Course and Hou	rtificate (	250210K	<b>4</b> Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours	Glebs	Las	тир.	Greats
II. Major Courses: 12 Hours				
A. Core: 12 Hours				
BPR 111 Blueprint Reading	1	2	0	2
MAC 121 Intro to CNC	2	0	0	2
MAC 122 CNC Turning	1	3	0	2
MAC 124 CNC Milling	1	3	0	2
MAC 151 Machining Calculations	1	2	0	2
MAC 171 Measure/Materials & Safety	0	2	0	1
MAC 172 Job Plan, Bench & Layout	0	2	0	1
Total Credits	-	,	-	12
				•

#### **COMPUTER PROGRAMMING A25130**

Program Under Review-Students Are Not Currently Being Accepted

The Computer Programming curriculum prepares individuals for employment as computer programmers and related positions through study and applications in computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations.

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

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

### Computer Programming

Associate in Applied Science Degree A25130 (Revised 2009\*03) Course and Hour Requirements

Work

			Hours		Work	
Title			Class	Lab	Exp.	Credits
I. Gene	eral E	ducation Courses: 15 Hours				
	A. Eng	lish: 6 Hours				
	J	ENG 111 Expository Writing	3	0	0	3
		ENG 112 Argument-Based Research	3	0	0	3
	or	ENG 113 Literature-Based Research	3	0	0	3
	or	ENG 114 Professional Research and Report	ing 3	0	0	3
	B. Soci	al/Behavioral Sciences: 3 Hours				
		Selected from the list of social/behavioral science	es electives for	r the Associ	ate in App	lied Science
		degree appearing in the current catalog.				
	C. Hur	manities/Fine Arts: 3 Hours				
		Selected from the list of humanities/fine arts elec	ctives for the	Associate in	Applied S	Science
		degree appearing in the current catalog.				
	D. Mat	h/Natural Sciences: 3 Hours				
		MAT 161 College Algebra	3	0	0	3
II. Maj	or Co	urses: 54 Hours				
	A. Cor	e: 42 Hours				
		BUS 110 Introduction to Business	3	0	0	3
		CIS 110 Introduction to Computers	2	2	0	3
		CIS 115 Intro to Programming & Logic	2	2	0	3
		CSC 134 C++ Programming	2	3	0	3
		CSC 139 Visual BASIC Programming	2	3	0	3
		CSC 234 Adv C++ Programming	2	3	0	3
		CSC 239 Adv Visual BASIC Prog	2	3	0	3
		CSC 289 Programming Capstone Proj	1	4	0	3
		CTS 285 Systems Analysis & Design	3	0	0	3
		DBA 110 Database Concepts	2	3	0	3
		NET 125 Networking Basics	1	4	0	3
		NOS 110 Operating System Concepts	2	3	0	3
		NOS 120 Linux/UNIX Single User	2	2	0	3
	or	NOS 130 Windows Single User	2	2	0	3
		SEC 110 Security Concepts	3	0	0	3

**Computer Programming A25130 (Continued)** 

	•	8	3	Hours		Work	<b>'</b>
Title				Class	Lab	Exp.	Credits
	B. Other Major	Courses: 12 Hour	S				
	1. Required:	9 Hours					
	CSC 1	51 JAVA Programi	ming	2	3	0	3
	WEB	l 15 Web Markup a	and Scripting	2	2	0	3
	WEB	180 Active Server 1	Pages	2	2	0	3
	2. Select 3 ho	urs from the follow	ving:				
	COE	111-112 Co-op Wo	rk Experience I	0	0	10-20	1-2
	COE	121-122 Co-op Wo	ork Experience II	0	0	10-20	1-2
	COE	131-132 Co-op Wo	ork Experience III	0	0	10-20	1-2
	CTS 1	20 Hardware/Soft	ware Support	2	3	0	3
	CTS 1	25 Presentation G	raphics	2	2	0	3
	CTS 1	30 Spreadsheet		2	2	0	3
	WEB	10 Internet/Web	Fundamentals	2	2	0	3
III. O	ther Require	d Courses: 1	Hour				
	ACA 1	11 College Studen	it Success	1	0	0	1
	Total	Credits					70

### Computer Programming Internet Programming Certificate C25130C1

(Revised 2006\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
A. Core: 9 Hours				
CIS 110 Introduction to Computers	2	2	0	3
CIS 115 Intro to Programming & Logic	2	2	0	3
SEC 110 Security Concepts	3	0	0	3
B. Other Major Courses: 9 Hours				
CSC 151 JAVA Programming	2	3	0	3
WEB 115 Web Markup and Scripting	2	2	0	3
WEB 180 Active Server Pages	2	2	0	3
Total Credits				18

#### **COSMETOLOGY A55140**

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.

### Cosmetology Associate in Applied Science A55140

(Revised 2013\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 15 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 114 Prof Research & Reporting	3	0	0	3
D. Sasial/Dahanianal Sainnasa, 2 Hanna				

B. Social/Behavioral Sciences: 3 Hours

Selected from the list of social/behavioral sciences electives for the Associate in Applied Science degree appearing in the current catalog

C. Humanities/Fine Arts: 3 Hours

Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog

D. Math/Natural Sciences: 3 Hours

Selected from the list of math/natural sciences electives for the Associate in Applied Science degree appearing in the current catalog

#### II. Major Courses: 49 Hours

A. Cor	re: 34 Hours				
	COS 111 Cosmetology Concepts I	4	0	0	4
or	COS 111A Cosmetology Concepts IA	2	0	0	2
	and				
	COS 111B Cosmetology Concepts IB	2	0	0	2
	COS 112 Salon I	0	24	0	8
or	COS 112A Salon IA	0	12	0	4
	and				
	COS 112B Salon IB	0	12	0	4
	COS 113 Cosmetology Concepts II	4	0	0	4
or	COS 113A Cosmetology Concepts IIA	2	0	0	2
	and				
	COS 113B Cosmetology Concepts IIB	2	0	0	2
	COS 114 Salon II	0	24	0	8
or	COS 114A Salon IIA	0	12	0	4
	and				
	COS 114B Salon IIB	0	12	0	4
	COS 115 Cosmetology Concepts III	4	0	0	4
or	COS 115A Cosmetology Concepts IIIA	2	0	0	2
	and				
	COS 115B Cosmetology Concepts IIIB	2	0	0	2
	COS 116 Salon III	0	12	0	4

Cosmetology A55140 (C	ontii	nued)		
or COS 116A Salon IIIA	0	6	0	2
and				
COS 116B Salon IIIB	0	6	0	2
COS 223 Contemp Hair Color	1	3	0	2
B. Other Required Courses: 15 hours selected from	om the fo	llowing:		
ACC 120 Prin of Financial Acct	3	2	0	4
BUS 115 Business Law	3	0	0	3
BUS 121 Business Math	2	2	0	3
BUS 230 Small Business Mgmt	3	0	0	3
BUS 270 Prof Development	3	0	0	3
CIS 111 Basic PC Literacy	1	2	0	2
COS 225 Adv Contemp Hair Color	1	3	0	2
COS 250 Computerized Salon Ops	1	0	0	1
SPA 111 Elementary Spanish I	3	0	0	3
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>				65

#### Cosmetology Diploma D55140

(Revised 2013\*03) Course and Hour Requirements

Title

Hours

Class

Lab

Work

Exp. Credits

I. General E	ducation Courses: 6 Hours			1	
English	n: 3 Hours				
	ENG 111 Expository Writing	3	0	0	3
Math/	Natural Sciences: 3 Hours				
	Selected from the list of math/natural sciences elec	ctives for th	he Associate i	n Applied	Science
	degree appearing in the current catalog.				
II. Major Co	ourses: 41 Hours				
	e: 34 Hours				
11, 001	COS 111 Cosmetology Concepts I	4	0	0	4
or	COS 111A Cosmetology Concepts IA	2	0	0	2
	and	_			_
	COS 111B Cosmetology Concepts IB	2	0	0	2
	COS 112 Salon I	0	24	0	8
or	COS 112A Salon IA	0	12	0	4
0.	and	Ü			•
	COS 112B Salon IB	0	12	0	4
	COS 113 Cosmetology Concepts II	4	0	0	4
or	COS 113A Cosmetology Concepts IIA	2	0	0	2
01	and	-	· ·	Ü	-
	COS 113B Cosmetology Concepts IIB	2	0	0	2
	COS 114 Salon II	0	24	0	8
or	COS 114A Salon IIA	0	12	0	4
01	and	O	1.4	Ü	•
	COS 114B Salon IIB	0	12	0	4
	COS 11 To Satoli IID COS 115 Cosmetology Concepts III	4	0	0	4
or	COS 115 Cosmetology Concepts IIIA	2	0	0	2
OI	COS 113/1 Cosmictology Concepts 111/1	4	U	U	4

and

Cosmetology D55140 (Continued)

	•	Hours	,	Work	
Title		Class	Lab	Exp.	Credits
	COS 115B Cosmetology Concepts IIIB	2	0	0	2
	COS 116 Salon III	0	12	0	4
О	r COS 116A Salon IIIA	0	6	0	2
	and				
	COS 116B Salon IIIB	0	6	0	2
	COS 223 Contemp Hair Color	1	3	0	2
В	3. Other Required Courses: 7 hours selected from	m the follo	owing:		
	ACC 120 Prin of Financial Acct	3	2	0	4
	BUS 121 Business Math	2	2	0	3
	CIS 111 Basic PC Literacy	1	2	0	2
	SPA 111 Elementary Spanish I	3	0	0	3
III. Other	Required Courses: 1 Hour				
	ACA 111 College Student Success	1	0	0	1
	<b>Total Credits</b>				48

#### Cosmetology Skills Certificate C55140K1

### Skills Certificate C55140K1 (Revised 2013\*03) Course and Hour Requirements

	(Nevised 2013"03) Course and Hou	Hours	ements	Work	
Title		Class	Lab	Exp.	Credits
	ducation Courses: 0 Hours	Citabo	1100	zarp.	Greats
	ourses: 34 Hours				
A. Cor	e: 34 Hours				
	COS 111 Cosmetology Concepts I	4	0	0	4
or	COS 111A Cosmetology Concepts IA and	2	0	0	2
	COS 111B Cosmetology Concepts IB	2	0	0	2
	COS 112 Salon I	0	24	0	8
or	COS 112A Salon IA and	0	12	0	4
	COS 112B Salon IB	0	12	0	4
	COS 113 Cosmetology Concepts II	4	0	0	4
or	COS 113A Cosmetology Concepts IIA and	2	0	0	2
	COS 113B Cosmetology Concepts IIB	2	0	0	2
	COS 114 Salon II	0	24	0	8
or	COS 114A Salon IIA and	0	12	0	4
	COS 114B Salon IIB	0	12	0	4
	COS 115 Cosmetology Concepts III	4	0	0	4
or	COS 115A Cosmetology Concepts IIIA and	2	0	0	2
	COS 115B Cosmetology Concepts IIIB	2	0	0	2
	COS 116 Salon III	0	12	0	4
or and	COS 116A Salon IIIA	0	6	0	2
	COS 116B Salon IIIB	0	6	0	2
	COS 223 Contemp Hair Color	1	3	0	2
	Total Credits				34

## Cosmetology Esthetics Skills Certificate C55230K

#### (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 16 Hours				
COS 119 Esthetics Concepts I	2	0	0	2
COS 120 Esthetics Salon I	0	18	0	6
COS 125 Esthetics Concepts II	2	0	0	2
COS 126 Esthetics Salon II	0	18	0	6
Total Credits				16

#### Cosmetology

#### Cosmetology Instructor Skills Certificate C55160K (Revised 2013\*03) Course and Hour Requirements

The Cosmetology Instructor curriculum provides a course of study for learning the skills needed to teach the theory and practice of cosmetology as required by the North Carolina Board of Cosmetic Arts.

Course work includes requirements for becoming an instructor, introduction to teaching theory, methods and aids, practice teaching, and development of evaluation instruments. Graduates of the program may be employed as cosmetology instructors in public or private education and business.

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 24 Hours				
COS 271 Instructor Concepts I	5	0	0	5
COS 272 Instructor Practicum I	0	21	0	7
COS 273 Instructor Concepts II	5	0	0	5
COS 274 Instructor Practicum II	0	21	0	7
Total Credits				24

#### CRIMINAL JUSTICE TECHNOLOGY A55180

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.

#### **Criminal Justice Technology**

Associate in Applied Science Degree A55180 (Revised 2012\*03) Course and Hour Requirements

This degree satisfies the requirements for the Dual Enrollment Agreement with Fayetteville State University.

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 18 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 112 Argument-Based Research	3	0	0	3
or ENG 113 Literature-Based Research	3	0	0	3
or ENG 114 Professional Research & Reporting	g 3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
PSY 150 General Psychology	3	0	0	3
C. Humanities/Fine Arts: 3 Hours				
Selected from the list of humanities/fine arts elective	ves for the 2	Associate in	Applied S	Science
degree appearing in the current catalog.				
D. Natural Sciences: 3 Hours				
BIO 161 Intro to Human Biology	3	0	0	3
or BIO 111 General Biology I	3	3	0	4
E. Mathematics: 3 Hours				
MAT 121 Algebra/Trigonometry	2	2	0	3
or MAT 161 College Algebra	3	0	0	3
II. Major Courses: 53 Hours				
A. Core: 22 Hours				
CJC 111 Intro to Criminal Justice	3	0	0	3
CJC 112 Criminology	3	0	0	3
CJC 113 Juvenile Justice	3	0	0	3
CJC 131 Criminal Law	3	0	0	3
CJC 212 Ethics & Community Relations	3	0	0	3
CJC 221 Investigative Principles	3	2	0	4
CJC 231 Constitutional Law	3	0	0	3

### Criminal Justice Technology A55180 (Continued)

	Hours		Work	
Title	Class	Lab	Exp.	Credits
B. Other Major Courses: 31 Hours				
1. Required Courses: 24 Hours				
CIS 110 Introduction to Computers	2	2	0	3
CJC 121 Law Enforcement Operations	3	0	0	3
CJC 132 Court Procedures & Evidence	3	0	0	3
CJC 141 Corrections	3	0	0	3
CJC 222 Criminalistics	3	0	0	3
CJC 232 Civil Liability	3	0	0	3
POL 120 American Government	3	0	0	3
SOC 210 Intro to Sociology	3	0	0	3
2. Select 7 hours from the following: 7 Hours				
CJC 160 Terroism: Underlying Issues	3	0	0	3
CJC 214 Victimology	3	0	0	3
CJC 233 Correctional Law	3	0	0	3
PSY 183 Psychology of Addiction 3	0	0	3	
PSY 241 Developmental Psychology	3	0	0	3
SPA 111 Elem Spanish I	3	0	0	3
COE 111 Co-op Work Experience I	0	0	10	1
COE 115 Work Experience Seminar I	1	0	0	1
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				72

#### **CULINARY ARTS A55150**

The Culinary Arts curriculum provides specific training required to prepare students to assume positions as trained culinary professionals in a variety of foodservice settings including full service restaurants, hotels, resorts, clubs, catering operations, contract food service, and health care facilities.

Students will be provided theoretical knowledge/practical applications that provide critical competencies to meet industry demands, including environmental stewardship, operational efficiencies and professionalism. Courses include sanitation/safety, baking, garde-manger, culinary fundamentals/production skills, nutrition, customer service, purchasing/cost control, and human resource management.

Graduates should qualify for entry-level opportunities including prep cook, line cook, and station chef. American Culinary Federation certification is available to graduates. With experience, graduates may advance to positions such as sous-chef, executive chef, or food service manager.

# Culinary Arts Associate in Applied Science Degree A55150 (Revised 2012\*03) Course and Hour Requirements

Hours

Work

		110015		VVOIK	
Title		Class	Lab	Exp.	Credits
I. Gen	eral Education Courses: 15 Hours				
	A. English: 6 Hours				
	ENG 111 Expository Writing	3	0	0	3
	ENG 113 Literature Based Research	3	0	0	3
	or ENG 114 Prof. Research and Reporting	3	0	0	3
	B. Social/Behavioral Sciences: 3 Hours				
	Selected from the list of social/behavioral sciences	s electives for	r the Associ	ate in App	lied Science
	degree appearing in the current catalog.				
	C. Humanities/Fine Arts: 3 Hours				
	Selected from the list of humanities/fine arts elect	ives for the 2	Associate in	Applied S	Science
	degree appearing in the current catalog.				
	D. Math/Natural Sciences: Select 3 Hours from the	ne followin	ng:		
	MAT 115 Mathematical Models	2	2	0	3
	MAT 161 College Algebra	3	0	0	3
II. Ma	jor Courses: 60 Hours				
	A. Core: 30 Hours				
	CUL 110 Sanitation & Safety	2	0	0	2
	CUL 112 Nutrition for Foodservice	3	0	0	3
	CUL 120 Purchasing	2	0	0	2
	CUL 135 Food & Beverage Service	2	0	0	2
	CUL 140 Basic Culinary Skills	2	6	0	5
	CUL 160 Baking I	1	4	0	3
	CUL 170 Garde Manger I	1	4	0	3
	CUL 240 Culinary Skills II	1	8	0	5
	HRM 245 Human Resource Mgmt-Hosp	3	0	0	3
	COE 111 Co-op Work Experience I	0	0	10	1
	COE 121 Co-op Work Experience II	0	0	10	1

#### **Culinary Arts A55150 (Continued)**

	Hours		Work	
Title	Class	Lab	Exp.	Credits
B. Other Major Courses: 30 Hours				
1. Required Courses - 21 hours				
CIS 111 Basic PC Literacy	1	2	0	2
CUL 110A Sanitation & Safety Lab	0	2	0	1
CUL 112A Nutrition for Foodservice Lab	0	2	0	1
CUL 120A Purchasing Lab	0	2	0	1
CUL 135A Food & Beverage Service Lab	0	2	0	1
CUL 230 Global Cuisine	1	8	0	5
CUL 230A Global Cuisine Lab	0	3	0	1
CUL 260 Baking II	1	4	0	3
CUL 270 Garde-Manger II	1	4	0	3
HRM 160 Info Systems for Hospitality	2	2	0	3
2. 9 hours selected from the following:				
CUL 130 Menu Design	2	0	0	2
CUL 150 Food Science	1	2	0	2
CUL 150A Food Science Lab	0	2	0	1
CUL 275 Catering Cuisine	1	8	0	5
CUL 283 Farm to Table	2	6	0	5
HRM 215 Restaurant Management	3	0	0	3
HRM 215A Restaurant Mgt Lab	0	2	0	1
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				76

### Culinary Arts Diploma D55150D1

(Revised 2012\*03) Course and Hour Requirements

Title	Hours Class	Lab	Work Exp.	Credits
I. General Education Courses: 6 Hours				
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
Selected from the list of social/behavioral sciences of	electives for	the Associa	ite in Appl	lied Science
degree appearing in the current catalog.				
II. Major Courses: 32 Hours				
A. Core: 29 Hours				
CUL 110 Sanitation & Safety	2	0	0	2
CUL 112 Nutrition for Foodservice	3	0	0	3
CUL 120 Purchasing	2	0	0	2
CUL 135 Food & Beverage Service	2	0	0	2
CUL 140 Basic Culinary Skills	2	6	0	5
CUL 160 Baking I	1	4	0	3
CUL 170 Garde Manger I	1	4	0	3
CUL 240 Culinary Skills II	1	8	0	5
HRM 245 Human Resource Mgmt-Hosp	3	0	0	3
COE 111 Co-op Work Experience I	0	0	10	1

#### **Culinary Arts D55150D1 (Continued)**

	Hours		Work	
Title	Class	Lab	Exp.	Credits
B. Other Major Courses: 3 Hours				
CUL 110A Sanitation & Safety Lab	0	2	0	1
CUL 120A Purchasing Lab	0	2	0	1
CUL 135A Food & Beverage Service Lab	0	2	0	1
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>				39

### Culinary Arts Skills Certificate C55150K1

(Revised 2011\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 14 Hours				
A. Core: 14 Hours				
CUL 110 Sanitation & Safety	2	0	0	2
CUL 120 Purchasing	2	0	0	2
CUL 135 Food & Beverage Service	2	0	0	2
CUL 140 Basic Culinary Skills	2	6	0	5
B. Other Major Courses: 3 Hours				
CUL 110A Sanitation & Safety Lab	0	2	0	1
CUL 120A Purchasing Lab	0	2	0	1
CUL 135A Food & Beverage Service Lab	0	2	0	1
Total Credits				14

#### **Culinary Arts**

Culinary Arts Essential Skills Certificate\* C55150K2 (Revised 2012\*01) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 16 Hours				
A. Core: 12 Hours				
CUL 110 Sanitation & Safety	2	0	0	2
CUL 112 Nutrition for Foodservice	3	0	0	3
CUL 120 Purchasing	2	0	0	2
CUL 135 Food & Beverage Service	2	0	0	2
HRM 245 Human Resource Mgt-Hosp	3	0	0	3
B. Other Major Courses: 4 Hours				
CUL 110A Sanitation & Safety Lab	0	2	0	1
CUL 112A Nutrition for Foodservice Lab	0	3	0	1
CUL 120A Purchasing Lab	0	2	0	1
CUL 135A Food & Beverage Service Lab	0	2	0	1
<b>Total Credits</b>				16

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

#### DENTAL ASSISTING

#### Diploma D45240

#### (Program is offered through an Instructional Service Agreement with Wayne Community College.)

Interested students are encouraged to contact a counselor in the Office of Admissions to obtain information about the program.

The Dental Assisting curriculum prepares individuals to assist the dentist in the delivery of dental treatment and to function as integral members of the dental team while performing chairside and related office and laboratory procedures.

Course work includes instruction in general studies, biomedical sciences, dental sciences, clinical sciences, and clinical practice. A combination of lecture, laboratory, and clinical experiences provide students with knowledge in infection/hazard control, radiography, dental materials, preventive dentistry, and clinical procedures.

Graduates may be eligible to take the Dental Assisting National Board Examination to become Certified Dental Assistants. As a Dental Assistant II, defined by the Dental Laws of North Carolina, graduates work in dental offices and other related areas.

#### **Dental Assisting**

Diploma D45240

#### (Revised 2009\*03) Course and Hour Requirements

Hours

Class

1

0

0

1 46

Lab

Work

Exp. Credits

Title	Citass	Lan	LAP.	Cicuis
Hours				
I. General Education Courses: 6 Hours				
A. English: 3 Hours				
ENG 102 Applied Communications II***	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
PSY 150 General Psychology	3	0	0	3
C. Math/Natural Sciences: 3 Hours				
BIO 106 Intro to Anat/Phys/Micro**	4	0	0	3
Students are required to demonstrate con	petency in	CIS 070	and the	equiva
lent of MAT 060 or DMA 010-030 prior to e	enrollment	•		
II. Major Courses: 39 Hours				
A. Core: 39 Hours				
DEN 100 Basic Orofacial Anatomy*	2	0	0	2
<b>DEN 101 Preclinical Procedures*</b>	4	6	0	7
DEN 102 Dental Materials*	3	4	0	5
<b>DEN 103 Dental Sciences*</b>	2	0	0	2
DEN 104 Dental Health Education*	2	2	0	3
DEN 105 Practice Management*	2	0	0	2
<b>DEN 106 Clinical Practice I*</b>	1	0	12	5
<b>DEN 107 Clinical Practice II*</b>	1	0	12	5
DEN 111 Infection/Hazard Control	2	0	0	2
DEN 112 Dental Radiography*	2	3	0	3
III. Other Required Courses: 1 Hour				

ACA 111 College Student Success \* **Total Credits** 

Title

<sup>\*</sup>Courses must be completed through Wayne Community College.
\*\*Students may take BIO 163 or BIO 168 and BIO 169 at Lenoir Community College.
\*\*\*Students may take ENG 111 at Lenoir Community College.
The Diploma in Dental Assisting will be awarded by Wayne Community College upon successful completion of all requirements.

#### **DENTAL HYGIENE**

Associate in Applied Science Degree A45260 (Program is offered through an Instructional Service Agreement with Wayne Community College.)

Interested students are encouraged to contact a counselor in the Office of Admissions to obtain information about the program.

The Dental Hygiene curriculum provides individuals with the knowledge and skills to access, 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.

#### **Dental Hygiene**

## Associate in Applied Science A45260 (Revised 2009\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
Hours				
I. General Education Courses: 20 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 114 Professional Research and Report	rting 3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
PYS 150 General Psychology	3	0	0	3
C. Humanities/Fine Arts: 3 Hours				
Selected from the list of humanities/fine arts ele	ctives for the	Associate in	Applied S	Science
degree appearing in the current catalog.				
D. Math/Natural Sciences: 8 Hours				
BIO165 Anatomy and Physiology I		3	0	4
BIO 166 Anatomy and Physiology I	[ <b>I</b> ** 3	3	0	4
Students are required to demonstrate com	netency ir	. CIS 070	and the	eaniva

Students are required to demonstrate competency in CIS 070 and the equivalent of MAT 070 or DMA 010-050 prior to enrollment.

#### II. Major Courses: Hours

A. Core: Hours

DEN 110 Orofacial Anatomy*	2	2	0	3
DEN 111 Infection/Hazard Control*	2	0	0	2
DEN 112 Dental Radiography*	2	3	0	3
<b>DEN 120 Dental Hyg Preclinical Lec*</b>	2	0	0	2
<b>DEN 121 Dental Hyg Preclinical Lab*</b>	0	6	0	2
DEN 123 Nutrition/Dental Health*	2	0	0	2
DEN 124 Periodontology*	2	0	0	2
DEN 130 Dental Hygiene Theory I*	2	0	0	2
DEN 131 Dental Hygiene Clinic I*	0	0	9	3

#### **Dental Hygiene A45260 (Continued)**

Н	Iours		Work	
Title	Class	Lab	Exp.	Credits
DEN 140 Dental Hygiene Theory II*	1	0	0	1
DEN 141 Dental Hygiene Clinic II*	0	0	6	2
DEN 220 Dental Hygiene Theory III*	2	0	0	2
DEN 221 Dental Hygiene Clinic III*	0	0	12	4
DEN 222 Gen and Oral Pathology*	2	0	0	2
DEN 223 Dental Pharmacology*	2	0	0	2
DEN 224 Materials and Procedures*	1	3	0	2
DEN 230 Dental Hygiene Theory IV*	1	0	0	1
DEN 231 Dental Hygiene Clinic IV*	0	0	12	4
DEN 232 Community Dental Health*	2	0	3	3
DEN 233 Professional Development*	2	0	0	2
B. Other Required: Hours				
BIO 175 General Microbiology***	2	2	0	3
CHM 130 Gen, Org & Biochemistry*	3	0	0	3
CHM 130A Gen, Org & Biochem Lab*	<sup>k</sup> 2	2	0	1
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success*	1	0	0	1
<b>Total Credits</b>				<b>74</b>

<sup>\*</sup>Courses must be completed through Wayne Community College.

<sup>\*\*</sup>Students may take BIO 168 and BIO 169 at Lenoir Community College.

<sup>\*\*\*</sup>Students may take BIO 275 at Lenoir Community College.

The Associate in Applied Science in Dental Hygiene will be awarded by Wayne Community College upon successful completion of all requirements.

#### **DIETETIC TECHNICIAN A45310**

Program Under Review—Students Are Not Currently Being Accepted For questions about this program, contact admissions counselor.

The Dietetic Technician Program prepares individuals to promote optimal health through proper nutrition by providing personalized services to meet client's needs and ensure balanced diets. Dietetic Technicians work under the supervision of a registered dietician who is licensed in the state in which they practice.

Course work includes content related to food, nutrition, communication, and management. The physical, biological, behavioral, and social sciences support these areas.

Employment opportunities include childcare centers, hospitals, correctional centers, public health agencies, retirement centers, rehabilitation centers, hospices, clinics, nursing homes, home care programs, or medical offices.

#### **Dietetic Technician**

#### **Associate in Applied Science Degree A45310** (Revised 2012\*03) Course and Hour Requirements

The Lenoir Community College Dietetic Technician Program is currently granted Developmental Accreditation by the Commission on Accreditation for Dietetic Education of the American Dietetic Association, 216 W. Jackson Blvd., Chicago, IL 60606-6995, 312-899-5400.

Students on premises and enrolled in the program after developmental accreditation is granted are considered graduates of an accredited program on successful completion of the program

are considered graduates of an accredited program on successi	ui compi	euon or u	ie progra	1111.
	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 17 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 114 Professional Research and Reporting	g 3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
PSY 150 General Psychology	3	0	0	3
C. Humanities/Fine Arts: 3 Hours				
Selected from the list of humanities/fine arts elective	es for the	Associate in	Applied S	Science
degree appearing in the current catalog.				
D. Math/Natural Sciences: 5 Hours				
BIO 163 Basic Anat. & Physiology	4	2	0	5
Students are required to demonstrate of	compete	ency in th	e equivo	alent of
Mat 080 or DMA 010-080 prior to enrol	llment i	n this cu	rriculun	n.
II. Major Courses: 55 Hours				
A. Core: 51 Hour				
DET 110 Dietetic Technician I	6	0	6	8

A. Core: 51 Hour				
DET 110 Dietetic Technician I	6	0	6	8
DET 115 Dietetic Technician II	2	0	0	2
DET 120 Dietetic Technician III	6	0	9	9
DET 210 Dietetic Technician IV	6	0	9	9
DET 220 Dietetic Technician V	6	0	12	10
DET 225 Dietetic Technician VI	2	0	0	2
BIO 275 Microbiology	3	3	0	4
CHM 130 Gen, Org, & Biochemistry	3	0	0	3
CHM 130A Gen. Org. & Biochemistry Lab	0	2	0	1
PSY 241 Developmental Psych	3	0	0	3
B. Other Major Courses: 4 hours				
COE 111 Co-op Work Experience I	0	0	10	1
MAT 115 Mathematical Models	2	2	0	3

#### **Dietetic Technician A45310 (Continued)**

	Hours		Work	
Title	Class	Lab	Exp.	Credits
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>				73

All health science students must make grades of "A," "B," "C," or "SA" on all applicable course work to progress each semester and graduate from the program.

#### Dietetic Technician

**Advanced Certificate C45310C** 

(Revised 2001\*01) Course and Hour Requirements

This certificate is not intended to be offered to the beginning student of the dietetic technician program but to a Bachelor of Science or a Bachelor of Arts degree from an ADA accredited program in dietetics.

For a student to be allowed into this certificate program the following conditions must be met prior to enrollment.

- A. B.A./B.S. degree from an ADA accredited program in dietetics
- B. Original Verification Statement from Program Director of an ADA Accredited 4-year degree program in dietetics.

The Lenoir Community College Dietetic Technician Program is currently granted Developmental Accreditation by the Commission on Accreditation or Dietetic Education of the American Dietetic Association, 216 W. Jackson Blvd., Chicago, IL 60606-6995, 312-899-5400.

Students on premises and enrolled in the program after developmental accreditation is granted are considered graduates of an accredited program on successful completion of the program.

Hours		Work	
Class	Lab	Exp.	Credits
6	0	12	10
2	0	0	2
0	0	10	1
			13
	6 2	Class Lab  6 0 2 0	Class Lab Exp.  6 0 12 2 0 0

#### **EARLY CHILDHOOD EDUCATION A55220**

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**

Associate in Applied Science Degree A55220 (Revised 2012\*03) Course and Hour Requirements

I	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 15 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 114 Professional Research and Reporting	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
SOC 210 Introduction to Sociology	3	0	0	3
or SOC 213 Sociology of the Family	3	0	0	3
C. Humanities/Fine Arts: 3 Hours				
Selected from the list of humanities/fine arts elective	es for the 1	Associate in	Applied S	Science
degree appearing in the current catalog.				
D. Math/Natural Sciences: 3 Hours				
MAT 115 Mathematical Models	2	2	0	3
or MAT 161 College Algebra	3	0	0	3
II. Major Courses: 56 Hours				
A. Core: 35 Hours				
1. Required Courses				
EDU 119 Intro to Early Child Educ	4	0	0	4
EDU 131 Child, Family, & Commun	3	0	0	3
EDU 144 Child Development I	3	0	0	3
EDU 145 Child Development II	3	0	0	3
EDU 146 Child Guidance	3	0	0	3
EDU 151 Creative Activities	3	0	0	3
EDU 153 Health, Safety, & Nutri	3	0	0	3
EDU 221 Children with Exceptionalities	3	0	0	3
EDU 271 Educational Technology	2	2	0	3
EDU 280 Language & Literacy Exp	3	0	0	3
EDU 284 Early Childhood Capstone Prac	1	9	0	4

#### **Early Childhood Education A55220 (Continued)**

•	Hours	•	Work	,
Title	Class	Lab	Exp.	Credits
B. Other Major Courses: 21 hours				
1. Required: 12 Hours				
CIS 110 Introduction to Computers	2	2	0	3
EDU 251 Exploration Activities	3	0	0	3
EDU 259 Curriculum Planning	3	0	0	3
EDU 282 Early Childhood Lit	3	0	0	3
2. 9 Hours selected from the following				
BUS 230 Small Business Management	3	0	0	3
EDU 152 Music, Movement, & Language	3	0	0	3
EDU 234 Infants, Toddlers, & Twos	3	0	0	3
EDU 235 School-Age Dev & Program	3	0	0	3
EDU 261 Early Childhood Admin I	3	0	0	3
EDU 262 Early Childhood Admin II	3	0	0	3
PSY 150 General Psychology	3	0	0	3
PSY 246 Adolescent Psychology	3	0	0	3
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				72

### **Early Childhood Education**

Diploma D55220D

(Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 9 Hours				
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
SOC 210 Introduction to Sociology	3	0	0	3
or SOC 213 Sociology of the Family	3	0	0	3
C. Math/Natural Sciences: 3 Hours				
MAT 115 Mathematical Models	2	2	0	3
or MAT 161 College Algebra	3	0	0	3
II. Major Courses: 31 Hours				
A. Core: 25 Hours				
1. Required Courses				
EDU 119 Intro to Early Child Educ	4	0	0	4
EDU 131 Child, Family, & Community	3	0	0	3
EDU 144 Child Development I	3	0	0	3
EDU 145 Child Development II	3	0	0	3
EDU 146 Child Guidance	3	0	0	3
EDU 151 Creative Activities	3	0	0	3
EDU 153 Health, Safety, & Nutri	3	0	0	3
EDU 221 Children with Exceptionalities	3	0	0	3

#### Early Childhood Education D55220D (Continued)

	Hours		Work	
Title	Class	Lab	Exp.	Credits
B. Other Major Courses: 6 hours selected from the	following	:		
CIS 110 Introduction to Computers	2	2	0	3
EDU 152 Music, Movement, & Language	3	0	0	3
EDU 280 Language & Literacy Exp	3	0	0	3
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				41

#### **Early Childhood Education**

Special Needs Certificate C55220C5

(Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 16 Hours				
A. Core: 13 hours				
1. Required Courses				
EDU 119 Intro to Early Child Educ	4	0	0	4
EDU 144 Child Development I	3	0	0	3
EDU 145 Child Development II	3	0	0	3
EDU 221 Children with Exceptionalities	3	0	0	3
B. Other Major Courses: 3 Hours				
EDU 280 Language & Literacy Exp	3	0	0	3
Total Credits				16

### **Early Childhood Education**

Skills Certificate\* C55220K1

(Revised 2012\*01) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 16 Hours				
A. Core: 16 Hours				
EDU 119 Intro to Early Child Educ	4	0	0	4
EDU 131 Child, Family, and Community	3	0	0	3
EDU 146 Child Guidance	3	0	0	3
EDU 151 Creative Activities	3	0	0	3
EDU 153 Health, Safety, & Nutri	3	0	0	3
Total Credits				16

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

#### **Early Childhood Education**

Administrator Skills Certificate C55220K2 (Revised 2010\*03) Course and Hour Requirements

(Iterised 2010 00) course and ite	. requir	CITTO			
	Hours		Work		
Title	Class	Lab	Exp.	Credits	
I. General Education Courses: 0 Hours					
II. Major Courses: 13 Hours					
1. Required Courses					
EDU 261 Early Childhood Admin I	3	0	0	3	
EDU 262 Early Childhood Admin II	3	0	0	3	
2. 7 hours selected from the following:					
EDU 119 Intro to Early Child Educ	4	0	0	4	
EDU 131 Child, Family, & Commun	3	0	0	3	
EDU 144 Child Development I	3	0	0	3	
EDU 145 Child Development II	3	0	0	3	
EDU 146 Child Guidance	3	0	0	3	
EDU 151 Creative Activities	3	0	0	3	
EDU 153 Health, Safety, & Nutri	3	0	0	3	
Total Credits				13	

#### **Infant/Toddler Care Certificate**

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.

#### Infant/Toddler Care

Certificate C55290

#### (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 16 Hours				
A. Core: 16 hours				
1. Required Courses				
EDU 119 Intro to Early Child Educ	4	0	0	4
EDU 144 Child Development I	3	0	0	3
EDU 131 Child, Family, & Community	3	0	0	3
EDU 153 Health, Safety, & Nutri	3	0	0	3
EDU 234 Infants, Toddlers, & Twos	3	0	0	3
Total Credits				16

#### **EMERGENCY MEDICAL SCIENCE A45340**

This curriculum is designed to prepare graduates to enter the workforce as paramedics. Additionally, the program can provide an Associate Degree for individuals desiring an opportunity for career enhancement. The course of study provides the student an opportunity to acquire basic and advanced life support knowledge and skills by utilizing classroom instruction, practical laboratory sessions, hospital clinical experience, and field internships with emergency medical service agencies. Students progressing through the program become eligible to apply for both state and national certification exams. Employment opportunities include EMS agencies, fire and rescue agencies, air medical services, specialty areas of hospitals, industry, educational institutions, and government agencies.

#### Emergency Medical Science Associate in Applied Science Degree A45340 (Revised 2012\*03) Course and Hour Requirements

Hours

Work

			nours		VVOIK	
Title			Class	Lab	Exp.	Credit
I. Gen	ieral Ed	lucation Courses: 20 Hours				
	A. Engl	ish: 6 Hours				
		ENG 111 Expository Writing	3	0	0	3
		ENG 114 Professional Research and Report	ing 3	0	0	3
	B. Socia	al/Behavioral Sciences: 3 Hours	Ü			
		Selected from the list of social/behavioral sciences	electives for	r the Associ	ate in Appl	ied Science
		degree appearing in the current catalog.	Ü			
	C. Hun	nanities/Fine Arts: 3 Hours				
		Selected from the list of humanities/fine arts elected	ives for the 1	Associate in	Applied Se	cience
		degree appearing in the current catalog.	J		11	
	D. Matl	h/Natural Sciences: Select 8 hours from the	following	:		
		MAT 121 Algebra/Trigonometry I	2	2	0	3
	or	MAT 161 College Algebra	3	0	0	3
	or	AST 111 Descriptive Astronomy &	3	0	0	3
	and	BIO 163 Basic Anatomy & Physiology	4	2	0	5
	or	BIO 168 Anatomy and Physiology I	3	3	0	4
	and	BIO 169 Anatomy and Physiology II	3	3	0	4
II. N	faior C	ourses: 49 Hours				
11. 1		e: 49 Hours required				
	71. 001	EMS 110 EMT-Basic	5	6	0	7
	or	EMS 110A EMT-Basic	3	3	0	4
	and	EMS 110B EMT-Basic	2	3	0	3
		EMS 120 Intermediate Interventions	2	3	0	3
		EMS 121 EMS Clinical Practicum I	0	6	0	2
		EMS 130 Pharmacology I for EMS	1	3	0	2 2 2 2 2 2
		EMS 131 Adv Airway Management	1	2	0	2
		EMS 140 Rescue Scene Management	1	3	0	2
		EMS 150 Emerg Vehicles & EMS Comm		3	0	2
		EMS 210 Adv Patient Assessment	1	3	0	
		EMS 220 Cardiology	2	6	0	4
		EMS 221 EMS Clinical Practicum II	0	9	0	3
		EMS 231 EMS Clinical Practicum III	0 2	9	0	3
	or	EMS 235 EMS Management EMS 125 EMS Educational Methodolog		0	0	2 2
	or	EMS 240 Special Needs Patients	y 2 1	2	0	2
		EMS 241 EMS Clinical Practicum IV	0	9	0	3
		EMS 250 Adv Medical Emergencies	2	3	0	3
			•	-	-	-

#### **Emergency Medical Science A45340 (Continued)**

		Hours		Work	
Title		Class	Lab	Exp.	Credits
	EMS 260 Adv Trauma Emergencies	1	3	0	2
	EMS 270 Life Span Emergencies	2	2	0	3
	EMS 285 EMS Capstone	1	3	0	2
B. Other l	Required Courses: 3 Hours				
	CIS 110 Intro to Computers	2	2	0	3
III. Other	Required Courses: 1 Hour				
	ACA 111 College Student Success	1	0	0	1
	Total Credits				73

#### **Emergency Medical Science**

Essential Basic Certificate\* C45340C

(Revised 2012\*01) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credit
I. General Education Courses: 0 Hours				
II. Major Courses: 13 Hours				
EMS 110 EMT-Basic	5	6	0	7
EMS 140 Rescue Scene Management	1	3	0	2
EMS 150 Emerg Vehicles & EMS Comn	n 1	3	0	2
EMS 235 EMS Management	2	0	0	2
Total Credits				13

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

#### **Emergency Medical Science**

Emergency Medical Technician-Basic Certificate C45340C1 (Revised 2012\*03) Course and Hour Requirements

,	Hours		Work	
Title	Class	Lab	Exp.	Credit
I. General Education Courses: 0 Hours				
II. Major Courses: 9 Hours				
EMS 110 EMT-Basic	5	6	0	7
EMS 150 Emerg Vehicles & EMS Comm	1	3	0	2
III. Other Major Courses: 4 Hours				
ACA 111 College Student Success	1	0	0	1
CIS 110 Intro to Computers	2	2	0	3
<b>Total Credits</b>				13

## Emergency Medical Science Emergency Medical Technician-Intermediate Certificate C45340C2 (Revised 2012\*03) Course and Hour Requirements

,	Hours		Work	
Title	Class	Lab	Exp.	Credit
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
EMS 110 EMT-Basic	5	6	0	7
EMS 120 Intermediate Interventions	2	3	0	3
EMS 121 EMS Clinical Practicum I	0	6	0	2
EMS 130 Pharmacology I for EMS	1	3	0	2
EMS 131 Adv Airway Management	1	2	0	2
EMS 150 Emerg Vehicles & EMS Comn	n 1	3	0	2
Total Credits				18

All Emergency Medical Science students must make grades of "A," "B," or "C" on all major courses to graduate from the program.

#### EMERGENCY MEDICAL SCIENCE—BRIDGING

The Emergency Medical Science Bridging program was developed to allow currently certified, non-degree Paramedics to earn a two-year Associate of Applied Science Degree in Emergency Medical Science. A total of 45 transfer hours will be awarded to certified EMT-Paramedics. Admission requirements must be met prior to matriculation.

#### **Emergency Medical Science—Bridging**

Associate in Applied Science Degree A45340B (Revised 2012\*03) Course and Hour Requirements

Hours

Work

Title         Class         Lab         Exp.         Credit           I. General Education Courses: 20 Hours           A. English: 6 Hours           ENG 111 Expository Writing         3         0         0         3           ENG 114 Professional Research and Reporting 3         0         0         3           B. Social/Behavioral Sciences: 3 Hours         Selected from the list of social/behavioral sciences electives for the Associate in Applied Science degree appearing in the current catalog         C. Humanities/Fine Arts: 3 Hours           Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog           D. Math/Natural Sciences: Select 8 hours from the following:           MAT 121 Algebra/Trigonometry I         2         2         0         3           or         MAT 121 Algebra/Trigonometry I         2         2         0         3           or         MAT 161 College Algebra         3         0         0         3           and         BIO 163 Basic Anatomy & Physiology I         3         3         0         4           III. Major Courses: 10 Hours           A. Core: 7 Hours required           EMS 140 Rescue Scene Management         1         <			Hours		Work	
A. English: 6 Hours  ENG 111 Expository Writing ENG 114 Professional Research and Reporting 3 0 0 0 3  B. Social/Behavioral Sciences: 3 Hours  Selected from the list of social/behavioral sciences electives for the Associate in Applied Science degree appearing in the current catalog  C. Humanities/Fine Arts: 3 Hours  Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog  D. Math/Natural Sciences: Select 8 hours from the following:  MAT 121 Algebra/Trigonometry I 2 2 2 0 3  or MAT 161 College Algebra 3 0 0 3  or AST 111 Descriptive Astronomy & 3 0 0 3  and BIO 163 Basic Anatomy & Physiology 4 2 0 5  or BIO 168 Anatomy and Physiology I 3 3 0 4  and BIO 169 Anatomy and Physiology II 3 3 0 4  II. Major Courses: 10 Hours  A. Core: 7 Hours required  EMS 140 Rescue Scene Management 1 3 0 2  EMS 235 EMS Management 2 0 0 0 2  EMS 235 EMS Educational Methodology 2 0 0 0 2  EMS 280 EMS Bridging Course 2 2 0 0 3  B. Other Required Courses: 3 Hours  CIS 110 Intro to Computers 2 0 0 0 1  Credits required  ACA 111 College Student Success 1 0 0 0 1  Credits required  Total transfer credits 45  Total transfer credits 45	Title		Class	Lab	Exp.	Credit
A. English: 6 Hours  ENG 111 Expository Writing ENG 114 Professional Research and Reporting 3 0 0 0 3  B. Social/Behavioral Sciences: 3 Hours  Selected from the list of social/behavioral sciences electives for the Associate in Applied Science degree appearing in the current catalog  C. Humanities/Fine Arts: 3 Hours  Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog  D. Math/Natural Sciences: Select 8 hours from the following:  MAT 121 Algebra/Trigonometry I 2 2 2 0 3  or MAT 161 College Algebra 3 0 0 3  or AST 111 Descriptive Astronomy & 3 0 0 3  and BIO 163 Basic Anatomy & Physiology 4 2 0 5  or BIO 168 Anatomy and Physiology I 3 3 0 4  and BIO 169 Anatomy and Physiology II 3 3 0 4  II. Major Courses: 10 Hours  A. Core: 7 Hours required  EMS 140 Rescue Scene Management 1 3 0 2  EMS 235 EMS Management 2 0 0 0 2  EMS 235 EMS Educational Methodology 2 0 0 0 2  EMS 280 EMS Bridging Course 2 2 0 0 3  B. Other Required Courses: 3 Hours  CIS 110 Intro to Computers 2 0 0 0 1  Credits required  ACA 111 College Student Success 1 0 0 0 1  Credits required  Total transfer credits 45  Total transfer credits 45	I. General E	ducation Courses: 20 Hours				
ENG 114 Professional Research and Reporting 3 0 0 3 and B. Social/Behavioral Sciences: 3 Hours  Selected from the list of social/behavioral sciences electives for the Associate in Applied Science degree appearing in the current catalogs  C. Humanities/Fine Arts: 3 Hours  Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalogs  D. Math/Natural Sciences: Select 8 hours from the following:  MAT 121 Algebra/Trigonometry I 2 2 2 0 3 3 0 0 3 3 0 0 3 3 0 0 3 3 0 0 3 3 0 0 0 3 3 0 0 0 3 3 0 0 0 3 3 0 0 0 3 3 0 0 0 3 3 0 0 0 3 3 0 0 0 3 3 0 0 0 3 3 0 0 0 3 3 0 0 0 0 3 0 0 0 3 0 0 0 0 3 0	A. Eng	lish: 6 Hours				
ENG 114 Professional Research and Reporting 3 0 0 3 and B. Social/Behavioral Sciences: 3 Hours  Selected from the list of social/behavioral sciences electives for the Associate in Applied Science degree appearing in the current catalogs  C. Humanities/Fine Arts: 3 Hours  Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalogs  D. Math/Natural Sciences: Select 8 hours from the following:  MAT 121 Algebra/Trigonometry I 2 2 2 0 3 3 0 0 3 3 0 0 3 3 0 0 3 3 0 0 3 3 0 0 0 3 3 0 0 0 3 3 0 0 0 3 3 0 0 0 3 3 0 0 0 3 3 0 0 0 3 3 0 0 0 3 3 0 0 0 3 3 0 0 0 3 3 0 0 0 0 3 0 0 0 3 0 0 0 0 3 0	0	ENG 111 Expository Writing	3	0	0	3
Selected from the list of social/behavioral sciences electives for the Associate in Applied Sciences degree appearing in the current catalog  C. Humanities/Fine Arts: 3 Hours  Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog  D. Math/Natural Sciences: Select 8 hours from the following:  MAT 121 Algebra/Trigonometry I 2 2 2 0 3 3 0 0 3 0 3 0 0 3 0 0 3 0 0 0 3 0			ng 3	0	0	3
C. Humanities/Fine Arts: 3 Hours   Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog	B. Soci	al/Behavioral Sciences: 3 Hours				
C. Humanities/Fine Arts: 3 Hours   Selected from the list of humanities/fine arts electives for the Associate in Applied Science   degree appearing in the current catalog		Selected from the list of social/behavioral sciences	electives fo	r the Associ	ate in Appl	ied Science
Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog   D. Math-Natural Sciences: Select 8 hours from the following:   MAT 121 Algebra/Trigonometry I		degree appearing in the current catalog.				
D. Math/Natural Sciences: Select 8 hours from the following:   D. Math/Natural Sciences: Select 8 hours from the following:   MAT 121 Algebra/Trigonometry I	C. Hur	manities/Fine Arts: 3 Hours				
D. Math		Selected from the list of humanities/fine arts election	es for the	Associate in	Applied S	cience
MAT 121 Algebra/Trigonometry I 2 2 0 3 or MAT 161 College Algebra 3 0 0 3 or AST 111 Descriptive Astronomy & 3 0 0 3 and BIO 163 Basic Anatomy & Physiology 4 2 0 5 or BIO 168 Anatomy and Physiology I 3 3 0 4 and BIO 169 Anatomy and Physiology II 3 3 0 4 II. Major Courses: 10 Hours  A. Core: 7 Hours required EMS 140 Rescue Scene Management 1 3 0 2 EMS 235 EMS Management 2 0 0 2 EMS 235 EMS Management 2 0 0 2 Or EMS 125 EMS Educational Methodology 2 0 0 2 EMS 280 EMS Bridging Course 2 2 0 3 B. Other Required Courses: 3 Hours CIS 110 Intro to Computers 2 2 0 3  III. Other Required Courses: 1 Hour  ACA 111 College Student Success 1 0 0 0 1 Credits required Total transfer credits Total Credits		degree appearing in the current catalog.				
or MAT 161 College Algebra 3 0 0 3 or AST 111 Descriptive Astronomy & 3 0 0 3 and BIO 163 Basic Anatomy & Physiology 4 2 0 5 or BIO 168 Anatomy and Physiology I 3 3 0 4 and BIO 169 Anatomy and Physiology II 3 3 0 4 II. Major Courses: 10 Hours  A. Core: 7 Hours required EMS 140 Rescue Scene Management 1 3 0 2 EMS 235 EMS Management 2 0 0 2 EMS 235 EMS Educational Methodology 2 0 0 2 EMS 280 EMS Bridging Course 2 2 0 3 B. Other Required Courses: 3 Hours CIS 110 Intro to Computers 2 2 0 3  III. Other Required Courses: 1 Hour  ACA 111 College Student Success 1 0 0 0 1 Credits required Total transfer credits Total Credits 5 76	D. Mat	th/Natural Sciences: Select 8 hours from the	following	g:		
or AST 111 Descriptive Astronomy & 3 0 0 5 and BIO 163 Basic Anatomy & Physiology 4 2 0 5 or BIO 168 Anatomy and Physiology I 3 3 0 4 and BIO 169 Anatomy and Physiology II 3 3 0 4  II. Major Courses: 10 Hours  A. Core: 7 Hours required EMS 140 Rescue Scene Management 1 3 0 2 EMS 235 EMS Management 2 0 0 2 Or EMS 125 EMS Educational Methodology 2 0 0 2 EMS 280 EMS Bridging Course 2 2 0 3  B. Other Required Courses: 3 Hours CIS 110 Intro to Computers 2 2 0 3  III. Other Required Courses: 1 Hour  ACA 111 College Student Success 1 0 0 1 Credits required Total transfer credits Total Credits 76		MAT 121 Algebra/Trigonometry I	2	2	0	
and or and BIO 163 Basic Anatomy & Physiology I and BIO 168 Anatomy and Physiology I and BIO 169 Anatomy and Physiology II and BIO 169 Anatomy and BIO 16	or	MAT 161 College Algebra		0	0	3
or BIO 168 Anatomy and Physiology I 3 3 0 4 and BIO 169 Anatomy and Physiology II 3 3 0 4  II. Major Courses: 10 Hours  A. Core: 7 Hours required  EMS 140 Rescue Scene Management 1 3 0 2 EMS 235 EMS Management 2 0 0 2 or EMS 125 EMS Educational Methodology 2 0 0 2 EMS 280 EMS Bridging Course 2 2 0 3  B. Other Required Courses: 3 Hours CIS 110 Intro to Computers 2 2 0 3  III. Other Required Courses: 1 Hour  ACA 111 College Student Success 1 0 0 1 Credits required Total transfer credits Total Credits 76	or	AST 111 Descriptive Astronomy &	3		0	3
and BIO 169 Anatomy and Physiology II 3 3 0 4  II. Major Courses: 10 Hours  A. Core: 7 Hours required  EMS 140 Rescue Scene Management 1 3 0 2 EMS 235 EMS Management 2 0 0 2 Or EMS 125 EMS Educational Methodology 2 0 0 2 EMS 280 EMS Bridging Course 2 2 0 3  B. Other Required Courses: 3 Hours CIS 110 Intro to Computers 2 2 0 0 3  III. Other Required Courses: 1 Hour  ACA 111 College Student Success 1 0 0 0 1 Credits required Total transfer credits Total Credits 5 76	and	BIO 163 Basic Anatomy & Physiology			0	5
III. Major Courses: 10 Hours  A. Core: 7 Hours required  EMS 140 Rescue Scene Management	or	BIO 168 Anatomy and Physiology I			0	4
A. Core: 7 Hours required  EMS 140 Rescue Scene Management 1 3 0 2  EMS 235 EMS Management 2 0 0 2  or EMS 125 EMS Educational Methodology 2 0 0 2  EMS 280 EMS Bridging Course 2 2 0 3  B. Other Required Courses: 3 Hours  CIS 110 Intro to Computers 2 2 0 3  III. Other Required Courses: 1 Hour  ACA 111 College Student Success 1 0 0 1  Credits required Total transfer credits Total Credits 5 76	and	BIO 169 Anatomy and Physiology II	3	3	0	4
EMS 140 Rescue Scene Management 1 3 0 2 EMS 235 EMS Management 2 0 0 0 2 or EMS 125 EMS Educational Methodology 2 0 0 2 EMS 280 EMS Bridging Course 2 2 0 0 3 B. Other Required Courses: 3 Hours CIS 110 Intro to Computers 2 2 0 0 3  III. Other Required Courses: 1 Hour  ACA 111 College Student Success 1 0 0 0 1 Credits required Total transfer credits Total Credits 5 76	II. Major Co	urses: 10 Hours				
EMS 140 Rescue Scene Management 1 3 0 2 EMS 235 EMS Management 2 0 0 0 2 or EMS 125 EMS Educational Methodology 2 0 0 2 EMS 280 EMS Bridging Course 2 2 0 0 3 B. Other Required Courses: 3 Hours CIS 110 Intro to Computers 2 2 0 0 3  III. Other Required Courses: 1 Hour  ACA 111 College Student Success 1 0 0 0 1 Credits required Total transfer credits Total Credits 5 76	A. Cor	e: 7 Hours required				
or EMS 125 EMS Educational Methodology 2 0 0 2 EMS 280 EMS Bridging Course 2 2 0 3 3 B. Other Required Courses: 3 Hours CIS 110 Intro to Computers 2 2 0 0 3 III. Other Required Courses: 1 Hour ACA 111 College Student Success 1 0 0 1 Credits required Total transfer credits 5 Total Credits 10 Tot		*	1	3	0	2
or EMS 125 EMS Educational Methodology 2 0 0 2 EMS 280 EMS Bridging Course 2 2 0 3 3 B. Other Required Courses: 3 Hours CIS 110 Intro to Computers 2 2 0 0 3 III. Other Required Courses: 1 Hour ACA 111 College Student Success 1 0 0 1 Credits required Total transfer credits 5 Total Credits 10 Tot		EMS 235 EMS Management	2	0	0	2
EMS 280 EMS Bridging Course 2 2 0 3 B. Other Required Courses: 3 Hours CIS 110 Intro to Computers 2 2 0 0 3  III. Other Required Courses: 1 Hour  ACA 111 College Student Success 1 0 0 1 Credits required 31 Total transfer credits Total Credits 5 76	or	_	2	0	0	
CIS 110 Intro to Computers 2 2 0 0 3  III. Other Required Courses: 1 Hour  ACA 111 College Student Success 1 0 0 1 Credits required 31 Total transfer credits 45 Total Credits 76		EMS 280 EMS Bridging Course	2	2	0	3
III. Other Required Courses: 1 Hour         ACA 111 College Student Success       1       0       0       1         Credits required       31         Total transfer credits       45         Total Credits       76	B. Oth	er Required Courses: 3 Hours				
ACA 111 College Student Success 1 0 0 1 Credits required 31 Total transfer credits 45 Total Credits 76		CIS 110 Intro to Computers	2	2	0	3
Credits required31Total transfer credits45Total Credits76	III. Other Re	equired Courses: 1 Hour				
Credits required31Total transfer credits45Total Credits76		ACA 111 College Student Success	1	0	0	1
Total Credits 76						31
		Total transfer credits				45
All Emergency Medical Science students must make grades of "A," "B," or "C" on all major		Total Credits				76
	All Emergency M	edical Science students must make grades of	"A," "B,	" or "C" o	on all maj	or

#### **GENERAL OCCUPATIONAL TECHNOLOGY A55280**

# (64-76 Semester Hours Credit Required) ASSOCIATE IN APPLIED SCIENCE DEGREE (Revised 2004\*03) Course and Hour Requirements

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

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

Graduates will become more effective workers, better qualified for advancements within their field of employment, and become qualified for a wide range of entry-level employment opportunities.

All courses must be taken from approved AAS programs.

#### COMPLETION OF DOCUMENTATION FOR

#### **Student Information**

A separate documentation form must be completed for each student. It is recommended that the form be completed in the semester prior to the semester the student plans to graduate. Complete the student information as indicated.

#### **General Education**

Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics.

Degree programs must contain a minimum of 6 semester hours of communications. For each course list the course prefix and number, course title, credit hours, and the code and title of an approved program of study that includes the course.

#### **Core Courses**

The student must complete 18 SHC from a combination of core courses for curriculum programs approved to be offered by the College. For each course list the course prefix and number, course title, credit hours, and the code and title of an approved program of study that uses the course in its core.

#### **Other Program Courses**

The student must complete a minimum of 31 SHC from a combination of major courses for curriculums approved to be offered by the College. For each course list the course prefix and number, course title, credit hours, and the code and title of an approved program of study that uses the course in its major.

Work experience, including cooperative education, practicums, and internships, may be included in the Associate in Applied Science degree with a maximum of 8 SHC. For each course list the course prefix and number, course title, credit hours, and the code and title of an approved program of study that uses the course in its major.

A college may require other subjects or courses to complete graduation requirements. These requirements may include electives, orientation, study skills courses, or other graduation requirements. For each course list the course prefix and number, course title, credit hours, and the code and title of an approved program of study that includes the course.

#### Official Signature and Date

This section should include the signature of the President or his designee certifying that the program is in compliance with the North Carolina Administrative Code and with NCCCS guidelines for implementation of this program.

#### **GLOBAL LOGISTICS TECHNOLOGY A25170**

The Global Logistics Technology curriculum prepares individuals for a multitude of career opportunities in distribution, transportation, and manufacturing organizations.

Classroom instruction, field of study experiences, and practical laboratory applications of logistics management and global technology capabilities are included in the program of study.

Course work includes computer applications, accounting, business law, economics, management, industrial sciences, and international studies. Students will solve different levels of logistics-related problems through case study evaluations and supply chain projects utilizing logistical hardware and intelligent software tools.

Graduates should qualify for positions in a wide range of government agencies, manufacturing, and service organizations. Employment opportunities include entry-level purchasing, material management, warehousing, inventory, transportation coordinators, and logistics analysts. Upon completion, graduates may be eligible for certification credentials through APICS, and AST&L.

#### **Global Logistics Technology** Associate in Applied Science Degree A25170

(Revised 2011\*03) Course and Hour Requirements

(Iterised 2011 00) Godise and 1100	Hours	cincing	Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 15 Hours			•	
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 114 Prof Research & Reporting	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
ECO 251 Prin of Microeconomics	3	0	0	3
C. Humanities/Fine Arts: 3 Hours				
Selected from the list of humanities/fine arts ele	ctives for the	Associate in	Applied S	Science
degree appearing in the current catalog.				
D. Math/Natural Sciences: 3 Hours selected from	n the follow	ring:		
MAT 121 Algebra/Trigonometry I	3	0	0	3
MAT 161 College Algebra	3	0	0	3
II. Major Courses: 52 Hours				
A. Core: 34 Hours				
BUS 115 Business Law I	3	0	0	3
BUS 137 Principles of Management	3	0	0	3
CIS 110 Introduction to Computers	2	2	0	3
DBA 110 Database Concepts	2	3	0	3
INT 110 International Business	3	0	0	3
LOG 110 Introduction to Logistics	3	0	0	3
LOG 125 Transportation Logistics	3	0	0	3
LOG 215 Supply Chain Management	3	0	0	3
LOG 235 Import/Export Management	3	0	0	3
LOG 240 Purchasing Logistics	3	0	0	3
LOG 250 Advanced Global Logistics	3	2	0	4
B. Other Major Courses: 18 Hours				
1. Required: 15 hours				
ISC 135 Principles of Industrial Mgmt	3	0	0	3
ISC 222 Project Planning/Control	1	2	0	2
LOG 211 Distribution Management	3	0	0	3
ACC 120 Prin of Financial Acct	3	2	0	4
ECM 210 Intro to E-Commerce	2	2	0	3

**Global Logistics Technology (Continued)** 

8	Hours		Work	
Title	Class	Lab	Exp.	Credits
2. 3 hours from the following:				
ACC 121 Prin of Managerial Acct	3	2	0	4
BUS 116 Business Law II	3	0	0	3
BUS 225 Business Finance	2	2	0	3
CIS 115 Intro to Prog & Logic	2	2	0	3
COE 111-112 Co-op Work Experience	ce I 0	0	10-20	1-2
COE 121-122 Co-op Work Experience	ce II 0	0	10-20	1-2
CTS 125 Presentations	3	0	0	3
CTS 130 Spreadsheet	2	2	0	3
LOG 225 Logistics Systems	3	2	0	4
LOG 245 Logistics Security	3	0	0	3
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				68

#### Global Logistics Technology Diploma D25170D

(Revised 2011\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 6 Hours				
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Math/Natural Sciences: 3 Hours selected from	the follow	ing:		
MAT 121 Algebra/Trigonometry I	3	0	0	3
MAT 161 College Algebra	3	0	0	3
II. Major Courses: 40 Hour				
A. Core: 28 Hours				
BUS 137 Principles of Management	3	0	0	3
CIS 110 Introduction to Computers	2	2	0	3
DBA 110 Database Concepts	2	3	0	3
LOG 110 Introduction to Logistics	3	0	0	3
LOG 125 Transportation Logistics	3	0	0	3
LOG 215 Supply Chain Management	3	0	0	3
LOG 235 Import/Export Management	3	0	0	3
LOG 240 Purchasing Logistics	3	0	0	3
LOG 250 Advanced Global Logistics	3	2	0	4
B. Other Major Courses: 12 Hours				
1. Required: 9 hours				
ACC 120 Prin of Financial Acct	3	2	0	4
INT 110 International Business	3	0	0	3
ISC 222 Project Planning/Control	1	2	0	2
100 222 Froject Frammig/Control	1	4	U	4

#### Global Logistics Technology D25170D (Continued)

	Hours		Work	
Title	Class	Lab	Exp.	Credits
2. Other Major Hours: Select 3 hours from the fo	ollowing			
ACC 121 Prin of Managerial Acct	3	2	0	4
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
CTS 125 Presentations	3	0	0	3
ECM 210 Intro to E-Commerce	3	0	0	3
ISC 135 Principles of Industrial Mgmt	3	0	0	3
LOG 211 Distribution Management	2	2	0	3
LOG 225 Logistics Systems	3	2	0	4
LOG 245 Logistics Security	3	0	0	3
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				47

### **Global Logistics Technology**

General Logistics Certificate C25170C1 (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 12 Hours				
A. Core: 12 Hours				
LOG 110 Introduction to Logistics	3	0	0	3
LOG 125 Transportation Logistics	3	0	0	3
LOG 215 Supply Chain Management	3	0	0	3
LOG 240 Purchasing Logistics	3	0	0	3
Total Credits				12

#### **Global Logistics Technology**

International Logistics Certificate C25170C2 (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 15 Hours				
A. Core: 15 Hours				
ECM 210 Introduction to E-Commerce	3	0	0	3
INT 110 International Business	3	0	0	3
LOG 110 Introduction to Logistics	3	0	0	3
LOG 125 Transportation Logistics	3	0	0	3
LOG 235 Import/Export Management	3	0	0	3
Total Credits				15

# Global Logistics Technology Skills Certificate\* C25170K

#### (Revised 2012\*01) Course and Hour Requirements

(	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
A. Core: 15 Hours				
LOG 110 Introduction to Logistics	3	0	0	3
LOG 125 Transportation Logistics	3	0	0	3
LOG 215 Supply Chain Management	3	0	0	3
LOG 235 Import/Export Management	3	0	0	3
LOG 240 Purchasing Logistics	3	0	0	3
B. Other Major Course:				
LOG 211 Distribution Management	2	2	0	3

**Total Credits** 18

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

#### **GRAPHIC ARTS AND IMAGING TECHNOLOGY A30180**

The Graphic Arts and Imaging Technology curriculum is designed to provide students with knowledge and skills necessary for employment in the printing, publishing, packaging, and related industries. Students will receive hands-on training in computer publishing, imaging technology, offset lithography, screen printing, and emerging printing technologies. Training may also include flexography, graphic design, and multimedia. Graduates should qualify for career opportunities within the printing and publishing industries.

### **Graphic Arts and Imaging Technology**

Associate in Applied Science Degree A30180 (Revised 2010\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 15 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 114 Professional Research and Reporti	ng 3	0	0	3
B. Social/Behavioral Sciences: 3 Hours	0			
Selected from the list of social/behavioral sciences	s electives fo	r the Associ	ate in App	lied Science
degree appearing in the current catalog. PSY 150				
C. Humanities/Fine Arts: 3 Hours				
Selected from the list of humanities/fine arts elect	tives for the	Associate in	Applied S	Science
degree appearing in the current catalog. ART 11	1 is recon	nmended.		
D. Math/Natural Sciences: 3 Hours selected from	the follow	ving:		
MAT 115 Mathematical Models	2	2	0	3
or MAT 161 College Algebra	3	0	0	3
II. Major Courses: 53 Hours				
A. Core: 20 Hours				
GRA 121 Graphic Arts I	2	4	0	4
GRA 151 Computer Graphics I	1	3	0	2
GRA 152 Computer Graphics II	1	3	0	2
GRA 221 Graphic Arts II	2	4	0	4
GRA 255 Image Manipulation I	1	3	0	2
GRA 256 Image Manipulation II	1	3	0	2 2
GRD 141 Graphic Design I	2	4	0	4
B. Other Major Courses: 33 Hours				
1. Required Courses 28 Hours				
GRA 110 Graphic Arts Orientation	2	0	0	2
GRA 153 Computer Graphics III	1	3	0	2
GRA 154 Computer Graphics IV	1	3	0	2
GRA 222 Graphic Arts III	2	4	0	4
GRA 250 E-Document Publishing	1	3	0	2
GRA 257 Image Manipulation III	1	3	0	2
GRD 142 Graphic Design II	2	4	0	4
GRD 271 Multimedia Design I	1	3	0	2
GRD 280 Portfolio Design	2	4	0	4
PRN 155 Screen Printing I	1	3	0	2
PRN 220 Offset Press Fundamentals	1	3	0	2

#### Graphic Arts and Imaging Technology A30180 (Continued)

	Hours		Work	
Title	Class	Lab	Exp.	Credits
2. Other major hours: select 5 hours from the fo	llowing		1	
BUS 115 Business Law I	3	0	0	3
BUS 137 Principles of Management	3	0	0	3
BUS 260 Business Communication	3	0	0	3
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0 I	0	10-20	1-2
COE 131-132 Co-op Work Experience II	II 0	0	10-20	1-2
GRA 245 Printing Sales/Service	3	0	0	3
GRD 110 Typography I	2	2	0	3
GRD 265 Digital Print Production	1	4	0	3
PRN 156 Screen Printing II	1	3	0	2
<b>or</b> Other college-level courses from the following pref CSC, MKT, OST, PRN.	fixes: ART, I	BUS, CIS,		
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				69

### **Graphic Arts and Imaging Technology**

Certificate C30180C1

(Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
GRA 121 Graphic Arts I	2	4	0	4
GRA 151 Computer Graphics I	1	3	0	2
GRA 152 Computer Graphics II	1	3	0	2
GRA 221 Graphic Arts II	2	4	0	4
GRA 255 Image Manipulation I	1	3	0	2
GRD 141 Graphic Design I	2	4	0	4
Total Credits				12

#### **Graphic Arts and Imaging Technology**

Computer Graphics Certificate\* C30180C2 (Revised 2012\*01) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
A. Core				
GRA 151 Computer Graphics I	1	3	0	2
GRA 152 Computer Graphics II	1	3	0	2
GRA 255 Image Manipulation I	1	3	0	2
GRA 256 Image Manipulation II	1	3	0	2
GRD 141 Graphic Design I	2	4	0	4

#### **Graphic Arts and Imaging Technology C30180C2 (Continued)**

		Hours		Work	
Title		Class	Lab	Exp.	Credits
	B. Other Major Courses				
	GRA 153 Computer Graphics III	1	3	0	2
	GRA 154 Computer Graphics IV	1	3	0	2
	GRA 257 Image Manipulation III	1	3	0	2
	<b>Total Credits</b>				18

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

#### **Graphic Arts and Imaging Technology**

Printing Sales and Service Certificate C30180C5 (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 14 Hours				
BUS 115 Business Law I	3	0	0	3
BUS 137 Principles of Management	3	0	0	3
BUS 260 Business Communication	3	0	0	3
GRA 110 Graphic Arts Orientation	2	0	0	2
GRA 245 Printing Sales/Service	3	0	0	3
Total Credits				14

### **Graphic Arts and Imaging Technology**

Skills Certificate C30180K

(Revised 2002\*03) Course and Hour Requirements
Hours

Work

Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 12 Hours				
A. Core				
GRA 151 Computer Graphics I	1	3	0	2
GRA 152 Computer Graphics II	1	3	0	2
GRA 255 Image Manipulation I	1	3	0	2
GRD 141 Graphic Design I	2	4	0	4
B. Other Major Courses				
GRA 110 Graphic Arts Orientation	2	0	0	2
Total Credits				12

# **Graphic Arts and Imaging Technology** Vehicle and Outdoor Graphics Skills Certificate C30180K1

## (Revised 2011\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 17 Hours				
A. Core				
GRA 121 Graphic Arts I	2	4	0	4
GRA 151 Computer Graphics I	1	3	0	2
GRA 152 Computer Graphics II	1	3	0	2
GRA 255 Image Manipulation I	1	3	0	2
GRD 141 Graphic Design I	2	4	0	4
GRD 265 Digital Print Production	1	4	0	3
<b>Total Credits</b>				17

#### **GUNSMITHING A30200**

The Gunsmithing curriculum is designed to provide the student with the required skills needed to refurbish metal and wood as applicable to firearms, to diagnose malfunctions for repair, and to accomplish more complex custom gunsmithing tasks. Course work includes manufacturing of tools used in the gunsmithing trade, restoration of firearms, stock making, barrel work, repair work, and custom work. The student will accomplish this work by performing actual gunsmithing tasks in a hands-on environment. Graduates should qualify as a professional gunsmith, able to complete any task in general gunsmithing.

# Gunsmithing Associate in Applied Science Degree A30200 (Revised 2012\*03) Course and Hour Requirements

Hours Work Title Class Lab Exp. Credits I. General Education Courses: 15 Hours A. English: 6 Hours ENG 111 Expository Writing 3 0 0 3 ENG 112 Argument-Based Research 3 0 3 0 0 0 3 ENG 114 Professional Research and Reporting 3 B. Social/Behavioral Sciences: 3 Hours Selected from the list of social/behavioral sciences electives for the Associate in Applied Science degree appearing in the current catalog. C. Humanities/Fine Arts: 3 Hours Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog. D. Math/Natural Sciences: 3 Hours selected from the following: MAT 115 Mathematical Models 9 2 0 3 3 0 0 3 MAT 161 College Algebra II. Major Courses: 52 Hours A. Core: 12 Hours GSM 111 Gunsmithing I 2 12 0 6 2 12 0 GSM 120 Gunsmithing Tools 6 B. Other Major Courses: 40 Hours 1. Required Courses 37 Hours GSM 125 Barrel Fitting/Alteration 3 9 0 6 GSM 127 General Repair 3 9 0 6 2 12 GSM 225 Gun Metal Refinishing 0 6 GSM 227 Adv Repair Technology 2 12 0 6 2 GSM 230 Handgun Technology 9 0 5 GSM 235 Current Gunsmithing Tech 2 12 0 6 MAC 118 Machine Shop Basic 1 3 0 2 2. Select 3 hours from the following 2 2 CIS 110 Introduction to Computers 0 3 0 COE 111-112 Co-op Work Experience I 0 10-20 1-2 COE 121-122 Co-op Work Experience II 0 1-2 0 10-20 COE 131-132 Co-op Work Experience III 0 0 10-20 1-2 III. Other Required Courses: 1 Hour ACA 111 College Student Success 1 0 0 1 **Total Credits** 68

## **Gunsmithing**Basic Gunsmithing Skills Certificate\* C30200K1 (Revised 2012\*03) Course and Hour Requirements

,	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 14 Hours				
A. Core: 12 Hours				
GSM 111 Gunsmithing I	2	12	0	6
GSM 120 Gunsmithing Tools	2	12	0	6
B. Other Major Courses: 2 Hours				
MAC 118 Machine Shop Basic	1	3	0	2
Total Credits				14

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

## **Gunsmithing**Advanced Gunsmithing Skills Certificate C30200K2 (Revised 2010\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 12 Hours				
A. Core				
GSM 125 Barrel Fitting/Alteration	3	9	0	6
GSM 127 General Repair	3	9	0	6
<b>Total Credits</b>				12

#### HEALTHCARE MANAGEMENT TECHNOLOGY A25200

## (Program is offered through an Instructional Service Agreement with Pitt Community College)

The Healthcare Management Technology curriculum is designed to prepare students for employment in healthcare business and financial operations. Students will gain a comprehensive understanding of the application of management principles to the healthcare environment.

The curriculum places emphasis on planning, organizing, directing, and controlling tasks related to healthcare organizational objectives including the legal and ethical environment. Emphasis is placed on the development of effective communication, managerial, and supervisory skills.

Graduates may find employment in healthcare settings including hospitals, medical offices, clinics, long-term care facilities, and insurance companies. Graduates are eligible to sit for the Certified Patient Account Manager (CPAM) and the Certified Manager of Patient Accounts (CMPA).

#### **Healthcare Management Technology**

Associate in Applied Science Degree A25200 (Agreement Revised 2011\*03) Course and Hour Requirements

( 9	Hours	1	Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 18 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
B. English Elective: 3 Hours (select one course fro	m the follow	wing)		
ENG 112 Argument-Based Research	3	0	0	3
ENG 113 Literature-Based Research	3	0	0	3
ENG 114 Professional Research and Repor	ting 3	0	0	3
C. Communication: 3 Hours (select one course fro	om the follo	owing)		
COM 120 Intro Interpersonal Comm	3	0	0	3
COM 231 Public Speaking	3	0	0	3
D. Social/Behavioral Sciences: 3 Hours (select one	e course fro	m the fol	lowing)	
PSY 150 General Psychology	3	0	0	3
SOC 213 Sociology of the Family	3	0	0	3
E. Humanities/Fine Arts: 3 Hours (select one cou	rse from the	e followin	g)	
Selected from the list of humanities/fine arts electives for the As	ssociate in Ap	plied Scien	ce degree a <sub>l</sub>	bpearing in
the current catalog.				
F. Math/Natural Sciences: 3 Hours (select one cou			· ·	
MAT 115 Mathematical Models	2	2	0	3
MAT 140 Survey of Mathematics	3	0	0	3
MAT 161 College Algebra	3	0	0	3
II. Major Courses: 56 Hours				
A. Core: 34 Hours				
ACC 120 Prin of Financial Acct	3	2	0	4
ACC 121 Prin of Managerial Acct	3	2	0	4
ACC 140 Payroll Accounting	1	2	0	2
or ACC 150 Accounting Software Applic	1	2	0	2
HMT 110 Intro to Healthcare Mgt*	3	0	0	3
HMT 210 Medical Insurance*	3	0	0	3
HMT 211 Long-Term Care Admin*	3	0	0	3
HMT 220 Healthcare Financial Mgmt*	4	0	0	4
HMT 225 Practice Mana Simulation	2	2	0	3
MED 118 Medical Law and Ethics	2	0	0	2
or OST 149 Medical Legal Issues	3	0	0	3

# **Healthcare Management Technology A25200 (Continued)**Work

	Hours		Work	
Title	Class	Lab	Exp.	Credits
MED 121 Medical Terminology I	3	0	0	3
MED 122 Medical Terminology II	3	0	0	3
B. Major Courses: 22 Hours				
<b>BUS 110 Introduction to Business</b>	3	0	0	3
BUS 121 Business Math	2	2	0	3
or MAT 155 Statistical Analysis	3	0	0	3
BUS 153 Human Resource Management	3	0	0	3
CIS 110 Intro to Computers	2	2	0	3
or CIS 111 Basic PC Literacy	1	2	0	2
or OST 137 Office Software Applications*	1	2	0	2
CTS 130 Spreadsheet	2	2	0	3
COE 112 Co-op Work Experience I	0	0	20	2
HMT 212 Mgt of Healthcare Org*	3	0	0	3
SPA 120 Spanish for the Workplace	3	0	0	3
III. Other Required Courses: 2 Hours				
ACA 111 College Student Success	1	0	0	1
COE 110 World of Work	1	0	0	1
<b>Total Credits</b>				76

<sup>\*</sup>A minimum of 19 SHC must be completed through Pitt Community College. HMT 110, HMT 210, HMT 211, HMT 220, HMT 212 and at least 4 additional semester hours must be taken at Pitt Community College. The Associate in Applied Science Degree in Healthcare Management Technology will be awarded by Pitt Community College upon successful completion of all requirements.

#### **HORTICULTURE TECHNOLOGY A15240**

The Horticulture Technology curriculum is designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study.

Course work includes plant science, plant materials, propagation, soils, fertilizers, and pest management. Also included are courses in plant production, landscaping, and the management and operation of horticulture businesses.

Graduates should qualify for employment opportunities in nurseries, garden centers, greenhouses, landscape operations, gardens, and governmental agencies. Graduates should also be prepared to take the certified plant professional and licensed pesticide applicators examinations.

# Horticulture Technology Associate in Applied Science Degree A15240 (Revised 2012\*03) Course and Hour Requirements

Hours

Work

			Hours		VVOIK	
Title			Class	Lab	Exp.	Credits
I. Gen	eral E	ducation Courses: 15 Hours				
	A. Eng	glish: 6 Hours				
		ENG 111 Expository Writing	3	0	0	3
		ENG 112 Argument-Based Research	3	0	0	3
	or	ENG 113 Literature Based Research	3	0	0	3
	or	ENG 114 Prof Research & Reporting	3	0	0	3
	B. Soc	ial/Behavioral Sciences: 3 Hours				
		Selected from the list of social/behavioral sciences	electives for	r the Associ	ate in App	lied Science
		degree appearing in the current catalog.				
	C. Hu	manities/Fine Arts: 3 Hours				
		Selected from the list of humanities/fine arts election	ves for the	Associate in	Applied S	cience
		degree appearing in the current catalog.				
	D. Ma	th/Natural Sciences: 3 Hours				
		MAT 115 Mathematical Models	2	2	0	3
	or	MAT 161 College Algebra	3	0	0	3
II. Ma	jor Co	ourses: 51 Hours				
		re: 15 Hours				
		HOR 160 Plant Materials I	2	2	0	3
		HOR 162 Applied Plant Science	2	2	0	3
		HOR 164 Horticulture Pest Management	2	2	0	3
		HOR 166 Soils & Fertilizers	2	2	0	3
		HOR 168 Plant Propagation	2	2	0	3
	B. Oth	er Major Courses: 36 Hours				
	1. R	equired Hours: 28 Hours				
		HOR 112 Landscape Design I	2	3	0	3
		HOR 114 Landscape Construction	2	2	0	3
		HOR 116 Landscape Management I	2	2	0	3
		HOR 124 Nursery Operations	2	3	0	3
		HOR 134 Greenhouse Operations	2	2	0	3
		HOR 213 Landscape Design II	2	2	0	3
		HOR 217 Landscape Management II	1	3	0	2
		HOR 255 Interiorscapes	1	2	0	2
		HOR 260 Plant Materials II	2	2	0	3
		HOR 273 Hort Mgmt. & Marketing	3	0	0	3

**Horticulture Technology A15240 (Continued)** 

	Hours		Work	
Title	Class	Lab	Exp.	Credits
2. 8 Hours selected from the following:				
CIS 110 Introduction to Computers	2	2	0	3
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
COE131-132 Co-op Work Experience III	0	0	10-20	1-2
HOR 118 Equipment Op & Maint	1	3	0	2
HOR 150 Intro to Horticulture	2	0	0	2
HOR 152 Horticultural Practices	0	3	0	1
HOR 215 Landscape Irrigation	2	2	0	3
HOR 251 Insects & Diseases	2	2	0	3
HOR 253 Horticulture Turfgrass	2	2	0	3
HOR 271 Garden Center Mgmt	2	0	0	2
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>				67

#### Horticulture Technology Greenhouse Technician Diploma D15240D1

(Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 6 Hours				
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Math/Natural Sciences: 3 Hours				
MAT 115 Mathematical Models	2	2	0	3
or MAT 161 College Algebra	3	0	0	3
II. Major Courses: 30 Hours				
A. Core: 15 Hours				
HOR 160 Plant Materials I	2	2	0	3
HOR 162 Applied Plant Science	2	2	0	3
HOR 164 Horticulture Pest Management	2	2	0	3
HOR 166 Soils & Fertilizers	2	2	0	3
HOR 168 Plant Propagation	2	2	0	3
B. Other Major Courses: 15 Hours				
1. Required Hours: 8 Hours				
HOR 134 Greenhouse Operations	2	2	0	3
HOR 255 Interiorscapes	1	2	0	2
HOR 260 Plant Materials II	2	2	0	3
2. 7 Hours selected from the following				
(a maximum of 4 hrs of COE is allowed):				
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2

**Horticulture Technology D15240D1 (Continued)** 

	37	Hours	`	Work	,
Title		Class	Lab	Exp.	Credits
	COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
	COE 131-132 Co-op Work Experience III	0	0	10-20	1-2
	HOR 118 Equipment Op & Maint	1	3	0	2
	HOR 124 Nursery Operations	2	3	0	3
	HOR 150 Intro to Horticulture	2	0	0	2
	HOR 152 Horticultural Practices	0	3	0	1
	HOR 215 Landscape Irrigation	2	2	0	3
	HOR 251 Insects & Diseases	2	2	0	3
	HOR 273 Hort Mgmt. & Mkt	3	0	0	3
III. Other Re					
	ACA 111 College Student Success	1	0	0	1
	Total Credits				37

# Horticulture Technology Plant Protection Technician Diploma D15240D2

Plant Protection Technician Diploma D15240D2 (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
	Class	Lab	Exp.	Credits
I. General Education Courses: 6 Hours				
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Math/Natural Sciences: 3 Hours				
MAT 115 Mathematical Models	2	2	0	3
or MAT 161 College Algebra	3	0	0	3
II. Major Courses: 32 Hours				
A. Core: 15 Hours				
HOR 160 Plant Materials I	2	2	0	3
HOR 162 Applied Plant Science	2	2	0	3
HOR 164 Hor Pest Mgmt	2	2	0	3
HOR 166 Soils & Fertilizers	2	2	0	3
HOR 168 Plant Propagation	2	2	0	3
B. Other Major Courses: 17 Hours				
1. Required Hours: 3 Hours				
HOR 251 Insects & Diseases	2	2	0	3
2. 14 Hours selected from the following				
(a maximum of 2 hrs of COE is allowed):				
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
COE 131-132 Co-op Work Experience III	0	0	10-20	1-2
HOR 116 Landscape Management	2	2	0	3
HOR 118 Equipment Op & Maint	1	3	0	2
HOR 124 Nursery Operations	2	3	0	3
HOR 134 Greenhouse Operations	2	2	0	3
HOR 152 Horticultural Practices	0	3	0	1
HOR 215 Landscape Irrigation	2	2	0	3
HOR 253 Horticulture Turfgrass	2	2	0	3
HOR 255 Interiorscapes	1	2	0	2
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				39
172				

Horticulture Technology
Landscape Technician Diploma D15240D3
(Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 6 Hours			•	
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Math/Natural Sciences: 3 Hours				
MAT 115 Mathematical Models	2	2	0	3
or MAT 161 College Algebra	3	0	0	3
II. Major Courses: 30 Hours				
A. Core: 15 Hours				
HOR 160 Plant Materials I	2	2	0	3
HOR 162 Applied Plant Science	2	2	0	3
HOR 164 Hor Pest Mgmt	2	2	0	3
HOR 166 Soils & Fertilizers	2	2	0	3
HOR 168 Plant Propagation	2	2	0	3
B. Other Major Courses: 15 Hours				
1. Required Hours: 6 Hours				
HOR 112 Landscape Design I	2	3	0	3
HOR 260 Plant Materials II	2	2	0	3
2. 9 Hours selected from the following (a maximum)	um of 4 h	rs of CO	E is allow	
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
COE 131-132 Co-op Work Experience III	0	0	10-20	1-2
HOR 114 Landscape Construction	2	2	0	3
HOR 116 Landscape Management	2	2	0	3
HOR 118 Equipment Op & Maint	1	3	0	2
HOR 213 Landscape Design II	2	2	0	3
HOR 215 Landscape Irrigation	2	2	0	3
HOR 217 Landscape Mgmt II	1	3	0	2
HOR 251 Insects & Diseases	2	2	0	3
HOR 253 Horticulture Turfgrass	2	2	0	3
HOR 273 Hor Mgmt & Marketing	3	0	0	3
III. Other Required Courses:		-	O	3
ACA 111 College Student Success	1	0	0	1
Total Credits	•			37
Horticulture Techn	ology	7		
Skills Certificate C1524				
(Revised 2010*03) Course and Hour	Requir	ements		
	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
A. Core: 15 Hours				
HOR 160 Plant Materials I	2	2	0	3
HOR 162 Applied Plant Science	2	2	0	3
HOR 164 Horticulture Pest Management	2	2	0	3
HOR 166 Soils & Fertilizers	2	2	0	3
HOR 168 Plant Propagation	2	2	0	3
110K 100 Hant Hopagation	4	4	U	5

#### **Horticulture Technology C15240K (Continued)**

		Hours	-	Work	-
Title		Class	Lab	Exp.	Credits
B. Other Maj	or Courses - 3 Hours selected from	the followin	ıg:		
HO	R 112 Landscape Design I	2	3	0	3
HO	R 114 Landscape Construction	2	2	0	3
HO	R 116 Landscape Management I	2	2	0	3
НО	R 118 Equipment Op & Maint	1	3	0	2
НО	R 124 Nursery Operations	2	3	0	3
HO	R 134 Greenhouse Operations	2	2	0	3
HO	R 150 Intro to Horticulture	2	0	0	2
HO	R 152 Horticultural Practices	0	3	0	1
НО	R 215 Landscape Irrigation	2	2	0	3
НО	R 260 Plant Materials II	2	2	0	3
Tota	al Credits				18

#### **Horticulture Technology**

Garden Center Skills Certificate C15240K2 (Revised 2010\*03) Course and Hour Requirements

Hours

Work

2

16

Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 15 Hours (a maximum of 2 ho	urs of CC	DE is allov	ved)	
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121 Co-op Work Experience II	0	0	10	1
HOR 116 Landscape Management I	2	2	0	3
HOR 150 Intro to Horticulture	2	0	0	2
HOR 160 Plant Materials I	2	2	0	3
HOR 164 Horticulture Pest Management	2	2	0	3
HOR 271 Garden Center Mgmt	2	0	0	2
Total Credits				15

### **Horticulture Technology**

Landscaping Skills Certificate C15240K3 (Revised 2010\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 16 Hours				
A. Core: 9 Hours				
HOR 160 Plant Materials I	2	2	0	3
HOR 164 Horticulture Pest Management	2	2	0	3
HOR 166 Soils & Fertilizers	2	2	0	3
B. Other Major Courses: 7 Hours (a maximum of 2	2 hours of	COE is	allowed)	
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
HOR 116 Landscape Management I	2	2	0	3
HOR 150 Intro to Horticulture	2	0	0	2

HOR 217 Landscape Management II

**Total Credits** 

## Horticulture Technology Landscape Management Skills Certificate C15240K4 (Revised 2010\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 14 Hours				
A. Core: 6 Hours				
HOR 116 Landscape Management I	2	2	0	3
HOR 164 Horticulture Pest Management	2	2	0	3
B. Other Major Courses: 8 Hours selected from the	following	:		
(a maximum of 2 hours of COE is allowed				
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
HOR 114 Landscape Construction	2	2	0	3
HOR 150 Intro to Horticulture	2	0	0	2
HOR 215 Landscape Irrigation	2	2	0	3
HOR 253 Horticulture Turfgrass	2	2	0	3
<b>Total Credits</b>				14

#### **HUMAN SERVICES TECHNOLOGY A45380**

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

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

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

#### Human Services Technology Associate in Applied Science Degree A45380

(Revised 2012\*03) Course and Hour Requirements

		Hours		Work	
Title		Class	Lab	Exp.	Credits
I. General Ed	ucation Courses: 18 Hours				
A. Engli	sh: 6 Hours				
	ENG 111 Expository Writing	3	0	0	3
	ENG 113 Literature-Based Research	3	0	0	3
or	ENG 114 Professional Research & Reporting	3	0	0	3
B. Socia	l/Behavioral Sciences: 3 Hours				
	Selected from the list of social/behavioral sciences	courses for	the Associa	te in Apple	ied Science
	degree appearing in the current catalog.				
C. Hum	anities/Fine Arts: 6 Hours				
	COM 231 Public Speaking	3	0	0	3
and	3 hours selected from the list of humanities/fine an	ts electives	for the Asso	ociate in A	pplied
	Science degree appearing in the current catalog.				
D. Natur	ral Sciences/Mathematics: 3 Hours				
	AST 151 General Astronomy I	3	0	0	3
II. Major Cou	ırses: 53 Hours				
A. Core	: 28 Hours				
1. Rec	quired Courses:				
	HSE 110 Introduction to Human Services	2	2	0	3
	HSE 112 Group Process I	1	2	0	2
	HSE 123 Interviewing Techniques	2	2	0	3
	HSE 125 Counseling	2	2	0	3
	HSE 210 Human Services Issues	2	0	0	2 3
	HSE 225 Crisis Intervention	3	0	0	
	PSY 150 General Psychology	3	0	0	3
	PSY 241 Developmental Psychology	3	0	0	3
2. 6 h	ours selected from the following.				
	SOC 210 Introduction to Sociology	3	0	0	3
	SOC 213 Sociology of the Family	3	0	0	3
	SOC 220 Social Problems	3	0	0	3

#### **Human Services Technology A45380 (Continued)**

	Hours		Work	
Title	Class	Lab	Exp.	Credits
B. Other Major Courses: 25 Hours				
COE 111 Co-op Work Experience I	0	0	10	1
COE 115 Work Experience Seminar I	1	0	0	1
COE 121 Co-op Work Experience II	0	0	10	1
COE 125 Work Experience Seminar	1	0	0	1
HSE 226 Mental Retardation	3	0	0	3
PSY 183 Psychology of Addiction	3	0	0	3
PSY 246 Adolescent Psychology	3	0	0	3
PSY 249 Psychology of Aging	3	0	0	3
PSY 260 Assessment Techniques	3	0	0	3
PSY 265 Behavior Modification	3	0	0	3
PSY 281 Abnormal Psychology	3	0	0	3
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				72

### **Human Services Technology**

General Diploma D45380D

(Revised 2012\*03) Course and Hour Requirements

	Hours		Work		
Title	Class	Lab	Exp.	Credits	
I. General Education Courses: 6 Hours					
A. English: 3 Hours					
ENG 111 Expository Writing	3	0	0	3	
B. Social/Behavioral Sciences: 3 Hours					
PSY 150 General Psychology	3	0	0	3	
II. Major Courses: 36 Hours					
A. Core: 16 Hours					
1. Required Courses:					
HSE 110 Introduction to Human Services	2	2	0	3	
HSE 112 Group Process I	1	2	0	2	
HSE 123 Interviewing Techniques	2	2	0	3	
HSE 125 Counseling	2	2	0	3	
HSE 210 Human Services Issues	2	0	0	2	
HSE 225 Crisis Intervention	3	0	0	3	
B. Other Major Courses:					
Select 20 Hours from the following					
COE 111 Co-op Work Experience I	0	0	10	1	
COE 115 Work Experience Seminar I	1	0	0	1	
HSE 226 Mental Retardation	3	0	0	3	
PSY 183 Psychology of Addiction	3	0	0	3	
PSY 246 Adolescent Psychology	3	0	0	3	
PSY 249 Psychology of Aging	3	0	0	3	
PSY 260 Assessment Techniques	3	0	0	3	
PSY 265 Behavior Modification	3	0	0	3	
PSY 281 Abnormal Psychology	3	0	0	3	
SOC 220 Social Problems	3	0	0	3	

## **Human Services Technology D45380D (Continued)**

	Hours		Work	
Title	Class	Lab	Exp.	Credits
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>				43

#### HUMAN SERVICES TECHNOLOGY MENTAL HEALTH CONCENTRATION A4538C

The Human Services Technology/Mental Health concentration prepares students for job opportunities in the mental health field. The curriculum enables students to understand culturally and emotionally handicapped, developmentally disabled or addicted clients through a variety of models and diagnoses.

Course work includes a history of the mental health movement, current developments and future trends, and theoretical models affecting individual development and behavior in a diverse client population. Fieldwork experiences provide opportunities for application of knowledge in agency and institutional settings.

Graduates should qualify for employment in mental health treatment centers serving a diverse multicultural client population in public and private settings. Graduates will work with individuals, families, groups, organizations, and communities in providing a therapeutic arena of care.

#### **Human Services Technology**

Mental Health Concentration
Associate in Applied Science Degree A4538C

Work

(Revised 2012\*03) Course and Hour Requirements

			nours		VVOIK	
Title			Class	Lab	Exp.	Credits
I. Ger	neral E	ducation Courses: 18 Hours				
_,		glish: 6 Hours				
		ENG 111 Expository Writing	3	0	0	3
		ENG 113 Literature-Based Research	3	0	0	3
	or	ENG 114 Professional Research & Reportir	ng 3	0	0	3
	B. Soc	ial/Behavioral Sciences: 3 Hours	_			
		Selected from the list of social/behavioral science	s courses for	the Associa	te in Apple	ied Science
		degree appearing in the current catalog.				
	C. Hu	manities/Fine Arts: 6 Hours				
		COM 231 Public Speaking	3	0	0	3
	and	3 hours selected from the list of humanities/fine	arts electives	for the Asse	ociate in A	pplied
		Science degree appearing in the current catalog.		-		
	D. Na	tural Sciences/Mathematics: 3 Hours				
		AST 151 General Astronomy I	3	0	0	3
II. M	aior Co	ourses: 52 Hours				
		re: 25 Hours				
	1. R	Required Courses:				
		HSE 110 Intro to Human Services	2	2	0	3
		HSE 112 Group Process I	1	2	0	
		HSE 123 Interviewing Techniques	2	2	0	2 3
		HSE 125 Counseling	2	2	0	3
		HSE 210 Human Services Issues	2	0	0	3 2 3 3
		HSE 225 Crisis Intervention	3	0	0	3
		PSY 150 General Psychology	3	0	0	3
		PSY 241 Developmental Psychology	3	0	0	3
	2.3	hours selected from the following:				
		SOC 210 Introduction to Sociology	3	0	0	3
		SOC 213 Sociology of the Family	3	0	0	3
		SOC 220 Social Problems	3	0	0	3

#### Human Services Technology Mental Health Concentration A4538C (Continued)

	Hours		Work					
Title	Class	Lab	Exp.	Credits				
B. Concentration: 14 Hours								
(Courses unique to the concentration are design	(Courses unique to the concentration are designated with**)							
HSE 226 Mental Retardation	HSE 226 Mental Retardation 3 0 0							
PSY 265 Behavioral Modification	3	0	0	3				
* *MHA 150 Mental Health Systems	3	0	0	3				
* *MHA 155 Psychological Assessment	3	0	0	3				
* *MHA 240 Advocacy	2	0	0	2				
C. Other Major Courses: 13 Hours								
COE 111 Co-op Work Experience I	0	0	10	1				
COE 115 Work Experience Seminar I	1	0	0	1				
COE 121 Co-op Work Experience II	0	0	10	1				
COE 125 Work Experience Seminar II	1	0	0	1				
PSY 183 Psychology of Addiction	3	0	0	3				
PSY 246 Adolescent Psychology	3	0	0	3				
or PSY 249 Psychology of Aging	3	0	0	3				
PSY 281 Abnormal Psychology	3	0	0	3				
III. Other Required Courses: 1 Hour								
ACA 111 College Student Success	1	0	0	1				
<b>Total Credits</b>				71				

#### **Human Services Technology Mental Health Concentration**

Mental Health Diploma D4538CD (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 6 Hours				
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
PSY 150 General Psychology	3	0	0	3
II. Major Courses: 38 Hours				
A. Core: 16 Hours				
1. Required Courses:				
HSE 110 Introduction to Human Services	s 2	2	0	3
HSE 112 Group Process I	1	2	0	2
HSE 123 Interviewing Techniques	2	2	0	3
HSE 125 Counseling	2	2	0	3
HSE 210 Human Services Issues	2	0	0	2
HSE 225 Crisis Intervention	3	0	0	3
B. Concentration: 14 Hours				
HSE 226 Mental Retardation	3	0	0	3
MHA 150 Mental Health Systems	3	0	0	3
MHA 155 Psychological Assessment	3	0	0	3
MHA 240 Advocacy	2	0	0	2
PSY 265 Behavioral Modification	3	0	0	3

# Human Services Technology Mental Health Concentration D4538CD (Continued)

		Hours		Work	
Title		Class	Lab	Exp.	Credits
C. Other N	Major Courses:				
Select 8	Hours from the following				
C	OE 111 Co-op Work Experience I	0	0	10	1
C	OE 115 Work Experience Seminar I	1	0	0	1
P	SY 183 Psychology of Addiction	3	0	0	3
P	SY 246 Adolescent Psychology	3	0	0	3
or P	SY 249 Psychology of Aging	3	0	0	3
P	SY 281 Abnormal Psychology	3	0	0	3
III. Other Requ	iired Courses: 1 Hour				
Ā	CA 111 College Student Success	1	0	0	1
T	otal Credits				45

### HUMAN SERVICES TECHNOLOGY SOCIAL SERVICES CONCENTRATION A4538D

The Human Services Technology/Social Services concentration prepares students for direct service delivery work in social service agencies. The curriculum enables students to link theory and practice through interactive classroom activities developing a skill based academic foundation.

Course work includes the history of the social service movement, ethical issues, case management, diversity issues, law in the practice of social work, and community resources. Students also gain skills in interviewing and counseling techniques.

Graduates should qualify for employment with local, county, state, and federal government social service agencies.

Employment includes family and child assistance, rehabilitation health services, medical assistance, youth services, aging, and developmentally disabled programs in public and private settings.

# **Human Services Technology**

Social Services Concentration

Associate in Applied Science Degree A4538D (Revised 2012\*03) Course and Hour Requirements

	]	Hours		Work	
Title		Class	Lab	Exp.	Credits
I. General Education	Courses: 18 Hours				
A. English: 6 Hours	S				
ENG 111	Expository Writing	3	0	0	3
ENG 113	Literature Based Research	3	0	0	3
or ENG 114	Professional Research & Reporting	3	0	0	3
B. Social/Behaviora	al Sciences: 3 Hours				
SOC 210	Introduction to Sociology	3	0	0	3
C. Humanities/Fin	e Arts: 6 Hours				
COM 231	Public Speaking	3	0	0	3
and 3 hours selec	cted from the list of humanities/fine art	s electives	for the Asse	ociate in $A_l$	pplied
Science degr	ee appearing in the current catalog.				
D. Natural Sciences	s/Mathematics: 3 Hours				
AST 151 C	General Astronomy I	3	0	0	3
II. Major Courses: 53	Hours				
A. Core: 25 Hours					
HSE 110 I	Intro to Human Services	2	2	0	3
HSE 112	Group Process I	1	2	0	2
HSE 123 I	Interviewing Techniques	2	2	0	3
HSE 125	Counseling	2	2	0	3
HSE 210 I	Human Services Issues	2	0	0	2
HSE 225	Crisis Intervention	3	0	0	3
PSY 150 C	General Psychology	3	0	0	3
PSY 241 I	Developmental Psychology	3	0	0	3
SOC 213	Sociology of the Family	3	0	0	3

# Human Services Technology Social Services Concentration A4538D (Continued)

	Hours		Work	
Title	Class	Lab	Exp.	Credits
B. Concentration: 15 Hours				
SWK 110 Introduction to Social Work	3	0	0	3
SWK 113 Working with Diversity	3	0	0	3
SWK 115 Community Resources	2	2	0	3
SWK 214 Social Work Law	3	0	0	3
SWK 220 SWK Issues in Client Service	es 3	0	0	3
C. Other Major Courses: 13 Hours				
CIS 110 Introduction to Computers	2	2	0	3
COE 111 Co-op Work Experience I	0	0	10	1
COE 115 Work Experience Seminar I	1	0	0	1
COE 121 Co-op Work Experience II	0	0	10	1
COE 125 Work Experience Seminar II	1	0	0	1
HSE 255 Health Prob & Prevent	2	2	0	3
SOC 220 Social Problems	3	0	0	3
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				72

# **Human Services Technology Social Services Concentration**

Diploma D4538DD

(Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 6 Hours				
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
PSY 150 General Psychology	3	0	0	3
or SOC 210 Introduction to Sociology	3	0	0	3
II. Major Courses: 34 Hours				
A. Core: 14 Hours				
HSE 110 Intro to Human Services	2	2	0	3
HSE 112 Group Process I	1	2	0	2
HSE 123 Interviewing Techniques	2	2	0	3
HSE 225 Crisis Intervention	3	0	0	3
SOC 213 Sociology of the Family	3	0	0	3
B. Concentration: 12 Hours				
SWK 110 Introduction to Social Work	3	0	0	3
SWK 113 Working with Diversity	3	0	0	3
SWK 115 Community Resources	2	2	0	3
SWK 220 SWK Issues in Client Services	3	0	0	3
C. Other Major Courses: 8 Hours				
CIS 110 Introduction to Computers	2	2	0	3
COE 111 Co-op Work Experience I	0	0	10	1
COE 115 Work Experience Seminar I	1	0	0	1
HSE 255 Health Prob & Prevent	2	2	0	3

# Human Services Technology Social Services Concentration D4538DD (Continued)

	Hours		Work	
Title	Class	Lab	Exp.	Credits
III. Other Required Courses: 1 Hour			•	
ACA 111 College Student Success	1	0	0	1
Total Credits				41

#### Alpha Sigma

Alpha Delta Omega was founded in 1988 at the University of Wisconsin, Oshkosh. The primary mission of the honor society is to recognize academic excellence, encourage quality service delivery in the field of Human Services, and promote the empowerment of all individuals within society.

The organization is open to all Human Services majors at the school in which there is a chapter. Students with a GPA of 3.0 or above in Human Services and overall are eligible to apply for membership. In addition to evaluating academic achievements, the student's commitment to excellence in the provision of services to others is evaluated. Each applicant submits an essay describing commitment to excellence and philosophy of working in the helping professions.

The Alpha Sigma Chapter was established in April 2002 at Lenoir Community College.

#### INDUSTRIAL ENGINEERING TECHNOLOGY A40240

The Industrial Engineering Technology curriculum prepares graduates to perform as technical leaders in manufacturing and service organizations. The curriculum incorporates the study and application of methods and techniques for developing, implementing and improving integrated systems involving people, material, equipment and information.

The course work emphasizes analytical and problem-solving techniques for process development and improvement. The curriculum includes systems analysis, quality and productivity improvement techniques, cost analysis, facilities planning, organizational management, effective communications, and computer usage as a problem-solving tool.

Graduates of the curriculum will qualify for positions in a wide range of manufacturing and service organizations.

Employment opportunities include industrial engineering technology, quality assurance, supervision, team leadership, and facilities management. Certification is available through organizations such as ASOC, SME, and APICS.

# **Industrial Engineering Technology**

Associate in Applied Science Degree A40240 (Revised 2011\*03) Course and Hour Requirements

Houre

Work

		Hours		Work	
Title		Class	Lab	Exp.	Credits
I. Ger	neral Education Courses: 15 Hours				
	A. English: 6 Hours				
	ENG 111 Expository Writing	3	0	0	3
	ENG 114 Prof Research & Reporting	3	0	0	3
	B. Social/Behavioral Sciences: 3 Hours				
	ECO 251 Prin of Microeconomics	3	0	0	3
	C. Humanities/Fine Arts: 3 Hours				
	Selected from the list of humanities/fine arts of	electives for the	Associate in	Applied S	cience
	degree appearing in the current catalog.				
	D. Math/Natural Sciences: 3 Hours selected from	om the follow	ing:		
	MAT 161 College Algebra	3	0	0	3
II. Ma	ajor Courses: 49 Hours				
	A. Core: 19 Hours				
	DFT 111 Technical Drafting I	1	3	0	2
	ISC 112 Industrial Safety	2	0	0	2
	or ISC 121 Environmental Health & Safe	ety 3	0	0	2 3 3
	ISC 132 Mfg Quality Control	2	3	0	3
	ISC 135 Principles of Industrial Mgmt	3	0	0	3
	ISC 136 Productivity Analysis I	2	3	0	3
	ISC 243 Prod and Oper Management	I 2	3	0	3
	MEC 242 Value/Supply Chain Mgmt	3	4	0	3
	B. Other Major Courses: 30 Hours				
	1. Required Courses: 24 Hours				
	CIS 110 Introduction to Computers	2	2	0	3
	CTS 130 Spreadsheets	2	2	0	3
	ISC 131 Quality Management	3	0	0	3
	ISC 153 Motion & Time Study	2	3	0	3
	ISC 221 Statistical Qual Control	3	0	0	3
	-				

# Industrial Engineering Technology A40240 (Continued)

()	Hours		Work	
Title	Class	Lab	Exp.	Credits
ISC 222 Project Planning/Control	1	2	0	2
MAT 162 College Trigonometry	3	0	0	3
MEC 181 Introduction to CIM	2	0	0	2
PHY131 Physics/Mechanics	3	2	0	4
or PHY 151 College Physics (PREFERRED)	3	2	0	4
2. 6 Hours from the following				
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
COE 131-132 Co-op Work Experience III	0	0	10-20	1-2
DBA 110 Database Concepts	2	3	0	3
DFT 151 CAD I	2	3	0	3
ISC 226 Facilities Design	3	2	0	4
MEC 110 Intro to CAD/CAM	1	2	0	2
MEC 181 Intro to CIM	2	0	0	2
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>				65

# Industrial Engineering Technology Diploma D40240D

(Revised 2011\*03) Course and Hour Requirements

·	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 6 Hours				
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Math/Natural Sciences: 3 Hours selected from	the follow	ing:		
MAT 161 College Algebra	3	0	0	3
II. Major Courses: 33 Hours				
A. Core: 19 Hours				
DFT 111 Technical Drafting I	1	3	0	2
ISC 112 Industrial Safety	2	0	0	2
or ISC 121 Environmental Health & Safety	3	0	0	3
ISC 132 Manufacturing Quality Control	2	3	0	3
ISC 135 Principles of Industrial Mgmt	3	0	0	3
ISC 136 Productivity Analysis I	2	3	0	3
ISC 243 Prod & Oper Management I	2	3	0	3
MEC 242 Value/Supply Chain Mgmt	3	0	0	3
B. Other Major Courses: 14 Hours				
1. Required Courses: 9 Hours				
CIS 110 Introduction to Computers	2	2	0	3
ISC 153 Motion & Time Study	2	3	0	3
ISC 221 Statistical Quality Control	3	0	0	3

# Industrial Engineering Tech D40240D (Continued) Hours Work

	Hours		Work	
Title	Class	Lab	Exp.	Credits
2. 5 Hours from the following:			•	
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience I		0	10-20	1-2
DFT 151 CAD I	2	3	0	3
ISC 222 Project Planning/Control	1	2	0	2
ISC 226 Facilities Design	3	2	0	4
MEC 110 Intro to CAD/CAM	1	2	0	2
MEC 181 Introduction to CIM	2	0	0	2
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				40
<b>Industrial Engineering</b>	Techn	ology		
Quality Certificate C402		0105)		
(Revised 2012*03) Course and Hou		oments		
(ICVISCU 2012 05) Course unu ilou	Hours	cincing	Work	
Title	Class	Lab	Exp.	Credits
	Class	Lab	Exp.	Citcuits
I. General Education Courses: 0 Hours				
II. Major Courses: 12 Hours				
ISC 131 Quality Management	3	0	0	3
ISC 132 Mfg Quality Control	2	3	0	3
ISC 136 Productivity Analysis I	2	3	0	3
ISC 221 Statistical Qual Control	3	0	0	3
Total Credits				12
Industrial Engineering	Tooks	01000		
Industrial Engineering			•	
Process Improvement Certifica	te C4024	0C3	•	
	te C4024 r Requir	0C3		
Process Improvement Certifica (Revised 2012*03) Course and Hou	te C4024 r Requir Hours	0C3 ements	Work	
Process Improvement Certifica (Revised 2012*03) Course and Hou	te C4024 r Requir	0C3		Credits
Process Improvement Certifica (Revised 2012*03) Course and Hou	te C4024 r Requir Hours	0C3 ements	Work	Credits
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours	te C4024 r Requir Hours	0C3 ements	Work	Credits
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours	te C4024 r Requir Hours	0C3 ements	Work	Credits 3
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours  ISC 131 Quality Management	te C4024 or Requir Hours Class	OC3 ements Lab	Work Exp.	3
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control	te C4024 r Requir Hours Class	OC3 ements Lab	Work Exp.	3 3
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control ISC 136 Productivity Analysis I	te C4024 or Requir Hours Class	OC3 ements  Lab  0 3	Work Exp.	3 3 3
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control ISC 136 Productivity Analysis I ISC 153 Motion & Time Study	te C4024 or Requir Hours Class	OC3 ements  Lab  0 3 3	Work Exp.	3 3 3 3
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control ISC 136 Productivity Analysis I ISC 153 Motion & Time Study  Total Credits	te C4024 r Requir Hours Class	0C3 ements  Lab  0 3 3 3	Work Exp. 0 0 0 0 0 0	3 3 3
Process Improvement Certifica (Revised 2012*03) Course and Hour Title  I. General Education Courses: 0 Hours  II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control ISC 136 Productivity Analysis I ISC 153 Motion & Time Study Total Credits  Industrial Engineering	te C4024 or Requir Hours Class  3 2 2 2 Techn	0C3 ements  Lab  0 3 3 3	Work Exp. 0 0 0 0 0 0	3 3 3 3
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control ISC 136 Productivity Analysis I ISC 153 Motion & Time Study  Total Credits  Industrial Engineering Supervision Certificate C4	te C4024 or Requir Hours Class  3 2 2 2 2  Techn 0240C4	CC3 ements  Lab  0 3 3 3 cology	Work Exp. 0 0 0 0 0 0	3 3 3 3
Process Improvement Certifica (Revised 2012*03) Course and Hour Title  I. General Education Courses: 0 Hours  II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control ISC 136 Productivity Analysis I ISC 153 Motion & Time Study Total Credits  Industrial Engineering	te C4024 r Requir Hours Class  3 2 2 2 2  Techn 0240C4 r Requir	CC3 ements  Lab  0 3 3 3 cology	Work Exp. 0 0 0 0 0 0	3 3 3 3
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control ISC 136 Productivity Analysis I ISC 153 Motion & Time Study  Total Credits  Industrial Engineering Supervision Certificate C4 (Revised 2012*03) Course and Hou	te C4024 r Requir Hours Class  3 2 2 2 2  Techn 0240C4 r Requir Hours	CC3 ements  Lab  0 3 3 3 cology ements	Work Exp.  0 0 0 0 0 .	3 3 3 3 12
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control ISC 136 Productivity Analysis I ISC 153 Motion & Time Study  Total Credits  Industrial Engineering Supervision Certificate C4 (Revised 2012*03) Course and Hou	te C4024 r Requir Hours Class  3 2 2 2 2  Techn 0240C4 r Requir	CC3 ements  Lab  0 3 3 3 cology	Work Exp. 0 0 0 0 0 0	3 3 3 3
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control ISC 136 Productivity Analysis I ISC 153 Motion & Time Study  Total Credits  Industrial Engineering Supervision Certificate C4 (Revised 2012*03) Course and Hou	te C4024 r Requir Hours Class  3 2 2 2 2  Techn 0240C4 r Requir Hours	CC3 ements  Lab  0 3 3 3 cology ements	Work Exp.  0 0 0 0 0 .	3 3 3 3 12
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control ISC 136 Productivity Analysis I ISC 153 Motion & Time Study  Total Credits  Industrial Engineering Supervision Certificate C4 (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours	te C4024 r Requir Hours Class  3 2 2 2 2  Techn 0240C4 r Requir Hours	CC3 ements  Lab  0 3 3 3 cology ements	Work Exp.  0 0 0 0 0 .	3 3 3 3 12
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control ISC 136 Productivity Analysis I ISC 153 Motion & Time Study Total Credits  Industrial Engineering Supervision Certificate C4 (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 14 Hours	te C4024 r Requir Hours Class  3 2 2 2 2  Techn 0240C4 r Requir Hours	CC3 ements  Lab  0 3 3 3 cology ements	Work Exp.  0 0 0 0 0 .	3 3 3 3 12
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control ISC 136 Productivity Analysis I ISC 153 Motion & Time Study  Total Credits  Industrial Engineering Supervision Certificate C4 (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 14 Hours  CIS 110 Introduction to Computers	te C4024 r Requir Hours Class  3 2 2 2 2  Techn 20240C4 r Requir Hours Class	CC3 ements  Lab  0 3 3 3 cology ements  Lab	Work Exp.	3 3 3 12 Credits
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control ISC 136 Productivity Analysis I ISC 153 Motion & Time Study Total Credits  Industrial Engineering Supervision Certificate C4 (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 14 Hours  CIS 110 Introduction to Computers ISC 131 Quality Management	te C4024 r Requir Hours Class  3 2 2 2 2  Techn 20240C4 r Requir Hours Class	CC3 ements  Lab  0 3 3 3 cology ements  Lab	Work Exp.  0 0 0 0  Work Exp.	3 3 3 12 Credits
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control ISC 136 Productivity Analysis I ISC 153 Motion & Time Study Total Credits  Industrial Engineering Supervision Certificate C4 (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 14 Hours  CIS 110 Introduction to Computers ISC 131 Quality Management ISC 135 Principles of Industrial Mgmt	te C4024 r Requir Hours Class  3 2 2 2 2  Techn 10240C4 r Requir Hours Class	0C3 ements  Lab  0 3 3 3 aclology ements  Lab  2 0 0	Work Exp.  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 12 Credits
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control ISC 136 Productivity Analysis I ISC 153 Motion & Time Study Total Credits  Industrial Engineering Supervision Certificate C4 (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 14 Hours  CIS 110 Introduction to Computers ISC 131 Quality Management ISC 135 Principles of Industrial Mgmt ISC 222 Project Planning/Control	te C4024 r Requir Hours Class  3 2 2 2 2  Techn 0240C4 r Requir Hours Class	0C3 ements  Lab  0 3 3 3 aology ements  Lab  2 0 0 2	Work Exp.  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 12 Credits
Process Improvement Certifica (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 12 Hours  ISC 131 Quality Management ISC 132 Mfg Quality Control ISC 136 Productivity Analysis I ISC 153 Motion & Time Study Total Credits  Industrial Engineering Supervision Certificate C4 (Revised 2012*03) Course and Hou  Title  I. General Education Courses: 0 Hours II. Major Courses: 14 Hours  CIS 110 Introduction to Computers ISC 131 Quality Management ISC 135 Principles of Industrial Mgmt	te C4024 r Requir Hours Class  3 2 2 2 2  Techn 0240C4 r Requir Hours Class	0C3 ements  Lab  0 3 3 3 aclology ements  Lab  2 0 0	Work Exp.  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 12 Credits

# **INDUSTRIAL MANAGEMENT TECHNOLOGY A50260**

The Industrial Management Technology curriculum is designed to equip students with the knowledge, skills, and abilities to function effectively in staff, front-line leadership, and mid-level management positions in organizations. The program emphasizes team building, TQM, SPC, motivation, continuous improvement, systems, and leadership.

Course work includes the integrated study of quality and productivity improvement, production operations, management, financial analysis, problem solving, and management of resources—human, physical, and information. Course work incorporates a broad understanding of computer applications to analyze and solve problems.

Graduates should qualify for entry level positions such as front-line supervisor, engineering assistant, production planner, inventory supervisor, or as a quality control technician. With additional training and experience, graduates could become plant manager or production managers.

# **Industrial Management Technology**

Associate in Applied Science Degree A50260 (Revised 2011\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 15 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 114 Prof Research & Reporting	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
ECO 251 Prin of Microeconomics	3	0	0	3
C. Humanities/Fine Arts: 3 Hours				
Selected from the list of humanities/fine arts el	lectives for the 1	Associate in	Applied S	Science
degree appearing in the current catalog.				
D. Math/Natural Sciences: 3 Hours selected from		_		
MAT 161 College Algebra	3	0	0	3
II. Major Courses: 49 Hours				
A. Core: 19 Hours				
ISC 112 Industrial Safety	2	0	0	2
ISC 132 Mfg Quality Control	2	3	0	3
ISC 133 Mfg Management Practices	2	0	0	2
ISC 135 Principles of Industrial Mgmt	3	0	0	3
ISC 136 Productivity Analysis I	2	3	0	3
ISC 233 Industrial Org and Mgmt	3	0	0	3
MEC 242 Value/Supply Chain Mgmt	3	0	0	3
B. Other Major Courses: 30 Hours				
1. Required Courses: 24 Hours				
ACC 120 Prin of Financial Acct	3	2	0	4
BUS 137 Princples of Mgmt	3	0	0	3
CIS 110 Introduction to Computers	2	2	0	3
CTS 130 Spreadsheets	2	2	0	3
ISC 131 Quality Management	3	0	0	3
ISC 221 Statistical Qual Control	3	0	0	3
ISC 222 Project Planning/Control	1 2	2 3	0	2 3
ISC 243 Prod & Oper Management I	4	3	U	3

**Industrial Management Technology A50260 (Continued)** 

	0	Hours	`	Work	,
Title		Class	Lab	Exp.	Credits
2.61	Hours selected from the following:				
	COE 111-112 Co-op Work Experience	I 0	0	10-20	1-2
	COE 121-122 Co-op Work Experience	II 0	0	10-20	1-2
	COE 131-132 Co-op Work Experience	III 0	0	10-20	1-2
	CTS 125 Presentations Graphics	2	2	0	3
	DBA 110 Database Concepts	2	3	0	3
	DFT 151 CAD I	2	3	0	3
	ISC 226 Facilities Design	3	2	0	4
	MEC 181 Intro to CIM	2	0	0	2
III. Other Re	quired Courses: 1 Hour				
	ACA 111 College Student Success	1	0	0	1
	Total Credit				65

# Industrial Management Technology Diploma D50260D

(Revised 2011\*03) Course and Hour Requirements

(Itevised 2011 00) course and nou	Hours	011101105	Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 6 Hours			•	
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Math/Natural Sciences: 3 Hours selected from	the follow	ing:		
MAT 161 College Algebra	3	0	0	3
II. Major Courses: 32 Hours				
A. Core: 19 Hours				
ISC 112 Industrial Safety	2	0	0	2
ISC 132 Mfg Quality Control	2	3	0	3
ISC 133 Mfg Management Practices	2	0	0	2
ISC 135 Principles of Industrial Mgmt	3	0	0	3
ISC 136 Productivity Analysis I	2	3	0	3
ISC 233 Industrial Org and Mgmt	3	0	0	3
MEC 242 Value/Supply Chain Mgmt	3	0	0	3
B. Other Major Courses: 13 Hours				
1. Required Courses: 11 Hours				
CIS 110 Introduction to Computers	2	2	0	3
ISC 131 Quality Management	3	0	0	3
ISC 221 Statistical Qual Control	3	0	0	3
ISC 222 Project Planning	1	2	0	2
2. 2 Hours selected from the following:				
ACC 120 Prin of Accounting I	3	2	0	4
BUS 137 Principles of Mgmt	3	0	0	3
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II		0	10-20	1-2
DFT 151 CAD I	2	3	0	3
ECO 251 Prin of Microeconomics	3	0	0	3
ISC 153 Motion & Time Study	2	3	0	3
ISC 226 Facilities Design	3	2	0	4

# Industrial Management Technology D50260D (Continued)

	Hours		work	
Title	Class	Lab	Exp.	Credits
III. Other Required Courses: 1 Hour			•	
ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>				39

### Industrial Management Technology Industrial Business Certificate C50260C1

Industrial Business Certificate C50260C1 (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours II. Major Courses: 14 Hours				
CIS 110 Introduction to Computers	2	2	0	3
CTS 130 Spreadsheets	2	2	0	3
ISC 135 Principles of Industrial Mgmt	3	0	0	3
ISC 222 Project Planning/Control	1	2	0	2
MEC 242 Value/Supply Chain Mgmt	3	0	0	3
Total Credits				14

### **LATERAL ENTRY C55430**

The Lateral Entry curriculum, developed for teachers who hold lateral entry license, provides a course of study leading to the development of the general pedagogy competencies needed to become certified to teach by the North Carolina Department of Public Instruction.

Course work includes human growth and development, learning theory, instructional technology, school policies and procedures, home, school, and community collaborations, and classroom organization and management to enhance learning. Courses offered by partnering senior institutions include instructional methods, literacy, and diversity.

Graduates should meet the general pedagogy competencies within the first three years of teaching, including a minimum of six semester hours per school year. Additional requirements, such as pre-service training and passing the PRAXIS, are required for licensure.

# Lateral Entry Certificate C55430

#### (Revised 2010\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credit
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
A. Core: 12 Hours				
EDU 131 Child, Family, & Community	3	0	0	3
EDU 163 Classroom Mgt & Instruct	3	0	0	3
EDU 243 Learning Theory	3	0	0	3
EDU 244 Human Growth/Development	3	0	0	3
EDU 245 Policies and Procedures	3	0	0	3
EDU 271 Educational Technology	2	2	0	3
Total Credits				18

# **Mechanical Engineering Technology A40320**

The Mechanical Engineering Technology curriculum prepares graduates for employment as technicians in the diversified mechanical and manufacturing engineering fields. Mechanical Engineering technicians assist in design, development, testing, process design and improvement, and troubleshooting and repair of engineered systems. Emphasis is placed on the integration of theory and hands-on application of engineering principles.

In addition to course work in engineering graphics, engineering fundamentals, materials and manufacturing processes, mathematics, and physics, students will study 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.

# **Mechanical Engineering Technology**

Associate in Applied Science Degree A40320 (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education: 15 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 112 Argument-Based Research	3	0	0	3
or ENG 113 Literature-Based Research	3	0	0	3
or ENG 114 Prof. Research & Reporting	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
Selected from the list of social/behavioral science	es electives for	r the Associ	ate in App	lied Science
degree appearing in the current catalog.	Ü			
C. Humanities/Fine Arts Elective: 3 Hours				
Selected from the list of humanities/fine arts elec	ctives for the 1	Associate in	Applied S	Science
degree appearing in the current catalog.				
D. Natural Sciences/Math: 3 Hours selected from	the followi	ng:		
MAT 121 Algebra & Trigonometry	2	2	0	3
MAT 161 College Algebra	3	0	0	3
II. Major Hours: 49 hours				
A. Core: 21 Hours				
ATR 112 Intro to Automation	2	3	0	3
DFT 119 Basic CAD	1	2	0	2
ELC 131 DC/AC Circuit Analysis	4	3	0	5
MAC 114 Intro to Metrology	2	0	0	2
MEC 111 Machine Processes I	1	4	0	3
MEC 161 Manufacturing Processes I	3	0	0	3
MEC 265 Fluid Mechanics	2	2	0	3

# **Mechanical Engineering Tech A40320 (Continued)**

	Hours		Work	
Title	Class	Lab	Exp.	Credits
B. Other Major Hours: 28 hours				
1. Required Courses: 24 Hours				
ATR 212 Industrial Robots	2	3	0	3
DFT 120 Advanced CAD	1	2	0	2
ELC 128 Intro to PLC	2	3	0	3
ELN 231 Industrial Controls	2	3	0	3
ISC 112 Industrial Safety	2	0	0	2
MEC 112 Machine Processes II	2	3	0	3
MEC 128 CNC Machining Processes	2	4	0	4
MEC 181 Intro to CIM	2	0	0	2
WLD 112 Basic Welding Processes	1	3	0	2
2. Select 4 Hours from the following:				
ATR 282 Robotics & CIM	3	2	0	4
CET 111 Computer Upgrade/Repair I	2	3	0	3
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
COE 131-132 Co-op Work Experience III	0	0	10-20	1-2
MAC 121 Intro to CNC	2	0	0	2
MEC 130 Mechanisms	2	2	0	3
ISC 131 Quality Management	3	0	0	3
ISC 225 Facility Layout	3	2	0	4
ISC 221 Statistical Quality Control	3	0	0	3
III. Other Required Hours: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				65

# $\underset{Diploma\ D40320}{\textbf{Mechanical Engineering Technology}}$

(Revised 2012\*03) Course and Hour Requirements

(IteViseu 2012 05) Gourse and Ite	our recquir	CHICHES		
	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education: 6 Hours				
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Natural Sciences/Math: 3 Hours selected from	m the followi	ng:		
MAT 121 Algebra & Trigonometry	2	2	0	3
MAT 161 College Algebra	3	0	0	3
II. Major Hours: 34 hours				
A. Core: 21 Hours				
ATR 112 Intro to Automation	2	3	0	3
DFT 119 Basic CAD	1	2	0	2
ELC 131 DC/AC Circuit Analysis	4	3	0	5
MAC 114 Intro to Metrology	2	0	0	2
MEC 111 Machine Processes I	1	4	0	3
MEC 161 Manufacturing Processes I	3	0	0	3
MEC 265 Fluid Mechanics	2	2	0	3

# Mechanical Engineering Tech D40320 (Continued)

	Hours		Work	
Title	Class	Lab	Exp.	Credits
B. Other Major Hours: 13 hours				
1. Required Courses: 8 Hours				
ATR 212 Industrial Robots	2	3	0	3
ELC 128 Intro to PLC	2	3	0	3
MEC 181 Intro to CIM	2	0	0	2
2. Select 5 Hours from the following:				
ATR 282 Robotics & CIM	3	2	0	4
CET 111 Computer Upgrade/Repair I	2	3	0	3
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
COE 131-132 Co-op Work Experience III	0	0	10-20	1-2
MAC 121 Intro to CNC	2	0	0	2
MEC 130 Mechanisms	2	2	0	3
ISC 225 Facility Layout	3	2	0	4
ISC 221 Statistical Quality Control	3	0	0	3
WLD 112 Basic Welding Processes	1	3	0	2
III. Other Required Hours: 1 Hour				
ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>				41

# **Mechanical Engineering Technology**

Robotics Skills Certificate C40320K

(Revised 2012\*03) Course and Hour Requirements

,	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education: 0 Hours				
II. Major Hours: 13 hours				
A. Core: 6 Hours				
ATR 112 Intro to Automation	2	3	0	3
MEC 161 Manufacturing Processes I	3	0	0	3
B. Other Major Hours: 7 hours				
ATR 212 Industrial Robots	2	3	0	3
ATR 282 Robotics & CIM	3	2	0	4
Total Credits				13

# **Mechanical Engineering Technology**

Electrical/Hydraulic Skills Certificate C40320K1 (Revised 2012\*03) Course and Hour Requirements

,	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education: 0 Hours				
II. Major Hours: 14 hours				
A. Core: 8 Hours				
ELC 131 DC/AC Circuit Analysis	4	3	0	5
MEC 265 Fluid Mechanics	2	2	0	3
B. Other Major Hours: 6 hours				
ELC 128 Intro to PLC	2	3	0	3
ELN 231 Industrial Controls	2	3	0	3
Total Credits				14

## Mechanical Engineering Technology Mechanical Skills Certificate C40320K2

Mechanical Skills Certificate C40320K2 (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education: 0 Hours				
II. Major Hours: 12 hours				
A. Core: 2 Hours				
MAC 114 Intro to Metrology	2	0	0	2
B. Other Major Hours: 10 hours				
MAC 121 Intro to CNC	2	0	0	2
MEC 111 Machine Processes I	1	4	0	3
MEC 112 Machine Processes II	2	3	0	3
MEC 128 CNC Machining Processes	2	4	0	4
Total Credits				14

# **Mechanical Engineering Technology**

Industrial & Design Skills Certificate C40320K3 (Revised 2012\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education: 0 Hours				
II. Major Hours: 14 hours				
A. Core: 2 Hours				
DFT 119 Basic CAD	1	2	0	2
B. Other Major Hours: 12 hours				
DFT 120 Advanced CAD	1	2	0	2
ISC 131 Quality Management	1	2	0	2
ISC 225 Facility Layout	3	2	0	4
ISC 221 Statistical Quality Control	3	0	0	3
Total Credits				14

### **MEDICAL ASSISTING A45400**

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

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

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

# Medical Assisting Associate in Applied Science Degree A45400 (Revised 2012\*03) Course and Hour Requirements

,	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education: 15 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 114 Prof. Research & Reporting	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
PSY 150 General Psychology	3	0	0	3
C. Humanities/Fine Arts Elective: 3 Hours				
Selected from the list of humanities/fine arts ele	ectives for the	Associate in	Applied S	Science
degree appearing in the current catalog.				
D. Natural Sciences/Math: 3 Hours				
MAT 115 Mathematical Models	2	2	0	3
II. Major Hours: 60 hours				
A. Core: 33 Hours				
1. Required Courses				
BIO 163 Basic Anat and Physiology	4	2	0	5
MED 110 Orientation to Med Assist	1	0	0	1
MED 118 Medical Law and Ethics	2	0	0	2
or OST 149 Med Legal Issues	3	0	0	3
MED 121 Medical Terminology I	3	0	0	3
MED 122 Medical Terminology II	3	0	0	3
MED 130 Admin Office Proc I	1	2	0	2
MED 131 Admin Office Proc II	1	2	0	2 2 5
MED 140 Exam Room Procedures I	3	4	0	
MED 150 Laboratory Procedures I	3	4	0	5
MED 260 Clinical Practicum	0	0	15	5
B. Other Major Hours: 27 hours				
CIS 110 Introduction to Computers	2	2	0	3
MED 113 Ori to Clinic Setting II	0	0	6	2
MED 240 Exam Room Proc II	3	4	0	5
MED 230 Admin Office Proc III	1	1	0	2
MED 232 Medical Insurance Coding	1	3	0	2

# **Medical Assisting A45400 (Continued)**

	Hours		Work	
Title	Class	Lab	Exp.	Credits
MED 264 Med Assisting Overview	2	0	0	2
MED 270 Symptomatology	2	2	0	3
MED 272 Drug Therapy	3	0	0	3
MED 274 Diet Therapy/Nutrition	3	0	0	3
OST 131 Keyboarding	1	2	0	2
III. Other Required Hours: 1 Hour				
ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>				76

All health science students must make grades of "A," "B," "C," or "SA" on all applicable course work to progress each semester and graduate from the program.

#### **MEDICAL OFFICE ADMINISTRATION A25310**

This curriculum prepares individuals for employment in medical and other health-care related offices.

Course work will include medical terminology; information systems; office management; medical coding, billing and insurance; legal and ethical issues; and formatting and word processing. Students will learn administrative and support functions and develop skills applicable in medical environments.

Employment opportunities are available in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other health-care related organizations.

### **Medical Office Administration**

Associate in Applied Science Degree A25310 (Revised 2013\*03) Course and Hour Requirements

(Revised 2013 03) Course and Hou	Hours	cincing	Work	
Title	Class	Lab	Exp.	Credit
I. General Education Courses: 15 Hours			I.	
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 114 Prof. Research and Reporting	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours	3	O	O	3
Selected from the list of social/behavioral science	es electives for	r the Associ	ate in Abb	lied Science
degree appearing in the current catalog.	o cuccuco y o.	1200001	11pp	
C. Humanities/Fine Arts: 3 Hours				
Selected from the list of humanities/fine arts elec	tives for the	Associate in	Applied S	Science
degree appearing in the current catalog.			TI	
D. Math/Natural Sciences: 3 Hours				
BIO 161 Intro to Human Biology	3	0	0	3
II. Major Courses: 57 Hours				
A. Core: 29 Hours				
CIS 110 Introduction to Computers	2	2	0	3
OST 131 Keyboarding	1	2	0	2
OST 134 Text Entry & Formatting	2	2	0	3
OST 148 Med Coding Billing & Insur	3	0	0	3
OST 149 Med Legal Issues	3	0	0	3
OST 164 Text Editing Applications	3	0	0	3
OST 243 Medical Office Simulation	2	2	0	3
OST 289 Administrative Office Mgt	2	2	0	3
Select one set:				
OST 141 Med Terms I -Med Office	3	0	0	3
OST 142 Med Terms II -Med Office	3	0	0	3
or				
MED 121 Medical Terminology I	3	0	0	3
MED 122 Medical Terminology II	3	0	0	3
B. Other Major Courses: 28 Hours				
1. Required: 22 Hours				
BUS 121 Business Math	2	2	0	3
OST 136 Word Processing	2	2	0	3
OST 181 Intro to Office Systems	2	2	0	3
OST 236 Adv Word/Information Proc	2	2	0	3
OST 244 Med Document Production	1	2	0	2
OST 241 Med Ofc Transcription I	1	2	0	2
OST 242 Med Ofc Transcription II	1	2	0	2
OST 247 Procedure Coding	1 1	2 2	0	2 2
OST 248 Diagnostic Coding 198	1	4	U	4
130				

# **Medical Office Administration A25310 (Continued)**

	Hours		Work	
Title	Class	Lab	Exp.	Credit
2. Select 6 hours from the following (a maximum	of 3 hou	rs of COI	E are allo	wed):
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
COE 131 Co-op Work Experience III	0	0	10	1
OST 122 Office Computations	1	2	0	2
OST 162 Executive Terminology	3	0	0	3
OST 166 Speech Recognition	1	2	0	2
OST 184 Records Management	2	2	0	3
OST 233 Office Publications Design	2	2	0	3
OST 249 CPC Certification	3	2	0	4
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				73

### **Medical Office Administration**

Medical Coding, Billing, & Insurance Certificate C25310C1 (Revised 2013\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credit
I. General Education Courses: 0 Hours				
II. Major Courses: 16 Hours				
A. Core: 12 Hours				
OST 148 Med Coding Billing & Insur	3	0	0	3
OST 243 Med Office Simulation	2	2	0	3
Select one set:				
OST 141 Med Terms I -Med Office	3	0	0	3
OST 142 Med Terms II -Med Office	3	0	0	3
or				
MED 121 Medical Terminology I	3	0	0	3
MED 122 Medical Terminology II	3	0	0	3
B. Other major courses: 4 Hours				
OST 247 CPT Coding in the Med Off	1	2	0	2
OST 248 Diagnostic Coding	1	2	0	2
Total Credits				16

# **Medical Office Administration**

Medical Transcription Certificate C25310C2 (Revised 2013\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credit
I. General Education Courses: 0 Hours			•	
II. Major Courses: 17 Hours				
A. Core: 9 Hours				
OST 134 Text Entry & Formatting	2	2	0	3
Select one set:				
OST 141 Med Terms I -Med Office	3	0	0	3
OST 142 Med Terms II -Med Office	3	0	0	3
or				
MED 121 Medical Terminology I	3	0	0	3

# **Medical Office Administration C25310C2 (Continued)**

		Hours	`	Work	,
Title		Class	Lab	Exp.	Credit
	MED 122 Medical Terminology II	3	0	0	3
	B. Other major courses: 8 Hours				
	OST 131 Keyboarding	1	2	0	2
	OST 241 Med Ofc Transcription I	1	2	0	2
	OST 242 Med Ofc Transcription II	1	2	0	2
	OST 244 Med Document Production	1	2	0	2
	Total Credits				17

### **Medical Office Administration**

Essential Medical Office Technology Certificate\* C25310C3 (Revised 2013\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credit
I. General Education Courses: 0 Hour	S		-	
II. Major Courses: 15 Hours				
CIS 110 Intro to Computers	2	2	0	3
OST 141 Med Terms I- Med Office	ce 3	0	0	3
OST 148 Med Coding Billing & In	nsur 3	0	0	3
OST 149 Medical Legal Issues	3	0	0	3
OST 243 Medical Office Simulation	on 2	2	0	3
Total Credits				15

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

# **Medical Office Administration**

Essential Medical Records Certificate\* C25310C4 (Revised 2013\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credit
I. General Education Courses: 0 Hours II. Major Courses: 15 Hours			•	
A. Core: 12 Hours				
CIS 110 Intro to Computers	2	2	0	3
OST 141 Med Terms I- Med Office	3	0	0	3
OST 148 Med Coding Billing & Insur	3	0	0	3
OST 149 Medical Legal Issues	3	0	0	3
B. Other Major Courses: 3 Hours				
OST 184 Records Management	2	2	0	3
Total Credits				15

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

### **NETWORKING TECHNOLOGY A25340**

The Networking Technology curriculum prepares individuals for employment supporting network infrastructure environments. Students will learn how to use technologies to provide reliable transmission and delivery of data, voice, image, and video communications in business, industry, and education.

Course work includes design, installation, configuration, and management of network infrastructure technologies and network operating systems. Emphasis is placed on the implementation and management of network software and the implementation and management of hardware such as switches and routers.

Graduates may find employment in entry-level jobs as local area network managers, network operators, network analysts, and network technicians. Graduates may also be qualified to take certification examinations for various network industry certifications, depending on their local program.

# Networking Technology Associate in Applied Science Degree A25340 (Revised 2013\*03) Course and Hour Requirements

Hours

Work

			110015		VVOIK	
Title			Class	Lab	Exp.	Credits
I. Ger	ieral E	ducation Courses: 15 Hours				
	A. Eng	glish: 6 Hours				
		ENG 111 Expository Writing	3	0	0	3
		ENG 112 Argument-Based Research	3	0	0	3
	or	ENG 113 Literature-Based Research	3	0	0	3
	or	ENG 114 Prof. Research and Reporting	3	0	0	3
	B. Soci	ial/Behavioral Sciences: 3 Hours				
		Selected from the list of social/behavioral sciences	electives for	r the Associ	ate in Appl	lied Science
		degree appearing in the current catalog.				
	C. Hu	manities/Fine Arts: 3 Hours				
		Selected from the list of humanities/fine arts election	ves for the	Associate in	Applied S	cience
		degree appearing in the current catalog.				
	D. Mai	th/Natural Sciences: 3 Hours				
		MAT 161 College Algebra	3	0	0	3
II. Ma	ijor Co	ourses: 53 Hours				
		re: 44 Hours				
		CIS 110 Introduction to Computers	2	2	0	3
	or	CIS 111 Basic PC Literacy	1	2	0	2
		CIS 115 Intro to Programming and Logic	2	3	0	3
		CTS 115 Info Sys Business Concepts	3	0	0	3
		CTS 120 Hardware/Software Support	2	3	0	3
		DBA 110 Database Concepts	2	3	0	3
		NET 125 Networking Basics	1	4	0	3
		NET 126 Routing Basics	1	4	0	3
		NET 225 Routing & Switching I	1	4	0	3
		NET 226 Routing & Switching II	1	4	0	3
		NET 289 Networking Project	1	4	0	3
		NOS 110 Operating System Concepts	2	3	0	3
		NOS 120 Linux/UNIX Single User	2	2	0	3
		NOS 130 Windows Single User	2	2	0	3
		NOS 220 Linux/UNIX Admin I	2	2	0	3
		SEC 110 Security Concepts	2	2	0	3

# **Networking Technology A25340 (Continued)**

	Hours		Work	
Title	Class	Lab	Exp.	Credits
	Citabb	ши	nap.	Circuits
B. Other Major Courses: 9 Hours				
1. Required: 3 Hours				
NOS 230 Windows Admin I	2	2	0	3
2. 6 hours selected from the following:				
CET 150 Computer Forensics I	2	3	0	3
CET 250 Computer Forensics II	2	3	0	3
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
COE 131-132 Co-op Work Experience III	0	0	10-20	1-2
CSC 134 C++ Programming	2	3	0	3
CSC 139 Visual BASIC Programming	2	3	0	3
CTS 130 Spreadsheet	2	2	0	3
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>				69

# **Networking Technology**

Networking Certificate C25340C1

(Revised 2013\*03) Course and Hour Requirements

		Hours		Work	
Title		Class	Lab	Exp.	Credits
I. General	Education Courses: 0 Hours				
II. Major C	ourses: 17 Hours				
A. Co	ore: 14 Hours				
	CIS 110 Introduction to Computers	2	2	0	3
or	CIS 111 Basic PC Literacy	1	2	0	2
	NOS 110 Operating System Concepts	2	3	0	3
	NOS 120 Linux/UNIX Single User	2	2	0	3
	NOS 130 Windows Single User	2	2	0	3
	SEC 110 Security Concepts	2	2	0	3
B. Ot	ther Major Courses: 3 Hours				
Se	lect one of the following:				
	NOS 220 Linux/UNIX Admin I	2	2	0	3
or	NOS 230 Windows Admin I	2	2	0	3
	Total Credits				17

# **Networking Technology**

Basic Computer Repair Certificate\* C25340C2 (Revised 2013\*01) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 15 Hours				
A. Core: 12 Hours				
CTS 120 Hardware/Software Support	2	3	0	3
NOS 110 Operating Systems Concepts	2	3	0	3
NOS 130 Windows Single User	2	2	0	3
SEC 110 Security Concepts	2	2	0	3

## **Networking Technology C25340C2 (Continued)**

B. Other Major Courses: 3 Hours

CIS 110 Intro to Computers 2 2 0 3 **Total Credits** 15

\*This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

# **Networking Technology**

Router and Switching Skills Certificate C25340K1 (Revised 2013\*03) Course and Hour Requirements

(IteVised 2015 05) Course and Hour	ricquii	CHICHES		
	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours			•	
II. Major Courses: 17 Hours				
A. Core: 15 Hours				
NET 125 Networking Basics	1	4	0	3
NET 126 Routing Basics	1	4	0	3
NET 225 Routing & Switching I	1	4	0	3
NET 226 Routing & Switching II	1	4	0	3
SEC 110 Security Concepts	2	2	0	3
B. Other Major Courses: 2 Hours (a maximum of 2	2 hours C	OE is allo	owed)	
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
or CSC 134 Intro To C++ Programming	2	3	0	3
Total Credits				17

# **Networking Technology**

Computer Forensics Skills Certificate C25340K2 (Revised 2013\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours			•	
II. Major Courses: 18 Hours				
A. Core: 12 Hours				
NOS 110 Operating Systems Concepts	2	3	0	3
NOS 120 Linux/UNIX Single User	2	2	0	3
NOS 130 Windows Single User	2	2	0	3
SEC 110 Security Systems Concepts	2	2	0	3
B. Other Major Courses: 6 Hours				
CET 150 Computer Forensics I	2	3	0	3
CET 250 Computer Forensics II	2	3	0	3
Total Credits				18

#### OCCUPATIONAL EDUCATION ASSOCIATE A55320

The Occupational Education Associate curriculum is designed for individuals skilled and experienced in a trade or technical specialty who would like to receive an associate degree in preparation for teaching or other purposes.

Course work is designed to supplement previous education, training, and/or experience the individual has already attained.

Graduates of the program may find employment as instructors in the field of occupational education.

# **Occupational Education Associate**

Associate in Applied Science Degree A55320 (Revised 2010\*03) Course and Hour Requirements

Work

Title	
A. English: 6 Hours  ENG 111 Expository Writing 3 0 0 0 3  ENG 112 Argument-Based Research 3 0 0 0 3  or ENG 113 Literature-Based Research 3 0 0 0 3  or ENG 114 Prof. Research and Reporting 3 0 0 0 3  B. Social/Behavioral Sciences: 3 Hours  PSY 150 General Psychology 3 0 0 0 3  C. Humanities/Fine Arts: 3 Hours  Selected from the list of humanities and fine arts electives for the Associate in Applied Science Degree appearing in the college catalog  D. Math/Natural Sciences: 3 Hours elected from the following:  MAT 121 Algebra and Trigonometry 2 2 0 3  MAT 161 College Algebra 3 0 0 3  II. Major Courses: 59 Hours  1. Required Courses: 21 Hours  EDU 175 Intro to Trade& Industrial Ed. 3 0 0 3  EDU 176 Occupational Analysis and 3 0 0 3  Course Development EDU 177 Instructional Methods 2 2 2 0 3	S
ENG 111 Expository Writing 3 0 0 0 3  ENG 112 Argument-Based Research 3 0 0 0 3  or ENG 113 Literature-Based Research 3 0 0 0 3  or ENG 114 Prof. Research and Reporting 3 0 0 0 3  B. Social/Behavioral Sciences: 3 Hours  PSY 150 General Psychology 3 0 0 0 3  C. Humanities/Fine Arts: 3 Hours  Selected from the list of humanities and fine arts electives for the Associate in Applied Science Degree appearing in the college catalog  D. Math/Natural Sciences: 3 Hours selected from the following:  MAT 121 Algebra and Trigonometry 2 2 0 0 3  MAT 161 College Algebra 3 0 0 3  II. Major Courses: 59 Hours  1. Required Courses: 21 Hours  EDU 175 Intro to Trade& Industrial Ed. 3 0 0 3  EDU 176 Occupational Analysis and 3 0 0 3  Course Development  EDU 177 Instructional Methods 2 2 0 0 3	
ENG 112 Argument-Based Research 3 0 0 0 3 or ENG 113 Literature-Based Research 3 0 0 0 3 B. Social/Behavioral Sciences: 3 Hours  PSY 150 General Psychology 3 0 0 0 3 C. Huminities/Fine Arts: 3 Hours  Selected from the list of humanities and fine arts electives for the Associate in Applied Science Degree appearing in the college catalog  D. Math/Natural Sciences: 3 Hours selected from the following:  MAT 121 Algebra and Trigonometry 2 2 0 0 3 MAT 161 College Algebra 2 0 0 3  II. Major Courses: 59 Hours  EDU 175 Intro to Trade& Industrial Ed. 3 0 0 3 EDU 176 Occupational Analysis and 3 0 0 3 Course Development EDU 177 Instructional Methods 2 2 0 0 3	
or ENG 113 Literature-Based Research 3 0 0 0 3 or ENG 114 Prof. Research and Reporting 3 0 0 0 3 B. Social/Behavioral Sciences: 3 Hours  PSY 150 General Psychology 3 0 0 0 3 C. Huminities/Fine Arts: 3 Hours  Selected from the list of humanities and fine arts electives for the Associate in Applied Science Degree appearing in the college catalog  D. Math/Natural Sciences: 3 Hours selected from the following:  MAT 121 Algebra and Trigonometry 2 2 2 0 3 MAT 161 College Algebra 2 0 0 3  II. Major Courses: 59 Hours  1. Required Courses: 21 Hours  EDU 175 Intro to Trade& Industrial Ed. 3 0 0 3 EDU 176 Occupational Analysis and 3 0 0 3 Course Development EDU 177 Instructional Methods 2 2 0 0 3	
or ENG 114 Prof. Research and Reporting 3 0 0 0 3 B. Social/Behavioral Sciences: 3 Hours PSY 150 General Psychology 3 0 0 0 3 C. Humanites/Fine Arts: 3 Hours Selected from the list of humanities and fine arts electives for the Associate in Applied Science Degree appearing in the college catalog  D. Math/Natural Sciences: 3 Hours selected from the following: MAT 121 Algebra and Trigonometry 2 2 2 0 3 MAT 161 College Algebra 2 0 0 3 MAT 161 College Algebra 3 0 0 0 3  II. Major Courses: 59 Hours  1. Required Courses: 21 Hours EDU 175 Intro to Trade& Industrial Ed. 3 0 0 3 EDU 176 Occupational Analysis and 3 0 0 3 Course Development EDU 177 Instructional Methods 2 2 0 0 3	
B. Social/Behavioral Sciences: 3 Hours PSY 150 General Psychology 3 0 0 0 3 C. Humanities/Fine Arts: 3 Hours Selected from the list of humanities and fine arts electives for the Associate in Applied Science Degree appearing in the college catalog  D. Math/Natural Sciences: 3 Hours selected from the following: MAT 121 Algebra and Trigonometry 2 2 0 0 3 MAT 161 College Algebra 3 0 0 3  II. Major Courses: 59 Hours  1. Required Courses: 21 Hours EDU 175 Intro to Trade& Industrial Ed. 3 0 0 3 EDU 176 Occupational Analysis and 3 0 0 3 Course Development EDU 177 Instructional Methods 2 2 0 0 3	
PSY 150 General Psychology 3 0 0 0 3 C. Humanities/Fine Arts: 3 Hours  Selected from the list of humanities and fine arts electives for the Associate in Applied Science Degree appearing in the college catalog  D. Math/Natural Sciences: 3 Hours selected from the following:  MAT 121 Algebra and Trigonometry 2 2 2 0 3 MAT 161 College Algebra 3 0 0 3  II. Major Courses: 59 Hours  1. Required Courses: 21 Hours  EDU 175 Intro to Trade& Industrial Ed. 3 0 0 3 EDU 176 Occupational Analysis and 3 0 0 3 Course Development EDU 177 Instructional Methods 2 2 0 0 3	
C. Humanities/Fine Arts: 3 Hours  Selected from the list of humanities and fine arts electives for the Associate in Applied Science Degree appearing in the college catalog  D. Math/Natural Sciences: 3 Hours selected from the following:  MAT 121 Algebra and Trigonometry 2 2 2 0 3  MAT 161 College Algebra 3 0 0 3  II. Major Courses: 59 Hours  1. Required Courses: 21 Hours  EDU 175 Intro to Trade& Industrial Ed. 3 0 0 3  EDU 176 Occupational Analysis and 3 0 0 3  Course Development  EDU 177 Instructional Methods 2 2 2 0 3	
Selected from the list of humanities and fine arts electives for the Associate in Applied Science Degree appearing in the college catalog  D. Math/Natural Sciences: 3 Hours selected from the following:  MAT 121 Algebra and Trigonometry 2 2 2 0 3  MAT 161 College Algebra 3 0 0 3  II. Major Courses: 59 Hours  1. Required Courses: 21 Hours  EDU 175 Intro to Trade& Industrial Ed. 3 0 0 3  EDU 176 Occupational Analysis and 3 0 0 3  Course Development  EDU 177 Instructional Methods 2 2 0 0 3	
Science Degree appearing in the college catalog  D. Math/Natural Sciences: 3 Hours selected from the following:  MAT 121 Algebra and Trigonometry 2 2 0 3 MAT 161 College Algebra 3 0 0 3  II. Major Courses: 59 Hours  1. Required Courses: 21 Hours  EDU 175 Intro to Trade& Industrial Ed. 3 0 0 3 EDU 176 Occupational Analysis and 3 0 0 3 Course Development EDU 177 Instructional Methods 2 2 0 0 3	
MAT 121 Algebra and Trigonometry       2       2       0       3         MAT 161 College Algebra       3       0       0       3         II. Major Courses: 59 Hours	
MAT 161 College Algebra 3 0 0 3  II. Major Courses: 59 Hours  1. Required Courses: 21 Hours  EDU 175 Intro to Trade& Industrial Ed. 3 0 0 3 EDU 176 Occupational Analysis and 3 0 0 3 Course Development EDU 177 Instructional Methods 2 2 0 0 3	
II. Major Courses: 59 Hours  1. Required Courses: 21 Hours  EDU 175 Intro to Trade& Industrial Ed. 3 0 0 3 EDU 176 Occupational Analysis and 3 0 0 3 Course Development EDU 177 Instructional Methods 2 2 0 0 3	
1. Required Courses: 21 Hours  EDU 175 Intro to Trade& Industrial Ed. 3 0 0 3  EDU 176 Occupational Analysis and 3 0 0 3  Course Development  EDU 177 Instructional Methods 2 2 0 3	
EDU 175 Intro to Trade& Industrial Ed. 3 0 0 3 EDU 176 Occupational Analysis and 3 0 0 3 Course Development EDU 177 Instructional Methods 2 2 0 3	
EDU 176 Occupational Analysis and 3 0 0 3 Course Development EDU 177 Instructional Methods 2 2 0 3	
Course Development EDU 177 Instructional Methods 2 2 0 3	
EDU 177 Instructional Methods 2 2 0 3	
EDII 170 Vocational Student Organ 2 0 0 2	
0	
EDU 271 Media Technology for Teachers 2 2 0 3	
EDU 281 Instruc Strat/Read & Writ 2 2 0 3	
ISC 121 Envir Health & Safety 3 0 0 3	
1. Other Major Courses: 35 Hours	
EDU 161 Intro to Exceptional Child 3 0 0 3	
EDU 163 Classroom Mgt & Instruct 3 0 0 3	
*Formal training and/or work experience within the specialty area(s): 29 Hou	îS.
2. Other Required: 3 Hours	
CIS 110 Introduction to Computers 2 2 0 3	
III. Other Required Courses: 1 Hour	
ACA 111 College Student Success 1 0 0 1	
Total Credits 75	

<sup>\*</sup> Formal training includes 29 SHC of courses from major requirements of Diploma and Associate in Applied Science Degree programs currently offered by the College. 0-8 SHC of which may be completed through cooperative work experience.

# Occupational Education Associate Teaching Certificate C55320

### (Revised 2012\*03) Course and Hour Requirements

,	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
EDU 175 Intro to Trade& Industrial Ed.	3	0	0	3
EDU 177 Instructional Methods	2	2	0	3
EDU 179 Vocational Student Organ.	3	0	0	3
EDU 271 Media Technology for Teachers	2	2	0	3
EDU 281 Instruc Strat/Read & Writ	2	2	0	3
ISC 121 Envir Health & Safety	3	0	0	3
Total Credits				18

### **OFFICE ADMINISTRATION A25370**

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

Students will complete courses designed to develop proficiency in the use of integrated software, oral and written communication, analysis and coordination of office duties and systems, and other skills.

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

#### Office Administration

Associate in Applied Science Degree A25370 (Revised 2013\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 15 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 114 Prof. Research and Reporting	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
Selected from the list of social/behavioral scient	ces electives for	r the Associ	ate in App	lied
Science degree appearing in the current catalog.				
C. Humanities/Fine Arts: 3 Hours				
Selected from the list of humanities/fine arts ele	ectives for the 1	Associate in	Applied	
Science degree appearing in the current catalog.				
D. Math/Natural Sciences: 3 Hours				
MAT 115 Mathematical Models	2	2	0	3
II. Major Courses: 57 Hours				
A. Core: 15 Hours				
CIS 110 Introduction to Computers	2	2	0	3
OST 134 Text Entry & Formatting	2	2	0	3
OST 164 Text Editing Applications	3	0	0	3
OST 184 Records Management	2	2	0	3
OST 289 Administrative Office Mgt	2	2	0	3
B. Other Major Courses: 42 Hours				
1. Required: 25 Hours				
BUS 121 Business Math	2	2	0	3
OST 131 Keyboarding	1	2	0	2 3
OST 136 Word Processing	2	2	0	
OST 162 Executive Terminology	3	0	0	3
OST 223 Admin Office Transcript I	2	2	0	3
OST 224 Admin. Ofc Transcript II	1	2	0	2
OST 233 Office Publications Design	2	2	0	3
OST 236 Adv Word/Information Proc	2	2	0	3
OST 286 Professional Development	3	0	0	3

# Office Administration A25370 (Continued)

	Hours		Work	
Title	Class	Lab	Exp.	Credits
2. Select 17 hours from the following				
(a maximum of 3 hours of COE are allowed):				
ACC 120 Prin of Financial Acct	3	2	0	4
ACC 140 Payroll Accounting	1	2	0	2
BUS 115 Business Law I	3	0	0	3
<b>BUS 260 Business Communication</b>	3	0	0	3
CTS 130 Spreadsheet	2	2	0	3
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
COE 131 Co-op Work Experience III	0	0	10	1
OST 122 Office Computations	1	2	0	2
OST 140 Internet Comm/ Research	1	2	0	2
OST 166 Speech Recognition	1	2	0	2
OST 181 Intro to Office Systems	2	2	0	3
OST 284 Emerging Technologies	1	2	0	2
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>				73

# **Office Administration**

Diploma D25370D

(Revised 2013\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
MAT 115 Mathematical Models	2	2	0	3
II. Major Courses: 40 Hours				
A. Core: 15 Hours				
CIS 110 Introduction to Computers	2	2	0	3
OST 134 Text Entry & Formatting	2	2	0	3
OST 164 Text Editing Applications	3	0	0	3
OST 184 Records Management	2	2	0	3
OST 289 Administrative Office Mgt	2	2	0	3
B. Other Major Courses: 25 Hours				
1. Required: 20 Hours				
OST 131 Keyboarding	1	2	0	2
OST 136 Word Processing	2	2	0	3
OST 162 Executive Terminology	3	0	0	3
OST 223 Admin Office Transcript I	2	2	0	3
OST 233 Office Publications Design	2	2	0	3
OST 236 Adv Word/Information Proc	2	2	0	3
OST 286 Professional Development	3	0	0	3

## Office Administration D25370D (Continued)

	Hours		Work	
Title	Class	Lab	Exp.	Credits
2. Select 5 hours from the following (a maximum	of 2 hou	rs of COI	E are allo	wed):
BUS 121 Business Math	2	2	0	3
<b>BUS 260 Business Communication</b>	3	0	0	3
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121 Co-op Work Experience II	0	0	10	1
OST 122 Office Computations	1	2	0	2
OST 140 Internet Comm/ Research	1	2	0	2
OST 166 Speech Recognition	1	2	0	2
OST 284 Emerging Technologies	1	2	0	2
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
Total Credits				47

#### **Office Administration**

Receptionist Certificate C25370C1 (Revised 2013\*03) Course and Hour Requirements

Title	Hours Class	Lab	Work Exp.	Credits
I. General Education Courses: 0 Hours				
II. Major Courses: 18 Hours				
A. Core: 6 Hours				
OST 134 Text Entry & Formatting	2	2	0	3
OST 164 Text Editing Applications	3	0	0	3
B. Other Major Courses: 12 Hours				
1. Required: 5 Hours				
OST 131 Keyboarding	1	2	0	2
OST 136 Word Processing	2	2	0	3
2. Select 7 hours from the following (a maximum	of 2 hou	rs of COI	E are allo	wed):
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121 Co-op Work Experience II	0	0	10	1
OST 122 Office Computations	1	2	0	2
OST 162 Executive Terminology	3	0	0	3
OST 223 Admin Office Transcript I	2	2	0	3
OST 233 Office Publications Design	2	2	0	3
OST 236 Adv Word/Information Proc	2	2	0	3
<b>Total Credits</b>				18

### **Office Administration**

Transcriptionist Certificate C25370C2 (Revised 2013\*03) Course and Hour Requirements

Title Hours Work
Class Lab Exp. Credits

I. General Education Courses: 0 Hours
II. Major Courses: 18 Hours
A. Core: 6 Hours
OST 134 Text Entry & Formatting 2 2 0 3

3

0

3

**OST 164 Text Editing Applications** 

# Office Administration C25370C2 (Continued)

		Hours		Work	
Title		Class	Lab	Exp.	Credits
	B. Other Major Courses: 12 Hours				
	OST 131 Keyboarding	1	2	0	2
	OST 136 Word Processing	2	2	0	3
	OST 166 Speech Recognition	1	2	0	2
	OST 223 Admin Office Transcript I	2	2	0	3
	OST 224 Admin Ofc Transcript II	1	2	0	2
	<b>Total Credits</b>				18

### Office Administration

**Word Processing Certificate C25370C3** 

(Revised 2013\*03) Course and Hour Requirements

,	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours			•	
II. Major Courses: 18 Hours				
A. Core: 9 Hours				
CIS 110 Introduction to Computers	2	2	0	3
OST 134 Text Entry & Formatting	2	2	0	3
OST 164 Text Editing Applications	3	0	0	3
B. Other Major Courses: 9 Hours				
1. Required: 5 Hours				
OST 131 Keyboarding	1	2	0	2
OST 136 Word Processing	2	2	0	3
2. Select 4 hours from the following (a maximur	n of 2 hou	rs of CO	E are allo	wed):
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121 Co-op Work Experience II	0	0	10	1
OST 166 Speech Recognition	1	2	0	2
OST 233 Office Publications Design	2	2	0	3
OST 236 Adv Word/Information Proc	2	2	0	3
Total Credits				18

# Office Administration

Office Administration Essential Certificate\* C25370C4 (Revised 2012\*01) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 0 Hours II. Major Courses: 15 Hours			-	
A. Core: 12 Hours				
CIS 110 Introduction to Computers	2	2	0	3
OST 164 Text Editing Applications	3	0	0	3
OST 184 Records Management	2	2	0	3
OST 289 Administrative Office Mgt	2	2	0	3
B. Other Major Courses: 3 Hours				
OST 136 Word Processing	2	2	0	3
Total Credits				15

<sup>\*</sup>This certificate has been identified as a pathway for high school students participating in the Career and College Promise initiative.

#### **POLYSOMNOGRAPHY A45670**

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.

#### Polysomnography A45670 Associate in Applied Science Degree A45670 (2010\*03) Course and Hour Requirements

Hours

Work

			Hours		Work	
Title			Class	Lab	Exp.	Credits
I. Gen	eral E	ducation: 18 Hours				
	A. Eng	dish				
		ENG 111 Expository Writing	3	0	0	3
		ENG 114 Prof. Research and Reporting	3	0	0	3
	B. Soci	al/Behavioral Sciences				
		PSY 150 General Psychology	3	0	0	3
	C. Hu	manities/Fine Arts: 6 Hours				
		COM 231 Public Speaking	3	0	0	3
	and	3 hours selected from the list of humanities/fine a	ırts electives	for the Asse	ociate in A	pplied
		Science degree appearing in the current catalog.				
	D. Nat	ural Sciences/Math				
		MAT 115 Mathematical Models	2	2	0	3
		Students are required to demonstrate	compete	ncy in E	NG 090,	RED
		090, and the equivalent of MAT 070 or	r <i>DMA 01</i>	$10-050 \ pr$	ior to	
		enrollment.				
II. Ma	jor Ho	ours: 53 hours				
•	A.Core	e: 25 Hours				
	1. R	equired Courses				
		PSG 110 Intro to Polysomnography	3	2	0	4
		PSG 111 Neuro/Cardiopulmonary A&P	4	0	0	4
		PSG 210 Polysomnography I	3	2	9	7
		PSG 211 Polysomnography II	2	6	9	7
		ELC 111 Intro to Electricity	2	2	0	3
	B. Oth	er Major Hours: 25 Hours				
		BIO 163 Anatomy and Physiology	4	2	0	5
		BIO 271 Pathophysiology	3	0	0	3
		CIS 110 Introduction to Computers	2	2	0	3
		MED 118 Medical Laws & Ethics	2	0	0	2
		MED 121 Medical Terminology I	3	0	0	3
		PSG 112 PSG Fundamentals	3	0	0	3
		PSG 212 Infant/Pediatric PSG	3	2	0	4
		PSG 213 Case Study/Exam Review	0	3	0	1
		POC CALIFOCK CHILL II. T				

PSG 214 PSG Clinical Apps I

Polysomnography A45670 (Continued)

		-	Hours	-	Work
Title		Class	Lab	Exp.	Credits
	III. Other Required Hours: 1 Ho	ur			
	ACA 111 College Student Success	1	0	0	1
	Total Credits				69

All health science students must make grades of "A", "B", "C", or "SA" on all applicable course work to progress each semester and graduate from the program.

The Polysomnography Associate Degree Program is approved by the North Carolina Department of Community Colleges and is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in conjunction with the Committee on Accreditation for Polysomnographic Technologist Education (CoA PSG).

CoA PSG 6 Pine Knoll Drive Beverly, MA 01915 774-855-4100

# PRACTICAL NURSING (DIPLOMA) D45660

The Practical Nursing curriculum prepares individuals with the knowledge and skills to provide nursing care to children and adults.

Students will participate in assessment, planning, implementing, and evaluating nursing care. Graduates are eligible to apply to take the National Council Licensure Examination (NCLEX-PN) which is required for practice as a Licensed Practical Nurse. Employment opportunities include hospitals, rehabilitation/long term care/home health facilities, clinics, and physicians' offices.

### Practical Nursing Diploma D45660

(Revised 2009\*03) Course and Hour Requirements

(IteViseu 2000 00) Gourse und IIe	vised 2005 05) Godise and Hour Requirements				
	Hours		Work		
Title	Class	Lab	Exp.	Credits	
I. General Education: 14 hours					
A. English					
ENG 111 Expository Writing	3	0	0	3	
B. Social/Behavioral Sciences					
PSY 150 General Psychology	3	0	0	3	
C. Natural Science/Math					
BIO 168 Anatomy and Physiology I	3	3	0	4	
BIO 169 Anatomy and Physiology II	3	3	0	4	
AND					
Students are required to demonstra	ite compete	ency in C	HM 094	and the	
equivalent of MAT 080 or DMA 010-	-080 prior t	o enrolln	nent in t	his	
curriculum.	_				
II. Major Hours: 33 hours					
NUR 101 Practical Nursing I	7	6	6	11	
NUR 102 Practical Nursing II	8	0	12	12	
NUR 103 Practical Nursing III	6	0	12	10	
III. Other Required Hours: 1 hour					
ACA 111 College Student Success	1	0	0	1	
Total Credits				48	

All health science students must make grades of "A," "B," "C," or "SA" on all applicable course work to progress each semester and graduate from the program.

#### LICENSED PRACTICAL NURSE REFRESHER C45390

The Licensed Practical Nurse Refresher curriculum provides a refresher course for individuals previously licensed as Practical Nurses and who are ineligible for reentry into nursing practice due to a lapse in licensure for five or more years.

Individuals entering this curriculum must have been previously licensed as a Practical Nurse. Course work includes common medical-surgical conditions and nursing approaches to their management, including mental health principles, pharmacological concepts, and safe clinical

nursing practice.

Graduates will be eligible to apply for reinstatement of licensure by the North Carolina Board of Nursing. Employment opportunities include hospitals, long term care facilities, clinics, physicians' offices, industry and community health agencies.

# **Licensed Practical Nurse Refresher**

#### Certificate C45390

#### (Revised 1998\*03) Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education: 0 hours				
II. Major Hours: 12 hours				
Core: 12 Hours				
NUR 107 LPN Refresher	9	0	9	12
Total Credits				12

#### RADIOGRAPHY A45700

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 maybe employed in hospitals, clinics, physicians' offices, medical laboratories, government agencies, and industry.

Radiography
Associate in Applied Science Degree A45700
(Revised 2010\*03) Course and Hour Requirements

(110115041 2010 00) 61041150 41141 111	(1101150th 2010 00) Course that 110th 110th 110th					
	Hours	Hours		Work		
Title	Class	Lab	Exp.	Credits		
I. General Education Courses: 17 Hours						
A. English: 6 Hours						
ENG 111 Expository Writing	3	0	0	3		
ENG 114 Prof. Research & Reporting	3	0	0	3		
B. Social/Behavioral Sciences: 3 Hours						
PSY 150 General Psychology	3	0	0	3		
C. Humanities/Fine Arts: 3 Hours						
Selected from the list of humanities/fine arts e	lectives for the	Associate in	Applied S	Science		
degree appearing in the current catalog.						
D. Math/Natural Sciences: 5 Hours						
BIO 163 Basic Anat & Physiology	4	2	0	5		
AND						

Students are required to demonstrate competency in the equivalent of MAT 070 or DMA 010-050 prior to enrollment in this curriculum.

### II. Major Courses: 53 Hours

**Total Credits** 

A. Core: 53 Hours				
RAD 110 Rad Intro & Patient Care	2	3	0	3
RAD 111 RAD Procedures I	3	3	0	4
RAD 112 RAD Procedures II	3	3	0	4
RAD 121 Radiographic Imaging I	2	3	0	3
RAD 122 Radiographic Imaging II	1	3	0	2
RAD 131 Radiographic Physics I	1	3	0	2
RAD 151 RAD Clinical Ed I	0	0	6	2
RAD 161 RAD Clinical Ed II	0	0	15	5
RAD 171 RAD Clinical Ed III	0	0	12	4
RAD 211 RAD Procedures III	2	3	0	3
RAD 231 Radiographic Physics II	1	3	0	2
RAD 241 Radiobiology/Protection	2	0	0	2
RAD 245 Image Analysis	1	3	0	2
RAD 251 RAD Clinical Ed IV	0	0	21	7
RAD 261 RAD Clinical Ed V	0	0	21	7
RAD 271 Radiography Capstone	0	3	0	1
B. Other Required Courses: 3 Hours				
CIS 110 Introduction to Computers	2	2	0	3
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
11011 111 Conege Student Success	1	9	0	

All health science students must make grades of "A," "B," "C," or "SA" on all applicable course work to progress each semester and graduate from the program.

#### SURGICAL TECHNOLOGY D45740

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.

# **Surgical Technology**

Diploma D45740

#### (Revised 2010\*03) Course and Hour Requirements

Title

I. General Education: 8 hours

**Total Credits** 

A English

Hours

Class

Lab

Work

Exp. Credits

46

A. English				
ENG 111 Expository Writing	3	0	0	3
B. Natural Sciences/Math				
BIO 163 Basic Anat & Physiology	4	2	0	5
AND				
Students are required to demonstr	rate compete	mcy in th	ie equiva	lent of
MAT 070 or DMA 010-050 prior to	enrollment	in this cı	ırriculun	ı.
II. Major Hours: 37 hours				
A. Core				
SUR 110 Intro to Surg Tech	3	0	0	3
SUR 111 Periop Patient Care	5	6	0	7
SUR 122 Surgical Procedures I	5	3	0	6
SUR 123 Sur Clinical Practice I	0	0	21	7
SUR 134 Surgical Procedures II	5	0	0	5
SUR 135 Sur Clinical Practice II	0	0	12	4
SUR 137 Prof Success Prep	1	0	0	1
B. Other Major Hours				
BIO 275 Microbiology	3	3	0	4
III. Other Required Hours: 1 hour				
ACA 111 College Student Success	1	0	0	1

All health science students must make grades of "A," "B," "C," or "SA" on all applicable course work to progress each semester and graduate from the program.

### SUSTAINABILITY TECHNOLOGIES A40370

The Sustainability Technologies curriculum is designed to prepare individuals for employment in environmental, construction, alternative energy, manufacturing, or related industries, where key emphasis is placed on energy production and waste reduction along with sustainable technologies. Course work may include alternative energy, environmental engineering technology, sustainable manufacturing, and green building technology. Additional topics may include sustainability, energy management, waste reduction, renewable energy, site assessment, and environmental responsibility. Graduates should qualify for positions within the alternative energy, construction, environmental, and/or manufacturing industries. Employment opportunities exist in both the government and private industry sectors where graduates may function as manufacturing technicians, sustainability consultants, environmental technicians, or green building supervisors.

# Sustainability Technologies Associate in Applied Science Degree A40370 Revised 2011\*03 (Course and Hour Requirements)

Hours

Work

		110015		TTOTE	
Title		Class	Lab	Exp.	Credits
I. Ger	neral Education: 15 Hours				
	A.English: 6 Hours				
	ENG 111 Expository Writing	3	0	0	3
	ENG 114 Prof. Research & Reporting	3	0	0	3
	B. Social/Behavioral Science: 3 Hours				
	3 SHC Selected from the list of social/behaviora	l science elec	ctives for the	Associate	in Applied
	Science Degree appearing in the college catalog		J		11
	C.Humanities/Fine Arts: 3 Hours				
	3 SHC Selected from the list of humanities and j	fine arts elec	tives for the	Associate	in Applied
	Science Degree appearing in the college catalog.		J		11
	D.Math/Natural Science: 3 Hours selected from t	he followi	ng:		
	MAT 121 Algebra/Trigonometry	2	2	0	3
	or MAT 161 College Algebra	3	0	0	3
II. Ma	ajor Courses: 52 Hours				
	A. Core: 12 Hours				
	ENV 110 Environmental Science	3	0	0	3
	SST 110 Intro to Sustainablity	3	0	0	3
	SST 120 Energy Use Analysis	2	2	0	3
	SST 210 Issues in Sustainablity	3	0	0	3
	B. Other Major Courses: 40 Hours				
	1. Subject Area Courses: 9 Hours				
	ALT 120 Renewable Energy Technology	2	2	0	3
	ALT 220 Photovoltaic Sys Technology	2	3	0	3
	SST 130 Modeling Renewable Energy	2	2	0	3
	2. Other required courses: 28 Hours				
	ALT 221 Adv. PV Sys Design	2	3	0	3
	BPR 130 Blue Print Reading/Const	1	2	0	2
	CST 111 Construction I	3	3	0	4
	CST 112 Construction II	3	3	0	4
	CMT 210 Prof Construction Superv	3	0	0	3
	ELC 113 Basic Wiring	2	6	0	4
	LAR 120 Sustainable Development	2	2	0	3
	SST 140 Green Building Concepts	1	3	0	2
	SST 250 Sustain Capstone Projects	1	6	0	3
	200 Sustain Capsione 110Joon	•	~	v	Ü

#### **Sustainability Technologies A40370 (Continued)**

	Hours		Work		
Title	Class	Lab	Exp.	Credits	
3.Other Major Technical Electives: 3 hours sele	cted from t	the follow	ing:		
AHR 211 Residential System Design	2	2	0	3	
ALT 240 Wind & Hydro Power Sys	2	2	0	3	
ALT 250 Thermal Systems	2	2	0	3	
CMT 112 Construction Management I	4	4	0	6	
CMT 120 Codes and Inspections	3	0	0	3	
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2	
COE 121-122 Co-op Work Experience I	I 0	0	10-20	1-2	
ENV 226 Enviromental Law	3	0	0	3	
PLU 115 Basic Plumbing	2	6	0	4	
III. Other Required Courses: 4 Hours					
ACA 111 College Student Success	1	0	0	1	
CIS 110 Intro to computers	2	2	0	3	
Total Credits				71	

Sustainability Technologies
Renewable Energy Diploma D40370D1
(Revised 2011\*03) Course and Hour Requirements

m: 1	(Revised 2011*03) Course and Hour	_		Б	G 11:
Title	IDI CII	Class	Lab	Exp.	Credits
I. Gene	eral Education: 6 Hours				
	A. English: 3 Hours				
	ENG 111 Expository Writing	3	0	0	3
	B. Math/Natural Science: 3 Hours				
	MAT 121 Algebra/Trigonometry	2	2	0	3
	or MAT 161 College Algebra	3	0	0	3
II. Maj	or Courses: 33 Hours				
	A.Core: 15 Hours				
	ENV 110 Environmental Science	3	0	0	3
	SST 110 Intro to Sustainability	3	0	0	3
	SST 120 Energy Use Analysis	2	2	0	3
	ALT 120 Renewable Energy Technology	2	2	0	3
	ALT 220 Photovoltaic Sys Technology	2	3	0	3
	B.Other Major Courses: 18 Hours				
	1. Required Courses: 12 Hours				
	ALT 221 Adv. PV Sys Design	2	3	0	3
	CMT 210 Prof Construction Superv	3	0	0	3
	ELC 113 Basic Wiring	2	6	0	4
	SST 140 Green Building Concepts	1	3	0	2
	2. 6 Hours selected from the following:				
	ALT 240 Wind & Hydro Power Sys	2	2	0	3
	ALT 250 Thermal Systems	2	2	0	3
	CMT 120 Codes and Inspections	3	0	0	3
	COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
	COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
	ENV 226 Environmental Law	3	0	0	3
	ISC 121 Environmental Health & Safety	3	0	0	3
	ACA 111 College Student Success	1	0	0	1
	CIS 110 Intro to Computers	2	2	0	3
	Total Credits	4	4	U	<b>39</b>
	iotal Greatts				33

## Sustainability Technologies Green Building Diploma D40370D2 rised 2011\*03) Course and Hour Requirement

(Revised 2011*03) Course and Hou	Requir	ements		
Title	Class	Lab	Exp.	Credits
I. General Education: 6 hours				
A. English: 3 Hours	3	0	0	3
ENG 111 Expository Writing B. Math/Natural Science: 3 Hours	3	U	U	3
	2	2	0	3
MAT 161 Callaga Alashar	3	0	0	3
or MAT 161 College Algebra	3	U	U	Э
II. Major Hours: 33 hours				
A. Core: 15 Hours				
ENV 110 Environmental Science	3	0	0	3
SST 110 Intro to Sustainability	3	0	0	3
SST 120 Energy Use Analysis	2	2	0	3
ALT 120 Renewable Energy Technology	2	2	0	3
ALT 220 Photovoltaic Sys Technology	2	3	0	3
B. Other Major Courses: 18 Hours				
1. Required Courses: 15 Hours				
BPR 130 Blue Print Reading/Const	1	2	0	2
CST 111 Construction I	3	3	0	4
CST 112 Construction II	3	3	0	4
CMT 210 Prof Construction Superv	3	0	0	3
SST 140 Green Building Concepts	1	3	0	2
2. 3 Hours selected from the following	_			_
AHR 211 Residential System Design	2	2	0	3
CMT 120 Codes and Inspections	3	0	0	3
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
ENV 226 Environmental Law	3	0	0	3
ISC 121 Environmental Health & Safety	3	0	0	3
PLU 115 Basic Plumbing	2	6	0	4
III. Other Required Courses: 4 Hours				
ACA 111 College Student Success	1	0	0	1
CIS 110 Intro to Computers	2	2	0	3
Total Credits				43
Sustainability Techn Essential Green Building Diplom (Revised 2012*01) Course and Hou	a* D403	70D3		
Title	Class	Lab	Exp.	Credits
I. General Education: 6 hours				
A. English: 3 Hours				
ENG 111 Expository Writing	3	0	0	3
B. Math/Natural Science: 3 Hours				
MAT 121 Algebra/Trigonometry	2	2	0	3
II. Major Hours: 33 hours				
A. Core: 15 Hours	0	0	^	0
ENV 110 Environmental Science	3	0	0	3
SST 110 Intro to Sustainability	3	0	0	3
SST 120 Energy Use Analysis	2	2	0	3
ALT 120 Renewable Energy Technology	2	2	0	3
ALT 220 Photovoltaic Sys Technology	2	3	0	3
218				

#### Sustainability Technologies D40370D3 (Continued)

24344114711101051051011010	0.020	(0.01		-/			
B. Other Major Courses: 18 Hours		-		-			
1. Required Courses: 18 Hours							
BPR 130 Blue Print Reading/Const	1	2	0	2			
CST 111 Construction I	3	3	0	4			
CST 112 Construction II	3	3	0	4			
CMT 120 Codes and Inspections	3	0	0	3			
CMT 210 Prof Construction Superv	3	0	0	3			
SST 140 Green Building Concepts	1	3	0	2			
III. Other Required Courses: 4 Hours							
ACA 111 College Student Success	1	0	0	1			
CIS 110 Intro to Computers	2	2	0	3			
ı							

<sup>\*</sup>This diploma has been identified as a pathway for high school students participating in the Career and College Promise initiative.

**Total Credits** 

#### **Sustainability Technologies**

Renewable Energy Certificate C40370C1 (Revised 2012\*03) Course and Hour Requirements

Title	Class	Lab	Exp.	Credits
I. General Education: 0 Hours			_	
II. Major Courses: 16 Hours				
SST 110 Intro to Sustainability	3	0	0	3
ALT 120 Renewable Energy Technology	2	2	0	3
ALT 220 Photovoltaic Sys Technology	2	3	0	3
ELC 113 Basic Wiring	2	6	0	4
ALT 250 Thermal Systems	2	2	0	3
Total Credits				16

#### **Sustainability Technologies**

Specialization in Green Building Certificate C40370C3 (Revised 2012\*03) Course and Hour Requirements

I itle	Class	Lab	Exp.	Credits
I. General Education: 0 Hours			•	
II. Major Courses: 14 Hours				
SST 110 Intro to Sustainability	3	0	0	3
SST 120 Energy Use Analysis	2	2	0	3
BPR 130 Blue Print Reading/Cons	1	2	0	2
CST 111 Construction I	3	3	0	4
SST 140 Green Building Concepts	1	3	0	2
Total Credits				14

#### Sustainability Technologies

Solar Photovoltaic Installation Certificate C40370C4 (Revised 2012\*03) Course and Hour Requirements

Title	Class	Lab	Exp.	Credits
I. General Education: 0 Hours			•	
II. Major Courses: 15 Hours				
ALT 120 Renewable Energy Technology	3	0	0	3
ALT 220 Photovoltaic Sys Technology	2	3	0	3
ALT 221 Adv. PV Sys Design	2	3	0	3
SST 120 Energy Use Analysis	2	2	0	3
SST 130 Modeling Renewable Energy	2	2	0	3
<b>Total Credits</b>				15

#### THERAPEUTIC MASSAGE A45750

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

Courses will include content in normal human anatomy and physiology, therapeutic massage, ethical/legal issues, business practices, nutrition and psychology.

Employment opportunities include hospitals, rehabilitation centers, health departments, home health, medical offices, nursing homes, spas/health/sports clubs, and private practice. Graduates may be eligible to take the Massage and Bodywork Licensing Exam or the National Certification for Therapeutic Massage and Bodywork.

#### Therapeutic Massage

Associate in Applied Science Degree A45750 (Revised 2013\*03) Course and Hour Requirements

Title

Hours

Class

Lab

Work

Exp. Credits

I. Gener	al Education Courses: 17 Hours	5		1		
A	A. English: 3 Hours					
	ENG 111 Expository Writing	3	0	0	3	
F	B. Social/Behavioral Sciences: 3 Hours					
	PSY 150 General Psychology	3	0	0	3	
(	C. Humanities/Fine Arts: 6 Hours					
	COM 231 Public Speaking	3	0	0	3	
a	and 3 hours selected from the list of humanities.	fine arts electives	for the Asso	ciate in Ap	plied	
	Science degree appearing in the current catal	log.				
I	D. Math/Natural Sciences: 5 Hours					
	BIO 163 Basic Anatomy and Physiol	ogy 4	2	0	5	
	AND	·				
	Students are required to demons	trate competer	ncy in th	e equiva	lent of	
	MAT 070 or DMA 010-050 prior to	o enrollment i	n this cu	rriculun	n.	
II. Majo	r Courses: 52 Hours					
A	A. Core: 45 Hours					
	BIO 271 Pathophysiology	3	0	0	3	
	<b>BUS 152 Human Relations</b>	3	0	0	3	
	MTH 110 Fundamentals of Massago	e 6	9	3	10	
	MTH 120 Ther Massage Application	ns 6	9	3	10	
	MTH 125 Ethics of Massage	2	0	0	2	
	MTH 130 Ther Massage Manageme	ent 2	0	0	2	
	MTH 210 Adv Skills of Massage	4	9	3	8	
	MTH 220 Outcome-Based Massage	4	6	3	7	
I	B. Other Major Courses: 7 hours					
	NUT 110 Nutrition	3	0	0	3	
	MED 121 Medical Terminology I	3	0	0	3	
	MTH 121 Clinical Supplement I	0	0	3	1	
III. Other Required Courses: 1 Hour						
	ACA 111 College Student Success	1	0	0	1	
	<b>Total Credits</b>				70	

All health science students must make grades of "A," "B," "C," or "SA" on all applicable course work to progress each semester and graduate from the program.

Graduates may be eligible to take the MBLEX (Massage and Bodywork Licensing Examination) to meet requirements for the North Carolina State Board of Massage Licensure.

#### Therapeutic Massage

#### Diploma D45750D

#### (Revised 2013\*01) Course and Hour Requirements

Hours

Work

Title	Class	Lab	Exp.	Credits		
I. General Education Courses: 11 Hours						
A. English: 3 Hours						
ENG 111 Expository Writing	3	0	0	3		
B. Social/Behavioral Sciences: 3 Hours						
PSY 150 General Psychology	3	0	0	3		
C. Math/Natural Sciences: 8 Hours						
BIO 163 Basic Anatomy and Physiology	4	2	0	5		
Students are required to demonstrate competency in the equivalent of						
MAT 070 or DMA 010–050 prior to enr	ollment	in this cu	ırriculu	m.		
II. Major Courses: 34 Hours						
A. Core: 30 Hours						
BIO 271 Pathophysiology	3	0	0	3		
BUS 152 Human Relations	3	0	0	3		
MTH 110 Fundamentals of Massage	6	9	3	10		
MTH 120 Ther Massage Applications	6	9	3	10		
MTH 125 Ethics of Massage	2	0	0	2		
MTH 130 Ther Massage Management	2	0	0	2		
B. Other Major Courses: 4 hours						
MED 121 Medical Terminology I	3	0	0	3		
MTH 121 Clinical Supplement I	0	0	3	1		
III. Other Required Courses: 1 Hour						
ACA 111 College Student Success	1	0	0	1		
Total Credits				46		

Students must complete 50 hours of independent practicum prior to receiving a Therapeutic Massage Diploma or Associate in Applied Science Degree.

Licensure is required to practice as a Massage Therapist in North Carolina. Refer to website for details: www.bmbt.org.

Graduates may be eligible to take the MBLEX (Massage and Bodywork Licensing Examination) to meet requirements for the North Carolina State Board of Massage Licensure.

#### **WELDING TECHNOLOGY A50420**

#### **Pathway: Production**

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

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

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.

#### **Welding Technology**

### Associate in Applied Science Degree A50420 (Revised 2013\*03) Course and Hour Requirements

Work

Title         Class         Lab         Exp. Credits           I. General Education Courses: 15 Hours           A. English: 6 Hours         ENG 111 Expository Writing         3         0         0         3           ENG 113 Literature-Based Research         3         0         0         3           B. Social/ Behavioral Sciences: 3 Hours         Selected from the list of social/behavioral sciences electives for the Associate in Applied Science degree appearing in the current catalogs           C. Humanities/Fine Arts: 3 Hours           Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog           D. Math/Natural Sciences: 3 Hours           MAT 121 Algebra/Trigonometry I         2         2         0         3           MAT 161 College Algebra         3         0         0         3           II. Major Cowses: 49 Hours           WILD 110 Cutting Processes         1         3         0         2           A. Core: 18 Hours           WILD 115 SMAW (Stick) Plate         2         9         0         5           Or WILD 115A SMAW (Stick) Plate         1         3         0         2 <th></th> <th></th> <th></th> <th>Hours</th> <th></th> <th>Work</th> <th></th>				Hours		Work	
A. English: 6 Hours  ENG 111 Expository Writing  ENG 113 Literature-Based Research  Or ENG 114 Prof Research & Reporting  B. Social/Behavioral Sciences: 3 Hours  Selected from the list of social/behavioral sciences electives for the Associate in Applied Science degree appearing in the current catalog  C. Humanities/Fine Arts: 3 Hours  Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog  D. Math/Natural Sciences: 3 Hours  MAT 121 Algebra/Trigonometry I 2 2 2 0 3 or MAT 161 College Algebra 3 0 0 3  II. Major Courses: 49 Hours  A. Core: 18 Hours  WLD 110 Cutting Processes 1 3 0 0 0 3  III. Major Courses: 49 Hours  A. Core: 18 Hours  WLD 115 SMAW (Stick) Plate 2 9 0 5 or WLD 115A SMAW (Stick) Plate 1 6 0 3 and WLD 115B SMAW (Stick) Plate 1 6 0 4 wLD 115B SMAW (Stick) Plate 1 6 0 4 wLD 115B GMAW (MIG) FCAW/plate 2 6 0 4 wLD 115 GMAW (MIG) FCAW/plate 2 6 0 4 wLD 141 Symbols & Specifications 2 2 0 0 3 B. Other Major Courses:  1. Required Hours: 21 Hours  BPR 111 Print Reading 1 2 0 2 0 2 wLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4 or WLD 116 SMAW (Stick) Plate/Pipe 1 6 0 3 wLD 116 SMAW (Stick) Plate/Pipe 1 6 0 3 wLD 12 GMAW (MIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 0 3	Title			Class	Lab	Exp.	Credits
A. English: 6 Hours  ENG 111 Expository Writing  ENG 113 Literature-Based Research  Or ENG 114 Prof Research & Reporting  B. Social/Behavioral Sciences: 3 Hours  Selected from the list of social/behavioral sciences electives for the Associate in Applied Science degree appearing in the current catalog  C. Humanities/Fine Arts: 3 Hours  Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog  D. Math/Natural Sciences: 3 Hours  MAT 121 Algebra/Trigonometry I 2 2 2 0 3 or MAT 161 College Algebra 3 0 0 3  II. Major Courses: 49 Hours  A. Core: 18 Hours  WLD 110 Cutting Processes 1 3 0 0 0 3  III. Major Courses: 49 Hours  A. Core: 18 Hours  WLD 115 SMAW (Stick) Plate 2 9 0 5 or WLD 115A SMAW (Stick) Plate 1 6 0 3 and WLD 115B SMAW (Stick) Plate 1 6 0 4 wLD 115B SMAW (Stick) Plate 1 6 0 4 wLD 115B GMAW (MIG) FCAW/plate 2 6 0 4 wLD 115 GMAW (MIG) FCAW/plate 2 6 0 4 wLD 141 Symbols & Specifications 2 2 0 0 3 B. Other Major Courses:  1. Required Hours: 21 Hours  BPR 111 Print Reading 1 2 0 2 0 2 wLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4 or WLD 116 SMAW (Stick) Plate/Pipe 1 6 0 3 wLD 116 SMAW (Stick) Plate/Pipe 1 6 0 3 wLD 12 GMAW (MIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 0 3 wLD 132 GTAW (TIG) Plate/Pipe 1 6 0 0 3	I. Gen	eral Ed	lucation Courses: 15 Hours				
ENG 113 Literature-Based Research 3 0 0 3 or ENG 114 Prof Research & Reporting 3 0 0 0 3 B. Social/Behavioral Sciences: 3 Hours  Selected from the list of social/behavioral sciences electives for the Associate in Applied  Science degree appearing in the current catalog  C. Humanities/Fine Arts: 3 Hours  Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog  D. Math/Natural Sciences: 3 Hours  MAT 121 Algebra/Trigonometry I 2 2 2 0 3 3 or MAT 161 College Algebra 3 0 0 3  II. Major Courses: 49 Hours  A. Core: 18 Hours  A. Core: 18 Hours  A. Core: 18 Hours  WLD 110 Cutting Processes 1 3 0 2 WLD 115 SMAW (Stick) Plate 2 9 0 5 or WLD 115 SMAW (Stick) Plate 1 6 0 3 and WLD 115B SMAW (Stick) Plate 1 6 0 3 and WLD 115B SMAW (Stick) Plate 1 3 0 2 WLD 121 GMAW (MIG) FCAW/plate 2 6 0 4 WLD 131 GTAW (TIG) Plate 2 6 0 4 WLD 141 Symbols & Specifications 2 2 0 0 3  B. Other Major Courses:  1. Required Hours: 21 Hours  BPR 111 Print Reading 1 2 0 2 2  WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4  or WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4  WLD 116 SMAW (Stick) Plate/Pipe 1 6 0 3 WLD 122 GMAW (MIG) Plate/Pipe 1 6 0 3 WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 143 Welding Metallurgy 1 2 0 2 WLD 144 Welding Metallurgy 1 2 0 2 WLD 143 Welding Metallurgy 1 2 0 2 WLD 143 Welding Metallurgy 1 2 0 2							
ENG 113 Literature-Based Research 3 0 0 3 or ENG 114 Prof Research & Reporting 3 0 0 0 3 B. Social/Behavioral Sciences: 3 Hours  Selected from the list of social/behavioral sciences electives for the Associate in Applied  Science degree appearing in the current catalog  C. Humanities/Fine Arts: 3 Hours  Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog  D. Math/Natural Sciences: 3 Hours  MAT 121 Algebra/Trigonometry I 2 2 2 0 3 3 or MAT 161 College Algebra 3 0 0 3  II. Major Courses: 49 Hours  A. Core: 18 Hours  A. Core: 18 Hours  A. Core: 18 Hours  WLD 110 Cutting Processes 1 3 0 2 WLD 115 SMAW (Stick) Plate 2 9 0 5 or WLD 115 SMAW (Stick) Plate 1 6 0 3 and WLD 115B SMAW (Stick) Plate 1 6 0 3 and WLD 115B SMAW (Stick) Plate 1 3 0 2 WLD 121 GMAW (MIG) FCAW/plate 2 6 0 4 WLD 131 GTAW (TIG) Plate 2 6 0 4 WLD 141 Symbols & Specifications 2 2 0 0 3  B. Other Major Courses:  1. Required Hours: 21 Hours  BPR 111 Print Reading 1 2 0 2 2  WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4  or WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4  WLD 116 SMAW (Stick) Plate/Pipe 1 6 0 3 WLD 122 GMAW (MIG) Plate/Pipe 1 6 0 3 WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 143 Welding Metallurgy 1 2 0 2 WLD 144 Welding Metallurgy 1 2 0 2 WLD 143 Welding Metallurgy 1 2 0 2 WLD 143 Welding Metallurgy 1 2 0 2			ENG 111 Expository Writing	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours  Selected from the list of social/behavioral sciences electives for the Associate in Applied Science degree appearing in the current catalog  C. Humanities/Fine Arts: 3 Hours  Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog  D. Math/Natural Sciences: 3 Hours  MAT 121 Algebra/Trigonometry I 2 2 2 0 3 or MAT 161 College Algebra 3 0 0 3  II. Major Courses: 49 Hours  A. Core: 18 Hours  WLD 110 Cutting Processes 1 1 3 0 2 WLD 115 SMAW (Stick) Plate 2 9 0 5 or WLD 115 SMAW (Stick) Plate 1 6 0 3 and WLD 115B SMAW (Stick) Plate 1 3 0 2 WLD 121 GMAW (MIG) FCAW/plate 2 6 0 4 WLD 131 GTAW (TIG) Plate 2 6 0 4 WLD 141 Symbols & Specifications 2 2 0 3  B. Other Major Courses:  1. Required Hours: 21 Hours  BPR 111 Print Reading 1 2 0 2 WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4 or WLD 116 SMAW (Stick) Plate/Pipe 1 3 0 2 WLD 116 SMAW (Stick) Plate/Pipe 1 6 0 3 WLD 118 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 118 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 119 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 119 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 114 Symbols MAW (Stick) Plate/Pipe 1 6 0 3 WLD 114 Symbols MAW (Stick) Plate/Pipe 1 6 0 3 WLD 114 Symbols MAW (Stick) Plate/Pipe 1 6 0 3 WLD 114 Symbols MAW (Stick) Plate/Pipe 1 6 0 3 WLD 114 Symbols MAW (Stick) Plate/Pipe 1 6 0 3 WLD 114 Symbols MAW (Stick) Plate/Pipe 1 6 0 3 WLD 114 Symbols MAW (Stick) Plate/Pipe 1 6 0 3 WLD 114 Symbols MAW (Stick) Plate/Pipe 1 6 0 3 WLD 114 Symbols MAW (Stick) Plate/Pipe 1 6 0 3 WLD 114 Symbols MAW (Stick) Plate/Pipe 1 6 0 3 WLD 114 Symbols MAW (Stick) Plate/Pipe 1 6 0 3 WLD 114 Symbols MAW (Stick) Plate/Pipe 1 6 0 3 WLD 115 SMAW (Stick) Plate/Pipe 1 6 0 3 WLD 115 SMAW (Stick) Plate/Pipe 1 6 0 3				3	0	0	3
Selected from the list of social/behavioral sciences electives for the Associate in Applied Science degree appearing in the current catalog   C. Humanities/Fine Arts: 3 Hours   Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog   D. Math/Natural Sciences: 3 Hours   MAT 121 Algebra/Trigonometry I   2   2   2   0   3   3   0   0   3     II. Major Courses: 49 Hours   WLD 110 Cutting Processes   1   3   0   2   2   2   0   3     II. Major Courses: 49 Hours   WLD 115 SMAW (Stick) Plate   2   9   0   5   5   5   6   0   3     II. Major Courses: 49 Hours   WLD 115 SMAW (Stick) Plate   2   9   0   5   5   6   0   4     WLD 115 SMAW (Stick) Plate   1   6   0   3   6   0   4     WLD 115B SMAW (Stick) Plate   1   3   0   2   6   0   4     WLD 121 GMAW (MIG) FCAW/plate   2   6   0   4     WLD 131 GTAW (TIG) Plate   2   6   0   4     WLD 141 Symbols & Specifications   2   2   2   0   3     B. Other Major Courses:   1. Required Hours: 21 Hours   BPR 111 Print Reading   1   2   0   2     WLD 116 SMAW (Stick) Plate/Pipe   1   3   0   2     and WLD 116B SMAW (Stick) Plate/Pipe   1   3   0   2     WLD 122 GMAW (MIG) Plate/Pipe   1   6   0   3     WLD 132 GTAW (TIG) Plate/Pipe   1   6   0   3     WLD 143 Welding Metallurgy   1   2   0   2     WLD 143 Welding Metallurgy   1   2   0   2     WLD 145 SMAW (Stick) Pipe   1   6   0   3     WLD 155 SMAW (Stick) Pipe   1   9   0   4     WLD 155 SMAW (Stick) Pipe   1   9   0   4     WLD 155 SMAW (Stick) Pipe   1   9   0   4     WLD 155 SMAW (Stick) Pipe   1   9   0   4     WLD 155 SMAW (Stick) Pipe   1   9   0   4     WLD 155 SMAW (Stick) Pipe   1   9   0   4     WLD 155 SMAW (Stick) Pipe   1   9   0   4     WLD 155 SMAW (Stick) Pipe   1   9   0   4     WLD 155 SMAW (Stick) Pipe   1   9   0   4     WLD 155 SMAW (Stick) Pipe   1   9   0   4     WLD 155 SMAW (Stick) Pipe   1   9   0   4     WLD 155 SMAW (Stick) Pipe   1   9   0   4     WLD 155 SMAW (Stick) Pipe   1   9   0   4     WLD 155 SMAW (Stick) Pipe		or	ENG 114 Prof Research & Reporting	3	0	0	3
Science degree appearing in the current catalog		B. Socia	al/Behavioral Sciences: 3 Hours				
C. Humanities/Fine Arts: 3 Hours    Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog   D. Math/Natural Sciences: 3 Hours			Selected from the list of social/behavioral science	s electives for	r the Associ	ate in App	lied
Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog   D. Math/Natural Sciences: 3 Hours			Science degree appearing in the current catalog.				
D. Math/Natural Sciences: 3 Hours		C. Hun	nanities/Fine Arts: 3 Hours				
D. Math/Natural Sciences: 3 Hours  MAT 121 Algebra/Trigonometry I 2 2 2 0 3 or MAT 161 College Algebra 3 0 0 3  II. Major Courses: 49 Hours  A. Core: 18 Hours  WLD 110 Cutting Processes 1 3 0 2 WLD 115 SMAW (Stick) Plate 2 9 0 5 or WLD 115A SMAW (Stick) Plate 1 6 0 3 and WLD 115B SMAW (Stick) Plate 1 3 0 2 WLD 121 GMAW (MIG) FCAW/plate 2 6 0 4 WLD 131 GTAW (TIG) Plate 2 6 0 4 WLD 141 Symbols & Specifications 2 2 0 0 3  B. Other Major Courses:  1. Required Hours: 21 Hours  BPR 111 Print Reading 1 2 0 2 WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4 or WLD 116A SMAW (Stick) Plate/Pipe 1 3 0 2 and WLD 116B SMAW (Stick) Plate/Pipe 1 6 0 3 WLD 12 GMAW (MIG) Plate/Pipe 1 6 0 3 WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 143 Welding Metallurgy 1 2 0 2 WLD 143 Welding Metallurgy 1 2 0 2 WLD 143 Welding Metallurgy 1 2 0 2			Selected from the list of humanities/fine arts elec	tives for the 1	Associate in	Applied S	cience
MAT 121 Algebra/Trigonometry I 2 2 2 0 3 or MAT 161 College Algebra 3 0 0 0 3  III. Major Courses: 49 Hours  A. Core: 18 Hours  WLD 110 Cutting Processes 1 3 0 2 WLD 115 SMAW (Stick) Plate 2 9 0 5 or WLD 115 SMAW (Stick) Plate 1 6 0 3 and WLD 115B SMAW (Stick) Plate 1 3 0 2 WLD 121 GMAW (MIG) FCAW/plate 2 6 0 4 WLD 131 GTAW (TIG) Plate 2 6 0 4 WLD 141 Symbols & Specifications 2 2 0 0 3  B. Other Major Courses:  1. Required Hours: 21 Hours  BPR 111 Print Reading 1 2 0 2 WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4 or WLD 116A SMAW (Stick) Plate/Pipe 1 3 0 2 and WLD 116B SMAW (Stick) Plate/Pipe 1 3 0 2 and WLD 116B SMAW (Stick) Plate/Pipe 1 6 0 3 WLD 122 GMAW (MIG) Plate/Pipe 1 6 0 3 WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 143 Welding Metallurgy 1 2 0 2 WLD 143 Welding Metallurgy 1 2 0 2 WLD 215 SMAW (Stick) Pipe 1 9 0 4			degree appearing in the current catalog.				
MAT 161 College Algebra       3       0       0       3         III. Major Courses: 49 Hours         A. Core: 18 Hours       SA. Core: 18 Hours       3       0       2         WLD 110 Cutting Processes       1       3       0       2         WLD 115 SMAW (Stick) Plate       2       9       0       5         or       WLD 115A SMAW (Stick) Plate       1       6       0       3         and       WLD 115B SMAW (Stick) Plate       1       3       0       2         WLD 121 GMAW (MIG) FCAW/plate       2       6       0       4         WLD 131 GTAW (TIG) Plate       2       6       0       4         WLD 141 Symbols & Specifications       2       2       0       3         B. Other Major Courses:       1       2       0       3         1. Required Hours: 21 Hours       3       0       2         WLD 116 SMAW (Stick) Plate/Pipe       1       9       0       4         or       WLD 116A SMAW (Stick) Plate/Pipe       1       3       0       2         and       WLD 116B SMAW (Stick) Plate/Pipe       1       6       0       3         WLD 122 GMAW (MIG) Plate/Pipe		D. Matl	h/Natural Sciences: 3 Hours				
Major Courses: 49 Hours   A. Core: 18 Hours   WLD 110 Cutting Processes   1   3   0   2   WLD 115 SMAW (Stick) Plate   2   9   0   5   5   5   6   7   WLD 115A SMAW (Stick) Plate   1   6   0   3   3   3   6   2   5   6   7   WLD 115B SMAW (Stick) Plate   1   3   0   2   7   7   7   7   7   7   7   7   7			MAT 121 Algebra/Trigonometry I	2	2	0	3
A. Core: 18 Hours  WLD 110 Cutting Processes 1 3 0 2  WLD 115 SMAW (Stick) Plate 2 9 0 5  or WLD 115A SMAW (Stick) Plate 1 6 0 3  and WLD 115B SMAW (Stick) Plate 1 3 0 2  WLD 121 GMAW (MIG) FCAW/plate 2 6 0 4  WLD 131 GTAW (TIG) Plate 2 6 0 4  WLD 141 Symbols & Specifications 2 2 0 3  B. Other Major Courses:  1. Required Hours: 21 Hours  BPR 111 Print Reading 1 2 0 2  WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4  or WLD 116A SMAW (Stick) Plate/Pipe 1 3 0 2  and WLD 116B SMAW (Stick) Plate/Pipe 1 6 0 3  WLD 122 GMAW (MIG) Plate/Pipe 1 6 0 3  WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3  WLD 143 Welding Metallurgy 1 2 0 2  WLD 215 SMAW (Stick) Pipe 1 9 0 4		or	MAT 161 College Algebra	3	0	0	3
A. Core: 18 Hours  WLD 110 Cutting Processes 1 3 0 2  WLD 115 SMAW (Stick) Plate 2 9 0 5  or WLD 115A SMAW (Stick) Plate 1 6 0 3  and WLD 115B SMAW (Stick) Plate 1 3 0 2  WLD 121 GMAW (MIG) FCAW/plate 2 6 0 4  WLD 131 GTAW (TIG) Plate 2 6 0 4  WLD 141 Symbols & Specifications 2 2 0 3  B. Other Major Courses:  1. Required Hours: 21 Hours  BPR 111 Print Reading 1 2 0 2  WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4  or WLD 116A SMAW (Stick) Plate/Pipe 1 3 0 2  and WLD 116B SMAW (Stick) Plate/Pipe 1 6 0 3  WLD 122 GMAW (MIG) Plate/Pipe 1 6 0 3  WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3  WLD 143 Welding Metallurgy 1 2 0 2  WLD 215 SMAW (Stick) Pipe 1 9 0 4	II. Ma	jor Co	urses: 49 Hours				
WLD 115 SMAW (Stick) Plate 2 9 0 5 or WLD 115A SMAW (Stick) Plate 1 6 0 3 and WLD 115B SMAW (Stick) Plate 1 3 0 2 WLD 121 GMAW (MIG) FCAW/plate 2 6 0 4 WLD 131 GTAW (TIG) Plate 2 6 0 4 WLD 141 Symbols & Specifications 2 2 0 3 B. Other Major Courses: 1. Required Hours: 21 Hours BPR 111 Print Reading 1 2 0 2 WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4 or WLD 116A SMAW (Stick) Plate/Pipe 1 3 0 2 and WLD 116B SMAW (Stick) Plate/Pipe 0 6 0 2 WLD 122 GMAW (MIG) Plate/Pipe 1 6 0 3 WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 143 Welding Metallurgy 1 2 0 2 WLD 215 SMAW (Stick) Pipe 1 9 0 4							
WLD 115 SMAW (Stick) Plate 2 9 0 5 or WLD 115A SMAW (Stick) Plate 1 6 0 3 and WLD 115B SMAW (Stick) Plate 1 3 0 2 WLD 121 GMAW (MIG) FCAW/plate 2 6 0 4 WLD 131 GTAW (TIG) Plate 2 6 0 4 WLD 141 Symbols & Specifications 2 2 0 3 B. Other Major Courses: 1. Required Hours: 21 Hours BPR 111 Print Reading 1 2 0 2 WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4 or WLD 116A SMAW (Stick) Plate/Pipe 1 3 0 2 and WLD 116B SMAW (Stick) Plate/Pipe 0 6 0 2 WLD 122 GMAW (MIG) Plate/Pipe 1 6 0 3 WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 143 Welding Metallurgy 1 2 0 2 WLD 215 SMAW (Stick) Pipe 1 9 0 4			WLD 110 Cutting Processes	1	3	0	2
or WLD 115A SMAW (Stick) Plate 1 6 0 3 and WLD 115B SMAW (Stick) Plate 1 3 0 2 WLD 121 GMAW (MIG) FCAW/plate 2 6 0 4 WLD 131 GTAW (TIG) Plate 2 6 0 4 WLD 141 Symbols & Specifications 2 2 0 3 B. Other Major Courses:  1. Required Hours: 21 Hours BPR 111 Print Reading 1 2 0 2 WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4 or WLD 116A SMAW (Stick) Plate/Pipe 1 3 0 2 and WLD 116B SMAW (Stick) Plate/Pipe 1 3 0 2 WLD 12 GMAW (MIG) Plate/Pipe 1 6 0 3 WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 143 Welding Metallurgy 1 2 0 2 WLD 215 SMAW (Stick) Pipe 1 9 0 4				2	9	0	5
WLD 121 GMAW (MIG) FCAW/plate 2 6 0 4 WLD 131 GTAW (TIG) Plate 2 6 0 4 WLD 141 Symbols & Specifications 2 2 0 3 B. Other Major Courses:  1. Required Hours: 21 Hours  BPR 111 Print Reading 1 2 0 2 WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4 or WLD 116A SMAW (Stick) Plate/Pipe 1 3 0 2 and WLD 116B SMAW (Stick) Plate/Pipe 0 6 0 2 WLD 122 GMAW (MIG) Plate/Pipe 1 6 0 3 WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 143 Welding Metallurgy 1 2 0 2 WLD 215 SMAW (Stick) Pipe 1 9 0 4		or		1	6	0	3
WLD 131 GTAW (TIG) Plate 2 6 0 4 WLD 141 Symbols & Specifications 2 2 2 0 3  B. Other Major Courses:  1. Required Hours: 21 Hours  BPR 111 Print Reading 1 2 0 2 WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4  or WLD 116A SMAW (Stick) Plate/Pipe 1 3 0 2  and WLD 116B SMAW (Stick) Plate/Pipe 0 6 0 2 WLD 122 GMAW (MIG) Plate/Pipe 1 6 0 3 WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 143 Welding Metallurgy 1 2 0 2 WLD 215 SMAW (Stick) Pipe 1 9 0 4		and	WLD 115B SMAW (Stick) Plate	1	3	0	2
WLD 141 Symbols & Specifications 2 2 2 0 3  B. Other Major Courses:  1. Required Hours: 21 Hours  BPR 111 Print Reading 1 2 0 2  WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4  or WLD 116A SMAW (Stick) Plate/Pipe 1 3 0 2  and WLD 116B SMAW (Stick) Plate/Pipe 0 6 0 2  WLD 122 GMAW (MIG) Plate/Pipe 1 6 0 3  WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3  WLD 143 Welding Metallurgy 1 2 0 2  WLD 215 SMAW (Stick) Pipe 1 9 0 4			WLD 121 GMAW (MIG) FCAW/plate	2	6	0	4
B. Other Major Courses:  1. Required Hours: 21 Hours  BPR 111 Print Reading 1 2 0 2  WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4  or WLD 116A SMAW (Stick) Plate/Pipe 1 3 0 2  and WLD 116B SMAW (Stick) Plate/Pipe 0 6 0 2  WLD 122 GMAW (MIG) Plate/Pipe 1 6 0 3  WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3  WLD 143 Welding Metallurgy 1 2 0 2  WLD 215 SMAW (Stick) Pipe 1 9 0 4			WLD 131 GTAW (TIG) Plate	2	6	0	4
1. Required Hours: 21 Hours  BPR 111 Print Reading 1 2 0 2  WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4  or WLD 116A SMAW (Stick) Plate/Pipe 1 3 0 2  and WLD 116B SMAW (Stick) Plate/Pipe 0 6 0 2  WLD 122 GMAW (MIG) Plate/Pipe 1 6 0 3  WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3  WLD 143 Welding Metallurgy 1 2 0 2  WLD 215 SMAW (Stick) Pipe 1 9 0 4			WLD 141 Symbols & Specifications	2	2	0	3
BPR 111 Print Reading 1 2 0 2 WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4 or WLD 116A SMAW (Stick) Plate/Pipe 1 3 0 2 and WLD 116B SMAW (Stick) Plate/Pipe 0 6 0 2 WLD 122 GMAW (MIG) Plate/Pipe 1 6 0 3 WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 143 Welding Metallurgy 1 2 0 2 WLD 215 SMAW (Stick) Pipe 1 9 0 4		B. Othe	er Major Courses:				
WLD 116 SMAW (Stick) Plate/Pipe 1 9 0 4 or WLD 116A SMAW (Stick) Plate/Pipe 1 3 0 2 and WLD 116B SMAW (Stick) Plate/Pipe 0 6 0 2 WLD 122 GMAW (MIG) Plate/Pipe 1 6 0 3 WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 143 Welding Metallurgy 1 2 0 2 WLD 215 SMAW (Stick) Pipe 1 9 0 4		1. Re	equired Hours: 21 Hours				
or WLD 116A SMAW (Stick) Plate/Pipe 1 3 0 2 and WLD 116B SMAW (Stick) Plate/Pipe 0 6 0 2 WLD 122 GMAW (MIG) Plate/Pipe 1 6 0 3 WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 143 Welding Metallurgy 1 2 0 2 WLD 215 SMAW (Stick) Pipe 1 9 0 4			BPR 111 Print Reading	1		0	2
and       WLD 116B SMAW (Stick) Plate/Pipe       0       6       0       2         WLD 122 GMAW (MIG) Plate/Pipe       1       6       0       3         WLD 132 GTAW (TIG) Plate/Pipe       1       6       0       3         WLD 143 Welding Metallurgy       1       2       0       2         WLD 215 SMAW (Stick) Pipe       1       9       0       4			WLD 116 SMAW (Stick) Plate/Pipe	1	9	0	4
WLD 122 GMAW (MIG) Plate/Pipe 1 6 0 3 WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 143 Welding Metallurgy 1 2 0 2 WLD 215 SMAW (Stick) Pipe 1 9 0 4		or	WLD 116A SMAW (Stick) Plate/Pipe	1	3	0	
WLD 132 GTAW (TIG) Plate/Pipe 1 6 0 3 WLD 143 Welding Metallurgy 1 2 0 2 WLD 215 SMAW (Stick) Pipe 1 9 0 4		and	WLD 116B SMAW (Stick) Plate/Pipe	0	6	0	
WLD 143 Welding Metallurgy 1 2 0 2 WLD 215 SMAW (Stick) Pipe 1 9 0 4			WLD 122 GMAW (MIG) Plate/Pipe	1	6	0	
WLD 215 SMAW (Stick) Pipe 1 9 0 4			WLD 132 GTAW (TIG) Plate/Pipe	1		0	
, , ,				1		0	
WLD 231 GTAW (TIG) Pipe 1 6 0 3			, , ,	1		0	
			WLD 231 GTAW (TIG) Pipe	1	6	0	3

Welding Technology A50420 (Continued)

	Hours		Work	
Title	Class	Lab	Exp.	Credits
2. 10 Hours selected from the following (maximu	ım 8 hour	s COE):		
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
COE 131-132 Co-op Work Experience II	I 0	0	10-20	1-2
WLD 112 Basic Welding Processes	1	3	0	2
WLD 151 Fabrication I	2	6	0	4
WLD 221 GMAW (MIG) Pipe	1	6	0	3
WLD 251 Fabrication II	1	6	0	3
WLD 261 Certification Practices	1	3	0	2
WLD 262 Inspection & Testing	2	2	0	3
III. Other Required Courses:	1 Hou	r		
ACA 111 College Student Success	1	0	0	1
Total Credits				65

#### Welding Technology Welding Technology Diploma\* D50420D

Welding Technology Diploma\* D50420D (Revised 2013\*01) Course and Hour Requirements

		Hours		Work	
Title		Class	Lab	Exp.	Credits
I. General E	ducation Courses: 6 Hours				
A. Eng	lish: 3 Hours				
	ENG 111 Expository Writing	3	0	0	3
B. Mat	h/Natural Sciences: 3 Hours				
	MAT 121 Algebra/Trigonometry I	2	2	0	3
or	MAT 161 College Algebra	3	0	0	3
II. Major Co	urses: 31 Hours				
	e: 18 Hours				
	WLD 110 Cutting Processes	1	3	0	2
	WLD 115 SMAW (Stick) Plate	2	9	0	5
or	WLD 115A SMAW (Stick) Plate	1	6	0	3
and	WLD 115B SMAW (Stick) Plate	1	3	0	2
	WLD 121 GMAW (MIG) FCAW/plate	2	6	0	4
	WLD 131 GTAW (TIG) Plate	2	6	0	4
	WLD 141 Symbols & Specifications	2	2	0	3
B. Oth	er Major Courses: 14 Hours				
	BPR 111 Print Reading	1	2	0	2
	WLD 116 SMAW (Stick) Plate/Pipe	1	9	0	4
or	WLD 116A SMAW (Stick) Plate/Pipe	1	3	0	2
and	WLD 116B SMAW (Stick) Plate/Pipe	0	6	0	2
	WLD 132 GTAW (TIG) Plate/Pipe	1	6	0	3
	WLD 143 Welding Metallurgy	1	2	0	2
	WLD 262 Inspection & Testing	2	2	0	3
III. Other Re	equired Courses: 1 Hour				
	ACA 111 College Student Success	1	0	0	1
	Total Credits				39

<sup>\*</sup>This diploma has been identified as a pathway for high school students participating in the Career and College Promise initiative.

Welding Technology SMAW (Stick) Welding Skills Certificate C50420K1 (Revised 2010\*03) Course and Hour Requirements

	(Iterised 2010 05) doubte and 1100	Hours	cincints	Work	
Title		Class	Lab	Exp.	Credits
I. General E	ducation Courses: 0 Hours			1.	
II. Major Co	ourses: 14 Hours				
3	WLD 110 Cutting Processes	1	3	0	2
	WLD 115 SMAW (Stick) Plate	2	9	0	5
or	WLD 115A SMAW (Stick) Plate	1	6	0	3
and	WLD 115B SMAW (Stick) Plate	1	3	0	2
	WLD 116 SMAW (Stick) Plate/Pipe	1	9	0	4
or	WLD 116A SMAW (Stick) Plate/Pipe	1	3	0	2
and	WLD 116B SMAW (Stick) Plate/Pipe	0	6	0	2
	WLD 141 Symbols & Specifications	2	2	0	3
	Total Credits				14
	XA7-1-12	1			
	Welding Technol	logy	400770		
	GTAW (TIG) Welding Skills Certif				
	(Revised 2008*03) Course and Hou	_	ements	Work	
T:4.		Hours	TL		Con dita
Title	ducation Courses: 0 Hours	Class	Lab	Exp.	Credits
	ourses: 13 Hours				
•	re: 7 Hours				
71. GO	WLD 131 GTAW (TIG) Plate	2	6	0	4
	WLD 141 Symbols & Specifications	2	2	0	3
R Oth	er Major Courses: 6 Hours	4	4	O	3
D. Ott	WLD 132 GTAW (TIG) Plate/Pipe	1	6	0	3
	WLD 231 GTAW (TIG) Pipe	1	6	0	3
	Total Credits	1	Ü	Ü	13
		_			
	Welding Technol	logy			
	GMAW (MIG) Welding Skills Certi				
	(Revised 2013*03) Course and Hou	ır Requir	ements		
		Hours		Work	
Title		Class	Lab	Exp.	Credit
	ducation Courses: 0 Hours				
•	ourses: 13 Hours				
A. Coi	e: 7 Hours				
	WLD 121 GMAW (MIG) FCAW/plate	2	6	0	4
	WLD 141 Symbols & Specifications	2	2	0	3
B. Oth	er Major Courses: 6 Hours				
	WLD 122 GMAW (MIG) Plate/Pipe	1	6	0	3
	WLD 262 Inspection and Testing	2	2	0	3
	Total Credits				13

#### **COURSE NUMBERING**

Courses at Lenoir Community College are selected from the Combined Course Library of the North Carolina Community College System.

- All preparatory and developmental courses are indicated by a three-letter prefix and numbered less than 100. These courses are not transferable. Example: MAT 060.
- 2. All freshman degree level courses are indicated by a three-letter prefix and are numbered 100-199. Example: MAT 121.
- 3. All sophomore degree level courses are indicated by a three-letter prefix and are numbered 200-299. Example: MAT 263.
- 4. Selected courses are divided into segments (A, B, C, etc.) for scheduling convenience. Credit for a divided course will be given upon successful completion of all segments.
- 5. Prerequisites are listed as either "state" or "local" depending upon whether they are required by the North Carolina Community College System (state) or Lenoir Community College (local).

#### **COURSE SUBSTITUTIONS**

Below is a list of approved course substitutions. Any other course substitutions require the approval of the division dean and the Vice President of Academic and Student Services.

Required Course	Approved Substitution
ACA 111	ACA 115 or 122
ACA 122	ACA 111 or 115 or 220
BIO 163	BIO 168, 169 (sequence)
BIO 168, 169	BIO 165, 166 (sequence)
BUS 152	SOC 210
CIS 111	CIS 110
ENG 101	ENG 111
ENG 102	ENG 114
ENG 112	ENG 113 or ENG 114
ENG 113	ENG 112 or ENG 114
ENG 114	ENG 112 or ENG 113
HUM 110	HUM 115
MAT 121, 122 (sequence)	MAT 161, 162 (sequence)
MAT 122	MAT 162
MAT 175	MAT 161, 162 (sequence)
PSY 260	MHA 155
Humanities/Fine Arts	COM 231(College Transfer Programs)

#### **DESCRIPTION OF COURSES**

Lecture Lab/Clinic Work Exp. Credit

#### ACADEMIC RELATED

#### ACA 111 College Student Success 1 0 0

This course introduces the college's physical, academic, and social environment and promotes the personal development essential for success. Topics include campus facilities and resources; policies, procedures, and programs; study skills; and life management issues such as health, self-esteem, motivation, goal-setting, diversity, and communication. Upon completion, students should be able to function effectively within the college environment to meet their educational objectives. This course is also available through the Virtual Learning Community (VLC).

#### ACA 122 College Transfer Success 1 0 0

This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

#### **ACCOUNTING**

#### ACC 120 Prin of Financial Acct 3 2 0

This course introduces business decision-making accounting information systems. Emphasis is placed on analyzing, summarizing, reporting, and interpreting financial information. Upon completion, students should be able to prepare financial statements, understand the role of financial information in decision-making and address ethical considerations. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

#### ACC 121 Prin of Managerial Acct 3 2 0 4

Prerequisites: State, ACC 120

This course includes a greater emphasis on managerial and cost accounting skills. Emphasis is placed on managerial accounting concepts for external and internal analysis, reporting and decision-making. Upon completion, students should be able to analyze and interpret transactions relating to managerial concepts including product-costing systems. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

#### ACC 131 Federal Income Taxes 2 2 0 3

This course provides an overview of federal income taxes for individuals, partnerships, and corporations. Topics include tax law, electronic research and methodologies and the use of technology for the preparation of individual and business tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax laws, and complete federal tax returns for individuals, partnerships, and corporations.

#### **ACC 140 Payroll Accounting** 1 2 0 2

Prerequisites: State, ACC 120

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.

# Lecture Lab/Clinic Work Exp. Credit ACC 150 Acct Software Appl 1 2 0 2 Prerequisites: State, ACC 120 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.

ACC 220 Intermediate Accounting I 3 2 0 4 Prerequisites: State, ACC 120

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 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.

ACC 221 Intermediate Acct II 3 2 0 4 Prerequisites: State, ACC 220

This course is a continuation of ACC 220. Emphasis is placed on special problems which may include leases, bonds, investments, ratio analyses, present value applications, accounting changes, and corrections. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

ACC 225 Cost Accounting 3 0 0 3 Prerequisites: State, ACC 121

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.

**ACC 240 Gov & Not-for-Profit Acct** 3 0 0

Prerequisites: State, ACC 121

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.

#### AEROSPACE AND FLIGHT TRAINING

**AER 110 Air Navigation** 2 2 0

This course covers the basic elements of air navigation, fundamentals of pilotage and dead reckoning, and the use of a plotter, computer, and aerial charts. Topics include pilotage, dead reckoning, radio navigation, LORAN, Global Positioning Systems, and the use of FAA publications. Upon completion, students should be able to interpret aeronautical charts and apply navigational principles.

**AER 111 Aviation Meteorology** 3 0 0 3

This course covers the atmosphere, interpretation and measurement of meteorological elements, and the effects of such on aircraft operations and performance. Topics include heat exchanges in the atmosphere; temperature, pressure, stability, clouds, air masses, fronts, and thunderstorms; and the use and interpretation of weather data. Upon completion, students should be able to analyze weather data for flight planning and safe flying.

#### the structure of aviation law. Emphasis is placed on Federal Aviation Regulations Parts 61, 91, and 135 with additional emphasis on legal issues in aviation law. Upon completion, students should be able to apply legal principles and interpret federal air regulations. **AER 113 History of Aviation** This course provides a historical survey of the efforts of manned-flight. Topics include the development of aircraft, milestones in aviation, noted pioneers, and the socioeconomic impact of flight upon modern civilization. Upon completion, students should be able to demonstrate an understanding of the advancements that aviation has accrued for society and contemporary changes in aviation. 3 **AER 114 Aviation Management** This course covers operation of a flight department on a cost-effective basis and analysis of profit and loss statements. Topics include flight operations costs, aircraft acquisition analysis and cost comparisons, costs versus revenue, and break even points. Upon completion, students should be able to calculate cost of flight operations and apply monthly and annual budget analysis. **AER 115 Flight Simulator** This course covers instrument instruction and training in a FAA-approved flight simulator. Emphasis is placed on approach and navigation procedures including holding and missed approaches. Upon completion, students should be able to plan and execute an IFR flight and smoothly transition to instrument training in the aircraft. **AER 150 Private Pilot Flt Theory** This course covers the aeronautical knowledge required to meet the Federal Aviation Administration regulations for private pilot certification. Topics include the principles of flight, the flight environment, basic aircraft systems and performance, basic meteorology and weather data interpretation, and FAA regulations. Upon completion, students should be able to demonstrate the

Lecture

This course provides an in-depth study of the state, federal, and international regulations forming

Lab/Clinic Work Exp.

**AER 151 Flight-Private Pilot** 

**AER 112 Aviation Laws & FARs** 

1 110

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Credit

This course provides the hands-on training needed to qualify for a Federal Aviation Administration private pilot certificate. Topics include flight maneuvers (ground procedures, take-offs, climbs, level flight, turns, glides, stalls, slow flight, descents, slips, landings, emergency procedures) and cross-country planning and navigation. Upon completion, students should be able to demonstrate the competencies required for the flight test practical exam for the private pilot certificate.

competencies required for the FAA written examination for a private pilot certificate.

AER 160 Instrument Flight Theory

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This course covers the required aeronautical knowledge of the Federal Aviation Administration Regulation Instrument Ground School. Topics include a study of instruments, systems, instrument flight charts, instrument flight planning, approach procedures, and the IFR regulations. Upon completion, students should be able to demonstrate the competencies required to complete the FAA written examination for an instrument rating.

**AER 161 Flight-Instrument Pilot** 

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Prerequisites: State, AER 151

This course covers instruction and training in instrument flight planning including IFR navigation, VOR, ILS, ADF, and compliance with ATC procedures. Emphasis is placed on approach and navigation procedures, including holding and missed approaches, and development of skill in executing en route and approach procedures. Upon completion, students should be able to plan and execute an IFR flight and demonstrate competencies required for the FAA instrument pilot flight exam.

#### Lecture Lab/Clinic Work Exp. Credit **AER 170 Commercial Flight Theory** 3 3 This course covers advanced aircraft control, cross-country operations, and other topics required for the FAA commercial pilot written exam. Emphasis is placed on the principles of aircraft performance and operation, take-off performance, cruise performance, descent and landing performance, and weight and balance computations. Upon completion, students should be able to demonstrate commercial pilot skills and competence in the materials required for the FAA written commercial pilot examination. **AER 171 Flight-Commercial Pilot** 0 6 0 3 Prerequisites: State, AER 161

This course provides the hands-on training needed to qualify for a Federal Aviation Administration commercial pilot certificate. Topics include flight instruction in advanced precision maneuvers, maximum performance take-off and landings, emergency procedures, operation of complex aircraft, aircraft performance, and range and fuel planning. Upon completion, students should be able to demonstrate competence in the areas of the flight test practical exam for the commercial pilot certificate.

## **AER 211 Air Traffic Control** 2 0 0 0 2 This course provides a detailed analysis of all aspects of air traffic control. Emphasis is placed on an in-depth analysis of air traffic control, including utilization of the air traffic environment based on the pilot's and controller's perspective. Upon completion, students should be able to operate an aircraft within the national airspace system under FAA air traffic control.

**AER 213 Avionics**2
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This course covers standard navigational and communications equipment and theory. Emphasis is placed on aviation radio spectrum, VHF omnirange, ILS, ADF, transponders, weather radar, flight directors, and autopilots. Upon completion, students should be able to utilize VOR, ADF, ILS, GPS, flight directors, HSI's, and autopilots in the flight environment.

# **AER 215 Flight Safety** 3 0 0 3 This course covers the basic procedures and practices of aircraft accident prevention, accident investigation, and reporting. Topics include a comprehensive review of federal regulations pertinent to aviation safety and analyses of actual aviation accident cases and their causes. Upon completion, students should be able to demonstrate an understanding and respect for specific personal factors such as attitude, motivation, and skill related to flight safety.

**AER 216 Engines & Systems** 2 2 0 3 3 This course introduces piston and turbine aircraft engines and associated systems. Topics include aircraft hydraulic, pneumatic, electrical, air conditioning, and pressurization systems along with the theory of engine operations, including power and thrust computations. Upon completion, students should be able to apply principles of engine and systems operation.

**AER 217 Air Transportation** 3 0 0 3 This course covers the development and present status of the air transportation system. Topics include federal legislation, characteristics and classification of air carriers, development of the air traffic control system, and the organization and function of the FAA. Upon completion, students should be able to relate the knowledge acquired to career development.

#### Lecture Lab/Clinic Work Exp. Credit **AER 218 Human Factors in Aviation** This course analyzes interpersonal relationships in the cockpit and related psychological factors that affect pilot performance and efficiency during flight operations. Topics include cockpit management, judgment, aircraft and flight crew coordination and control, physiological factors, responsibility, and decision-making capabilities. Upon completion, students should be able to apply workproven routines to stress management, crew responsibility, and the team concept in the cockpit.

#### ALTERNATIVE ENERGY TECHNOLOGY

ALT 110 Biofuels I	3	0	0	3
This course is designed to provide an intro	oduction to th	ne fundamental	s of biobased fu	iels. Emphasis
is placed on proper handling and use guide	elines, basic o	chemistry of bi	ofuels, producti	on methods,
and the social, environmental, and econom	nic impacts o	of biofuels. Upo	on completion,	students
should be able to demonstrate a general un	nderstanding	of biofuels.		

ALT 120 Renewable Energy Tech	2	2	0	3
This course provides an introduction to mul	tiple tech	nologies that allo	w for the prod	uction and con-
servation of energy from renewable sources.	Topics in	nclude hydo-elect	ric, wind powe	er, passive and
active solar energy, tidal energy, appropriate	building	techniques, and	energy conserv	vation methods.
Upon completion, students should be able to	o demons	strate an understa	nding of renev	wable energy
production and its impact on humans and the	heir envir	onment.		

ALT 220 Photovoltaic Sys Tech	2	3	0	3
This course introduces the concepts, tools, t	techniques	s, and materials ne	eded to unde	erstand systems
that convert solar energy into electricity wit	th photovo	ltaic (pv) technolo	gies. Topics	include site
analysis for system integration, building cod	des, and ac	lvances in photovo	ltaic technol	ogy. Upon
completion, students should be able to dem	onstrate a	n understanding o	f the princip	les of photovol-
taic technology and current applications.				

#### ALT 221 Adv PV Sys Design 9 3 0 3 Prerequisites: State, ALT 220

This course introduces specific elements in photovoltaic (pv) systems technologies including efficiency, modules, inverters, charge controllers, batteries, and system installation. Topics include National Electrical Code (NEC), electrical specifications, photovoltic system components, array design and power integration requirements that combine to form a unified structure. Upon completion, students should be able to demonstrate an understanding of various photovoltaic designs and proper installation of NEC compliant solar electric power systems.

#### **ALT 240 Wind & Hydro Power Sys** 3 This course introduces concepts, designs, tools, techniques, and material requirements for systems that convert wind and water into usable energy. Topics include the analysis, measurement, and es-

timation of potential energy of wind and water systems. Upon completion, students should be able to demonstrate an understanding of the technologies associated with converting wind and water into a viable energy source.

#### **ALT 250 Thermal Systems** 2 0 This course introduces concepts, tools, techniques, and materials used to convert thermal energy into a viable, renewable energy resource. Topics include forced convection, heat flow and exchange, radiation, the various elements of thermal system design, regulations, and system installation and maintenance. Upon completion, students should be able to demonstrate an understanding of geothermal and solar thermal systems and corresponding regulations.

#### Lecture Lab/Clinic Work Exp. Credit

#### AEROSTRUCTURE MANUFACTURING AND REPAIR

ASM 110 Aerostructure Shop Prac	2	2	0	3
This course introduces specialized hand too	ols, equipn	nent, aerostructur	e components	s, and assembly
plant layouts commonly found in the aerost	tructure m	anufacturing ind	ıstry. Empha	sis is placed on
precision instruments, identification of aero	ostructure	components, and	common pro	cedures used
in the manufacturing and repair of aerostro	uctures. U	Jpon completion,	students shou	ld be able to
demonstrate the proper use of tools and eq	uipment c	common to the ma	anufacturing a	and repair of
aerostructure components.				

# **ASM 111 Aero Industry Standards** 3 0 0 0 3 This course introduces the aerospace industry's standardized model for quality assurance in design, development and production. Emphasis is placed on how to prepare a process-oriented method of management to meet the quality standards prescribed for the aerospace industry. Upon completion, students should be able to demonstrate an understanding of the concepts and principles of quality assurance and apply them to the work environment.

ASM 112 Aero Assembly Methods 1 1 3	U	2
This course introduces the planning, fabrication, and assembly meth	hods used in aero	ostructure
manufacturing and repair processes. Emphasis is placed on working	in teams, fabric	ation, tooling
and assembly processes, change management principles and configu	ration controls.	Upon comple-
tion, students should be able to demonstrate an understanding of th	e concepts and p	orinciples used
in the manufacturing, assembly and repair of aerostructures.		

#### ASM 113 Aero Assembly Methods II 1 3 0 2 Prerequisites: ASM 112

This course introduces the advanced-level planning, fabrication, and assembly methods used in aerostructure manufacturing and repair processes. Emphasis is placed on working in teams, advanced-level fabrication, tooling and assembly processes, change management principles, and configuration controls. Upon completion, students should be able to demonstrate an understanding of advanced-level concepts and principles used in the manufacturing, assembly and repair of aerostructures.

### **ASM 114 Aerostructure Composites** 3 0 0 3 3 This course introduces provides an overview of the manufacturing of non-metallic aerostructuring of non-metallic

This course introduces provides an overview of the manufacturing of non-metallic aerostructures including associated computer numerical control (CNC) machining. Emphasis is placed on composite materials technology, fiber and resin properties, lay-up and curing procedures, tooling concepts, process planning and materials. Upon completion, students should be able to demonstrate a thorough understanding of the fundamentals of composite structure fabrication methods, materials, and application techniques.

# **ASM 115 Composite Repair Proced** 2 6 0 4 This course is designed to provide students with general knowledge of techniques used to repair composite aerostructures. Emphasis is placed on procedures involving safe and effective finish removal, disassembling, and the repair and/or replacement of damaged composite components. Upon completion, students should be able to demonstrate proper and safe procedures required for the repair of composite aerostructure components.

# ASM 116 Composite Material Test 2 3 0 3 This course is designed to provide students with general knowledge of the inspection process used during the repair of composite aerostructures. Emphasis is placed on composite material inspection procedures involving nondestructive inspection techniques and procedures. Upon completion, students should be able to demonstrate an understanding of proper and safe procedures involving nondestructive inspection.

# **ASM 210 Computer-Aided 3D Appl** 2 3 0 3 This course introduces computer aided three-dimensional interactive application (CATIA) software used to develop computerized solid models, parts, and engineering drawings for the aerostructure manufacturing industry. Emphasis is placed on drawing, editing, file management, and plotting of components using CATIA software in an aerostructure manufacturing environment. Upon completion, students should be able to produce and plot computer-aided design (CAD) drawing using CATIA software in an aerostructure manufacturing environment.

# **ASM 212 Aerostructure Join Mthds** 2 3 0 3 This course provides an introduction to a wide variety of joining processes used in aerostructure manufacturing. Emphasis is placed on conducting technical research for proper process selection and exploring case study examples of industry joining processes for various aerostructure applications. Upon completion, students should be able to demonstrate an understanding of the process of joining composite and metal components using aerostructure assembly techniques and guidelines.

#### ART

ART III Art Appreciation	3	0	0	3
This course introduces the origins and historia	orical develo	pment of art. I	Emphasis is pla	ced on the
relationship of design principles to various	art forms in	cluding but not	limited to scul	pture, paint-
ing, and architecture. Upon completion, str	udents shoul	d be able to ide	ntify and analy	ze a variety
of artistic styles, periods, and media. This	course has been	approved to satis	fy the Comprehen	sive Articulation
Agreement general education core requirement in hu	manities/fine o	arts.		

## **ART 113 Art Methods and Materials** 2 2 0 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement.

# **ART 114 Art History Survey I** 3 0 0 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. This course is writing intensive. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

# **ART 115 Art History Survey II** 3 0 0 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. This course is writing intensive. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

#### Lab/Clinic Work Exp. Lecture Credit **ART 121 Two-Dimensional Design** 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. This course has been approved for transfer under the CAA as a pre-major and/or elective course requirement. **ART 122 Three-Dimensional Design** 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. This course has been approved for transfer under the CAA as a pre-major and/or elective course requirement.

3 **ART 131 Drawing I** 0 This course introduces the language of drawing and the use of various drawing materials. Emphasis is placed on drawing techniques, media, and graphic principles. Upon completion, students should be able to demonstrate competence in the use of graphic form and various drawing processes. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

#### () **ART 132 Drawing II** 0 3 Prerequisites: State, ART 131

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

#### Articulation Agreement pre-major and/or elective course requirement. 6 0 3 **ART 135 Figure Drawing I**

Prerequisites: State, ART 131 This course introduces rendering the human figure with various drawing materials. Emphasis is placed on the use of the visual elements, anatomy, and proportion in the representation of the in drawing the human figure. This course has been approved to satisfy the Comprehensive Articulation Agree-

draped and undraped figure. Upon completion, students should be able to demonstrate competence ment pre-major and/or elective requirement.

ART 171 Computer Art I This course introduces the use of the computer as a tool for solving visual problems. Emphasis is placed on fundamentals of computer literacy and design through bit-mapped image manipulation. Upon completion, students should be able to demonstrate an understanding of paint programs, printers, and scanners to capture, manipulate, and output images. This course has been approved to satisfy

the Comprehensive Articulation Agreement pre-major and/or elective course requirement. 3 ART 193 Selected Topics in Art () Prerequisites: Local, Enrollment in Art Program (A10200) and ART 111

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

# ART 212 Gallery Assistantship I 0 2 0 1 This course covers the practical application of display techniques. Emphasis is placed on preparation of artwork for installation, hardware systems, and exhibition graphics. Upon completion, students should be able to demonstrate basic gallery exhibition skills. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement. ART 213 Gallery Assistantship II 0 2 0 1 Prerequisites: State, ART 212 This course provides additional experience in display techniques. Emphasis is placed on prepara-

This course provides additional experience in display techniques. Emphasis is placed on preparation of artwork for exhibition, alternative methods of installation, hardware systems, and exhibition graphics. Upon completion, students should be able to demonstrate independent decision-making and exhibition expertise. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

**ART 214 Portfolio and Résumé** 0 2 0 1 This course covers résumé writing, interview skills, and the preparation and presentation of an art portfolio. Emphasis is placed on the preparation of a portfolio of original artwork, the preparation of a photographic portfolio, approaches to résumé writing, and interview techniques. Upon completion, students should be able to mount original art for portfolio presentation, photograph and display a professional slide portfolio, and write an effective résumé. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement.

**ART 222 Wood Design I** 0 6 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## **ART 223 Wood Design II** 0 6 0 3 Prerequisites: State, ART 222

This course provides a continuation of the skills and techniques used in ART 222. Emphasis is placed on woodcarving and other processes. Upon completion, students should be able to use original designs in the creation of functional and sculptural forms. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## **ART 235 Figure Drawing II** 0 6 0 3 Prerequisites: State, ART 135

This course extends the study and rendering of the draped and undraped human figure. Emphasis is placed on the exploration of materials and approaches to drawing. Upon completion, students should be able to demonstrate creativity in the representation of the figure. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

ART 240 Painting I 0 6 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

# Lecture Lab/Clinic Work Exp. Credit ART 241 Painting II 0 6 0 3 Prerequisites: State, ART 240 This course provides a continuing investigation of the materials, processes, and techniques of painting. Emphasis is placed on the exploration of expressive content using a variety of creative processes. Upon completion, students should be able to demonstrate competence in the expanded use of form and variety. This course has been approved to satisfy the Comprehensive Articulation Agreement premajor and/or elective requirement.

#### **ART 243 Portrait Painting** 0 6 0 3

Prerequisites: State, ART 240

This course covers the portrait as subject matter by use of live models. Topics include composition, color mixing, and the history of portraiture. Upon completion, students should be able to demonstrate competence in the traditional approach to portrait painting. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## **ART 244 Watercolor** 0 6 0 3 This course introduces basic methods and techniques used in watercolor. Emphasis is placed on application, materials, content, and individual expression. Upon completion, students should be able to demonstrate a variety of traditional and nontraditional concepts used in watercolor media. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement.*

**ART 245 Metals I**0 6 0 3
This course introduces basic metal design in traditional and contemporary art forms using brass, copper, and silver. Emphasis is placed on designing and fabricating jewelry, small sculptures, and utilitarian objects. Upon completion, students should be able to design and produce small art objects. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a

#### **ART 246 Metals II** 0 6 0 3

Prerequisites: State, ART 245

pre-major and/or elective course requirement.

This course provides a continuation of metal design utilizing basic methods of casting and other processes. Emphasis is placed on individualized design. Upon completion, students should be able to design and produce expressive forms. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

#### **ART 247 Jewelry I** 0 6 0 3

This course introduces a basic understanding of the design and production of jewelry. Emphasis is placed on concepts and techniques using metals and other materials. Upon completion, students should be able to demonstrate an ability to use appropriate methods to create unique jewelry. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

#### **ART 248 Jewelry II** 0 6 0 3

Prerequisites: State, ART 247

This course is a continuation of the skills learned in ART 247. Emphasis is placed on the creation of individual designs that utilize a variety of techniques such as casting, cloisonné, and plique-a-jour. Upon completion, students should be able to create jewelry which demonstrates originality. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

#### Lecture Lab/Clinic Work Exp. Credit **ART 260 Photography Appreciation** This course introduces the origins and historical development of photography. Emphasis is placed on the study of composition and history of photography as an art form. Upon completion, students should be able to recognize and produce, using color transparencies, properly exposed, well-composed photographs. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement. 3 ART 261 Photography I This course introduces photographic equipment, theory, and processes. Emphasis is placed on camera operation, composition, darkroom technique, and creative expression. Upon completion, students should be able to successfully expose, develop, and print a well-conceived composition. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement. **ART 262 Photography II** 0 3 Prerequisites: State, ART 261 This course introduces the creative manipulation of alternative photographic materials and processes such as toning, hand coloring, infrared, and multiple exposures. Emphasis is placed on personal vision and modes of seeing. Upon completion, students should be able to create properly exposed images using a variety of photographic materials and processes. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement. **ART 263 Color Photography** 0 3 Prerequisites: State, ART 262 This course provides an introduction to the procedures and processes involved in color photography. Emphasis is placed on the study of light, filtration, exposure, and films along with the processing

This course provides an introduction to the procedures and processes involved in color photography. Emphasis is placed on the study of light, filtration, exposure, and films along with the processing and printing of color negative materials. Upon completion, students should be able to demonstrate an understanding of color principles, theories, and processes by using them creatively in the production of color prints. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement.

**ART 264 Digital Photography I** 1 4 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for

conceived composition. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

ART 265 Digital Photography II 1 4 0 3

Prerequisites: State, ART 264

This course provides exploration of the concepts and processes of photo manipulation through complex composite images, special effects, color balancing and image/text integration. Emphasis is placed on creating a personal vision and style. Upon completion, students should be able to produce well-executed images using a variety of photographic and photo manipulative approaches. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

**ART 266 Videography I** 0 6 0 3
This course introduces various aspects of basic video production including concept development, scripting, camera operation, and post-production. Emphasis is placed on creative expression, camera handling, story boarding, and editing. Upon completion, students should be able to demonstrate a basic understanding of video camera operation and production techniques. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement.* 

# **Lecture Lab/Clinic Work Exp. Credit ART 267 Videography II**0 6 0 3 Prerequisites: State, ART 266 This course is designed to provide a framework for the production of a long-term video project. Emphasis is placed on realization of the unique creative vision. Upon completion, students should be able to produce a thematically coherent, edited video with sound and titling. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement.

## ART 271 Computer Art II 0 6 0 3 Prerequisites: State, ART 171

This course includes advanced computer imaging techniques. Emphasis is placed on creative applications of digital technology. Upon completion, students should be able to demonstrate command of computer systems and applications to express their personal vision. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement.

## **ART 283 Ceramics I** 0 6 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

## **ART 284 Ceramics II** 0 6 0 3 Prerequisites: State, ART 283

This course covers advanced hand building and wheel techniques. Emphasis is placed on creative expression, surface design, sculptural quality, and glaze effect. Upon completion, students should be able to demonstrate a high level of technical competence in forming and glazing with a development of three-dimensional awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement.

**ART 288 Studio** 0 6 0 3
Prerequisites: Local, ART 132, ART 235, ART 241, ART 262, ART 267, or ART 271

This course provides the opportunity for advanced self-determined work beyond the limits of regular studio course sequences. Emphasis is placed on creative self-expression and in-depth exploration of techniques and materials. Upon completion, students should be able to create original projects specific to media, materials, and techniques. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement.

#### **ASTRONOMY**

## **AST 111 Descriptive Astronomy** 3 0 0 3 Prerequisite: Local, RED 090

This course introduces an overall view of modern astronomy. Topics include an overview of the solar system, the sun, stars, galaxies, and the larger universe. Upon completion, students should be able to demonstrate an understanding of the universe around them. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

## Lecture Lab/Clinic Work Exp. Credit AST 111A Descriptive Astronomy Lab 0 2 0 1 Proposociaire Legal PED 000

Prerequisite: Local, RED 090 Corequisite: State, AST 111

The course is a laboratory to accompany AST 111. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 111 and which provide practical experience. Upon completion, students should be able to demonstrate an understanding of the universe around them. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

# **AST 151 General Astronomy I** 3 0 0 3 3 Prerequisite: Local, Take One Set; Set 1: RED 090, MAT 070; Set 2: RED 090, DMA 010, DMA 020, DMA 030, DMA 040, DMA 050; Set 3: RED 090, MAT 060, DMA 040, DMA 050 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. *This course has been approved to satisfy the Comprehen-*

**AST 151A General Astronomy I Lab** 0 2 0 1
Prerequisite: Local, Take One Set; Set 1: RED 090, MAT 070; Set 2: RED 090, DMA 010, DMA 020, DMA 030, DMA 040, DMA 050; Set 3: RED 090, MAT 060, DMA 040, DMA 050
Corequisites: State, AST 151

sive Articulation Agreement general education core requirement in natural sciences/mathematics.

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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

#### AST 152 General Astronomy II 3 0 0 3

Prerequisites: State, AST 151 Corequisites: Local, AST 152A

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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

#### **AST 152A General Astronomy II Lab** 0 2 0

Prerequisites: State, AST 151 Corequisites: State, AST 152

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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

#### Lecture Lab/Clinic Work Exp. Credit

#### AUTOMATION AND ROBOTICS

### **ATR 112 Intro to Automation** 2 3 0 3

This course introduces the basic principles of automated manufacturing 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.

#### **ATR 212 Industrial Robots** 2 3 0

This course covers the operation of advanced 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.

## **ATR 282 Robotics and CIM** 3 2 0 4 This course covers robotics and CIM. Topics include application, programming, and maintenance of robotic devices and the relationship between robotics and CIM. Upon completion, students should be able

robotic devices and the relationship between robotics and CIM. Upon completion, students should be able to safely program, operate, and maintain robots and understand the relationship between robotics and CIM.

#### AUTOMOTIVE BODY REPAIR

#### **AUB 111 Painting & Refinishing I** 2 6 0 4

This course introduces the proper procedures for using automotive refinishing equipment and materials in surface preparation and application. Topics include federal, state, and local regulations, personal safety, refinishing equipment and materials, surface preparation, masking, application techniques, and other related topics. Upon completion, students should be able to identify and use proper equipment and materials in refinishing following accepted industry standards.

#### AUB 112 Painting & Refinishing II 2 6 0 4

Prerequisites: State, AUB 111

This course covers advanced painting techniques and technologies with an emphasis on identifying problems encountered by the refinishing technician. Topics include materials application, color matching, correction of refinishing problems, and other related topics. Upon completion, students should be able to perform spot, panel, and overall refinishing repairs and identify and correct refinish problems.

#### **AUB 114 Special Finishes** 1 2 0 2

Prerequisites: State, AUB 111

This course introduces multistage finishes, custom painting, and protective coatings. Topics include base coats, advanced intermediate coats, clear coats, and other related topics. Upon completion, students should be able to identify and apply specialized finishes based on accepted industry standards.

#### AUB 121 Non-Structural Damage I 1 4 0 3

This course introduces safety, tools, and the basic fundamentals of body repair. Topics include shop safety, damage analysis, tools and equipment, repair techniques, materials selection, materials usage, and other related topics. Upon completion, students should be able to identify and repair minor direct and indirect damage including removal/repairing/ replacing of body panels to accepted standards.

# Lecture Lab/Clinic Work Exp. Credit AUB 122 Non-Structural Damage II 2 6 0 4 This course covers safety, tools, and advanced body repair. Topics include shop safety, damage analysis, tools and equipment, advanced repair techniques, materials selection, materials usage, movable glass, and other related topics. Upon completion, students should be able to identify and repair or replace direct and indirect damage to accepted standards including movable glass and hardware. AUB 134 Autobody MIG Welding 1 4 0 3 This course covers the terms and procedures for welding the various metals found in today's autobody repair industry with an emphasis on personal/environmental safety. Topics include safety and

body repair industry with an emphasis on personal/environmental safety. Topics include safety and precautionary measures, setup/operation of MIG equipment, metal identification methods, types of welds/joints, techniques, inspection methods, and other related topics. Upon completion, students should be able to demonstrate a basic knowledge of welding operations and safety procedures according to industry standards.

#### **AUTOMOTIVE CUSTOMIZING TECHNOLOGY**

## **AUC 110 Intro to Auto Customizing** 2 2 0 0 3 This course introduces the expanding automotive customizing industry. Emphasis is placed on shop safety, tool and equipment identification, proper use of tools and equipment, and OSHA and EPA regulations. Upon completion, students should be able to demonstrate shop safety, proper use and identification of equipment and tools, and knowledgeable of OSHA and EPA regulation.

# **AUC 111 Auto Customizing Research** 3 0 0 3 This course covers planning, designs, and research used in automotive customizing. Emphasis is placed on auto customizing planning and cost analysis, creative design techniques, and research of available add on components used in auto customizing. Upon completion, students should be able to develop designs, prepare auto customizing cost analysis incorporated into a plan of action for customizing vehicles.

# **AUC 112 Auto Custom Fabrication** 2 4 0 4 This course covers modifications of existing vehicle components as well as fabrication of new vehicle components. Emphasis is placed on basic customizing techniques used on factory original parts as well as fabrication of custom components using machining processes and customizing techniques. Upon completion, students should be able to modify existing factory component and create custom fabricated components using auto customizing techniques.

**AUC 113 Custom Auto Upholstery** 2 6 0 4 This course will provide instruction in automotive upholstery repair and customizing. Topics will include; diagnosis, replacement or repair of worn upholstery, design, and modification of automotive upholstery using customizing techniques. Upon completion, students should be able to disassemble, repair, replace, and/or fabricate custom vehicle interior upholstery.

**AUC 114 Custom Fiberglass Skills** 2 4 0 4 This course will provide instruction in non-metallic customizing and repair techniques. Emphasis will be placed diagnosis and repair of cracks, proper use of bonding agents, fiberglass body parts removal/replacement, and custom fabrication techniques using fiberglass materials.

**AUC 115 Glass Customizing Methods** 2 4 0 4
This course will provide instruction removal/replacement, window tinting, and custom glass design etching techniques. Emphasis will be placed proper removal/replacement, window tinting, laws concerning window tinting, and customizing techniques used to etch designs in auto glasses. Upon completion, students should be able to interpret the laws concerning window tinting, perform removal/replacement/tinting, and use customizing techniques to etch designs on auto glass.

#### This course covers work-place safety, hazardous material and environmental regulations and procedures, proper use of hand tools, use of service information resources, and the basic concepts, systems and terms of automotive technology. Topics include familiarization with vehicle systems along with identification and proper use of various automotive hand and power tools. Upon completion, students should be able to describe safety and environmental procedures, terms associated with automobiles, identify and use basic tools and shop equipment. AUT 113 Automotive Servicing 1 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. **AUT 116 Engine Repair** 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. **AUT 116A Engine Repair Lab** 0 3 0 1 Corequisites: State, AUT 116 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. **AUT 123 Powertrain Diagn & Serv** 3 0 9 This course covers the diagnosis, repair and service of the vehicle powertrain and related systems. Topics include fundamental operating principles of engines and transmissions and use of proper service procedures for diagnosis, service and removal and replacement of major components. Upon completion, students should be able to perform basic service and diagnosis of the powertrain and related systems, and to perform in vehicle repairs and remove and replace components.

Lab/Clinic Work Exp.

Credit

Lecture

This course covers custom after-market electronics selection, installation, diagnosis and repair. Emphasis is placed on selection and installation of mobile audio-visual components. Upon completion, students should be able to select, construct, and install custom mobile electronic components.

This course covers custom airbrushing techniques, finish application, and equipment selection. Emphasis is placed on the design and application of custom airbrushing techniques and proper equipment maintenance. Upon completion, students should be able to design and apply custom air

This course provides the opportunity to design and construct an instructor-approved project. Emphasis is placed on selection, proposal, design construction, testing, and documentation of the approved project. Upon completion, students should be able to present and demonstrate an opera-

**AUC 116 Custom Mobile Electronics** 

brush graphics using a variety of techniques. AUC 285 Auto Custom Design Proj

**AUC 117 Custom Airbrushing** 

tional project.

**AUTOMOTIVE** 

**AUT 110 Intro. to Automotive Tech** 

#### Lecture Lab/Clinic Work Exp. Credit

#### **AUT 141 Suspension & Steering Sys**

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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.

#### **AUT 141A Suspension & Steering Sys Lab** 0

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Corequisites: State, AUT 141

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.

#### **AUT 151 Brake Systems**

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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.

#### **AUT 151A Brakes Systems Lab**

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Corequisites: State, AUT 151

This course is an optional lab to be used as an alternative to co-op placement in meeting the NA-TEF 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.

#### **AUT 161 Basic Auto Electricity**

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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.

#### **AUT 163 Adv Auto Electricity**

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Prerequisites: State, AUT 161

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.

#### **AUT 171 Auto Climate Control**

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This course covers the theory of refrigeration and heating, electrical/electronic/pneumatic controls, and diagnosis/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 describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information.

#### Lecture Lab/Clinic Work Exp. Credit

#### **AUT 181 Engine Performance 1**

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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.

#### **AUT 183 Engine Performance 2**

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Prerequisites: State, AUT 181

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.

#### **AUT 212 Auto Shop Management**

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This course covers principles of management essential to decision making, communication, authority, and leadership. Topics include shop supervision, customer relations, cost effectiveness, and workplace ethics. Upon completion, students should be able to describe basic automotive shop operation from a management standpoint. This course replaces AUT 112.

#### **AUT 213 Automotive Servicing 2**

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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.

#### **AUT 221 Auto Transm/Transaxles**

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This course covers operation, diagnosis, service, and repair of automatic transmissions/trans-axles. 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..

#### AUT 221A Auto Transm/Transax Lab 0

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Corequisites: State, AUT 221

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.

#### AUT 231 Man Trans/Axles/Drtrains

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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.

## Lecture Lab/Clinic Work Exp. Credit AUT 231A Man Trans/Ax/Drtrains Lab 0 3 0 1 Corequisites: State, AUT 231

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.

### **AUT 281 Adv Engine Performance** 2 2 0 3 Prerequisites: Local, AUT 181

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.

#### **AUT 283 Adv Auto Electronics** 2 2 0 3

Prerequisites: State, AUT 161

This course covers advanced electronic systems on automobiles. Topics include microcontrollers, on-board communications, telematics, hybrid systems, navigation, collision avoidance, and electronic accessories. Upon completion, students should be able to diagnose electronic systems using appropriate service information, procedures, and equipment and remove/replace/reprogram controllers, sensors, and actuators.

## **AUT 285 Intro to Alternative Fuels** 2 2 0 3 This course is an overview of alternative fuels and alternative fueled vehicles. Topics include composition and use of alternative fuels, including compressed natural gas, propane, biodiesel, ethanol, electric, hydrogen, synthetic fuels, and vehicles that use alternative fuels. Upon completion, students should be able to identify alternative fuel vehicles, explain how each alternative fuel

#### **BIOLOGY**

#### **BIO 094 Concepts of Human Biology** 3 2 0

Corequisites: State, ENG 095 or RED 090

delivery system works, and make minor repairs.

This course focuses on fundamental concepts of human biology. Topics include terminology, biochemistry, cell biology, tissues, body systems, and other related topics. Upon completion, students should be able to demonstrate preparedness for college-level anatomy and physiology courses.

#### **BIO 111 General Biology I** 3 3 0 4 Prerequisites: Local, Take One Set; Set 1: RED 090, ENG 090/090A, MAT 060; Set 2: RED 090, ENG 090/090A, DMA 010, DMA 020,DMA 030

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

## Lecture Lab/Clinic Work Exp. Credit BIO 112 General Biology II 3 3 0 4

Prerequisites: State, BIO 111

This course is a continuation of BIO 111. Emphasis is placed on organisms, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.* 

#### BIO 120 Introductory Botany 3 3 0 4

Prerequisites: State, BIO 110 or BIO 111

This course provides an introduction to the classification, relationships, structure, and function of plants. Topics include reproduction and development of seed and non-seed plants, levels of organization, form and function of systems, and a survey of major taxa. Upon completion, students should be able to demonstrate comprehension of plant form and function, including selected taxa of both seed and non-seed plants. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

### **BIO 140 Environmental Biology** 3 0 0 3 Prerequisites: Local, Take One Set; Set 1: RED 090, ENG 090/090A, MAT 070; Set 2: RED 090, ENG 090/090A, DMA 010, DMA 020, DMA 030, DMA 040, DMA 050; Set 3: RED 090, ENG 090/090A, MAT 060, DMA 040, DMA 050

Corequisites: Local, BIO 140A

This course introduces environmental processes and the influence of human activities upon them. Topics include ecological concepts, population growth, natural resources, and a focus on current environmental problems from scientific, social, political, and economic perspectives. Upon completion, students should be able to demonstrate an understanding of environmental interrelationships and of contemporary environmental issues. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

#### BIO 140A Environmental Biology Lab 0 3 0

Corequisites: State, BIO 140

This course provides a laboratory component to complement BIO 140. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental interrelationships and of contemporary environmental issues. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

#### **BIO 161 Intro to Human Biology** 3 0 0

Prerequisites: Local, RED 090, ENG 080

This course provides a basic survey of human biology. Emphasis is placed on the basic structure and function of body systems and the medical terminology used to describe normal and pathological states. Upon completion, students should be able to demonstrate an understanding of normal anatomy and physiology and the appropriate use of medical terminology.

#### **BIO 163 Basic Anat & Physiology** 4 2 0 5

Prerequisites: Local, RED 090,ENG 080

This course provides a basic study of the structure and function of the human body. Topics include a basic study of the body systems as well as an introduction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

#### Lecture Lab/Clinic Work Exp. Credit

#### **BIO 168 Anatomy and Physiology I**

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Prerequisites: Local, HS Chemistry with a "C" or better or BIO 094 or BIO 111 or BIO 163 or CHM 090 or CHM 094, or CHM 130 and CHM 130A

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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

#### **BIO 169 Anatomy and Physiology II**

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Prerequisites: State, BIO 168

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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

#### **BIO 250 Genetics**

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Prerequisites: State, BIO 112

This course covers principles of prokaryotic and eukaryotic cell genetics. Emphasis is placed on the molecular basis of heredity, chromosome structure, and 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

#### **BIO 271 Pathophysiology**

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Prerequisites: State, BIO 163, BIO 166, or BIO 169

This course provides an in-depth study of human pathological processes and their effects on homeostasis. Emphasis is placed on interrelationships among organ systems in deviations from homeostasis. Upon completion, students should be able to demonstrate a detailed knowledge of pathophysiology. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

#### **BIO 275 Microbiology**

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Prerequisites:BIO 110, BIO 111, BIO 163, BIO 165, or BIO 168

This course covers principles of microbiology and the impact these organisms have on man and the environment. Topics include the various groups of microorganisms, their structure, physiology, genetics, microbial pathogenicity, infectious diseases, immunology, and selected practical applications. Upon completion, students should be able to demonstrate knowledge and skills including microscopy, aseptic technique, staining, culture methods, and identification of microorganisms. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## LectureLab/ClinicWork Exp.CreditBIO 280 Biotechnology2303

Prerequisites: State, BIO 111 or CHM 151

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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

#### BIOTECHNOLOGY

#### **BTC 150 Bioethics** 3 0 0 3

Corequisites: State, RED 090

This course introduces the current ethics issues surrounding the biotechnology industries. Topics will include risk assessment, the relationships between science, technology, and society, and the effects of new biotechnology products upon the natural world. Upon completion, students should be able to demonstrate knowledge and critical thinking skills in decision-making related to bioethical issues.

#### BTC 181 Basic Lab Techniques 3 3 0 4

This course introduces the basic skills and knowledge necessary in a biological or chemical laboratory. Emphasis is placed on good manufacturing practices, safety, solution preparation, and equipment operation and maintenance following standard operating procedures. Upon completion, students should be able to prepare and perform basic laboratory procedures using labware, solutions, and equipment according to prescribed protocols.

#### BTC 250 Principles of Genetics 3 0 0 3

Prerequisites: BIO 111

This course covers the basic principles of genetics. Topics include Mendelian inheritance, gene mapping, molecular genetics, regulation of gene expression, population genetics, quantitative genetics, and the genetics of cancer. Upon completion, students should be able to demonstrate a broad understanding of genetics and the principles of heredity.

#### **BTC 285 Cell Culture** 2 3 0

Prerequisites: State, BIO 175 or BIO 275

This course introduces the theory and practices required to successfully initiate and maintain plant and animal cell cultures. Topics include aseptic techniques, the growth environment, routine maintenance of cell cultures, specialized culture techniques, and various applications. Upon completion, students should be able to demonstrate the knowledge and skills required to grow, maintain, and manipulate cells in culture.

#### BTC 286 Immunological Techniques 3 3 0 4

Prerequisites: State, BTC 285

This course covers the principles and practices of modern immunology, including the interactions between the various cellular and chemical components of the immune response. Topics include antigens, humoral immunity, cellular immunity, complement, immunological assays, and hybridoma use and production. Upon completion, students should be able to discuss the immune response, perform immunological assays, and make monoclonal antibody-producing hybridomas.

#### Lab/Clinic Work Exp. Lecture Credit 2 BTC 288 Biotech Lab Experience Prerequisites: State, BIO 250 or BTC 270 and BTC 281, BTC 285 or BTC 286 This course provides an opportunity to pursue an individual laboratory project in biotechnology. Emphasis is placed on developing, performing, and maintaining records of a project in a specific area of interest. Upon completion, students should be able to complete the project with accurate records and demonstrate an understanding of the process. BLUEPRINT READING **BPR 111 Print Reading** 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. 2 0 2 **BPR 121 Blueprint Reading: MECH** Prerequisites: State, BPR 111 or MAC 131 This course covers the interpretation of intermediate blueprints. Topics include tolerancing, auxiliary views, sectional views, and assembly drawings. Upon completion, students should be able to read and interpret a mechanical working drawing. 2 2 **BPR 130 Blueprint Reading/Const** This course covers the interpretation of blueprints and specifications that are associated with the construction trades. Emphasis is placed on interpretation of details for foundations, floor plans, elevations, and schedules. Upon completion, students should be able to read and interpret a set of construction blueprints.

#### **BUSINESS**

Prerequisites: State, BUS 115

<b>BUS 110 Introduction to Business</b>	3	0	0	3		
This course provides a survey of the busine	ess world. T	opics include the	basic principl	es and		
practices of contemporary business. Upon completion, students should be able to demonstrate an						
understanding of business concepts as a for	undation fo	r studying other	business subjec	cts. This course		
has been approved to satisfy the Comprehensive Art	iculation Agr	eement pre-major an	nd/or elective cou	rse requirement.		

**BUS 115 Business Law I** 3 0 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement

pre-major and/or elective course requirement.

BUS 116 Business Law II 3 0 0 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.

# BUS 121 Business Math 2 2 0 3 This course covers fundamental mathematical operations and their application to business problems. Topics include payroll, pricing, interest and discount, commission, taxes, and other pertinent uses of mathematics in the field of business. Upon completion, students should be able to apply mathematical concepts to business. BUS 125 Personal Finance 3 0 0 3 This course provides a study of individual and family financial decisions. Emphasis is placed on

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.

**BUS 135 Principles of Supervision** 3 0 0 3 This course introduces the basic responsibilities and duties of the supervisor and his/her relationship to higher-level supervisors, subordinates, and associates. Emphasis is placed on effective utilization of the work force and understanding the role of the supervisor. Upon completion, students should be able to apply supervisory principles in the work place.

**BUS 137 Principles of Management** 3 0 0 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.

**BUS 152 Human Relations** 3 0 0 3 3 This course introduces the concepts of effective human interaction in the business work environment. Topics include effective communication techniques, motivation, ego states, stress, and conflict. Upon completion, students should be able to explain the importance of human relations, apply motivational techniques, and implement strategies for resolving work related conflicts.

**BUS 153 Human Resource Management** 3 0 0 0 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.

BUS 225 Business Finance 2 2 0 3
Prerequisites: State, ACC 120

Upon completion, students should be able to anticipate and resolve human resource concerns.

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

**BUS 230 Small Business Management** 3 0 0 0 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.

	Lecture	Lab/Clinic	Work Exp.	Credit
<b>BUS 260 Business Communication</b>	3	0	0	3
Prerequisites: State, ENG 111				
This course is designed to develop skills in	writing busi	ness communics	tions Emphasis	s is placed o

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

#### **BUS 270 Professional Development** 3 0 0

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

#### COMPUTER ENGINEERING TECHNOLOGY

# **CET 110 Intro to CET** 0 3 0 1 This course introduces the basic skills required for computer technicians. Topics include career choices, safety practices, technical problem solving, scientific calculator usage, soldering/desoldering, keyboarding skills, engineering computer applications, and other related topics. Upon completion, students should be able to safely solder/desolder and use a scientific calculator and computer applications to solve technical problems.

## **CET 111 Computer Upgrade/Repair I** 2 3 0 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

#### **CET 150 Computer Forensics I** 2 3 0 3

This course is an introduction to computer forensic concepts, with emphasis on computer forensic methods and best practices. Topics include computer system analysis, physical and logical storage methods for different types of media, tools to recover and analyze data from storage media, system security. Upon completion, students should be able to use diagnostic and investigative techniques to identify and retrieve data from various types of computer media.

#### CET 211 Computer Upgrade/Repair II 2 3 0 3

Prerequisites: Local, CET 111

computer systems to perform within specifications.

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.

#### CET 212 Integrated Mfg Systems 1 3 0

This course covers computer topics related to integrated manufacturing systems common to current manufacturing facilities. Topics include robot programming, automated control systems, PLCs, data communication, and networking in an integrated manufacturing environment, and other related topics. Upon completion, students should be able to program robots using teaching pendants and troubleshoot and maintain network installations related to integrated manufacturing systems.

#### Lab/Clinic Work Exp. Lecture Credit

#### **CET 250 Computer Forensics II**

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This course is a study in computer forensic practices with emphasis placed on methods used for prevention, detection, and apprehension of perpetrators of cyber-criminal activity. Topics include the roles of Chief Security Officers in the securing of system breaches, vulnerabilities, network and server security issues, OS and application security risks. Upon completion students should be able to identify and collect evidence to prove unauthorized and inappropriate access on computer systems and networks.

#### CHEMISTRY

#### CHM 094 Basic Biological Chemistry

Prerequisites: State Take One Set: Set 1: MAT 060; Set 2: DMA 010, DMA 020, DMA 030, DMA 040 Local Take One Set: Set 1: MAT 070; Set 2: DMA 040, DMA 050

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This course introduces the chemistry important to biological processes. Emphasis is placed on the aspects of general, organic, and biological chemistry that apply to biological systems and processes. Upon completion, students should be able to demonstrate an understanding of the basic biological chemistry necessary for success in college-level biology courses.

#### CHM 130 Gen, Org, & Biochemistry

Prerequisites: Local, Take One Set: Set 1: RED 090, MAT 070; Set 2: RED 090, DMA 010, DMA 020, DMA 030, DMA 040, DMA 050; Set 3: RED 090, MAT 060, DMA 040, DMA 050 Corequisites: Local, CHM 130A

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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

#### CHM 130A Gen, Org, & Biochem Lab

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Corequisites: State, CHM 130

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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

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#### CHM 131 Introduction to Chemistry

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3 Prerequisites: Local, Take One Set: Set 1: RED 090, MAT 070; Set 2: RED 090, DMA 010, DMA 020, DMA 030, DMA 040, DMA 050; Set 3: RED 090, MAT 060, DMA 040, DMA 050 Corequisites: Local, CHM 131A

This course introduces the fundamental concepts of inorganic chemistry. Topics include measurement, matter and energy, atomic and molecular structure, nuclear chemistry, stoichiometry, chemical formulas and reactions, chemical bonding, gas laws, solutions, and acids and bases. Upon completion, students should be able to demonstrate a basic understanding of chemistry as it applies to other fields. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. This course is also available through the Virtual Learning Community (VLC).

## LectureLab/ClinicWork Exp.CreditCHM 131A Introduction to Chemistry Lab0301Corequisites: State, CHM 131

This course is a laboratory to accompany CHM 131. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 131. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 131. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

### CHM 132 Organic and Biochemistry 3 3 0 4 Prerequisites: State, CHM 131 and CHM 131A or CHM 151

This course provides a survey of major functional classes of compounds in organic and biochemistry. Topics include structure, properties, and reactions of the major organic and biological molecules and basic principles of metabolism. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts needed to pursue studies in related professional fields. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

## CHM 151 General Chemistry I 3 3 0 4 Prerequisite: Local, RED 090

This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

#### **CHM 152 General Chemistry II** 3 3 0 4

Prerequisites: State, CHM 151

This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

### CHM 251 Organic Chemistry I 3 3 0 4 Prerequisites: State, CHM 152

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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

# Lecture Lab/Clinic Work Exp. Credit CHM 252 Organic Chemistry II 3 3 0 4

Prerequisites: State, CHM 251

Learning Community (VLC).

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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

## INFORMATION SYSTEMS

# **CIS 070 Fundamentals of Computing** 0 2 0 1 This course covers fundamental functions and operations of the computer. Topics include identification of components, overview of operating systems, and other basic computer operations. Upon completion, students should be able to operate computers, access files, print documents and perform basic applications operations.

# CIS 110 Introduction to Computers 2 2 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics (Quantitative Option). This course is also available through the Virtual

# CIS 111 Basic PC Literacy 1 2 0 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. *This course is also available through the Virtual Learning Community (VLC)*.

# **CIS 115 Intro to Prog & Logic** 2 3 0 3 Prerequisites: State, MAT 070, MAT 080, MAT 090, MAT 095, MAT 120, MAT 121, MAT 161, MAT 171, MAT 175, DMA 010–040

This course introduces computer programming and problem solving in a structured program logic environment. Topics include language syntax, data types, program organization, problem solving methods, algorithm design, and logic control structures. Upon completion, students should be able to manage files with operating system commands, use top-down algorithm design, and implement algorithmic solutions in a programming language. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics (Quantitative Option). This course is also available through the Virtual Learning Community (VLC).

# **CRIMINAL JUSTICE**

# CJC 100 Basic Law Enforcement Trn 9 30 0 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.

# CJC 111 Intro to Criminal Justice 3 0 0

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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

# **CJC 112 Criminology** 3 0 0

This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.

# **CJC 113 Juvenile Justice** 3 0 0 3

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

# CJC 121 Law Enforcement Operations 3 0 0 3

This course introduces fundamental law enforcement operations. Topics include the contemporary evolution of law enforcement operations and related issues. Upon completion, students should be able to explain theories, practices, and issues related to law enforcement operations. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

# **CJC 131 Criminal Law** 3 0 0

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

# **CJC 132 Court Procedure & Evidence** 3 0 0 3

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.

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of the field of corrections. Topics include historical evolution, functions of the various components, alternatives to incarceration, treatment programs, inmate control, and other related topics. Upon completion, students should be able to explain the various components, processes, and functions of the correctional system. This course has been approved to satisfy the Comprehensive Articulation Agreement premajor and/or elective course requirement.

# CJC 160 Terrorism: Underlying Issues 3 0 0

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 considerations involving threat assessments. Upon completion, students should be able to identify and discuss the methods used in terrorists' activities and complete a threat assessment for terrorists' incidents.. This course transfers only to Fayetville State University under an articulation aggreement between Lenoir Community College and that institution.

# CJC 212 Ethics & Comm Relations 3 0 0 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.

# **CJC 214 Victimology** 3 0 0 3

This course introduces the study of victims. Emphasis is placed on roles/characteristics of victims, victim interaction with the criminal justice system and society, current victim assistance programs, and other related topics. Upon completion, students should be able to discuss and identify victims, the uniqueness of victims' roles, and current victim assistance programs. This course transfers only to Fayetville State University under an articulation aggreement between Lenoir Community College and that institution.

# CJC 221 Investigative Principles 3 2 0 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.

# **CJC 222 Criminalistics** 3 0 0 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.

# **CJC 231 Constitutional Law** 3 0 0 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.

COOPERATIVE EDUCAT	TION			
COE 111 Co-op Work Experience I This course provides work experience with a constudent's program of study. Emphasis is placed experience. Upon completion, students should employability skills, and satisfactorily perform	l on integratin be able to eva	g classroom le lluate career se	arning with rela	ited work
COE 112 Co-op Work Experience I This course provides work experience with a c student's program of study. Emphasis is place experience. Upon completion, students should employability skills, and satisfactorily perform	d on integratir d be able to ev	ng classroom le aluate career s	earning with rel	ated worl
COE 115 Work Exp Seminar I Corequisites: State, COE 111, COE 112 This course provides an opportunity to evaluat program of study. Emphasis is placed on discu curriculum components. Upon completion, stu experience competencies with their classroom	ssion of the su adents should	pervised pract	icum experienc	e and
COE 121 Co-op Work Experience II  This course provides work experience with a constituent's program of study. Emphasis is placed experience. Upon completion, students should employability skills, and satisfactorily perform	d on integratir d be able to ev	ng classroom le aluate career s	earning with rel	ated worl
COE 122 Co-op Work Experience II  This course provides work experience with a constudent's program of study. Emphasis is placed experience. Upon completion, students should employability skills, and satisfactorily perform	d on integratir d be able to ev	ng classroom le aluate career s	earning with rel	ated worl
COE 125 Work Exp Seminar II Corequisites: State, COE 121, COE 122 This course provides an opportunity to evaluate program of study. Emphasis is placed on discu curriculum components. Upon completion, stee experience competencies with their classroom	ssion of the su udents should	pervised pract	icum experienc	e and

Lecture

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This course introduces statutory/case law pertinent to correctional concepts, facilities, and related practices. Topics include examination of major legal issues encompassing incarceration, probation, parole, restitution, pardon, restoration of rights, and other related topics. Upon completion, students should be able to identify/discuss legal issues which directly affect correctional systems and personnel. This course transfers only to Fayetville State University under an articulation aggreement between Lenoir

be able to explain civil trial procedures and discuss contemporary liability issues.

This course covers liability issues for the criminal justice professional. Topics include civil rights violations, tort liability, employment issues, and other related topics. Upon completion, students should

CJC 232 Civil Liability

CJC 233 Correctional Law

Community College and that institution.

Lab/Clinic Work Exp.

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Credit

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# COE 131 Co-op Work Experience III 0 0 1 10 1 This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. COE 132 Co-op Work Experience III 0 0 0 20 2

Lecture

Lab/Clinic Work Exp.

Credit

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

# COE 135 Work Exp Seminar III 1 0 0 0 II Corequisites: State, COE 131, COE 132

This course provides an opportunity to evaluate practical experiences related to the student's program of study. Emphasis is placed on discussion of the supervised practicum experience and curriculum components. Upon completion, students should be able to clearly relate their work experience competencies with their classroom instruction.

# **COE 211 Co-op Work Experience IV** 0 0 10 1 This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

# **COMMUNICATION**

# **COM 110 Introduction to Communication** 3 0 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts (substitute). This course is also available through the Virtual Learning Community (VLC).

# **COM 231 Public Speaking** 3 0 0 3 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. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts (substitute).*

	Lecture	Lab/Clinic	Work Exp.	Credit		
COSMETOLOGY						
COS 111 Cosmetology Concepts I Corequisites: State, COS 112	4	0	0	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.						
COS 111A Cosmetology Concepts IA Corequisites: State, COS 112A	2	0	0	2		
COS 111B Cosmetology Concepts IB Corequisites: State, COS 112B COS 111A and COS 111B are the equiva		0	0	2		
COS 112 Salon I Corequisites: State, COS 111	0	24	0	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.						
COS 112A Salon IA Corequisites: State, COS 111A	0	12	0	4		
COS 112B Salon IB Corequisites: State, COS 111B COS 112A and COS 112B are the equiva	0 lent of COS	12	0	4		
COS 113 Cosmetology Concepts II	4	0	0	4		
Corequisites: State, COS 114 This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.						
COS 113A Cosmetology Concepts IL Corequisites: State, COS 114A	<b>A</b> 2	0	0	2		
COS 113B Cosmetology Concepts II Corequisites: State, COS 114B COS 113A and COS 113B are the equiva		0	0	2		
COS 114 Salon II Corequisites: State, COS 113	0	24	0	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.						

COS 114A Salon IIA

Corequisites: State, COS 113A

	Lecture	Lab/Clinic	Work Exp.	Credit		
COS 114B Salon IIB Corequisites: State, COS 113B COS 114A and COS 114B are the equiva	0 alent of COS	12 3 114	0	4		
COS 115 Cosmetology Concepts III Corequisites: State, COS 116	4	0	0	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.						
COS 115A Cosmetology Concepts II Corequisites: State, COS 116A	<b>IA</b> 2	0	0	2		
COS 115B Cosmetology Concepts II Corequisites: State, COS 116B COS 115A and COS 115B are the equiva-		0 3 115	0	2		
COS 116 Salon III	0	12	0	4		
Corequisites: State, COS 115  This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing, hair color, design, haircutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.						
COS 116A Salon IIIA Corequisites: State, COS 115A	0	6	0	2		
COS 116B Salon IIIB Corequisites: State, COS 115BCOS 116A	0 and COS 1	6 16B are the equ	0 ivalent of COS	116		
<b>COS 119 Esthetics Concepts I</b> 2 0 0 2 This course covers the concepts of esthetics. Topics include orientation, anatomy, physiology, hygiene, sterilization, first aid, chemistry, basic dermatology, and professional ethics. Upon completion, students should be able to demonstrate an understanding of the concepts of esthetics and meet course requirements.						
COS 120 Esthetics Salon I	0	18	0	6		
This course covers the techniques of esthetics in a comprehensive experience in a simulated salon setting. Topics include client consultation, facials, body treatments, hair removal, make-up applications, and color analysis. Upon completion, students should be able to safely and competently demonstrate esthetic services on clients in a salon setting.						
COS 125 Esthetics Concepts II	2	0	0	2		
This course covers more comprehensive esthetics concepts. Topics include nutrition, business management, make-up, and color analysis. Upon completion students should be able to demonstrate an understanding of the advanced esthetics concepts and meet course requirements.						
COS 126 Esthetics Salon II	0	18	0	6		
This course provides experience in a simulated esthetics setting. Topics include machine facials, aroma therapy, massage therapy, electricity, and apparatus. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology licensing examination for Estheticians.  259						

#### Lab/Clinic Work Exp. Lecture Credit **COS 223 Contemp Hair Coloring** 3 0 2 Prerequisites: State, COS 111 and COS 112 This course covers basic color concepts, hair coloring problems, and application techniques. Topics include color theory, terminology, contemporary techniques, product knowledge, and other related topics. Upon completion, students should be able to identify a clients color needs and safely and competently perform color applications and correct problems. 3 0 2 **COS 225 Adv Contemp Hair Coloring** Prerequisites: State, COS 223

This course covers advanced techniques in coloring applications and problem solving situations. Topics include removing unwanted color, replacing pigment and re-coloring, removing coatings, covering grey and white hair, avoiding color fading, and poor tint results. Upon completion, students should be able to apply problem solving techniques in hair coloring situations.

**COS 250 Computerized Salon Ops** 1 0 0 1

This course introduces computer and salon software. Emphasis is placed on various computer and salon software to death a salar to deat

salon software applications. Upon completion, students should be able to utilize computer skills and software applications in the salon setting.

# COS 271 Instructor Concepts I 5 0 0 5 Corequisites: State, COS 272

This course introduces the basic cosmetology instructional concepts. Topics include orientation, theories of education, unit planning, daily lesson planning, laboratory management, student assessment, record keeping, and other related topics. Upon completion, students should be able to identify theories of education, develop lesson plans, demonstrate supervisory techniques, and assess student performance in a classroom setting.

# COS 272 Instructor Practicum I 0 21 0 7 Corequisites: State, COS 271

This course covers supervisory and instructional skills for teaching entry-level cosmetology students in a laboratory setting. Topics include demonstrations of services, supervision, and entry-level student assessment. Upon completion, students should be able to demonstrate salon services and instruct and objectively assess the entry-level student.

# COS 273 Instructor Concepts II 5 0 0 5 Prerequisites: State, COS 271 and COS 272

Prerequisites: State, COS 2/1 and COS Corequisites: State, COS 274

This course covers advanced cosmetology instructional concepts. Topics include practical demonstrations, lesson planning, lecture techniques, development and administration of assessment tools, record keeping, and other related topics. Upon completion, students should be able to develop lesson plans, demonstrate supervision techniques, assess student performance in a classroom setting, and keep accurate records.

# COS 274 Instructor Practicum II 0 21 0 7

Prerequisites: State, COS 271 and COS 272

Corequisites: State, COS 273

This course is designed to develop supervisory and instructional skills for teaching advanced cosmetology students in a laboratory setting. Topics include practical demonstrations, supervision, and advanced student assessment. Upon completion, students should be able to demonstrate competence in the areas covered by the Instructor Licensing Examination and meet program completion requirements.

# CONSTRUCTION MANAGEMENT

# CMT 112 Construction Managements I 4 4 0 6

This course introduces students to the field of construction management technology. Topics include job planning, work methods, materials, equipment, and other related topics. Upon completion, students should be able to demonstrate basic knowledge of methods, materials, equipment, and the logical sequence of a construction.

# **CMT 120 Codes and Inspections** 3 0 0 3

This course covers building codes and the code inspections process used in the design and construction of residential and commercial buildings. Emphasis is placed on commercial, residential, and accessibility (handicapped) building codes. Upon completion, students should be able to understand the building code inspections process and apply building code principals and requirements to construction projects.

#### CMT 210 Prof Construction Superv 3 0 0 3

This course introduces the student to the fundamentals of effective supervision emphasizing professionalism through knowledge and applied skills. Topics include safety, planning and scheduling, contract, problem-solving, communications, conflict resolution, recruitment, employment laws and regulations, leadership, motivation, teamwork, discipline, setting objectives, and training. Upon completion, the student should be able to demonstrate the basic skills necessary to be successful as a supervisor in the construction industry.

# **COMPUTER SCIENCE**

# **CSC 134 C++ Programming** 2 3 0

This course introduces computer programming using the C++ programming language with objectoriented programming principles. Emphasis is placed on event-driven programming methods, including
creating and manipulating objects, classes, and using object-oriented tools such as the class debugger.
Upon completion, students should be able to design, code, test and debug at a beginning level. This course
has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course
requirement.

# **CSC 139 Visual BASIC Prog** 2 3 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# **CSC 151 JAVA Programming** 2 3 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement

	Lecture	Lab/Clinic	Work Exp.	Credit
CSC 234 Adv C++ Programming	2	3	0	3
Daniel Con 124				

Prerequisites: State, CSC 134

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.

# CSC 239 Adv Visual BASIC Prog 2 3 0 3

Prerequisites: State, CSC 139

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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# CSC 289 Programming Capstone Proj 1 4 0 3

Prerequisites: State, CTS 285

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.

# CONSTRUCTION

# **CST 110 Intro to Construction** 1 2 0

This course introduces construction terminology, materials, and practices found at a construction worksite. Emphasis is placed on common and innovative practices, methods, materials, and other related topics of the construction industry. Upon completion, students should be able to successfully identify various practices, methods, and materials used in the construction industry.

#### **CST 111 Construction I** 3 3 0 4

This course covers standard and alternative building methods to include wall framing. Topics include safety and footings, foundations, floor framing systems, and wall framing systems commonly used in the construction industry. Upon completion, students should be able to safely erect all framing necessary to begin roof framing.

# **CST 112 Construction II** 3 3 0 4

Prerequisites: State, CST 111

This course covers building methods and materials used to dry-in a building. Topics include safety, ceiling/roof framing applications, roof finishes, windows, and exterior doors. Upon completion, students should be able to safely erect different roof types and properly install windows and exterior doors, roofing, and exterior finish.

## CST 251 Electrical Wiring Systems 2 2 0

This course introduces residential and commercial electrical wiring systems. Topics include safety, care and use of tools and materials, use of NEC, circuit planning, overcurrent protection, and installation of conduits, cables, and conductors. Upon completion, students should be able to correctly identify tools, materials, and procedures for electrical installation.

#### Lecture Lab/Clinic Work Exp.

Credit

3

# COMPUTER INFORMATION TECHNOLOGY

# CTS 115 Info Sys Business Concepts 3 0

The 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# CTS 120 Hardware/Software Support 2 3 0

Prerequisites: State, CIS 110 or CIS 111

This course covers the basic hardware of a personal computer, including installation, operations and interactions with software. Topics include component identification, memory-system, peripheral installation and configuration, preventive maintenance, hardware diagnostics/repair, installation and optimization of system software, commercial programs, system configuration, and device-drivers. Upon completion, students should be able to select appropriate computer equipment and software, upgrade/maintain existing equipment and software, and troubleshoot/repair non-functioning personal computers.

# CTS 125 Presentation Graphics 2 2 0 3

Prerequisites: State, CIS 110 or CIS 111

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.

# **CTS 130 Spreadsheet** 2 2 0 3

Prerequisites: State, CIS 110 or CIS 111 or OST 137

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.

# CTS 285 Systems Analysis & Design 3 0 0 3

Prerequisites: State, CIS 115

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.

# CTS 289 System Support Project 1 4 0 3

Prerequisites: State, CTS 285

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.

# Lecture Lab/Clinic Work Exp. Credit CULINARY CUL 110 Sanitation & Safety 2 0 0 2 Corequisite: Local, CUL 110A This course introduces the basic principles of sanitation and safety and their relationship to the

This course introduces the basic principles of sanitation and safety and their relationship to the hospitality industry. Topics include personal hygiene, sanitation and safety regulations, use and care of equipment, the principles of food-borne illness, and other related topics. Upon completion, students should be able to demonstrate an understanding of sanitation and safety procedures in the hospitality industry.

# CUL 110A Sanitation & Safety Lab 0 2 0

Corequisites: State, CUL 110

This course is a laboratory to accompany CUL 110. Emphasis is placed on practical experiences that enhance the materials presented in CUL 110. Upon completion, students should be able to demonstrate practical applications of sanitation and safety procedures in the hospitality industry.

# CUL 112 Nutrition for Foodservice 3 0 0 3

Corequisites: Local, CUL 112A
This course covers the principles

This course covers the principles of nutrition and its relationship to the foodservice industry. Topics include fundamentals of personal nutrition, nutrition over the life cycle, weight management and exercise, health aspects of nutrition, developing healthy recipes and menus, healthy cooking techniques and marketing nutrition in a food service operation. Upon completion, students should be able to apply basic nutritional concepts to food preparation and selection.

# **CUL 112A Nutrition for Fdsv Lab**

Corequisites: State, CUL 112 0 3 0

This course provides a laboratory experience for enhancing student skills in the principles of nutrition and its relationship to the foodservice industry. Emphasis is placed on personal nutrition fundamentals, weight management/exercise, nutritional adaptation/analysis of recipes/menus, healthy cooking techniques and marketing nutrition in a foodservice operation. Upon completion, students should be able to apply basic nutritional concepts to food preparation and selection.

# **CUL 120 Purchasing** 2 0 0 2

Corequisites: Local, CUL 120A

This course covers purchasing for hotels and restaurants. Emphasis is placed on procurement, yield tests, inventory control, specification, planning, forecasting, market trends, terminology, cost controls, pricing, and foodservice ethics. Upon completion, students should be able to apply effective purchasing techniques based on the end-use of the product.

# CUL 120A Purchasing Lab 0 2 0

Corequisites: State, CUL 120

This course is a laboratory to accompany CUL 120. Emphasis is placed on practical experiences that enhance the materials presented in CUL 120. Upon completion, students should be able to demonstrate practical applications of purchasing within in the hospitality industry.

# **CUL 130 Menu Design** 2 0 0 2

This course introduces menu design. Topics include development of standardized recipes, layout, nutritional concerns, product utilization, demographics, and customer needs. Upon completion, students should be able to write, layout, and produce effective menus for a variety of hospitality settings.

# Lecture Lab/Clinic Work Exp. Credit CUL 135 Food & Beverage Service 2 0 0 2 Corequisite: Local, CUL 135A This course covers the practical skills and knowledge for effective food and beverage service in a variety of settings. Topics include reservations, greeting and service of guests, styles of service, handling complaints, and sales and merchandising. Upon completion, students should be able to demonstrate competence in human relations and technical skills required in the service of foods and beverages.

CUL 135A Food & Beverage Serv Lab 0 2 0

Corequisites: State, CUL 135

This course is a laboratory to accompany CUL 135. Emphasis is placed on practical experiences that enhance the materials presented in CUL 135. Upon completion, students should be able to demonstrate practical applications of skills required in the service of foods and beverages.

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CUL 140 Basic Culinary Skills 2 6 0 5
Corequisites: State, CUL 110

This course introduces the fundamental concepts, skills, and techniques involved in basic cookery. Emphasis is placed on recipe conversion, measurements, terminology, knife skills, safe food handling, cooking methods, flavorings, seasonings, stocks/sauces/soups, and other related topics. Upon completion, students should be able to exhibit the basic cooking skills used in the food service industry.

**CUL 150 Food Science** 1 2 0 2

Corequisites: Local, CUL 150A

This course covers the chemical and physical changes in foods that occur with cooking, handling, and processing. Topics include heat transfer and its effect on color, flavor, and texture; and emulsification, protein coagulation, leavening agents, viscosity, and gel formation. Upon completion, students should be able to demonstrate an understanding of the principles covered as they apply to food preparation in an experimental setting.

**CUL 150A Food Science Lab** 0 2 0

Corequisites: State, CUL 150

This course provides a laboratory experience for enhancing student skills with the chemical and physical changes that occur in food when cooking, handling and processing. Emphasis is placed on practical applications of heat transfer and its effect on color/flavor/texture, emulsification, protein coagulation, leavening agents, viscosity and gel formation. Upon completion, students should be able to demonstrate an understanding of these principles as they apply to food preparation in an experimental setting.

**CUL 160 Baking I** 1 4 0 3

Prerequisites: State, CUL 110 and CUL 140

This course covers basic ingredients, weights and measures, baking terminology, and formula calculations. Topics include yeast-raised products, quick breads, pastry dough, various cakes and cookies, and appropriate filling and finishing techniques. Upon completion, students should be able to prepare and evaluate baked products.

**CUL 170 Garde-Manger I** 1 4 0

Prerequisites: State, CUL 110 and CUL 140

This course introduces basic cold food preparation techniques and pantry production. Topics include salads, sandwiches, appetizers, dressings, basic garnishes, cheeses, cold sauces, and related food items. Upon completion, students should be able to lay out a basic cold food display and exhibit an understanding of the cold kitchen and its related terminology.

# Lecture Lab/Clinic Work Exp. Credit CUL 230 Global Cuisines 1 8 0 5

Prerequisites: State, Take All: CUL-110 and CUL-140

Corequisites: Local, CUL 230A

This course provides practical experience in the planning, preparation, and presentation of representative foods from a variety of world cuisines. Emphasis is placed on indigenous ingredients and customs, nutritional concerns, and cooking techniques. Upon completion, students should be able to research and execute a variety of international and domestic menus.

# CUL 230A Global Cuisines Lab 0 3 0

Prerequisites: State, Take All: CUL-110 and CUL-140

Corequisites: State, CUL 230

This course provides a laboratory experience for enhancing student skills with cuisines from around the world. Emphasis is placed on production of global cuisines based on historical and geographical influences, ingredients, customs, and cooking techniques. Upon completion, students should be able to exhibit an understanding of the culinary practices and techniques of specific countries.

# **CUL 240 Adv Culinary Skills** 1 8 0 5

Prerequisites: State, CUL 140

This course is a continuation of CUL 140. Emphasis is placed on meat fabrication and butchery; vegetable, starch, and protein cookery; compound sauces; plate presentation; breakfast cookery; and quantity food preparation. Upon completion, students should be able to plan, execute, and successfully serve entrees with complementary side items.

## **CUL 260 Baking II** 1 4 0 3

Prerequisites: State, CUL 160

This course is a continuation of CUL 160. Topics include specialty breads, pastillage, marzipan, chocolate, pulled-sugar, confections, classic desserts, pastries, and cake decorating. Upon completion, students should be able to demonstrate pastry preparation and plating, cake decorating, and show-piece production skills.

# **CUL 270 Garde Manger II** 1 4 0 3

Prerequisite: State, CUL 170

This course is a continuation of CUL 170. Topics include pates, terrines, galantines, ice and tallow carving, chaudfroid/aspic work, charcuterie, smoking, canapés, hors d'oeuvres, and related food items. Upon completion, students should be able to design, set up, and evaluate a catering function to include a classical cold buffet with appropriate show pieces.

# **CUL 275 Catering Cuisine** 1 8 0 5

Prerequisite: State, Take All: CUL-110, CUL-140, and CUL-240

This course covers the sequential steps to successful catering that include sales, client needs, menu planning, purchasing, costing, event pricing, staffing and sanitation concerns. Emphasis is placed on new culinary competencies and skills specific to catering preparation, presentation, and customer service. Upon completion, students should be able to demonstrate proficiency in the successful design and execution of various types of catering events.

#### **CUL 283 Farm to Table** 2 6 0 5

Prerequisite: State, Take All: CUL-110 and CUL-140

This course introduces students to the cooperation between sustainable farmers and foodservice operations. Emphasis is placed on environmental relationships, including how foods are grown, processed, and distributed, as well as related implications on quality and sustainability. Upon completion, students should be able to demonstrate an understanding of environmental stewardship and its impact on cuisine.

# DATABASE MANAGEMENT TECHNOLOGY

**DBA 110 Database Concepts** 2 3 0 3 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.

### DEVELOPMENTAL MATHEMATICS

**DMA 010 Operations with Integers** 0.75 0.50 0 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.

**DMA 020 Fractions and Decimals** 0.75 0.50 0

Prerequisites: State, DMA 010

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.

**DMA 030 Propor/Ratio/Rate/Percent** 0.75 0.50 0

Prerequisites: State, DMA 010 and DMA 020

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.

**DMA 040 Express/Lin Equat/Inequal** 0.75 0.50 0 1 Prerequisites: State, Take One Set: Set 1: DMA 010, DMA 020 and DMA 030 Set 2: MAT 060 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.

**DMA 050 Graphs/Equations of Lines** 0.75 0.50 0 1 Prerequisites: State, Take One Set: Set 1: DMA 010, DMA 020, DMA 030 and DMA 040 Set 2: DMA 040 and MAT 060

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 real-world situations as linear equations in two variables.

**DMA 060 Polynomial/Quadratic Appl** 0.75 0.50 0 1 Prerequisites: State, Take One Set: Set 1: DMA 010, DMA 020, DMA 030, DMA 040 and DMA 050

Set 2: DMA 040, DMA 050, and MAT 060 Set 3: MAT 060 and MAT 070

This course provides a conceptual study of problems involving graphic and algebraic representations of quadratics. 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.

**DMA 070 Rational Express/Equation** 0.75 0.50 0 1
Prerequisites: State, Take One Set: Set 1: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 and DMA 060 Set 2: DMA 040, DMA 050, DMA 060, and MAT 060 Set 3: DMA 060, MAT 060, and MAT 070 Set 4: DMA 010, DMA 020, DMA 030, DMA 060, AND MAT 070
This course provides a conceptual study of problems involving graphic and algebraic representations of rational equations. Topics include simplifying and performing operations with rational expressions and equations, understanding the domain, and determining the reasonableness of an answer. Upon completion, students should be able to find algebraic solutions to contextual problems with rational applications.

**DMA 080 Radical Express/Equations** 0.75 0.50 0 1
Prerequisites: State, Take One Set: Set 1: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060 and DMA 070 Set 2: DMA 060, DMA 070, MAT 060, and MAT 070 Set 3: DMA 040, DMA 050, DMA 060, DMA 070, and MAT 060 Set 4: DMA 010, DMA 020, DMA 030, DMA 060, DMA 070, and MAT 070

This course provides a conceptual study of the manipulation of radicals and the application of radical equations to real-world problems. Topics include simplifying and performing operations with radical expressions and rational exponents, solving equations, and determining the reasonableness of an answer. Upon completion, students should be able to find algebraic solutions to contextual problems with radical applications.

# DIETETIC TECHNICIAN

# **DET 110 Dietetic Technician I** 6 0 6 8

Prerequisite: Local, Enrollment in the Dietetic Technician Program(A45310)

This course introduces concepts basic to the role of the dietetic technician. Emphasis is placed on basic nutrition throughout the lifecycle, and selection of well-balanced diets for the promotion of health. Upon completion, students should be able to identify the basic principles of food and nutrition and diet planning.

# **DET 115 Dietetic Technician II** 2 0 0 2

Prerequisite: Local, Enrollment in the Dietetic Technician Program (A45310)

This course introduces the principles of food sanitation. Emphasis is placed on the control of food-borne illnesses and contaminants including methods used to prevent contamination during preparation and storage. Upon completion of the course students should be able to apply sanitation principles in practice as a dietetic technician.

# Lab/Clinic Work Exp. **DET 120 Dietetic Technician III** 9 Prerequisite: Local, Enrollment in the Dietetic Technician Program (A45310) This course introduces students to the foundation/basics of nutrition assessment and nutrition counseling and education. Emphasis is placed on the role of nutrition services in the health care settings. Upon completion, students should be able to participate in the assessment and identification of nutrition-related problems in the nutrition care process, provide general nutrition education for common medical conditions, develop/evaluate menus, and complete basic documentation in health records.

Lecture

Credit

#### **DET 210 Dietetic Technician IV** 9 9

Prerequisite: Local, Enrollment in the Dietetic Technician Program (A45310)

This course is designed to build upon nutritional assessment and integrate medical nutrition therapy/ diseases and the intervention, monitoring, and evaluation of the nutrition care process in acute care settings. Topics include the role of nutritional programs in community health settings and throughout the lifecycle. Upon completion students should be able to identify appropriate therapeutic dietary recommendations for certain diseases/conditions and communicate this effectively to the client/patient, develop menus, and document appropriately in the nutrition care process format.

#### **DET 220 Dietetic Technician V** 12 10

Prerequisite: Local, Enrollment in the Dietetic Technician Program (A45310)

This course provides a full and comprehensive overview of institution food service management. Emphasis is placed on the application of facility design, menu planning, food procurement, inventory control, food safety principles, human resource and financial management and food production. Upon completion, students should be able to work in a health care environment under the supervision of a registered dietitian and be eligible to sit for the national certified dietary managers' examination.

#### **DET 225 Dietetic Technician VI** 2 0 2

Prerequisite: Local, Enrollment in the Dietetic Technician Program (A45310)

This course provides an opportunity to explore issues related to the practice of the Dietetic Technician. Emphasis is placed on ethical, legal, professional, and political issues. Upon completion the student should be able to discuss issues relating to the practice of the Dietetic Technician.

# DRAFTING

#### **DFT 111 Technical Drafting I** 1 0 9

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

#### **DFT 119 Basic CAD** 1 0

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

	Lecture	Lab/Clinic	Work Exp.	Credit
DFT 120 Advanced CAD	1	2	0	2
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Prerequisites: State, DFT 119

This course is designed for non-drafting majors to build upon basic computer-aided drafting skills by the use of application-specific assignments. Emphasis is placed on advanced 2D, 3D, isometric, and modeling applications via the CAD system. Upon completion, students should be able to generate, manage, and output engineering drawings via the computer, printer, and plotter.

**DFT 151 CAD I** 2 3 0 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.

## ELECTRONIC COMMERCE

# **ECM 210 Intro to E-Commerce** 2 2 0 3

This course introduces the concepts and tools to implement electronic commerce via the Internet. Topics include application and server software selection, securing transactions, use and verification of credit cards, publishing of catalogs, and site administration. Upon completion, students should be able to setup a working e-commerce Internet web site.

# **ECONOMICS**

# **ECO 251 Prin of Microeconomics** 3 0 0 3

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

# ECO 252 Prin of Macroeconomics 3 0 0

This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

# **EDUCATION**

# EDU 119 Intro to Early Child Educ 4 0 0 4

This course covers the foundations of the education profession, the diverse educational settings for young children, professionalism and planning developmentally appropriate programs for all children. Topics include historical foundations, program types, career options, professionalism and creating inclusive environments and curriculum responsive to the needs of all children and families. Upon completion, students should be able to design career plans and develop schedules, environments and activity plans appropriate for all children. *This course is also available through the Virtual Learning Community (VLC)*.

#### EDU 131 Child, Family, & Commun

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Prerequisites: State, Take one set Set 1: ENG 080, RED 080 or Set 2: ENG 085

This course covers the development of partnerships between culturally and linguistically diverse families, children, schools and communities. Emphasis is placed on developing skills and identifying benefits for establishing, supporting, and maintaining respectful, collaborative relationships between diverse families, programs/schools, and community agencies/resources. Upon completion, students should be able to explain appropriate relationships between families, educators, and professionals that enhance development and educational experiences of all children. *This course is also available through the Virtual Learning Community (VLC)*.

#### **EDU 144 Child Development I**

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Prerequisites: State, Take one set: Set 1: ENG 080, RED 080 or Set 2: ENG 085

This course includes the theories of child development, needs, milestones, and factors that influence development, from conception through approximately 36 months. Emphasis is placed on developmental sequences in physical/motor, emotional/social, cognitive, and language domains and the impact of multiple influences on development and learning. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain environmental factors that impact development, and identify strategies for enhancing development. This course is also available through the Virtual Learning Community (VLC).

#### **EDU 145 Child Development II**

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Prerequisites: State, Take one set: Set 1: ENG 080, RED 080 or Set 2: ENG 085

This course includes the theories of child development, needs, milestones, and factors that influence development, from preschool through middle childhood. Emphasis is placed on developmental sequences in physical/motor, emotional/social, cognitive, and language domains and the impact of multiple influences on development and learning. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain environmental factors that impact development, and identify strategies for enhancing development. This course is also available through the Virtual Learning Community (VLC).

#### **EDU 146 Child Guidance**

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Prerequisites: State, Take one set: Set 1: ENG 080, RED 080 or Set 2: ENG 085

This course introduces principles and practical techniques including the design of learning environments for providing developmentally appropriate guidance for all children, including those at risk. Emphasis is placed on observation skills, cultural influences, underlying causes of behavior, appropriate expectations, development of self control and the role of communication and guidance. Upon completion, students should be able to demonstrate direct/indirect strategies for preventing problem behaviors, teaching appropriate/acceptable behaviors, negotiation, setting limits and recognizing at risk behaviors. This course is also available through the Virtual Learning Community (VLC).

#### **EDU 151 Creative Activities**

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Prerequisites: State, Take one set: Set 1: ENG 080, RED 080 or Set 2: ENG 085

This course covers planning, creation and adaptation of developmentally supportive learning environments with attention to curriculum, interactions, teaching practices and learning materials. Emphasis is placed on creating and adapting integrated, meaningful, challenging and engaging developmentally supportive learning experiences in art, music, movement and dramatics for all children. Upon completion, students should be able to create, adapt, implement and evaluate developmentally supportive learning materials, experiences and environments. This course is also available through the Virtual Learning Community (VLC).

# Lecture Lab/Clinic Work Exp. Credit EDU 152 Music, Movement, & Lang 3 0 0 3

Prerequisites: State, Take one set: Set 1: ENG 080, RED 080 or Set 2: ENG 085

This course introduces a historical perspective of music and movement and integrates the whole language concept with emphasis on diversity. Emphasis is placed on designing an environment that emphasizes language development through developmentally and culturally appropriate music and movement. Upon completion, students should be able to design an environment that develops language through a music and movement curriculum that emphasizes diversity.

# **EDU 153 Health, Safety, & Nutrit** 3 0 0 3

Prerequisites: State, Take one set: Set 1: ENG 080, RED 080 or Set 2: ENG 085

This course covers promoting and maintaining the health and well-being of all children. Topics include health and nutritional guidelines, common childhood illnesses, maintaining safe and healthy learning environments, recognition and reporting of abuse and neglect and state regulations. Upon completion, students should be able to demonstrate knowledge of health, safety, and nutritional needs, safe learning environments, and adhere to state regulations. *This course is also available through the Virtual Learning Community (VLC)*.

# EDU 161 Intro to Exceptional Chil 3 0 0 3

Prerequisites: State, Take one set: Set 1: ENG 080, RED 080 or Set 2: ENG 085

This course covers children with exceptionalities as life long learners within the context of the community, school and family. Emphasis is placed on inclusion, legal, social/political, environmental, and cultural issues relating to the teaching of children with exceptionalities. Upon completion, students should be able to demonstrate knowledge of identification processes, inclusive techniques, and professional practices and attitudes.

# **EDU 163 Classroom Mgt & Instruct** 3 0 0 3

Prerequisites: State, ENG 080, RED 080

This course covers management and instructional techniques with school-age populations. Topics include classroom management and organization, teaching strategies, individual student differences and learning styles, and developmentally appropriate classroom guidance techniques. Upon completion, students should be able to utilize developmentally appropriate behavior management and instructional strategies that enhance the teaching/learning process and promote students' academic success.

# **EDU 175 Intro to Trade & Industrial Ed** 3 0 0

Prerequisites: State, ENG 080, RED 080

This course introduces the philosophy, scope, and objectives of industrial education. Topics include the development of industrial education, employment opportunities, current events, current practices, and emerging trends. Upon completion, students should be able to describe the history, identify current practices, and describe current trends in industrial education.

# **EDU 176 Occ Analysis & Course Dev** 3 0 0

Prerequisites: State, ENG 080, RED 080

This course covers the principles and techniques of analyzing occupations to select suitable competencies and teaching methods for learning activities. Topics include occupational analysis, instructional methods, competency identification, and curriculum writing. Upon completion, students should be able to identify competencies, organize instructional materials, and select appropriate instructional methods.

# Lecture Lab/Clinic Work Exp. Credit EDU 177 Instructional Methods 2 2 0 3

Prerequisites: State, ENG 080, RED 080

This course covers instructional methods in technical education with emphasis on competency-based instruction. Topics include writing objectives, industrial methods, and determining learning styles. Upon completion, students should be able to select and demonstrate the use of a variety of instructional methods.

# EDU 179 Vocational Student Organ. 3 0 0 3

Prerequisites: State, ENG 080, RED 080

This course covers planning and organizing vocational youth clubs by understanding the structure and operating procedures to use club activities for personal and professional growth. Topics include self-assessment to set goals, club structure, election and installation of officers, club activities, function of committees, running meetings, contest preparation, and leadership skills. Upon completion students should be able to set personal goals, outline club structure, elect and install officers.

#### **EDU 216 Foundations of Education** 4 0 0 4 Prerequisites: State, Take one set Set 1: ENG 090 and RED 090 or Set 2: ENG 095

This course introduces the American educational system and the teaching profession. Topics include historical and philosophical foundations of education, contemporary educational, structural, legal, and financial issues, and experiences in public school classrooms. Upon completion, students should be able to relate classroom observations to the roles of teachers and schools and the process of teacher education. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement at select institutions only. This course is also available through the Virtual Learning Community (VLC).

# **EDU 221 Children with Exceptional** 3 0 0 3 Prerequisites: State, Take one set: Set 1: ENG 090, RED 090, EDU 144 EDU 145 or Set 2: ENG 090, RED 090, PSY 244 PSY 245 or Set 3: ENG 095, EDU 144 EDU 145 or Set 4: ENG 095, PSY 244 PSY 245

This course introduces children with exceptionalities, their families, support services, inclusive/diverse settings, and educational/family plans based on the foundations of child development. Emphasis is placed on the characteristics of exceptionalities, observation and assessment of children, strategies for adapting the learning environment, and identification of community resources. Upon completion, students should be able to recognize diverse abilities, describe the referral process, and depict collaboration with families/professionals to plan/implement, and promote best practice. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement at select institutions only. This course is also available through the Virtual Learning Community (VLC).

# **EDU 234 Infants, Toddlers, & Twos** 3 0 0 3 Prerequisites: State, Take one set: Set 1: ENG 090, RED 090, EDU 119 or Set 2: ENG 095, EDU 119

This course covers the unique needs and rapid changes that occur in the first three years of life and the inter-related factors that influence development. Emphasis is placed on recognizing and supporting developmental milestones through purposeful strategies, responsive care routines and identifying elements of quality, inclusive early care and education. Upon completion, students should be able to demonstrate respectful relationships that provide a foundation for healthy infant/toddler/twos development, plan/select activities/materials, and partner with diverse families.

# **EDU 235 School-Age Dev & Program** 3 0 0 0 3 Prerequisites: State, Take one set: Set 1: ENG 090, RED 090 or Set 2: ENG 095 This course includes developmentally appropriate practices in group settings for school-age children. Emphasis is placed on principles of development, environmental planning, and positive guidance techniques. Upon completion, students should be able to discuss developmental principles for all children ages five to twelve and plan and implement developmentally-appropriate activities.

Lecture

Lab/Clinic Work Exp.

Credit

# **EDU 243 Learning Theory** 3 0 0 3 Prerequisites: State, Take one set Set 1: ENG 090, RED 090 or Set 2: ENG 095 This course provides lateral entry teachers an introduction to learning theory, various styles of learning, and motivational factors involved in the learning process. Emphasis is placed on the development of cognitive skills using the eight types of intelligence and applying these to practical classroom situations. Upon completion, students should be able to describe theories and styles of learning and discuss the relationship between different types of intelligence to learning motivation.

# **EDU 244 Human Growth/Development** 3 0 0 3 Prerequisites: State, Take one set: Set 1: ENG 090, RED 090 or Set 2: ENG 095 This course introduces lateral entry teachers to theories and ages and stages related to human growth and development from birth through adolescence. Emphasis is placed on development through the stages of a child's life in the areas of physical, emotional, social, intellectual, and moral development. Upon completion, students should be able to identify and describe milestones of each stage in all areas of development and discuss factors that influence growth.

# **EDU 245 Policies and Procedures** 3 0 0 0 3 Prerequisites: State, Take one set: Set 1: ENG 090 and RED 090 orSet 2: ENG 095 This course is designed to introduce new lateral entry teachers to the policies and procedures established by the local education agency. Topics include emergency situation procedures, acceptable discipline, chain of command, role of mentors, evaluation procedures, employment requirements, dress codes, and other policies and procedures. Upon completion, students should be able to explain the policies and procedures to students, parents, or others and discuss the purpose of each policy category.

# **EDU 251 Exploration Activities** 3 0 0 3 3 Prerequisites: State, Take one set: Set 1: ENG 090, RED 090 or Set 2: ENG 095 This course covers discovery experiences in science, math, and social studies. Emphasis is placed on developing concepts for each area and encouraging young children to explore, discover, and construct concepts. Upon completion, students should be able to discuss the discovery approach to teaching, explain major concepts in each area, and plan appropriate experiences for children.

**EDU 259 Curriculum Planning** 3 0 0 3 Prerequisites: State, Take one set: Set 1: ENG 090, RED 090, EDU 119 or Set 2: ENG 095, EDU 119 This course is designed to focus on curriculum planning for three to five year olds. Topics include philosophy, curriculum models, indoor and outdoor environments, scheduling, authentic assessment, and planning developmentally appropriate experiences. Upon completion, students should be able to evaluate children's development, critique curriculum, plan for individual and group needs, and assess and create quality environments.

#### Lab/Clinic Work Exp. Lecture Credit

#### EDU 261 Early Childhood Admin I

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Prerequisites: State, Take one set: Set 1: ENG 090, RED 090 or Set 2: ENG 095

Corequisites: EDU 119

This course introduces principles of basic programming and staffing, budgeting/financial management and marketing, and rules and regulations of diverse early childhood programs. Topics include program structure and philosophy, standards of NC child care programs, finance, funding resources, and staff and organizational management. Upon completion, students should be able to develop components of program/personnel handbooks, a program budget, and demonstrate knowledge of fundamental marketing strategies and NC standards. This course is also available through the Virtual Learning Community (VLC).

### **EDU 262 Early Childhood Admin II**

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Prerequisites: State, Take one set: Set 1: ENG 090, RED 090, EDU 261 or Set 2: ENG 095, EDU 261 Corequisites: EDU 119

This course focuses on advocacy/leadership, public relations/community outreach and program quality/evaluation for diverse early childhood programs. Topics include program evaluation/ accreditation, involvement in early childhood professional organizations, leadership/mentoring, family, volunteer and community involvement and early childhood advocacy. Upon completion, students should be able to define and evaluate all components of early childhood programs, develop strategies for advocacy and integrate community into programs. This course is also available through the Virtual Learning Community (VLC).

#### EDU 271 Educational Technology

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Prerequisites: State, Take one set: Set 1: ENG 090, RED 090 or Set 2: ENG 095

This course introduces the use of technology to enhance teaching and learning in all educational settings. Topics include technology concepts, instructional strategies, materials and adaptive technology for children with exceptionalities, facilitation of assessment/evaluation, and ethical issues surrounding the use of technology. Upon completion, students should be able to apply technology enhanced instructional strategies, us a variety of technology resources and demonstrate appropriate technology skills in educational environments. This course is also available through the Virtual Learning Community (VLC).

#### EDU 280 Language & Literacy Exp

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Prerequisites: State, Take one set: Set 1: ENG 090, RED 090 or Set 2: ENG 095

This course is designed to expand students' understanding of children's language and literacy development and provides strategies for enhancing language/literacy experiences in an enriched environment. Topics include selection of diverse literature and interactive media, the integration of literacy concepts throughout the curriculum, appropriate observations/assessments and inclusive practices. Upon completion, students should be able to select, plan, implement and evaluate developmentally appropriate and diverse language/literacy experiences. This course is also available through the Virtual Learning Community (VLC).

# EDU 281 Instruc Strat/Read & Writ

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Prerequisites: State, ENG 090, RED 090

This course covers concepts, resources, and methods for teaching reading and writing to elementary through middle-grade children. Topics include the importance of literacy, learning styles, skills assessment, various reading and writing approaches and instructional strategies. Upon completion, students should be able to assess, plan, implement and evaluate school-age literacy experiences as related to the North Carolina Standard Course of Study. This course is also available through the Virtual Learning Community (VLC).

#### **EDU 282 Early Childhood Lit**

Prerequisites: State, Take one set: Set 1: ENG 090, RED 090 or Set 2: ENG 095

This course covers the history, selection, and integration of literature and language in the early childhood curriculum. Topics include the history and selection of developmentally appropriate children's literature and the use of books and other media to enhance language and literacy in the classroom. Upon completion, students should be able to select appropriate books for storytelling, reading aloud, puppetry, flannel board use, and other techniques.

EDU 284 Early Child Capstone Prac 1 9 0 4
Prerequisites: State, Take one set: Set 1: ENG 090, RED 090, EDU 119, EDU 144, EDU 145, EDU 146, EDU 151 or Set 2: ENG 090, RED 090, EDU 119, PSY 244, PSY 245, EDU 146, EDU 151 or Set 3: ENG 090, RED 090, EDU 119, PSY 245, EDU 144, EDU 146, EDU 151 or Set 4: ENG 090, RED 090, EDU 119, PSY 245, EDU 144, EDU 146, EDU 151 or Set 4: ENG 090, RED 090, EDU 119, PSY 244, EDU 145, EDU 146, EDU 151 or Set 5: ENG 095, EDU 119, EDU 144, EDU 145, EDU 146, EDU 151 or Set 6: ENG 095, EDU 119, PSY 244, PSY 245, EDU 146, EDU 151 or Set 7: ENG 095, EDU 119, EDU 144, PSY 245, EDU 146, EDU 151 or Set 8: ENG 095, EDU 119, EDU 146, EDU 151
This course is designed to allow students to apply skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on designing, implementing and evaluating developmentally appropriate activities and environments for all children; supporting/involving families; and modeling reflective and professional practices. Upon completion, students should be able to demonstrate developmentally appropriate plans/assessments, appropriate guidance techniques and ethical/professional behaviors as indicated by assignments and on-site faculty visits.

# **ENGINEERING**

#### **EGR 131 Intro to Electronics Tech**

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This course introduces the basic skills required for electrical/electronics technicians. Topics include soldering/desoldering, safety practices, test equipment, scientific calculators, AWG wire table, the resistor color code, electronic devices, problem solving, and use of hand tools. Upon completion, students should be able to solder/desolder, operate test equipment, apply problem-solving techniques, and use a scientific calculator.

#### **EGR 150 Intro to Engineering**

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This course is an overview of the engineering profession. Topics include career opportunities, ethics, public safety, the engineering method and design process, written and oral communication, interpersonal skills and team building, and microcomputers. Upon completion, students should be able to understand the engineering process and profession. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# EGR 210 Intro to Elec/Com Eng Lab 1 3 0

Prerequisites: State, MAT 271 and PHY 251

This course provides an overview of electrical and computer engineering, through a lecture and laboratory setting. Topics include fundamental concepts, electronic circuits, digital circuits, communication systems, and signal processing. Upon completion, students should be able to discuss the wide range of fields available to the electrical or computer engineer. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

#### Lab/Clinic Work Exp. Credit Lecture

### **EGR 211 Intro to Computer Org**

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Prerequisites: State, MAT 271, PHY 251 and CSC 134

This course provides an introduction to key concepts in computer organization. Topics include number representations, switching circuits, logic design, microprocessor design, assembly programming, interrupts and traps, structured program development and the C programming language. Upon completion, students should be able to represent numbers in various systems; to explain the functions of a microprocessor; and to design logic systems and circuits. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

#### EGR 212 Logic System Design I

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Prerequisites: State, MAT 271 and PHY 251

This course provides an introduction to digital circuits and analysis. Topics include Boolean Algebra; mixed logic; design of combinational circuits; introduction to sequential systems; and MSI building blocks. Upon completion, students should be able to analyze and design digital circuits and systems. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

#### **EGR 213 Electric Circuits**

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Prerequisites: State, MAT 271, PHY 251 and EGR 210

This course provides an introduction to theory, analysis and design of electric circuits. Topics include voltage, current, power, resistance, capacitance, inductance, Kirchoff's laws, nodal and mesh analysis, Thevenin's theorem, Norton's theorem, steady state and transient analysis, and operational amplifiers. Upon completion, students should be able to explain voltage, current, and power; to analyze electric circuits; and to design circuits using operational amplifiers. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## **EGR 220 Engineering Statics**

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Prerequisites: State, PHY 251

Corequisites: State, MAT 272

This course introduces the concepts of engineering based on forces in equilibrium. Topics include concentrated forces, distributed forces, forces due to friction, and inertia as they apply to machines, structures, and systems. Upon completion, students should be able to solve problems which require the ability to analyze systems of forces in static equilibrium. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## **EGR 225 Engineering Dynamics**

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Prerequisites: State, EGR 220 Corequisites: State, MAT 273

This course introduces the concepts of engineering based on the analysis of motion in Cartesian, cylindrical, and Spherical coordinate systems. Topics include the two and three dimensional motion of particles and rigid bodies, the forces associated with that motion, and relative motion between two coordinate systems. Upon completion, students should be able to solve problems which require the ability to analyze the motion and forces involved in a dynamic system. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# **Lecture Lab/Clinic Work Exp. Credit EGR 228 Intro to Solid Mechanics** 3 0 0 3

Prerequisites: State, EGR 220

This course provides an introduction to engineering theory of deformable solids and applications. Topics include stress and deformation resulting from axial, torsion, and bending loads; shear and moment diagrams; Mohr's circle of stress; and strain and buckling of columns. Upon completion, students should be able to analyze solids subject to various forces and design systems using a variety of materials. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# EGR 230 Engineering Materials 3 0 0 3

Prerequisites: State, CHM 151

This course provides an introduction to fundamental physical principals governing the structure and constitution of metallic and nonmetallic materials. Topics include the relationships among the fundamental physical principles and the mechanical, physical and chemical properties of engineering materials. Upon completion, students should be able to explain the fundamental physical properties important to the design and understanding of engineering materials. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# **ELECTRICITY**

# **ELC 111 Intro to Electricity** 2 2 0 3

Prerequisites: Local, PSG 110 Corequisites: Local, PSG 111

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.

# **ELC 113 Basic Wiring I** 2 6 0

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

#### **ELC 128 Intro to PLC** 2 3 0

This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to install PLCs and create simple programs.

# **ELC 131 DC/AC Circuit Analysis** 4 3 0 5 Corequisites: Local, Take One Set: Set 1: MAT 070; Set 2: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050; Set 3: MAT 060, DMA 040, DMA 050

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

# **ELECTRONICS**

# ELN 131 Semiconductor Applications 3 3 0 4

Prerequisites: Local, ELC 131

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 discrete component circuits using appropriate techniques and test equipment.

# ELN 133 Digital Electronics 3 3 0 4

This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, MSI and LSI circuits, AC/DC converters, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.

#### ELN 231 Industrial Controls 2 3 0

Prerequisites: State, ELC 112, ELC 131, or ELC 140

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

## ELN 232 Intro to Microprocessors 3 3 0

Prerequisites: State, ELN 133

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

# **EMERGENCY MEDICAL SCIENCE**

#### **EMS 110 EMT-Basic** 5 6 0 7

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-Basic certification.

EMS 110A EMT-Basic	3	3	0	4	
EMS 110B EMT-Basic	2	3	0	3	
EMS 110A and EMS 110B are the equivalent of EMS 110					

EMS 120 Intermediate Interventions 2 3 0

Prerequisites: State, EMS 110

Corequisites: State, Take One Set 1: EMS-121, EMS-130, and EMS-131 or Set 2: EMS-122, EMS-130, and EMS-131

This course is designed to provide the necessary information for interventions appropriate to the EMT-Intermediate and is required for intermediate certification. Topics include automated external defibrillation, basic cardiac electrophysiology, intravenous therapy, venipuncture, acid-base balance, and fluids and electrolytes. Upon completion, students should be able to properly establish an IV line, obtain venous blood, utilize AEDs, and correctly interpret arterial blood gases.

# Lecture Lab/Clinic Work Exp. Credit EMS 121 EMS Clinical Practicum I 0 6 0 2

Prerequisites: State, EMS 110

Corequisites: State, EMS 120, EMS 130, and EMS 131

This course is the initial hospital and field internship and is required for intermediate and paramedic certification. Emphasis is placed on intermediate-level care. Upon completion, students should be able to demonstrate competence with intermediate-level skills.

#### EMS 125 EMS Instructor Methodology 1

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This course covers the information needed to develop and instruct EMS courses. Topics include instructional methods, lesson plan development, time management skills, and theories of adult learning. Upon completion, students should be able to teach EMS courses and meet the North Carolina EMS requirements for instructor methodology.

# **EMS 130 Pharmacology I for EMS** 1 3 0

Prerequisites: State, EMS 110

Corequisites: State, EMS 120 and EMS 131

This course introduces the fundamental principles of pharmacology and medication administration and is required for intermediate and paramedic certification. Topics include terminology, pharmacokinetics, pharmacodynamics, weights, measures, drug calculations, legislation, and administration routes. Upon completion, students should be able to accurately calculate drug dosages, properly administer medications, and demonstrate general knowledge of pharmacology.

# EMS 131 Adv Airway Management 1 2 0

Prerequisites: State, EMS 110

Corequisites: State, EMS 120 and EMS 130

This course is designed to provide advanced airway management techniques and is required for intermediate and 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.

# EMS 140 Rescue Scene Management 1 3 0

This course introduces rescue scene management and is required for paramedic certification. Topics include response to hazardous material conditions, medical 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.

# **EMS 150 Emerg Vehicle & EMS Comm** 1 3 0

This course examines the principles governing emergency vehicles, maintenance of emergency vehicles, and EMS communication equipment and is required for paramedic certification. Topics include applicable motor vehicle laws affecting emergency vehicle operation, defensive driving, collision avoidance techniques, communication systems, and information management systems. Upon completion, students should have a basic knowledge of emergency vehicles, maintenance, and communication needs.

# EMS 210 Advanced Patient Assessment 1 3 0

Prerequisites: State, EMS 120, EMS 130, EMS 131, and EMS 121 or EMS 122

This course covers advanced patient assessment techniques and is required for paramedic certification. Topics include initial assessment, medical-trauma history, field impression, complete physical exam process, on-going assessment, and documentation skills. Upon completion, students should be able to utilize basic communication skills and record and report collected patient data.

# Lecture Lab/Clinic Work Exp. Credit EMS 220 Cardiology 2 6 0 4

Prerequisites: State, EMS 120, EMS 130, and EMS 131

This course provides an in-depth study of cardiovascular emergencies and is required for paramedic certification. Topics include anatomy and physiology, pathophysiology, rhythm interpretation, cardiac pharmacology, and patient treatment. Upon completion, students should be able to certify at the Advanced Cardiac Life Support Provider level utilizing American Heart Association guidelines.

## **EMS 221 EMS Clinical Pract II** 0 9 0

Prerequisites: State, EMS 121; or EMS 122 and COE 111

This course is a continuation of the hospital and field internship required for paramedic certification. Emphasis is placed on advanced-level care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

# **EMS 231 EMS Clinical Pract III** 0 9 0 3

Prerequisites: State, EMS 221; or EMS 222 and COE 121

This course is a continuation of the hospital and field internship required for paramedic certification. Emphasis is placed on advanced-level care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

## **EMS 235 EMS Management** 2 0 0

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. This course is also available through the Virtual Learning Community (VLC).

# EMS 240 Special Needs Patients 1 2 0 2

Prerequisites: State, EMS 120, EMS 121 or EMS 122, EMS 130, and EMS 131

This course includes concepts of crisis intervention and techniques of dealing with special needs patients and is required for paramedic certification. Topics include behavioral emergencies, abuse, assault, challenged patients, personal well-being, home care, and psychotherapeutic pharmacology. Upon completion, students should be able to recognize and manage frequently encountered special needs patients.

# EMS 241 EMS Clinical Practicum IV 0 9 0 3

Prerequisites: State, EMS 231; or EMS 232 and COE 131

This course is a continuation of the hospital and field internship required for paramedic certification. Emphasis is placed on advanced-level care. Upon completion, students should be able to provide advanced-level patient care as an entry-level paramedic.

# EMS 250 Ad Medical Emergencies 2 3 0 3

Prerequisites: State, EMS 120, EMS 130, EMS 131, and EMS 121 or EMS 122

This course provides an in-depth study of medical conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include pulmonology, neurology, endocrinology, anaphylaxis, gastroenterology, toxicology, and environmental emergencies integrating case presentation and emphasizing pharmacotherapeutics. Upon completion, students should be able to recognize and manage frequently encountered medical conditions based upon initial patient impression.

#### Lab/Clinic Work Exp. Lecture Credit

#### EMS 260 Ad Trauma Emergencies

Prerequisites: State, EMS 120, EMS 130, EMS 131, and EMS 121 or EMS 122

This course provides in-depth study of trauma including pharmacological interventions for conditions frequently encountered in the pre-hospital setting and is required for paramedic certification. Topics include hemorrhage control, shock, burns, and trauma to head, spine, soft tissue, thoracic, abdominal, and musculoskeletal areas with case presentations utilized for special problems situations Upon completion, students should be able to recognize and manage traumaituations based upon patient impressions and should meet requirements of BTLS or PHTLS courses.

#### EMS 270 Life Span Emergencies

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Prerequisites: State, EMS 120, EMS 130, and EMS 131

This course, required for paramedic certification, covers medical/ethical/legal issues and the spectrum of age-specific emergencies from conception through death. 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 and certify at the Pediatric Advanced Life Support Provider level.

#### EMS 280 EMS Bridging Course

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This course is designed to bridge the knowledge gained in a continuing education paramedic program with the knowledge gained in an EMS curriculum program. Topics include patient assessment, documentation, twelve-lead ECG analysis, thrombolytic agents, cardiac pacing, and advanced pharmacology. Upon completion, students should be able to perform advanced patient assessment documentation using the problem-oriented medical record format and manage complicated patients.

### EMS 285 EMS Capstone

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Prerequisites: State, EMS 220, EMS 250, and EMS 260

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.

# **ENGLISH**

## **ENG 080 Writing Foundations**

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Prerequisites: Local, Placement

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

#### **ENG 085 Reading & Writing Found**

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Prerequisites: State, ENG 070 and RED 070, or ENG 075

This course uses whole language to develop proficiency in reading and writing for college. Emphasis is placed on applying analytical and critical reading skills to a variety of texts and on introducing the writing process. Upon completion, students should be able to recognize and use various patterns of text organization and compose effective paragraphs. This course integrates ENG 080 and RED 080. This course does not satisfy the developmental reading and writing prerequisites for ENG 111 or ENG 111A.

#### Lab/Clinic Work Exp. Credit Lecture

#### ENG 085A Reading & Writing Found Lab 0

Prerequisites: State, ENG 070 and RED 070; or ENG 075

Corequisites: State, ENG 085

This laboratory provides the opportunity to practice the skills introduced in ENG 085. Emphasis is placed on practical skills for applying analytical and critical reading skills to a variety of texts and on the writing process. Upon completion, students should be able to apply those skills in the production of effective paragraphs.

#### **ENG 090 Composition Strategies**

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Prerequisites: State, ENG 080 or ENG 085

Corequisites: Local, ENG 090A

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

#### **ENG 090A Comp Strategies Lab**

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Prerequisites: State, ENG 080 or ENG 085

Corequisites: State, ENG 090

This writing lab is designed to practice the skills introduced in ENG 090. Emphasis is placed on learning and applying the conventions of standard written English in developing paragraphs within the essay. Upon completion, students should be able to compose a variety of paragraphs and a unified, coherent essay.

#### **ENG 095 Reading & Comp Strategies**

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Prerequisites: State, ENG 080 and RED 080; or ENG 085

This course uses whole language to strengthen proficiency in reading and writing for college. Emphasis is placed on applying critical reading skills to narrative and expository texts and on using the writing process. Upon completion, students should be able to comprehend, analyze, and evaluate college texts and to compose essays in preparation for college writing. This course integrates ENG 090 and RED 090. This course satisfies the developmental reading and writing prerequisites for ENG 111 and ENG 111A.

## ENG 095A Reading & Comp Strat Lab

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Prerequisites: State, ENG 080 and RED 080; or ENG 085

Corequisites: State, ENG 095

This laboratory provides the opportunity to practice the skills introduced in ENG 095. Emphasis is placed on practical skills for applying critical reading skills to narrative and expository texts and on the writing process. Upon completion, students should be able to apply those skills in the production of effective essays in preparation for college writing.

#### **ENG 111 Expository Writing**

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Prerequisites: State, ENG 090, RED 090; Local, ENG 090A

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

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#### **ENG 112 Argument-Based Research** 3

Prerequisites: State, ENG 111

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

# ENG 113 Literature-Based Research 3 0

Prerequisites: State, ENG 111

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

## ENG 114 Prof Research & Reporting 3 0 0 3

Prerequisites: State, ENG 111

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

# **ENG 125 Creative Writing I** 3 0 0 3

Prerequisites: State, ENG 111

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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# **ENG 134 Introduction to Poetry** 3 0 0 3

Prerequisites: State, ENG 111

Corequisites: State, ENG 112, ENG 113, or ENG 114

This course provides intensive study of the poem as a literary form, based on close reading of representative texts. Emphasis is placed on the development and analysis of poetry. Upon completion, students should be able to interpret, analyze, and discuss the distinguishing features of poetry. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# ENG 231 American Literature I 3 0 0 3

Prerequisites: State, ENG 112, ENG 113, or ENG 114

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

# Lecture Lab/Clinic Work Exp. Credit ENG 232 American Literature II 3 0 0 3

Prerequisites: State, ENG 112, ENG 113, or ENG 114

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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## **ENG 235 Survey of Film as Lit** 3 0 0

Prerequisites: State, ENG 113

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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# ENG 241 British Literature I 3 0 0 3

Prerequisites: State, ENG 112, ENG 113, or ENG 114

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

## ENG 242 British Literature II 3 0 0

Prerequisites: State, ENG 112, ENG 113, or ENG 114

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

# **ENG 253 The Bible as Literature** 3 0 0

Prerequisites: State, ENG 112, ENG 113, or ENG 114

This course introduces the Hebrew Old Testament and the Christian New Testament as works of literary art. Emphasis is placed on the Bible's literary aspects including history, composition, structure, and cultural contexts. Upon completion, students should be able to identify and analyze selected books and passages using appropriate literary conventions. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# ENG 272 Southern Literature 3 0 0 3

Prerequisites: State, ENG 112, ENG 113, or ENG 114

This course provides an analytical study of the works of several Southern authors. Emphasis is placed on the historical and cultural contexts, themes, aesthetic features of individual works, and biographical backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and discuss selected works. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# Lecture Lab/Clinic Work Exp. Credit ENG 273 African-American Literature 3 0 0 3

Prerequisites: State, ENG 112, ENG 113, or ENG 114

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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# ENVIRONMENTAL SCIENCE

#### ENV 110 Environmental Science 3 0 0

This course covers the environmental problems facing society today. Topics include population, natural resources, air and water pollution, and waste disposal problems. Upon completion, students should be able to demonstrate insight into the role the individual plays in shaping the environment.

## **ENV 120 Earth Science** 3 2 0

Prerequisites: State, ENV 110 or BIO 140 and BIO 140A

This course covers the fundamental principles of earth science that provide a foundation for continued study in environmental science. Emphasis is placed on the basic principles of geology, oceanography, meteorology, astronomy, and the development of inquiry about the natural world through observation. Upon completion, students should be able to demonstrate an understanding of the component areas of earth science.

## ENV 218 Environmental Health 3 0 0

Prerequisites: State, BIO 111, ENV 110, or BIO 140 and BIO 140A

This course covers the influence of environmental conditions on human health. Emphasis is placed on environmental contaminants and the major exposure routes of the human body. Upon completion, students should be able to examine segments of the environment, including air, water, and food, and determine how the conditions of these influence human health.

# **ENV 222 Air Quality** 3 2 0 4

Prerequisites: State, CHM 131 and ENV 110 or BIO 140 and BIO 140A

This course introduces the study of air quality and air pollution. Emphasis is placed on air pollution basics, current atmospheric conditions, effects of air pollution, air quality analysis and measurement, and regulatory control of air pollution. Upon completion, students should be able to demonstrate an understanding of the environmental hazards associated with air pollution from a human health and welfare perspective.

# ENV 224 Land Resource Management 3 2 0 4

Prerequisites: State, ENV 110 or BIO 140 and BIO 140A or ENV 120 or GEL 120 or PHS 130 This course covers methods of properly managing land-based resources for maximum conservation and use. Emphasis is placed on the physical, biological, and ecological principles underlying sustainable use of soil, mineral, forest, and ground and surface water resources for current and future generations. Upon completions, students should be able to develop conservation plans for sustainable use of major land resources.

#### **ENV 226 Environmental Law**

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This course covers federal laws and acts concerning environmental quality standerds and the use of resources, legal procedures for enforcing laws, and problems concerning enforcement. Emphasis is placed on environmental law basics, water quality laws, air quality laws, waste disposal laws, and biological resource protection laws. Upon completion, students should be able to demonstrate an understanding of federal/state environmental laws and their importance to the protection of environmental quality.

# **GEOGRAPHY**

### **GEO 111 World Regional Geography**

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

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## GRAPHIC ARTS

#### **GRA 110 Graphic Arts Orientation**

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This course covers the history, development, and commercial applications of the major printing processes. Topics include offset lithography, screen printing, intaglio, relief printing, and emerging technologies. Upon completion, students should be able to demonstrate an understanding of the major characteristics, advantages, and disadvantages of each process.

#### **GRA 121 Graphic Arts I**

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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.

#### **GRA 151 Computer Graphics I**

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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.

#### **GRA 152 Computer Graphics II**

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Prerequisites: State, GRA 151

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.

	Lecture	Lab/Clinic	Work Exp.	Credit
GRA 153 Computer Graphics III	1	3	0	2
Prerequisites: State, GRA 152				
This course is a continuation of GRA 152	. Emphasis	is placed on adv	anced compute	r graphics
hardware and software applications. Upo	n completion	n, students shoul	d be able to der	nonstrate
competence in selection and utilization of	appropriate	software for spe	cialized applica	tions.
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GRA 154 Computer Graphics IV	1	3	0	2
Prerequisites: State, GRA 153				

This course is a continuation of GRA 153. Emphasis is placed on advanced techniques using a variety of hardware and software applications to produce complex projects. Upon completion,

students should be able to use electronic document production tools.

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**GRA 221 Graphic Arts II**Prerequisites: State, GRA 121, GRA 151

This course is a continuation of GRA 121. Topics include multi-color image preparation, pre-press production, control of close/hairline register in image assembly and press operation, and post-press procedures. Upon completion, students should be able to demonstrate competence in all phases of graphic arts production.

# **GRA 222 Graphic Arts III** 2 4 0 4

Prerequisites: State, GRA 221, GRA 152

This course is a continuation of GRA 221. Topics include advanced electronic pre-press, press operation, and post-press procedures. Upon completion, students should be able to demonstrate competence in all phases of advanced graphic arts production.

# **GRA 245 Printing Sales/Service** 3 0 0 3

This course covers the operation of a sales, marketing, and service program for a printing company or printing supplier. Topics include marketing, prospecting, telephone sales, customer service, order entry, closing the sale, and answering objections. Upon completion, students should be able to understand the operation of sales and service in printing and printing supply organizations.

# **GRA 250 E-Document Publishing** 1 3 0 2

Prerequisites: State, GRA 151

This course provides instruction in electronic publishing of cross-media, cross-platform digital documents and the workflow requirements associated with output options. Topics include the creation, editing, conversion, color separation, output requirements and options, interactivity, and delivery methods. Upon completion, students should be able to create, output, and distribute cross-media, cross-platform digital documents within specifications.

# **GRA 255 Image Manipulation I** 1 3 0 2

Prerequisites: State, GRA 151 or GRD 151

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.

## **Lecture Lab/Clinic Work Exp. Credit GRA 256 Image Manipulation II**Prerequisites: State, GRA 255 Lecture Lab/Clinic Work Exp. Credit

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.

## **GRA 257 Image Manipulation III** 1 3 0 2 Prerequisites: State, GRA 153, GRA 256

This course is a continuation of GRA 256. Emphasis is placed on producing quality color separations through image manipulation, gray component replacement/undercolor removal, dot-gain compensation, and color correction. Upon completion, students should be able to use hardware and software to produce color separations that have been adjusted to meet tolerances of printing production equipment.

## **GRAPHIC DESIGN**

## **GRD 110 Typography I**2 2 0 3 This course introduces the history and mechanics of type and its application to layout and design. Tonics include typographic fundamentals, anatomy measurements, composition identification and

This course introduces the history and mechanics of type and its application to layout and design. Topics include typographic fundamentals, anatomy, measurements, composition, identification, and terminology. Upon completion, students should be able to demonstrate proficiency in design application, analysis, specification, and creation of typographic elements.

## GRD 141 Graphic Design I 2 4 0

This course introduces the conceptualization process used in visual problem solving. Emphasis is placed on learning the principles of design and on the manipulation and organization of elements. Upon completion, students should be able to apply design principles and visual elements to projects.

## **GRD 142 Graphic Design II** 2 4 0 4

Prerequisites: State, GRD 141 or ART 121

This course covers the application of visual elements and design principles in advertising and graphic design. Topics include creation of various designs, such as logos, advertisements, posters, outdoor advertising, and publication design. Upon completion, students should be able to effectively apply design principles and visual elements to projects.

## **GRD 265 Digital Print Production** 1 4 0 3

Prerequisites: State, GRD 151 or GRA 151

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.

## **GRD 271 Multimedia Design I** 1 3 0

Prerequisites: State, GRA 151

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.

# **Lecture** Lab/Clinic Work Exp. Credit GRD 280 Portfolio Design 2 4 0 4 Prerequisites: State, GRD 142 and GRA 152 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 résumé 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.

## **GUNSMITHING**

GSM 111 Gunsmithing I	2	12	0	6		
This course introduces hand tools, blueprints, and basic machine tools used in gunsmithing.						
Emphasis is placed on safety and the completion of projects from blueprints using hand and ma-						
chine tools. Upon completion, students should be able to read and work from blueprints using hand						
tools and make basic machine tool setups.						

## **GSM 120 Gunsmithing Tools** 2 12 0 6 This course covers the manufacture of tools used in the gunsmithing trade. Emphasis is placed on the production of tools used for gunsmithing from working drawings. Upon completion, students should be able to use blueprints to produce tools and fixtures for use in gunsmithing.

## **GSM 125 Barrel Fitting/Alteration** 3 9 0 6 This course covers custom barrel fitting, chambering, and action alterations. Emphasis is placed on safety and completion of custom-barreled actions using hand and machine tools and welding equipment. Upon completion, students should be able to perform alterations to various firearms, including custom-barreled actions, recoil pads, and choke tubes.

## **GSM 127 General Repair** 3 9 0 6 This course introduces the design and function of firearms, sight mounting, and basic reloading of ammunition. Emphasis is placed on safety and the completion of repair projects using hand and machine tools and the furnace. Upon completion, students should be able to diagnose and correct basic malfunctions, produce and fix simple parts, choose and install sights, and perform basic reloading skills.

## **GSM 225 Gun Metal Refinishing** 2 12 0 6 This course introduces gun metal finishes. Topics include metal polishing and the finishing of steel, aluminum, and castings using hand tools and buffing equipment. Upon completion, students should be able to caustic blue, rust blue, anodize, parkerize, and color-case harden gunmetal.

GSM 227 Adv Repair Technology	2	12	0	6
This course covers advanced repair techniq	ues and t	rigger designs on	rifles and shots	guns. Emphasis
is placed on repairing various firearms and	adjusting	trigger pulls to sa	afe industry star	ndards using
fixtures and hand and machine tools. Upon	complet	ion, students shou	ıld be able to sa	afely adjust and
repair various firearms.				

GSM 230 Handgun Technology	2	9	0	5
This course covers the design, function, ar	nd customizir	ng of handguns	. Emphasis is pl	laced on
repairs and custom alterations. Upon completion, students should be able to perform repairs on				
revolvers and semi-automatic pistols and c	ustomize har	ndguns.		

### Lab/Clinic Work Exp. Lecture Credit

This course introduces current materials and gunsmithing techniques. Emphasis is placed on material characteristics, applications, and tooling requirements. Upon completion, students should be able to demonstrate competence in current gunsmithing techniques such as composite stockmaking and synthetic bedding.

## HEALTH

## **HEA 110 Personal Health/Wellness**

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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## HEA 112 First Aid & CPR

**GSM 235 Current Gunsmithing Tech** 

This course introduces the basics of emergency first aid treatment. Topics include rescue breathing, CPR, first aid for choking and bleeding, and other first aid procedures. Upon completion, students should be able to demonstrate skills in providing emergency care for the sick and injured until medical help can be obtained. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## **HEA 120 Community Health**

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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## HISTORY

### HIS 111 World Civilizations I 3 0

Prerequisites: Local, RED 090, ENG 080

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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

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### **HIS 112 World Civilizations II** 3 0 3

Prerequisites: Local, RED 090, ENG 080

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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

## Lecture Lab/Clinic Work Exp. Credit HIS 121 Western Civilization I 3 0 0 3

Prerequisites: Local, RED 090, ENG 080

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

## HIS 122 Western Civilization II 3 0 0 3

Prerequisites: Local, RED 090, ENG 080

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

## **HIS 131 American History I** 3 0 0 3

Prerequisites: Local, RED 090, ENG 080

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

## $\textbf{HIS 132 American History II} \qquad \qquad 3 \qquad \qquad 0 \qquad \qquad 0 \qquad \qquad 3$

Prerequisites: Local, RED 090, ENG 080

This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

## HIS 145 The Second World War 3 0 0 3

Prerequisites: Local RED 090, ENG 080

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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

## **HIS 211 Ancient History** 3 0 0 3

Prerequisite: Local, RED 090, ENG 080

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. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

## include World War II, the Cold War, social unrest, the Vietnam War, the Great Society, and current political trends. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in recent America. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement. HORTICULTURE **HOR 112 Landscape Design I** This course covers landscape principles and practices for residential and commercial sites. Emphasis is placed on drafting, site analysis, and common elements of good design, plant material selection, and proper plant utilization. Upon completion, students should be able to read, plan, and draft a landscape design. **HOR 114 Landscape Construction** 2 0 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. 3 HOR 116 Landscape Management I This course covers information and skills necessary to analyze a property and develop a management schedule. Emphasis is placed on property measurement, plant condition, analysis of client needs, and plant culture needs. Upon completion, students should be able to analyze a property, develop management schedules, and implement practices based on client needs. HOR 118 Equipment Op & Maint This course covers the proper operation and maintenance of selected equipment used in horticulture. Emphasis is placed on the maintenance, minor repairs, safety devices, and actual operation of selected equipment. Upon completion, students should be able to design a maintenance schedule, service equipment, and demonstrate safe operation of selected equipment. **HOR 124 Nursery Operations** This course covers nursery site and crop selection, cultural practices, and production and marketing methods. Topics include site considerations, water availability, equipment, irrigation, fertilization, containers, media, and pest control. Upon completion, students should be able to design and implement a nursery operation and grow and harvest nursery crops. **HOR 134 Greenhouse Operations** This course covers the principles and procedures involved in the operation and maintenance of greenhouse facilities. Emphasis is placed on the operation of greenhouse systems, including the environmental control, record keeping, scheduling, and production practices. Upon completion, students should be able to demonstrate the ability to operate greenhouse systems and facilities to produce greenhouse crops. **HOR 150 Intro to Horticulture**

Lecture

This course is a study of American society from the post-Depression era to the present. Topics

HIS 231 Recent American History

Prerequisite: Local, RED 090, ENG 080

Lab/Clinic Work Exp.

Credit

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an understanding of the basic principles of horticulture.

This course covers the history, development, and basic techniques of horticulture. Topics include propagation techniques, planting procedures, watering and fertility, plant growth, pest and disease control, and garden design and history. Upon completion, students should be able to demonstrate

# HOR 152 Horticultural Practices 0 3 0 1 This course covers the maintenance of ornamental plantings and production areas. Topics include maintenance of flower beds, vegetable gardens, greenhouses, and container and field nursery stock using sound horticultural practices. Upon completion, students should be able to apply the principles and practices of maintaining ornamental landscape plantings. HOR 160 Plant Materials I 2 2 0 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

HOR 162 Applied Plant Science 2 2 0 3

the proper selection and utilization of plant materials.

This course introduces the basic concepts of botany as they apply to horticulture. Topics include nomenclature, physiology, morphology, and anatomy as they apply to plant culture. Upon completion, students should be able to apply the basic principles of botany to horticulture.

HOR 164 Hort Pest Management 2 2 0

This course covers the identification and control of plant pests including insects, diseases, and weeds. Topics include pest identification and chemical regulations, safety, and pesticide application. Upon completion, students should be able to meet the requirements for North Carolina Commercial Pesticide Ground Applicators license.

## **HOR 166 Soils & Fertilizers** 2 2 0

This course covers the physical and chemical properties of soils and soil fertility and management. Topics include soil formation, classification, physical and chemical properties, testing, fertilizer application, and other amendments. Upon completion, students should be able to analyze, evaluate, and properly amend soils/media.

**HOR 168 Plant Propagation** 2 2 0 3

This course is a study of sexual and asexual reproduction of plants. Emphasis is placed on seed propagation, grafting, stem and root propagation, micro-propagation, and other propagation techniques. Upon completion, students should be able to successfully propagate ornamental plants.

HOR 213 Landscape Design II 2 2 0

Prerequisites: State, HOR 112

This course covers residential and commercial landscape design, cost analysis, and installation. Emphasis is placed on job cost estimates, installation of the landscape design, and maintenance techniques. Upon completion, students should be able to read landscape design blueprints, develop cost estimates, and implement the design.

HOR 215 Landscape Irrigation 2 2 0 3

This course introduces basic irrigation design, layout, and installation. Topics include site analysis, components of irrigation systems, safety, types of irrigation systems, and installation techniques. Upon completion, students should be able to design and install basic landscape irrigation systems.

HOR 217 Landscape Management II 1 3 0 2

Prerequisites: State, HOR 110 or HOR 116

This course provides additional opportunities to design plans, write contracts, and present proposals. Emphasis is placed on the development, pricing, and presentation of proposals and additional exploration of cultural applications. Upon completion, students should be able to analyze a property, develop a management plan, and price and present that plan.

### Lecture Lab/Clinic Work Exp. Credit **HOR 251 Insects & Diseases** 3 This course introduces insects and diseases of economic importance to horticultural crops. Topics include insect life cycles and identifying characteristics; plant diseases, including their signs and symptoms; control methods; and insect scouting for IPM. Upon completion, students should be able to demonstrate an understanding of insect and disease identification, collection, and control. 9 0 9 3 **HOR 253 Horticulture Turfgrass**

Prerequisites: State, HOR 162 or HOR 166

This course covers information and skill development necessary to establish and manage landscape turfgrasses. Topics include grass identification, establishment, cultural requirements, application of control products, fertilization, and overseeding techniques. Upon completion, students should be able to analyze a landscape site and determine those cultural and physical activities needed to establish or mange a quality turf.

## **HOR 255 Interiorscapes** This course covers plant selection, design, and management for interior settings. Topics include tropical plant identification, cultural requirements, insect and disease identification and control, and

design and management requirements for interior plants. Upon completion, students should be able to design, install, and manage plants in interior settings.

### **HOR 260 Plant Materials II** 0 3 This course covers important landscape plants. Emphasis is placed on identification, plant nomenclature, growth characteristics, culture requirements, and landscape uses. Upon completion, students should be able to demonstrate knowledge of the proper selection and utilization of plant materials.

0 2 **HOR 271 Garden Center Mgmt** 9 () This course covers the retail marketing of gardening products and services through mass market and independent garden centers. Topics include garden center layout, customer relations, market

choice, product lines, vendors, and the relationship with the broader horticultural community. Upon completion, students should be able to demonstrate an understanding of the principles and practices of the retail garden center.

## HOR 273 Hor Mgmt & Marketing

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.

## HOTEL AND RESTAURANT MANAGEMENT

## HRM 160 Info Systems for Hospitality 2 0 This course covers current technology and technological issues for the future as they apply to the hospitality industry. Emphasis is placed on the effect of technology on e-commerce, human resources, menu management, and hospitality management systems. Upon completion, students will be able to demonstrate competence in utilizing contemporary information application systems in a hospitality setting.

	Lecture	Lab/Clinic	Work Exp.	Credit		
HRM 215 Restaurant Management Prerequisites: State, CUL 135 This course provides an overview of the vimanaging a food and beverage operation. accounting, marketing, and human resour pletion, students should be able to demonst	Topics includes from an i	ude planning, ac integrated mana	lministration, or gerial viewpoin	rganization, t. Upon com-		
HRM 215A Restaurant Mgt Lab Prerequisites: State, CUL 135 Corequisites: State, HRM 215 This course is a laboratory to accompany of restaurant management principles. Up basic proficiency in restaurant manageme	on completi	on, students sho				
HRM 245 Hosp Human Resource Mgt 3 0 0 3 This course presents a systematic approach to human resource management in the hospitality industry. Topics include labor regulations and laws, hiring, development, discipline, motivation, separation, productivity, and organizational culture. Upon completion, students should be able to apply sound human resource management skills to the hospitality industry.  HUMAN SERVICES						
HSE 110 Intro to Human Services 2 2 0 3 This course introduces the human services field, including the history, agencies, roles, and careers. Topics include personal/professional characteristics, diverse populations, community resources, disciplines in the field, systems, ethical standards, and major theoretical and treatment approaches. Upon completion, students should be able to identify the knowledge, skills, and roles of the human services worker.						
HSE 112 Group Process I	1	2	0	9		

**HSE 112 Group Process I** 1 2 0 2

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

HSE 123 Interviewing Techniques 2 2 0 3

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

**HSE 125 Counseling** 2 2 0 3

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

## HSE 210 Human Services Issues 2 0 0 2 This course covers current issues and trends in the field of human services. Emphasis is placed on contemporary topics with relevance to special issues in a multi-faceted field. Upon completion, students should be able to integrate the knowledge, skills, and experiences gained in classroom and clinical experiences with emerging trends in the field.

Lecture

Lab/Clinic Work Exp.

Credit

## **HSE 225 Crisis Intervention** 3 0 0 3 This course introduces the basic theories and principles of crisis intervention. Emphasis is placed on identifying and demonstrating appropriate and differential techniques for intervening in various crisis situations. Upon completion, students should be able to assess crisis situations and respond appropriately.

## HSE 226 Mental Retardation 3 0 0 3 Prerequisites: State, PSY 150

This course covers mental retardation and related issues. Emphasis is placed on the theoretical perspectives, causes, prevention, and treatment of mental retardation. Upon completion, students should be able to demonstrate a general knowledge of the mentally retarded individual.

## **HSE 255 Health Prob & Prevent** 2 2 0 0 3 This course surveys a range of health problems and issues, including the development of prevention strategies. Topics include teen pregnancy, HIV/AIDS, tuberculosis, communicable diseases, professional burnout, substance abuse, and sexually transmitted diseases. Upon completion, students should be able to identify health issues and demonstrate prevention strategies.

## **HUMANITIES**

## HUM 110 Technology and Society 3 0 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## **HUM 115 Critical Thinking** 3 0 0 3 Prerequisite: State ENG 111

This course introduces the use of critical thinking skills in the context of human conflict. Emphasis is placed on 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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## **HUM 120 Cultural Studies** 3 0 0 3 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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

### Lab/Clinic Work Exp. Lecture Credit 3

## **HUM 122 Southern Culture**

This course explores the major qualities that make the South a distinct region. Topics include music, politics, literature, art, religion, race relations, and the role of social class in historical and contemporary contexts. Upon completion, students should be able to identify the characteristics that distinguish Southern culture. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## HUM 220 Human Values and Meaning 3

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Prerequisites: State, ENG 111

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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## INTERNATIONAL BUSINESS

## **INT 110 International Business**

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.

## INDUSTRIAL SCIENCE

## **ISC 112 Industrial Safety**

This course introduces the principles of industrial safety. Emphasis is placed on industrial safety, OSHA, and environmental regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment and OSHA compliance.

## ISC 121 Envir Health & Safety

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

## **ISC 131 Quality Management**

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

## ISC 132 Mfg Quality Control

This course introduces quality concepts and techniques used in industry. Topics include elementary statistics and probability, process control, process capability, and quality improvement tools. Upon completion, students should be able to demonstrate an understanding of the concepts and principles of quality and apply them to the work environment.

# ISC 133 Mfg Management Practices 2 0 0 2 This course covers successful industrial organizations and management practices for improving quality and productivity. Topics include self-managed work teams, problem-solving skills, and production management techniques. Upon completion, students should be able to demonstrate an understanding of day-to-day plant operations, team management processes, and the principles of group dynamics. ISC 135 Principles of Industrial Mgmt 3 0 0 3 This course covers the managerial principles and practices required for organizations to succeed in modern industry. Topics include the functions and roles of all levels of management, organization

This course covers the managerial principles and practices required for organizations to succeed in modern industry. Topics include the functions and roles of all levels of management, organization design, and planning and control of manufacturing operations. Upon completion, students should be able to demonstrate an under-standing of management principles and integrate these principles into job situations.

**ISC 136 Productivity Analysis I** 2 3 0 3 This course covers methods of measuring, analyzing, and improving productivity. Topics include methods analysis, standardized practices, process analysis, and human factors. Upon completion, students should be able to apply productivity improvement techniques.

**ISC 153 Motion & Time Study** 2 3 0 3 This course covers the principles of motion and time study including practice in time study using a stop watch. Emphasis is placed on the principles of motion economy, performance rating, allowances, and development of standards. Upon completion, students should be able to perform motion and time study, MTM analysis, and work-sampling studies.

## **ISC 170 Problem-Solving Skills** 3 0 0 3 This course covers basic concepts of interpersonal and problem-solving skills. Topics include leadership development, constructive feedback, building relationships, and winning support from others.

Upon completion, students should be able to use interpersonal skills effectively and lead others.

## **ISC 221 Statistical Quality Control** 3 0 0 3 Prerequisites: Local, MAT 121 or MAT 161

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

## ISC 222 Project Planning/Control 1 2 0 2 This course covers how to plan schedule and control projects typical in manufacturing and ser

This course covers how to plan, schedule and control projects typical in manufacturing and service industries. Topics include fundamental project management concepts and hands-on computer application experience with process flow charting and PERT/CPM project managers. Upon completion, students should be able to plan, schedule and control projects using state-of-the-art computer application programs.

## **ISC 225 Facility Layout** 3 2 0 4 This course provides a practical study of facility planning with emphasis on a structured approach

to solving layout problems. Emphasis is placed on investigating and designing an effective facility layout. Upon completion, students should be able to design a basic work area indicating effective use of allowable resources.

# ISC 226 Facilities Design3204This course introduces the methods and principles used to design efficient facilities. Emphasis is placed on efficient processes required to optimize facilities design. Upon completion, students should be able to design efficient facilities.ISC 233 Industrial Org & Mgmt3003Prerequisites: State, ISC 128 or ISC 133

This course covers advanced organization and management philosophies for organization improvement. Emphasis is placed on understanding comprehensive organization improvement concepts such as reengineering, MBQA, ISO 9000, and teams. Upon completion, students should be able to demonstrate an understanding of organizations and assess their strengths and weaknesses.

## ISC 236 Productivity Analysis II 2 3 0 3 Prerequisites: State, ISC 136

This course covers advanced process and system productivity improvement concepts. Topics include work measurement techniques, resource measurement and planning, team improvement concepts, and team productivity measurements. Upon completion, students should be able to demonstrate an understanding of advanced productivity concepts and apply advanced productivity improvement techniques to work situations.

## **ISC 243 Prod & Oper Management I** 2 3 0 3 This course introduces concepts used to analyze and solve productivity and operational problems. Topics include operations strategy, forecasting, resource allocation, and materials management. Upon completion, students should be able to recognize, analyze, and solve a variety of productivity and operational problems.

**ISC 273 Design of Experiments I** 2 0 0 0 2 This course introduces various methods of evaluating production variables to minimize production of non-conforming products. Topics include basic principles such as hypotheses testing, factorial design, and Taguchi principles. Upon completion, students should be able to plan and conduct experiments concerning products or processes.

## LANDSCAPE ARCHITECTURE TECHNOLOGY

## **LAR 120 Sustainable Development** 2 2 0 0 3 This course introduces students to sustainable practices in site design and land development. Topics include conservation subdivision design, transportation issues, urban planning, water conservation, rain gardens, alternative technologies, permaculture design, low impact design, and grey water systems. Upon completion, students should be able to demonstrate techniques and procedures used for mitigating the impact of development on the environment.

## **GLOBAL LOGISTICS TECHNOLOGY**

LOG 110 Introduction to Logistics	3	0	0	3
This course provides an overview of logistics.	Topics	include traffic ma	ınagement, wa	arehousing,
inventory control, material handling, global lo	ogistics,	and the movemen	it and storage	of goods from
raw materials sources to end consumers. Upo	1	,		to identify the
different segments of logistics and use the terr	minolog	y of the industry.		

### Lecture Lab/Clinic Work Exp. Credit

## **LOG 125 Transportation Logistics**

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This course covers the role and importance of the transportation industry. This is an overview of transportation emphasizing its environmental and sociological aspects, economic impact, services, regulatory guidelines, policies, and its future. Upon completion, students should be able to identify modes of transportation, interpret governing regulations, and describe the principles and terminology used in the transportation industry.

## LOG 211 Distribution Management

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Prerequisites: State, LOG 110

This course covers the functions, techniques, and tools utilized in warehousing and distribution centers and their role in business and logistics. Emphasis is placed on warehouse and distribution center management, operations, productivity, software systems, picking, automation, cross docking, safety, security, material handling, benchmarking, and cost. Upon completion, students should be able to describe the role of warehouses and distribution centers, apply industry principles and terminology, and understand distribution productivity measures.

## LOG 215 Supply Chain Management

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Prerequisites: State, LOG 110

This course covers all activities involved in the flow of products and information between the suppliers, customers, producers, and service providers. Topics include acquiring, purchasing, manufacturing, assembling, and distributing goods and services throughout the supply chain organizations. Upon completion, students should be able to identify the supply chain units, describe the materials management processes, and prepare for the APICS CPIM examination.

## LOG 225 Logistics Systems

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Prerequisites: State, LOG 215

This course covers the design, implementation, and application of logistics software systems utilized by businesses to improve accountability, and capabilities of their logistics processes. Emphasis is placed on an in-depth understanding of logistical software applications, optimization models, automated data collection, electronic data interchange, and other logistics software tools. Upon completion, students should be able to identify the various logistics software applications and explain how they are utilized to improve business and logistics processes.

## LOG 235 Import/Export Management 3

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Prerequisites: State, LOG 125

This course introduces the elements of import and export operations, from transportation to documentation, finance, and security and the effects on the global supply chain. Emphasis is placed on existing import/export regulations, customs documentation, intermodal transportation, foreign freight forwarders, global technology, and homeland security initiatives. Upon completion, students should be able to perform import/export operations, channels of distribution, implemented technologies, and associate with operating a secure supply chain.

## **LOG 240 Purchasing Logistics**

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Prerequisites: State, LOG 110

This course introduces the various aspects of purchasing, and their impact on materials management, supply chain, transportation, and global logistics processes. Emphasis is placed on the different methods of electronic sourcing, negotiating and pricing principles, and on the internal and external considerations associated with international logistics. Upon completion, students should be able to describe and apply the principles and terminology used in procurement including electronic data interchange services, purchasing and logistics systems.

### Lab/Clinic Work Exp. Lecture Credit LOG 245 Logistics Security 3 0 0 3

Prerequisites: State, LOG 110

This course covers the role and importance of securing the domestic and global transportation and supply chain networks. Emphasis is placed on Customs and Border Protection, Department of Homeland Security, the Transportation Security Agency and how they affect businesses, logistics and transportation processes. Upon completion, students should be able to apply the principles and terminologies used in securing the logistics and transportation networks and identify potential threats.

### **LOG 250 Advanced Global Logistics** 3 9 0 4

Prerequisites: State, LOG 125

This course covers the advanced application of global operations and logistics strategies, planning, technology, risk, and management necessary to cope with the global business environment. Emphasis is placed on a in-depth understanding of global sourcing, shipping, tracking, and e-logistics systems necessary to operate inbound/outbound logistics in a global market. Upon completion, students should be able to identify the different global markets and logistics technology available to process international inbound/outbound logistics transactions.

## MACHINING

### MAC 112 Machining Technology II 2 12 0 6

Prerequisites: State, MAC 111

This course provides additional instruction and practice in the use of precision measuring tools, lathes, milling machines, and grinders. Emphasis is placed on setup and operation of machine tools including the selection and use of work holding devices, speeds, feeds, cutting tools, and coolants. Upon completion, students should be able to perform basic procedures on precision grinders and advanced operations of measuring, layout, drilling, sawing, turning, and milling.

MAC 112AB Machining Technology IIA Prerequisites: State, MAC 111	. 1	6	0	3
MAC 112BB Machining Technology IIB Prerequisites: Local, MAC 112A MAC 112A and MAC 112B are the equivalent		6 AC 112.	0	3
MAC 113 Machining Technology III	2	12	0	6

Prerequisites: State, MAC 112

MAC 114 Intro to Metrology

This course provides an introduction to advanced and special machining operations. Emphasis is placed on working to specified tolerances with special and advanced setups. Upon completion,

## students should be able to produce a part to specifications.

This course introduces the care and use of precision measuring instruments. Emphasis is placed on the inspection of machine parts and use of a wide variety of measuring instruments. Upon completion, students should be able to demonstrate the correct use of measuring instruments.

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### 2 **MAC 118 Machine Shop Basic**

This course will introduce the fundamentals of measuring tools, tolerances and the basic set-up and operations of drill presses, lathes, and milling machines. Emphasis is placed on manufacturing standards and procedures used in welding, automotive, and engineering environments. Upon completion, students should be able to use measuring tools, perform basic machine operations, and apply manufacturing standards.

## MAC 121 Intro to CNC This course introduces the concepts and capabilities of computer numerical control machine tools. Topics include setup, operation, and basic applications. Upon completion, students should be able to explain operator safety, machine protection, data input, program preparation, and program storage **MAC 122 CNC Turning** This course introduces the programming, setup, and operation of CNC turning centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC turning centers. MAC 124 CNC Milling This course introduces the manual programming, setup, and operation of CNC machining centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC machining centers. **MAC 151 Machining Calculations** This course introduces basic calculations as they relate to machining occupations. Emphasis is placed on basic calculations and their applications in the machine shop. Upon completion, students should be able to perform basic shop calculations. MAC 152 Adv Machining Calc This course combines mathematical functions with practical machine shop applications and problems. Emphasis is placed on gear ratios, lead screws, indexing problems, and their applications in the machine shop. Upon completion, students should be able to calculate solutions to machining problems. 3 MAC 160 Coordinate Measuring Mach 2

Lecture

Lab/Clinic Work Exp.

Credit

This course introduces methods in the setup and operation of coordinate measuring machines. Emphasis is placed on the programming of coordinate measuring machines and the measurement of complex parts. Upon completion, students should be able to demonstrate skills in programming, operation, and setup of coordinate measuring machines.

MAC 171 Measure/Material & Safety 0 2 0 1
This course introduces precision measuring instruments, process control and adjustment, inspection, material handling and workplace safety. Topics include properly identifying and handling various measurement instruments and materials, process control, adjustment and improvement, personal protective equipment (PPE) and OSHA safety regulations. Upon completion, students should be able to safely demonstrate effective measurement techniques, identify and handle various materials, and explain safe industry practices.

**MAC 172 Job Plan, Bench & Layout** 0 2 0 1 This course introduces the basics of job process planning, sawing, and manual operations including benchwork and layout. Topics include deciphering blueprints and/or schematics, dimensions, design and using various instruments required in the layout of various components. Upon completion, students should be able to demonstrate an understanding of job plans, dimensions, design, transfer and layout common to the machining industry.

## Lecture Lab/Clinic Work Exp. Credit MAC 173 Manual Milling/Drilling 1 3 0 2

This course introduces the fundamental skills associated with the design, setup and operation of drill presses and manual milling machines. Topics include blueprints, cutting tools, coolants, component identification, drill presses and manual milling machine operations, process plans, setup, speeds and feeds, and work holding devices. Upon completion, students should be able to demonstrate the proper set-up and operation of a drill press and manual milling machine.

## **MAC 174 Manual Turning**

This course introduces the fundamental skills associated with the design, setup and safe operation of manual lathes including the identification of all major lathe components. Topics include setup and operation of a lathe including the selection and use of work holding devices, speeds, feeds, cutting tools, and coolants. Upon completion, students should be able to demonstrate the proper setup and operation of a manual lathe.

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## MAC 214 Machining Technology IV 2 12 0 6

Prerequisites: State, MAC 112

This course provides advanced applications and practical experience in the manufacturing of complex parts. Emphasis is placed on inspection, gaging, and the utilization of machine tools. Upon completion, students should be able to manufacture complex assemblies to specifications.

## **MAC 222 Advanced CNC Turning** 1 3 0 2

Prerequisites: State, MAC 122

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.

## **MAC 224 Advanced CNC Milling** 1 3 0

Prerequisites: State, MAC 124

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.

## $\textbf{MAC 231 CNC Graphics Prog: Turning} \quad 1 \qquad \qquad 4 \qquad \qquad 0 \qquad \qquad 3$

Prerequisites: State, MAC 121 or MAC 122

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, include machine selection, tool selection, operational sequence, speed, feed, and cutting depth.

## MAC 232 CNC Graphics Prog: Milling 1 4 0

Prerequisites: State, MAC 121 or MAC 124

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.

### Lab/Clinic Work Exp. Credit Lecture

## MAC 233 Appl in CNC Machining

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.

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## MAC 234 Adv Multi-Axis Machining

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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.

## **MAC 247 Production Tooling**

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This course provides advanced study in tooling currently utilized in the production of metal parts. Emphasis is placed on the proper use of tooling used on CNC and other production machine tools. Upon completion, students should be able to choose proper tool grades based on manufacturing requirements and troubleshoot carbide tooling problems

## **MATHEMATICS**

## MAT 050 Basic Math Skills

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Prerequisites: Local, Placement

This course is designed to strengthen basic math skills. Topics include properties, rounding, estimating, comparing, converting, and computing whole numbers, fractions, and decimals. Upon completion, students should be able to perform basic computations and solve relevant mathematical problems.

### MAT 115 Mathematical Models

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Prerequisites: State, Take One Set; Set 1: DMA 101, DMA 020, DMA 030, DMA 040, DMA 050, MAT 060\* and MAT 070; Set 2: MAT 060\* and MAT 080; Set 3: MAT 060\* and MAT 090; Set 4: MAT 095; Set 5: MAT 120; Set 6: MAT 121; Set 7: MAT 161; Set 8: MAT 171; Set 9: MAT 175 This course develops the ability to utilize mathematical skills and technology to solve problems at a level found in non-mathematics- intensive programs. Topics include applications to percent, ratio and proportion, formulas, statistics, function notation, linear functions, probability, sampling techniques, scatter plots, and modeling. Upon completion, students should be able to solve practical problems, reason and communicate with mathematics, and work confidently, collaboratively, and independently.

## MAT 121 Algebra/Trigonometry I

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Prerequisites: State, Take One Set; Set 1: DMA 010, DMA 020, DMA 030, DMA 040, and DMA 050; Set 2: MAT 060\* and MAT 070; Set 3: MAT 060\* and MAT 080; Set 4: MAT 060 and MAT 090; Set 5: MAT 095

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.

### Lecture Lab/Clinic Work Exp. Credit

## MAT 122 Algebra/Trigonometry II

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Prerequisites: State, MAT 121, MAT 161, MAT 171, or MAT 175

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

## MAT 141 Mathematical Concepts I

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Prerequisites: State, Take One Set; Set 1: DMA 010, DMA 020, DMA 030, and DMA 040; Set 2: MAT 060\* and MAT 080; Set 3: MAT 060\* and MAT 090; Set 4: MAT 095; Set 5: MAT 120; Set 6: MAT 161; Set 7: MAT 161; Set 8: MAT 171; Set 9: MAT 175

This course is the first of a two-course sequence that develops a deeper understanding and appreciation of the basic concepts of mathematics. Emphasis is placed on sets, logic, number bases, elementary number theory, introductory algebra, measurement including metrics, and problem solving. Upon completion, students should be able to communicate orally and in writing these basic mathematical concepts. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

## MAT 142 Mathematical Concepts II

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0 Prerequisites: State, MAT 141

This course is the second of a two-course sequence that develops a deeper understanding and appreciation of the basic concepts of mathematics. Emphasis is placed on probability, statistics, functions, introductory geometry, and mathematics of finance. Upon completion, students should be able to communicate orally and in writing these basic mathematical concepts and utilize technology as a mathematical tool. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirements in natural sciences/mathematics.

### MAT 151 Statistics I

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Prerequisites: State, Take One Set; Set 1: DMA 010, DMA 020, DMA 030, DMA 040, and DMA 050; Set 2: MAT 060\* and MAT 080; Set 3: MAT 060\* and MAT 090; Set 4: MAT 095; Set 5: MAT 120; Set 6: MAT 121; Set 7: MAT 140; Set 8: MAT 161; Set 9: MAT 171; Set 10: MAT 175 This course provides a project-based approach to the study of basic probability, descriptive and inferential statistics, and decision making. Emphasis is placed on measures of central tendency and dispersion, correlation, regression, discrete and continuous probability distributions, quality control, population parameter estimation, and hypothesis testing. Upon completion, students should be able to describe important characteristics of a set of data and draw inferences about a population from sample data. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics (Quantitative Option).

## **MAT 155 Statistical Analysis**

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Prerequisites: State, MAT 080 or MAT 090 or MAT 095 or MAT 120 or MAT 121 or MAT 161 or MAT 171 or MAT 175 or DMA 010-080 or MAT 060-070 and DMA 060-080 or MAT 060 and DMA 040-080

This course is an introduction to descriptive and inferential statistics. Topics include sampling, distributions, plotting data, central tendency, dispersion, Central Limits Theorem, confidence intervals, hypothesis testing, correlations, regressions, and multinomial experiments. Upon completion, students should be able to describe data and test inferences about populations using sample data. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics (Quantitative Option).

## Lecture Lab/Clinic Work Exp. Credit

## **MAT 155A Statistics Analysis Lab**

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Prerequisites:State, MAT 080 or MAT 090 or MAT 095 or MAT 120 or MAT 121 or MAT 161 or MAT 171 or MAT 175 or DMA 010–080 or MAT 060–070 and DMA 060–080 or MAT 060 and DMA 040–080

This course is a laboratory for MAT 155. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## MAT 161 College Algebra

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Prerequisites: State, Take One Set; Set 1: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060, DMA 070, and DMA 080; Set 2: MAT 060\* and MAT 080; Set 3: MAT 060\* and MAT 090; Set 4: MAT 095

This course provides an integrated technological approach to algebraic topics used in problem solving. Emphasis is placed on applications involving equations and inequalities; polynomial, rational, exponential and logarithmic functions; and graphing and data analysis/modeling. Upon completion, students should be able to choose an appropriate model to fit a data set and use the model for analysis and prediction. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics for the Associate in Arts Degree.

## **MAT 162 College Trigonometry**

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Prerequisites: State, MAT 161

This course provides an integrated technological approach to trigonometric applications used in problem solving. Emphasis is placed on applications involving trigonometric ratios, right triangles, oblique triangles, trigonometric functions, graphing, vectors, and complex numbers. Upon completion, students should be able to apply the above principles of trigonometry to problem solving and communication. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics for the Associate in Arts Degree.

## **MAT 175 Precalculus**

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Prerequisites: Local, placement: Score of 86 or higher on Accuplacer Algebra or MAT161 This course provides an intense study of the topics which are fundamental to the study of calculus. Emphasis is placed on functions and their graphs with special attention to polynomial, rational, exponential, logarithmic and trigonometric functions, and analytic trigonometry. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

### **MAT 175A Precalculus Lab**

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Corequisites: MAT 175

This course is a laboratory for MAT 175. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).

## Lecture Lab/Clinic Work Exp. Credit MAT 263 Brief Calculus 3 0 0 3

Prerequisites: State, MAT 161, MAT 171, or MAT 175

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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

## **MAT 271 Calculus I** 3 2 0 4

Prerequisites: State, MAT 172 or MAT 175

This course covers in depth the differential calculus portion of a three-course calculus sequence. Topics include limits, continuity, derivatives, and integrals of algebraic and transcendental functions of one variable, with applications. Upon completion, students should be able to apply differentiation and integration techniques to algebraic and transcendental functions. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

## **MAT 272 Calculus II** 3 2 0 4

Prerequisites: State, MAT 271

This course provides a rigorous treatment of integration and is the second calculus course in a three-course sequence. Topics include applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to use integration and approximation techniques to solve application problems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

## **MAT 273 Calculus III** 3 2 0 4

Prerequisites: State, MAT 272

This course covers the calculus of several variables and is third calculus course in a three-course sequence. Topics include functions of several variables, partial derivatives, multiple integrals, solid analytical geometry, vector-valued functions, and line and surface integrals. Upon completion, students should be able to solve problems involving vectors and functions of several variables. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

## **MAT 280 Linear Algebra** 3 0 0 3

Prerequisites: State, MAT 271

This course provides a study of linear algebra topics with emphasis on the development of both abstract concepts and applications. Topics include vectors, systems of equations, matrices, determinants, vector spaces, linear transformations in two or three dimensions, eigenvectors, eigenvalues, diagonalization and orthogonality. Upon completion, students should be able to demonstrate both an understanding of the theoretical concepts and appropriate use of linear algebra models to solve application problems. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## Lecture Lab/Clinic Work Exp. Credit MAT 285 Differential Equations 3 0 0 3 Proposition State MAT 272

Prerequisites: State, MAT 272

This course provides an introduction to ordinary differential equations with an emphasis on applications. Topics include first-order, linear higher-order, and systems of differential equations; numerical methods; series solutions; eigenvalues and eigenvectors; Laplace transforms; and Fourier series. Upon completion, students should be able to use differential equations to model physical phenomena, solve the equations, and use the solutions to analyze the phenomena. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

## **MECHANICAL**

## MEC 110 Intro to CAD/CAM 1 2 0 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.

## **MEC 111 Machine Processes I** 1 4 0 3 This course introduces safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include safety, measuring tools, and the basic setup and operation of lathes, milling machines, drill presses, and saws. Upon completion, students should be able to manufacture a simple part to a specified tolerance.

## **MEC 112 Machine Processes II** 2 3 0 3 This course covers advanced use of milling machines and lathes. Emphasis is placed on safety and compound setup of milling machines and lathes for manufacture of projects with a specified fit. Upon completion, students should be able to demonstrate proper procedures for manufacture of assembled parts.

## **MEC 128 CNC Machining Processes** 2 4 0 4 This course covers programming, setup, and operations of CNC turning, milling, and other CNC machines. Topics include programming formats, control functions, program editing, and part production and inspection. Upon completion, students should be able to manufacture simple parts using CNC machines.

## **MEC 130 CNC Mechanisms** 2 2 0 0 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.

## **MEC 145 Mfg Materials I** 2 3 0 3 This course introduces a variety of manufacturing materials and common processing techniques. Emphasis is placed on the processing, testing, and application of materials such as wood, metals, plastics, ceramics, and composites. Upon completion, students should be able to demonstrate an understanding of fundamental engineering applications for a variety of materials, including their process capabilities and limitations.

# Lecture Lab/Clinic Work Exp. Credit MEC 161 Mfg Processes I 3 0 0 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. MEC 172 Intro to Metallurgy 2 2 0 3 This course covers the production, properties, testing, classification, microstructure, and heat-treat-

This course covers the production, properties, testing, classification, microstructure, and heat-treating effects of ferrous and non-ferrous metals. Topics include the iron-carbon phase diagram, ITT diagram, ANSI code, quenching, senescing, and other processes concerning metallurgical transformations. Upon completion, students should be able to understand the iron-carbon phase diagram, ITT diagram, microstructure images, and other phenomena concerning the behavior of metals.

## MEC 181 Introduction to CIM 2 0 0 2 This course introduces the elements of computer-integrated manufacturing (CIM). Topics include statistical process control, computer-aided design and manufacturing, numeric control, and flexible systems. Upon completion, students should be able to explain the major components of computer-integrated manufacturing.

**MEC 242 Value/Supply Chain Mgmt** 3 0 0 3 This course covers the design and operation of supply/value chains in use by organizations. Topics include supply chain strategies and management, lean logistics, quality within the supply chain, resource planning and forecasting, and information technology use within value chains. Upon completion, students should be able to demonstrate an understanding of supply chain management and describe value chain processes.

## **MEC 265 Fluid Mechanics** 2 2 0 0 3 This course covers the physical behavior of fluids and fluid systems. 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.

## **MEDICAL ASSISTING**

Corequisite: Local, MED 232

## **MED 110 Orientation to Med Assist** 1 0 0 1 1 This course covers the history of medicine and the role of the medical assistant in the health care setting. Emphasis is placed on professionalism, communication, attitude, behaviors, and duties in the medical environment. Upon completion, students should be able to project a positive attitude and promote the profession of medical assisting.

## **MED 113 Ori to Clinic Setting II** 0 6 0 2 Prerequisites: Local, Enrollment in the Medical Assisting Program (A45400), MED 118 or OST 149, MED 130, MED 131

This course provides an opportunity to observe and/or perform in the medical setting. Emphasis is placed on administrative and clinical medical assisting. Upon completion, students should be able to identify administrative and clinical procedures in the health care environment.

	Lecture	Lab/Clinic	Work Exp.	Credit
MED 118 Medical Law and Ethics	2	0	0	2
Prerequisites: Local RED 080				

Prerequisites: Local, RED 080 Corequisites: Local, RED 090

This course covers legal relationships of physicians and patients, contractual agreements, professional liability, malpractice, medical practice acts, informed consent, and bioethical issues. Emphasis is placed on legal terms, professional attitudes, and the principles and basic concepts of ethics and laws involved in providing medical services. Upon completion, students should be able to meet the legal and ethical responsibilities of a multi-skilled health professional.

## MED 121 Medical Terminology I 3 0 0 3

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. This course is also available through the Virtual Learning Community (VLC).

## $\textbf{MED 122 Medical Terminology II} \qquad \qquad 3 \qquad \qquad 0 \qquad \qquad 0 \qquad \qquad 3$

Prerequisites: State, MED 121

This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

## **MED 130 Admin Office Proc I** 1 2 0 2

Prerequisites: Local, Enrollment in the Medical Assisting Program (A45400)

Corequisites: Local, MED 122, MED 131

This course introduces medical office administrative procedures. Topics include appointment processing, written and oral communications, medical records, patient orientation, and safety. Upon completion, students should be able to perform basic administrative skills within the medical environment.

## **MED 131 Admin Office Proc II** 1 2 0 2

Prerequisites: Local, Enrollment in the Medical Assisting Program (A45400), MED 118 or OST 149

Corequisites: Local, MED 130

This course provides medical office procedures in both economic and management skills. Topics include physical plant maintenance, equipment and supplies, liability coverage, medical economics, and introductory insurance procedures. Upon completion, students should be able to manage the economics of the medical office and supervise personnel.

## **MED 140 Exam Room Procedures I** 3 4 0 5 Prerequisites: Local; Enrollment in the Medical Assisting Program (A45400), BIO 163, MED 122, MED 130

Corequisite: Local, MED 272, MED 274

This course provides instruction in clinical examining room procedures. Topics include asepsis, infection control, assisting with exams and treatment, patient education, preparation and administration of medications, EKG, vital signs, and medical emergencies. Upon completion, students should be able to demonstrate competence in exam room procedures.

### Lab/Clinic Work Exp. Lecture Credit MED 150 Laboratory Procedures I 3 5 Prerequisites: Local, Enrollment in the Medical Assisting Program (A45400), BIO 163, MED 122, MED 140 Corequisites: Local, MED 240, MED 270 This course provides instruction in basic lab techniques used by the medical assistant. Topics

include lab safety, quality control, collecting and processing specimens, performing selective tests, phlebotomy, screening and follow-up of test results, and OSHA/CLIA regulations. Upon completion, students should be able to perform basic lab tests/skills based on course topics.

## **MED 230 Admin Office Proc III** Prerequisites: State, MED 131, Local, Enrollment in the Medical Assisting Program (A45400), MED 113

Corequisites: MED 260

This course provides advanced medical office administrative procedures. Emphasis is placed on management skills including personnel supervision, practice management, public relations, and insurance coding. Upon completion, students should be able to exhibit advanced managerial medical assisting skills.

### 3 2 **MED 232 Medical Insurance Coding** 0 Prerequisites: Local, Enrollment in the Medical Assisting Program (A45400), BIO, 163, MED 118 or OST 149, MED 122, MED 131

Corequisites: Local, MED 113, MED 240, MED 150

This course is designed to develop coding skills. Emphasis is placed on advanced diagnostic and procedural coding in the outpatient facility. Upon completion, students should be able to demonstrate proficiency in coding for reimbursement.

### 0 MED 240 Exam Room Proc II 3 4 5 Prerequisites: State, MED 140, Local, Enrollment in the Medical Assisting Program (A45400) Corequisites: Local, MED 150, MED 270

This course is designed to expand and build upon skills presented in MED 140. Emphasis is placed on advanced exam room procedures. Upon completion, students should be able to demonstrate enhanced competence in selected exam room procedures.

## **MED 260 MED Clinical Practicum** 5 Prerequisites: Local, Enrollment in the Medical Assisting Program (A45400), MED 113 Corequisites: Local, MED 230

This course provides the opportunity to apply clinical, laboratory, and administrative skills in a medical facility. Emphasis is placed on enhancing competence in clinical and administrative skills necessary for comprehensive patient care and strengthening professional communications and interactions. Upon completion, students should be able to function as an entry-level health care professional.

### MED 264 Med Assisting Overview 2 0 0 2 Prerequisites: Local, MED 113

Corequisites: Local, MED 230, MED 260

This course provides an overview of the complete medical assisting curriculum. Emphasis is placed on all facets of medical assisting pertinent to administrative, laboratory, and clinical procedures performed in the medical environment. Upon completion, students should be able to demonstrate competence in the areas covered on the national certification examination for medical assistants.

### Lab/Clinic Work Exp. Lecture Credit

## MED 270 Symptomatology

3

Prerequisites: Local, Enrollment in the Medical Assisting Program (A45400) MED 272, MED 274 Corequisites: Local, MED 240, MED 150 This course covers the study of disease symptoms and the appropriate actions taken by medical

assistants in a medical facility in relation to these symptoms. Emphasis is placed on interviewing skills and appropriate triage, preparing patients for procedures, and screening test results. Upon completion, students should be able to recognize how certain symptoms relate to specific diseases, recognize emergency situations, and take appropriate actions.

## MED 272 Drug Therapy

Prerequisites: Local, Enrollment in the Medical Assisting Program (A45400), BIO 163, MED 122, MAT 115

Corequisites: Local, MED 140, MED 274

This course focuses on major drug groups, including their side effects, interactions, methods of administration, and proper documentation. Emphasis is placed on the theory of drug administration. Upon completion, students should be able to identify, spell, recognize side effects of, and document the most commonly used medications in a physician's office.

## MED 274 Diet Therapy/Nutrition

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This course introduces the basic principles of nutrition as they relate to health and disease. Topics include basic nutrients, physiology, dietary deficiencies, weight management, and therapeutic nutrition in wellness and disease. Upon completion, students should be able to interpret clinical and dietary data and provide patient counseling and education.

## MENTAL HEALTH

## MHA 150 Mental Health Systems

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3

Prerequisites: State, HSE 110

This course introduces the treatment and services available at both public and private mental health facilities. Topics include intake procedures, admission criteria, history, and structure of mental health facilities. Upon completion, students should be able to demonstrate competence in articulating both the theory and practice of mental health services delivery. This course is a unique concentration requirement of the Mental Health concentration in the Human Services Technology program.

## MHA 155 Psychological Assessment

3

3 Prerequisites: State, PSY 150; Local, Take One Set: Set 1 RED 090, MAT 070; Set 2 RED 090, DMA 010-050; Set 3: RED 090, MAT 060, DMA 040-050

This course covers psychological assessment. Emphasis is placed on different types of psychological tests. Upon completion, students should be able to recognize and understand the purpose of various psychological tests. This course is a unique concentration requirement of the Mental Health concentration in the Human Services Technology program.

## MHA 240 Advocacy

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Prerequisites: State, HSE 110

This course covers the roles and duties of the client advocate. Topics include treatment planning, needs assessment, referral procedures, and follow-up and integration of services. Upon completion, students should be able to effectively manage the care of the whole person from contact initiation to termination. This course is a unique concentration requirement of the Mental Health concentration in the Human Services Technology program.

## Lecture Lab/Clinic Work Exp. Credit

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3

## MARKETING AND RETAILING

strate an understanding of the basic principles of retailing.

able to apply marketing principles in organizational decision making.

MKT 120 Principles of Marketing

MKT 122 Visual Merchandising

MKT 121 Retailing

## This course introduces basic layout design and commercial display in retail and service organizations. Topics include an analysis of display as a visual merchandising medium and an examination of the principles and applications of display and design. Upon completion, students should be able to plan, build, and evaluate designs and displays. MKT 123 Fundamentals of Selling 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. MKT 220 Advertising and Sales Promotion 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. 3 () 0 3 MKT 225 Marketing Research Prerequisites: State MKT 120 This course provides information for decision making by providing guidance in developing, analyzing, and using data. Emphasis is placed on marketing research as a tool in decision making. Upon completion, students should be able to design and conduct a marketing research project and interpret the results. **MKT 227 Marketing Applications** 3 0 This course extends the study of diverse marketing strategies. Emphasis is placed on case studies and small-group projects involving research or planning. Upon completion, students should be able to effectively participate in the formulation of a marketing strategy. MKT 232 Social Media Marketing This course is designed to build students' social media marketing skills by utilizing projects that give students hands on experience implementing social media marketing strategies. Topics include integrating different social media technologies into a marketing plan, creating social media marketing campaigns, and applying appropriate social media tools. Upon completion, students should be able to use social media technologies to create and improve marketing efforts for businesses.

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

This course examines the role of retailing in the economy. Topics include the development of present retail structure, functions performed, effective operations, and managerial problems resulting from current economic and social trends. Upon completion, students should be able to demon-

## Lecture Lab/Clinic Work Exp. Credit

## THERAPEUTIC MASSAGE

**MTH 110 Fundamentals of Massage** 6 9/3 0 10

Prerequisites: Local, Admission into Therapeutic Massage Program (D45750D) and MAT 070 or DMA 010–050 or MAT 060 and DMA 040–050

Corequisites: Local, BIO 163

This course introduces concepts basic to the role of the massage therapist in a variety of clinical settings. Emphasis is placed on beginning theory and techniques of body work as well as skill in therapeutic touch. Upon completion of the course, the student should be able to apply basic practical massage therapy skills.

## MTH 120 Ther Massage Applications 6 9/3 0 10

Prerequisites: State, MTH 110; Local, BIO 163

Corequisites: Local, BIO 271

This course provides an expanded knowledge and skill base for the massage therapist in a variety of clinical settings. Emphasis is placed on selected therapeutic approaches throughout the linesman. Upon completion, students should be able to perform entry level therapeutic massage on various populations.

## **MTH 121 Clinical Supplement I** 0 3 0

Corequisites: State, Take one: MTH 110, MTH 120, MTH 125, MTH 210 or MTH 220 This course is designed to introduce the student to a variety of clinical experiences. Emphasis is placed on applying the therapeutic massage process across the lifespan. Upon completion, students should be able to demonstrate delivery of massage techniques in a clinical setting.

## **MTH 125 Ethics of Massage** 2 0 0

This course is designed to explore issues related to the practice of massage therapy. Emphasis is placed on ethical, legal, professional, and political issues. Upon completion, students should be able to discuss issues relating to the practice of massage therapy, client/therapist relationships as well as ethical issues.

## MTH 130 Ther Massage Management 2 0 0 2

Prerequisites: State, MTH 110

This course introduces the basic responsibilities in the development and administration of a professional massage therapy practice. Emphasis is placed on identifying successful practice management methods such as selecting a business structure, negotiating a contract/lease, developing a business/marketing plan, designing a massage space, differentiating spa from clinical practice, management of client/financial records and physician referral. Upon completion, students should be able to demonstrate the knowledge and skills necessary to develop and manage a massage therapy practice.

## **MTH 210 Adv Skills of Massage** 4 9/3 0 8

Prerequisites: State, MTH 120; Local, MTH 125, BIO 271

This course provides an expanded knowledge and skill in diverse body work modalities in a variety of clinical settings. Emphasis is placed on selected techniques such as Neuromuscular Therapy, Sports Massage Soft Tissue Release, Spa Approaches, Oriental Therapies and Energy Techniques. Upon completion, students should be able to perform basic skills in techniques covered.

## Lecture Lab/Clinic Work Exp. Credit MTH 220 Outcome-Based Massage 4 6/3 0 7 Prerequisites: State, MTH 120; Local, MTH 210 This course provides knowledge and skills in more complex body works modalities in a variety

This course provides knowledge and skills in more complex body works modalities in a variety of clinical settings. Emphasis is placed on developing advanced skills in outcome-based Massage. Upon completion, students should be able to perform basic skills in techniques covered.

## **MUSIC**

core requirement in humanities/fine arts.

## **MUS 110 Music Appreciation** 3 0 0 3 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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education

## **MUS 111 Fundamentals of Music** 3 0 0 3 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. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement.*

## MUS 113 American Music 3 0 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

## MUS 121 Music Theory I 3 2 0 4 This course provides an in-depth introduction to melody, rhythm, and harmony. Emphasis is placed on fundamental melodic, rhythmic, and harmonic analysis, introduction to part writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## MUS 122 Music Theory II 3 2 0 4 Prerequisites: State, MUS 121

This course is a continuation of studies begun in MUS 121. Emphasis is placed on advanced melodic, rhythmic, and harmonic analysis and continued studies in part-writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

MUS 131 Chorus I	0	2	0	1
This course provides an opportunity to gain	in experience	e singing in a ch	orus. Emphasi	s is placed
on vocal techniques and the study and per	formance of	a variety of sty	les and periods	of choral
literature. Upon completion, students sho	uld be able to	o demonstrate s	kills needed to	participate in
choral singing leading to performance. The	his course has b	een approved to sa	tisfy the Comprehe	ensive Articula-
tion Agreement pre-major and/or elective requirem	ent.			

## Lecture Lab/Clinic Work Exp. Credit MUS 132 Chorus II 0 2 0 1

Prerequisites: State, MUS 131

This course provides a continuation of studies begun in MUS 131. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement.

## **MUS 151 Class Music I** 0 2

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. Colleges may use a letter suffix to designate a specific instrument or voice, for example MUS 151P for piano. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## **MUS 152 Class Music II** 0 2 0

Prerequisites: State, MUS 151

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. Colleges may use a letter suffix to designate a specific instrument or voice, for example MUS 152P for piano. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as an elective course requirement. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## **MUS 161 Applied Music I** 1 2 0

This course provides individual instruction in the skills and techniques of the particular instrument or voice. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Colleges may use a letter suffix to designate a specific instrument or voice, for example MUS 161P for piano. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## **MUS 162 Applied Music II** 1 2 0

Prerequisites: State, MUS 161

This course is a continuation of MUS 161. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Colleges may use a letter suffix to designate a specific instrument or voice, for example MUS 162P for piano. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

## MUS 170 Business of Music 3 0 0

This course introduces the basic elements of the music business. Topics include copyright law, musical arrangements and abridgements, recording and songwriting contracts, agents and managers, performing rights organizations, and the musician's union. Upon completion, students should be able to demonstrate an understanding of the basic elements of the music business. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

### Lab/Clinic Work Exp. Lecture Credit **MUS 212 American Musical Theatre** 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. This course has been approved to satisfy the Comprehen-

sive Articulation Agreement pre-major and/or elective requirement.

**MUS 232 Chorus IV** 

Prerequisites: State, MUS 162

## 2 **MUS 217 Elementary Conducting** This course introduces the basic patterns and skills for conducting instrumental and vocal groups. Emphasis is placed on conducting beat patterns, expressive gestures, fermatas, accents, tempos, and rehearsal techniques. Upon completion, students should be able to demonstrate the above skills by conducting vocal and/or instrumental groups. This course has been approved to satisfy the Com-

## **MUS 221 Music Theory III** 4 Prerequisites: State, MUS 122

prehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

This course is a continuation of MUS 122. Emphasis is placed on altered and chromatic harmony, common practice era compositional techniques and forms, and continued studies in part-writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

### **MUS 222 Music Theory IV** 4 Prerequisites: State, MUS 221

This course is a continuation of studies begun in MUS 221. Emphasis is placed on continued study of common practice era compositional techniques and forms, 20th century practices, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. This course has been approved to satisfy the Comprehensive Articulation

## Agreement for transferability as a pre-major and/or elective course requirement. **MUS 231 Chorus III** 0

Prerequisites: State, MUS 132 This course is a continuation of MUS 132. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.

## This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement.

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Prerequisites: State, MUS 231 This course is a continuation of MUS 231. Emphasis is placed on vocal techniques and the study of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. This course has been approved to

### satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement. 0 2 **MUS 261 Applied Music III** 1

This course is a continuation of MUS 162. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Colleges may use a letter suffix to designate a specific instrument or voice, for example MUS 261P for piano. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## Lecture Lab/Clinic Work Exp. Credit MUS 262 Applied Music IV 1 2 0 2

Prerequisites: State, MUS 261

This course is a continuation of MUS 261. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Colleges may use a letter suffix to designate a specific instrument or voice, for example MUS 262P for piano. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## **MUS 270 Music Literature** 3 0 0

Prerequisites: State, MUS 122

This course is a survey of music literature from the Middle Ages to the present. Emphasis is placed on selected works of representative composers. Upon completion, students should be able to trace important developments and demonstrate an understanding of the aspects of the composers' styles. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective requirement.

## MUS 280 Music for the El Classroom 3 0 0 3

Prerequisites: State, MUS 110

This course covers the skills necessary for teaching music in the elementary school. Emphasis is placed on integrating music activities which are suitable for all ages of elementary students, including theory, performance, and conducting, into classroom activities. Upon completion, students should be able to utilize a variety of music activities in the elementary school classroom. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

## NETWORKING TECHNOLOGY

## NET 110 Networking Concepts 2 2 0 3

This course introduces students to the networking field. Topics include network terminology and protocols, local-area networks, wide-area networks, OSI model, cabeling, router programming, Ethernet, IP addressing, and network standards. Upon completion, students should be able to perform tasks related to networking mathematics, terminology, and models, media, Ethernet, subnetting, and TCP/IP Protocols.

## NET 111 Internetwk Arch & Design 2 2 0 3

Prerequisites: State, NET 110

This course introduces the physical and logical design of local area networks, wide area networks, and networking devices used in the design implementation and integration. Topics include LAN segmentation, VLANS, IP addressing, router, switch, and server placements with an emphasis on design. Upon completion, students should be able to understand fundamental LAN and WAN design and the physical and logical aspects needed to achieve the design goal.

## NET 113 Home Automaton Systems 2 2 0 3

This course covers the design, installation, testing, troubleshooting, and customer service of a fully automated home. Emphasis is placed on a structured wiring system that integrates the home phone, TV, home theater, audio, video, computer network, lighting, security systems, and automation systems into a pre-wired, remote controlled system. Upon completion, students should be able to design, install, and maintain home automation systems.

## Lecture Lab/Clinic Work Exp. Credit NET 125 Networking Basics 1 4 0 3

This course introduces the networking field. Emphasis is placed on network terminology and protocols, local-area networks, wide-area networks, OSI model, cabling, router programming, Ethernet, IP addressing, and network standards. Upon completion, students should be able to perform tasks related to networking mathematics, terminology, and models, media, Ethernet, subnetting, and TCP/IP Protocols.

## **NET 126 Routing Basics** 1 4 0 3

Prerequisites: State, NET 125

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 protocols, and access lists. Upon completion, students should have an understanding of routers and their role in WANs, router configuration, routing protocols, TCP/IP, troubleshooting, and ACLs.

## **NET 225 Routing & Switching I** 1 4 0 3

Prerequisites: State, NET 126

This course focuses on advanced IP addressing techniques, intermediate routing protocols, command-line interface configuration of switches, Ethernet switching, VLANs, STP, and VTP. Emphasis will be placed on application and demonstration of skills acquired in pre-requisite courses. Upon completion, students should be able to perform tasks related to VLSM, routing protocols, switching concepts and configuration, STP, VLANs, and VTP.

## **NET 226 Routing & Switching II** 1 4 0 3

Prerequisites: State, NET 225

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, and PPP encapsulation operations on a router. Upon completion, students should be able to provide solutions for network routing problems, identify ISDN protocols, and describe the Spanning Tree protocol.

## **NET 289 Networking Project** 1 4 0 3

Corequisites: State, NET 226

This course provides an opportunity to complete a significant networking project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, documentation, installation, testing, presentation, and training. Upon completion, students should be able to complete a project from the definition phase through implementation.

## NETWORKING OPERATING SYSTEMS

## NOS 110 Operating System Concepts 2 3 0 3

This course introduces students to a broad range of operating system concepts, including installation and maintenance. Emphasis is placed on operating system concepts, management, maintenance, and resources required. Upon completion of this course, students will have an understanding of OS concepts, installation, management, maintenance, using a variety of operating systems.

## LectureLab/ClinicWork Exp.CreditNOS 120 Linux/UNIX Single User2203Prerequisites: State, NOS 110 or CET 211

This course develops the necessary skills for students to develop both GUI and command line skills for using and customizing a Linux workstation. Topics include Linux file system and access permissions, GNOME Interface, VI editor, X Window System expression pattern matching, I/O redirection, network and printing utilities. Upon completion, students should be able to customize and use Linux systems for command line requirements and desktop productivity roles.

## NOS 130 Windows Single User 2 2 0 3 Prerequisites: State, NOS 110 or CET 211

This course introduces operating system concepts for single-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating systems functions at the support level in a single-user environment.

## NOS 220 Linux/UNIX Admin I 2 2 0 3

Prerequisites: State, NOS 120

This course introduces the Linux file system, group administration, and system hardware controls. Topics include installation, creation and maintaining file systems, NIS client and DHCP client configuration, NFS, SMB/Samba, Configure X, Gnome, KDE, basic memory, processes, and security. Upon completion, students should be able to perform system administration tasks including installation, configuring and attaching a new Linux workstation to an existing network.

## **NOS 230 Windows Admin I** 2 2 0 3

Prerequisites: State, NOS 130

This course covers the installation and administration of a Windows Server network operating system. Topics include managing and maintaining physical and logical devices, access to resources, the server environment, managing users, computers, and groups, and Managing/Implementing Disaster Recovery. Upon completion, students should be able to manage and maintain a Windows Server environment.

## **NURSING**

## **NUR 101 Practical Nursing I** 7 6/6 0 11

Prerequisites: Local, Admission into the Practical Nursing Program (D45660)

Corequisites: Local, BIO 168, PSY 150

This course introduces concepts as related to the practical nurse's caregiver and discipline-specific roles. Emphasis is placed on the nursing process, legal/ethical/professional issues, wellness/illness patterns, and basic nursing skills. Upon completion, students should be able to demonstrate beginning understanding of nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span.

## **NUR 102 Practical Nursing II** 8 12 0 12

Prerequisites: Local, NUR 101

Corequisite: Local, BIO 169, ENG 111

This course includes more advanced concepts as related to the practical nurse's caregiver and discipline-specific roles. Emphasis is placed on the nursing process, delegation, cost effectiveness, legal/ethical/professional issues, and wellness/illness patterns. Upon completion, students should be able to begin participating in the nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span.

## Lecture Lab/Clinic Work Exp. Credit NUR 103 Practical Nursing III 6 12 0 10

Prerequisites: Local, NUR 102

This course focuses on use of nursing/related concepts by practical nurses as providers of care/members of discipline in collaboration with health team members. Emphasis is placed on the nursing process, wellness/illness patterns, entry-level issues, accountability, advocacy, professional development, evolving technology, and changing health care delivery systems. Upon completion, students should be able to use the nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span.

## **NUR 107 LPN Refresher** 9 9 0 12

This refresher course is designed to provide an independent didactic review for the previously licensed practical nurse whose license has lapsed. Emphasis is placed on common medical-surgical conditions and nursing interventions, including mental health principles, pharmacological concepts, and safe clinical practice. Upon completion, students will be eligible to apply for reinstatement of licensure.

## **NUR 111 Intro to Health Concepts** 4 6/6 0 8 Prerequisites: Local, Admission to the Associate Degree Nursing Program (A45110)

Corequisites: Local, BIO 168, NUR 117, PSY 150

This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including medication administration, assessment, nutrition, ethics, interdisciplinary teams, informatics, evidence-based practice, individual-centered care, and quality improvement. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

## NUR 112 Health-Illness Concepts 3 6 0 5

Prerequisites: State, NUR 111; Local, NUR 117, BIO 168

Corequisites: Local, BIO 169, PSY 241, ENG 111

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of acid-base, metabolism, cellular regulation, oxygenation, infection, stress/coping, health-wellness-illness, communication, caring interventions, managing care, safety, quality improvement, and informatics. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

## NUR 113 Family Health Concepts 3 6 0 5 Prerequisites: State, NUR 111; Local, NUR 112, NUR 114, NUR 117, NUR 211 Corequisites: Local, ENG 112, BIO 275

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of oxygenation, sexuality, reproduction, grief/loss, mood/affect, behaviors, development, family, health-wellness-illness, communication, caring interventions, managing care, safety, and advocacy. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

## NUR 114 Holistic Health Concepts 3 6 0 5 Prerequisites: State, NUR 111; Local, NUR 112, NUR 117, NUR 211 Corequisites: Local, COM 231

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.

### Lecture Lab/Clinic Work Exp. Credit

## **NUR 117 Pharmacology**

Prerequisites: Local, Admission to the Associate Degree Nursing Program (A45110)

Corequisites: Local, BIO 168, NUR 111, PSY 150

This course introduces information concerning sources, effects, legalities, and the safe use of medications as therapeutic agents. Emphasis is placed on nursing responsibility, accountability, pharmocokinetics, routes of medication administration, contraindications, and side effects. Upon completion, students should be able to compute dosages and administer medication safely.

## **NUR 211 Health Care Concepts**

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Prerequisites: State, NUR 111; Local, NUR 112, NUR 117

Corequisites: Local, BIO 169, PSY 241, ENG 111

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, infection, immunity, mobility, comfort, behaviors, health-wellness-illness, clinical decision-making, caring interventions, managing care, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

## **NUR 212 Health System Concepts**

Prerequisites: State, NUR 111; Local, NUR 112, NUR 113, NUR 114, NUR 117, NUR 211

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Corequisites: Local, ENG 112, BIO 275

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-wellnessillness, collaboration, managing care, safety, advocacy, legal issues, policy, healthcare systems, ethics, accountability, and evidence-based practice. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

## **NUR 213 Complex Health Concepts**

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Prerequisites: State, NUR 111 Local, NUR 112, NUR 113, NUR 114, NUR 211, NUR 212, NUR 117 and BIO 275

Corequisites: Local, HUM/FINE Arts Elective

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.

## NUTRITION

### NUT 110 Nutrition

This course covers basic principals of nutrition and their relationship to human health. Topics include meeting nutritional needs of healthy people, menu modification based on special dietary needs, food habits, and contemporary problems associated with nutrition. Upon completion, students should be able to apply basic nutritional concepts as they relate to health and well being

## OFFICE ADMINISTRATION

## **OST 080 Keyboarding Literacy**

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.

# **Lecture Lab/Clinic Work Exp. Credit OST 122 Office Computations**1 2 0 2 This course introduces the keypad and the touch method using the electronic calculator. Topics include mathematical functions in business applications. Upon completion, students should be able to use the electronic calculator to solve a wide variety of problems commonly encountered in business. **OST 131 Keyboarding**1 2 0 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

**OST 134 Text Entry & Formatting** 2 2 0 3

at an acceptable speed and accuracy level using the touch system.

Prerequisites: Local, OST 131

This course is designed to provide skills needed to increase speed, improve accuracy, and format documents. Topics include letters, memos, tables, and business reports. Upon completion, students should be able to produce documents and key timed writings at speeds commensurate with employability. *This course is also available through the Virtual Learning Community (VLC)*.

**OST 136 Word Processing** 2 2 0 3 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. *This course is also available through the Virtual Learning Community (VLC).* 

OST 140 Med Int Comm/Research 1 2 0 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 should be able to use the Internet to research any office topics required for employment.

**OST 141 Med Terms I -Med Office** 3 0 0

This course uses a language-structure approach to present the terminology and vocabulary that will be encountered in medical office settings. Topics include word parts that relate to systemic components, conditions, pathology, and disorder remediation in approximately one-half of the systems of the human body. Upon completion, students should be able to relate words to systems, pluralize, define, pronounce, and construct sentences with the included terms.

OST 142 Med Terms II -Med Office 3 0 0 3

This course is a continuation of OST 141 and continues the study, using a language-structure approach, of medical office terminology and vocabulary. Topics include word parts that relate to systemic components, conditions, pathology, and disorder remediation in the remaining systems of the human body. Upon completion, students should be able to relate words to systems, pluralize, define, pronounce, and construct sentences with the included terms.

OST 148 Med Coding Billing & Insu 3 0 0 3 Prerequisites: Local, MED 121, OST 141

This course introduces fundamentals of medical coding, billing, and insurance. Emphasis is placed on the medical billing cycle to include third party payers, coding concepts, and form preparation. Upon completion, students should be able to explain the life cycle of and accurately complete a medical insurance claim. *This course is also available through the Virtual Learning Community (VLC)*.

#### Lecture Lab/Clinic Work Exp. Credit **OST 149 Medical Legal Issues** 3 3 This course introduces the complex legal, moral, and ethical issues involved in providing healthcare services. Emphasis is placed on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professional liabilities; and medical practice liability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior. **OST 162 Executive Terminology** 0 0 3 This course is designed to increase and improve proficiency in word usage. Topics include root words, prefixes, suffixes, homonyms, synonyms, and specialized vocabularies. Upon completion,

**OST 164 Text Editing Applications** 

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This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text.

OST 166 Speech Recognition 1 2 0

students should be able to use acquired vocabulary skills in the global workplace.

Prerequisites: State, CIS 110 or CIS 115 or OST 137

This course is designed to provide skills needed to compose and edit documents using speech recognition technology. Emphasis is placed on specialized speech recognition features, intensive editing, and proofreading skills. Upon completion, students should be able to produce mailable business documents using speech recognition software.

**OST 181 Intro to Office Systems** 2 2 0 3

This course introduces the skills and abilities needed in today's office. Topics include effectively interacting with coworkers and the public, processing simple financial and informational documents, and performing functions typical of today's offices. Upon completion, students should be able to display skills and decision-making abilities essential for functioning in the total office context.

**OST 184 Records Management** 2 2 0 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. This course is also available through the Virtual Learning Community (VLC).

OST 223 Admin Office Transcript I 2 2 0 3

Prerequisites: State, OST 164; and OST 134 or OST 136

This course provides experience in transcribing documents. Emphasis is placed on appropriate formatting, advanced text editing skills, and transcription techniques. Upon completion, students should be able to transcribe office documents.

OST 224 Admin. Ofc Transcript II 1 2 0

Prerequisites: State, OST 223

This course provides instruction and practice in advanced transcription skills. Emphasis is placed on specialized transcription features. Upon completion, students should be able to transcribe complex business documents.

	Lecture	Lab/Clinic	Work Exp.	Credit
<b>OST 233 Office Publications Design</b>	2	2	0	3
Prerequisites: State, OST 136				
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				

OST 236 Adv Word/Information Proc 2 2 0 3

Prerequisites: State, OST 136

This course develops proficiency in the utilization of advanced word/information processing functions. Emphasis is placed on advanced word processing features. Upon completion, students should be able to produce a variety of complex business documents. *This course is also available through the Virtual Learning Community (VLC)*.

# OST 241 Med Ofc Transcription I 1 2 0

Prerequisites: State, MED 121 or OST 141

produce professional business documents and publications.

This course introduces machine transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription, proofreading, and use of reference materials as well as vocabulary building. Upon completion, students should be able to prepare accurate and usable transcripts of voice recordings in the covered specialties.

# $\textbf{OST 242 Med Ofc Transcription II} \qquad \qquad 1 \qquad \qquad 2 \qquad \qquad 0 \qquad \qquad 2$

Prerequisites: State, OST 241

This course continues building transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription and text editing, efficient use of reference materials, increasing transcription speed and accuracy, and improving understanding of medical terminology. Upon completion, students should be able to display competency in accurately transcribing medical documents.

# **OST 243 Med Office Simulation** 2 2 0 3

Prerequisites: State, OST 148

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. This course is a unique concentration requirement in the Medical Office Systems Technology concentration in the Office Systems Technology program.

# **OST 244 Med Document Production** 1 2 0

Prerequisites: State, OST 134

This course provides production-level skill development in processing medical documents. Emphasis is placed on producing mallable documents through the use of medical-related materials. Upon completion, students should be able to perform competently in preparing accurate, correctly formatted, and usable documents.

# **OST 247 Procedure Coding** 1 2 0

Prerequisites: State, MED 121 or OST 141

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: State, MED 121 or OST	141			
This course provides an in-depth study of system. Upon completion, students should be a system.				_
, , ,	1	1 /	0	,
OST 249 CPC Certification	3	2	0	4
Prerequisites: State, OST 247 and OST	248			
This course provides instruction that wil	l prepare stude	nts to sit for the	e American Ass	ociation of
Professional Coders (AAPC) CPC Exam	. Topics includ	e diagnostic an	id procedural co	oding. Upon
completion, students should be able to si	t for the AAPO	CPC Exam.		
OST 284 Emerging Technologies	1	2	0	2
This course provides opportunities to ex				
fying, researching, and presenting currer	_	•		
sion. Upon completion, students should			portance of kee	ping abreast
of technological changes that affect the	office profession	nal.		
OST 286 Professional Developmen	ı <b>t</b> 3	0	0	3
This course covers the personal competer		· ·	o .	-
in the office. Topics include interpersona				0
professional growth, multicultural aware		, , 11		1
should be able to demonstrate these attri		•		,
		,,		
OST 289 Administrative Office Mg	g <b>t</b> 2	2	0	3

Lecture

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Lab/Clinic Work Exp.

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Credit

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# PUBLIC ADMINISTRATION

should be able to adapt in an office environment.

Prerequisites: State, OST 164 and either OST 134 or OST 136

**OST 248 Diagnostic Coding** 

# **PAD 151 Intro to Public Admin** 3 0 0 3 Prerequisite: State, Admission to the Business Administration, Public Administration Program (A2512H)

This course is designed to be a capstone course for the office professional and provides a working knowledge of modern office procedures. Emphasis is placed on scheduling, telephone procedures, travel arrangements, event planning, office design, and ergonomics. Upon completion, students

This course includes an overview of the role of the public administrator in government and examination of the development and implementation of public policy. Topics include public personnel administration and management, decision making, public affairs, ethics, organizational theries, budgetary functions within governmental agencies, and other governmental issues. Upon completion, students should be able to explain the functions of government in society and in the lives of people composing that society.

PAD 152 Ethics in Government 3 0 0 3

This course introduces the ethical issues and problems within the public administration field.

Emphasis is placed on building analytical skills, stimulating moral imagination, and recognizing the discretionary power of the administrator's role. Upon completion, students should be able to

understand the moral dimensions of public administrative decision making.

# **Lecture Lab/Clinic Work Exp. Credit PAD 251 Public Finance & Budgeting** 3 0 0 3 Prerequisite: State, Admission to the Business Administration, Public Administration Program (A2512H) This course provides an overview of the public finance and budgeting processes used in the allocation of public resources to meet differing public interests. Topics include the political environment, government expenditures, revenues, taxation, budgetary process theories and techniques, and the relation of government finance to the economy. Upon completion, students should be able to recog-

nize impacts of government revenue and expenditure policies and understand the role of budgeting

# **PAD 252 Public Policy Analysis** 3 0 0 3 Prerequisite: State, Admission to the Business Administration, Public Administration Program (A2512H)

This course is a study of methods and techniques used to determine the effectiveness of public programs. Emphasis is placed on the concept of ecology and environmental impact, informal groups and information networks, and the relationship between public and private sectors. Upon completion, students should be able to analyze case studies with the use of political analysis techniques.

# **PAD 253 Intro to Urban Planning** 3 0 0 3 This course includes an analysis of current urban problems and the forces responsible for urban and regional growth. Topics include historical perspectives on the planning approach to urban phenomena and the evaluation of current proposals dealing with aspects of the urban situation. Upon completion, students should be able to evaluate urban and regional growth problems through

# PHYSICAL EDUCATION

case study analysis.

Prerequisites: State, PED 111

in executing governmental policy.

# PED 110 Fit and Well for Life 1 2 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# **PED 111 Physical Fitness I** 0 3 0 1 This course provides an individualized approach to physical fitness utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness programs. Upon completion, students should be able to set up and implement an individualized physical fitness program. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# PED 112 Physical Fitness II 0 3 0

This course is an intermediate-level fitness class. Topics include specific exercises contributing to fitness and the role exercise plays in developing body systems. Upon completion, students should be able to implement and evaluate an individualized physical fitness program. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.* 

#### Lab/Clinic Work Exp. Lecture Credit PED 113 Aerobics I 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement. PED 114 Aerobics II 0 3 0 1 Prerequisites: PED 113

This course provides a continuation of a program of cardiovascular fitness involving rhythmic exercise. Emphasis is placed on a wide variety of aerobic activities which include cardiovascular efficiency, strength, and flexibility. Upon completion, students should be able to participate in and design a rhythmic aerobic exercise routine. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

PED 117 Weight Training I This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

#### 0 0 PED 118 Weight Training II Prerequisites: State, PED 117

This course covers advanced levels of weight training. Emphasis is placed on meeting individual training goals and addressing weight training needs and interests. Upon completion, students should be able to establish and implement an individualized advanced weight training program. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major

and/or elective course requirement.

**PED 119 Circuit Training** This course covers the skills necessary to participate in a developmental fitness program. Emphasis is placed on the circuit training method which involves a series of conditioning timed stations arranged for maximum benefit and variety. Upon completion, students should be able to understand and appreciate the role of circuit training as a means to develop fitness. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

**PED 120 Walking for Fitness** This course introduces fitness through walking. Emphasis is placed on stretching, conditioning exercises, proper clothing, fluid needs, and injury prevention. Upon completion, students should be able to participate in a recreational walking program. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

PED 121 Walk, Jog, Run 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# Lab/Clinic Work Exp. Lecture Credit PED 125 Self-Defense-Beginning 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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement. 2 0 PED 126 Self-Defense-Intermediate Prerequisites: State, PED 125 This course is designed to aid students in building on the techniques and skills developed in PED

125. Emphasis is placed on the appropriate psychological and physiological responses to various encounters. Upon completion, students should be able to demonstrate intermediate skills in self-defense stances, blocks, punches, and kick combinations. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# PED 128 Golf-Beginning 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 knowledge of the rules and etiquette of golf. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

PED 130 Tennis-Beginning This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# PED 131 Tennis-Intermediate 0 0

Prerequisites: State, PED 130 This course emphasizes the refinement of playing skills. Topics include continuing the development of fundamentals, learning advanced serves, and strokes and pace and strategies in singles and doubles play. Upon completion, students should be able to play competitive tennis. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

PED 137 Badminton This course covers the fundamentals of badminton. Emphasis is placed on the basics of serving, clears, drops, drives, smashes, and the rules and strategies of singles and doubles. Upon completion, students should be able to apply these skills in playing situations. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

PED 139 Bowling-Beginning This course introduces the fundamentals of bowling. Emphasis is placed on ball selection, grips, stance, and delivery along with rules and etiquette. Upon completion, students should be able to participate in recreational bowling. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# Lab/Clinic Work Exp. Lecture Credit PED 143 Volleyball-Beginning This course covers the fundamentals of volleyball. Emphasis is placed on the basics of serving, passing, setting, spiking, blocking, and the rules and etiquette of volleyball. Upon completion, students should be able to participate in recreational volleyball. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement. PED 144 Volleyball-Intermediate Prerequisites: State, PED 143 This course covers more advanced volleyball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to participate in competitive volleyball. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement. PED 145 Basketball-Beginning This course covers the fundamentals of basketball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational basketball. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement. PED 146 Basketball-Intermediate 2 0 Prerequisites: State, PED 145 This course covers more advanced basketball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to play basketball at a competitive level. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement. PED 150 Baseball-Beginning This course covers the fundamentals of baseball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational baseball. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement. PED 151 Baseball-Intermediate 3 0 Prerequisites: State, PED 150 This course covers more advanced baseball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to play baseball at a competitive level. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement. PED 187 Social Dance-Beginning This course introduces the fundamentals of popular social dances. Emphasis is placed on basic social dance techniques, dances, and a brief history of social dance. Upon completion, students should be able to demonstrate specific dance skills and perform some dances. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

PED 254 Coaching Basketball

#### PED 256 Coaching Baseball

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. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# **PHILOSOPHY**

# PHI 215 Philosophical Issues

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Prerequisites: State, ENG 111

This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critique the philosophical components of an issue. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

#### **PHI 240 Introduction to Ethics**

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Prerequisites: State, ENG 111

This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on utilitarianism, rule-based ethics, existentialism, relativism versus objectivism, and egoism. Upon completion, students should be able to apply various ethical theories to individual moral issues such as euthanasia, abortion, crime and punishment, and justice. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community (VLC).

# **PHYSICS**

### **PHY 110 Conceptual Physics**

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This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

#### PHY 110A Conceptual Physics Lab

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Corequisite: State, PHY 110

This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY110. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

#### PHY 131 Physics-Mechanics

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Prerequisites: State, MAT 121, MAT 161, MAT 171, or MAT 175

This algebra/trigonometry-based course introduces fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

#### PHY 151 College Physics I

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Prerequisites: State, MAT 161, MAT 171, or MAT 175; Local, RED 090, ENG 090/090A This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

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## PHY 152 College Physics II

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Prerequisites: State, PHY 151

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-solvingability for the topics covered. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

#### PHY 251 General Physics I

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Prerequisites: State, MAT 271 Corequisites: State, MAT 272

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

#### PHY 252 General Physics II

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Prerequisites: State, MAT 272 and PHY 251

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

# **PLUMBING**

### PLU 111 Intro to Basic Plumbing

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This course introduces basic plumbing tools, materials, and fixtures. Topics include standard tools, materials, and fixtures used in basic plumbing systems and other related topics. Upon completion, students should be able to demonstrate an understanding of a basic plumbing system.

#### **PLU 115 Basic Plumbing**

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This course covers the basic installation and maintenance of plumbing systems and components. Topics include safe use of tools, implementation of standard practices, and installation/maintenance of piping, fittings, valves, appliances and fixtures used in plumbed systems. Upon completion, students should be able to install/maintain basic plumbing systems, components, appliances, and fixtures through appropriate use of plumbing tools and standard practices.

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# POLITICAL SCIENCE

#### POL 120 American Government 3 0

Prerequisites: Local, RED 090, ENG 080

This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

# **POL 220 International Relations** 3 0

This course provides a study of the effects of ideologies, trade, armaments, and alliances on relations among nation-states. Emphasis is placed on regional and global cooperation and conflict, economic development, trade, non-governmental organizations, and international institutions such as the World Court and UN. Upon completion, students should be able to identify and discuss major international relationships, institutions, and problems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

# **POLYSOMNOGRAPHY**

# PSG 110 Intro to Polysomnography 3 2 0 4

Prerequisites: Local, Admission into the Polysomnography Program (45670)

Corequisites: Local, BIO 163, MED 121

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.

# PSG 111 Neuro/Cardiopulmonary A & P 4 0 0 4

Prerequisites: State, BIO 163 or BIO 165/166 or BIO 168/169, Local, PSG 110

Corequisites: Local, ELC 111

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.

#### **PSG 112 PSG Fundamentals** 3 0 0 3

Prerequisites: Local, PSG 111

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.

#### Lecture Lab/Clinic Work Exp. Credit PSG 210 Polysomnography I 2/9 0 7 Prerequisites: State, PSG 111 or PSG 189; Local, PSG 112 Corequisites: Local, PSG 214 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. 6/9 2 0 7

**PSG 211 Polysomnography II** Prerequisites: State, PSG 210

Corequisites: Local, PSG 212, PSG 213

procedures through written, laboratory and clinical evaluations.

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

# PSG 212 Infant/Pediatric PSG 3 2 0 4

Prerequisites: Local, PSG 210 Corequisites: Local, PSG 211

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, student should be able to demonstrate competence in concepts through written and laboratory evaluations.

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# PSG 213 Case Study/Exam Review 0 3 0

Prerequisites: Local, PSG 210 Corequisites: Local, PSG 211

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.

# **PSG 214 PSG Clinical Apps I** 0 2 0

Prerequisites: Local, PSG 112 Corequisites: Local, PSG 210

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.

# **PRINTING**

# **PRN 155 Screen Printing I** 1 3 0

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.

# **PRN 156 Screen Printing II** 1 3 0 2

Prerequisites: State, PRN 155

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.

#### **PRN 220 Offset Press Fundamentals**

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This course is designed to provide the fundamental skills required to setup and operate an offset press. Emphasis is placed on setup, press operation, maintenance, and troubleshooting of single-color jobs on various paper stock on sheet-fed offset presses and duplicators. Upon completion, students should be able to produce commercial-quality single-color work.

# **PSYCHOLOGY**

# **PSY 150 General Psychology**

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Prerequisites: Local, RED 090

This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

#### **PSY 183 Psychology of Addiction**

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Prerequisites: Local, PSY 150

This course covers historical and theoretical perspectives on addictive behavior and the genetic, familial, and socio-cultural influences on addiction. Topics include addictions to eating, gambling, alcohol, drugs, relationships, work, and sex. Upon completion, students should be able to demonstrate knowledge of the theories of addiction and the factors underlying addictive behaviors.

# PSY 241 Developmental Psych

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Prerequisites: State, PSY 150

This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

### **PSY 246 Adolescent Psychology**

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Prerequisites: State, PSY 150

This course provides an overview of the behavior patterns, life changes, and social issues that accompany the developmental stage of adolescence. Topics include developmental theories; physical, cognitive and psychosocial growth; transitions to young adulthood; and socio-cultural factors that influence adolescent roles in home, school and community. Upon completion, students should be able to identify typical and atypical adolescent behavior patterns as well as appropriate strategies for interacting with adolescents. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

### **PSY 249 Psychology of Aging**

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Prerequisites: State, PSY 150

This course covers the particular needs and behaviors of the maturing adult. Emphasis is placed on psychosocial processes; biological and intellectual aspects of aging; adjustments to retirement, dying, bereavement; and the stereotypes and misconceptions concerning the elderly. Upon completion, students should be able to show an understanding of the psychological factors related to the aging process. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

# LectureLab/ClinicWork Exp.CreditPSY 260 Assessment Techniques3003

Prerequisites: State, PSY 150

This course introduces the field of psychological assessment. Topics include an introduction to standardized testing and methods of test administration and scoring. Upon completion, students should be able to demonstrate a familiarity with commonly used assessment instruments and understand the implications of test results.

# **PSY 263 Educational Psychology** 3 0 0 3

Prerequisites: State, PSY 150

This course examines the application of psychological theories and principles to the educational process and setting. Topics include learning and cognitive theories, achievement motivation, teaching and learning styles, teacher and learner roles, assessment, and developmental issues. Upon completion, students should be able to demonstrate an understanding of the application of psychological theory to educational practice. This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

# **PSY 265 Behavioral Modification** 3 0 0

Prerequisites: State, PSY 150

This course is an applied study of factors influencing human behavior and strategies for behavioral change. Emphasis is placed on cognitive-behavioral theory, behavioral assessment, practical applications of conditioning techniques, and maintenance of adaptive behavior patterns. Upon completion, students should be able to implement basic learning principles to effect behavioral changes in self and others.

# **PSY 281 Abnormal Psychology** 3 0 0 3

Prerequisites: State, PSY 150

This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

# **RADIOGRAPHY**

# **RAD 110 Rad Intro & Patient Care** 2 3 0

Prerequisites: Local, Admission into the Radiography Program (A45700)

Corequisites: State, RAD 111 and RAD 151; Local, BIO 163

This course provides an overview of the radiography profession and student responsibilities. Emphasis is placed on basic principles of patient care, radiation protection, technical factors, and medical terminology. Upon completion, students should be able to demonstrate basic skills in these areas.

# **RAD 111 RAD Procedures I** 3 3 0 4

Corequisites: State, RAD 110 and RAD 151; Local, BIO 163

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.

#### Lecture Lab/Clinic Work Exp. Credit RAD 112 RAD Procedures II 3 0 4 Prerequisites: State, RAD 110, RAD 111 and RAD 151; Local, BIO 163 Corequisites: Local, RAD 121 and RAD 161 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

#### RAD 121 Radiographic Imaging I 0 3 Prerequisites: State, RAD 110, RAD 111, and RAD 151; Local, BIO 163

Corequisites: Local, RAD 112 and RAD 161

these areas.

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.

#### 3 0 2 RAD 122 Radiographic Imaging II Prerequisites: State, RAD 112, RAD 121, and RAD 161

Corequisites: State, RAD 131 and RAD 171

This course provides advanced principles of imaging including digital radiography. Emphasis is placed on the factors that impact brightness, contrast, recorded detail, and distortion. Upon completion, students should be able to demonstrate an understanding of advanced principles of imaging.

#### 3 0 2 RAD 131 Radiographic Physics I Prerequisites: Local, RAD 112, RAD 121, and RAD 161

Corequisites: Local, RAD 122 and RAD 171

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.

#### 0 2 RAD 151 RAD Clinical Ed I 6

Corequisites: State, RAD 110 and RAD 111; Local, BIO 163

This course introduces patient management and basic radiographic procedures in the clinical setting. Emphasis is placed on mastering positioning of the chest and extremities, manipulating equipment, and applying principles of ALARA. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

#### RAD 161 RAD Clinical Ed II 0 5 0 Prerequisites: State, RAD 110, RAD 111, and RAD 151; Local, BIO 163 Corequisites: State, RAD 112 and RAD 121

This course provides additional experience in patient management and in more complex radiographic procedures. Emphasis is placed on mastering positioning of the spine, pelvis, head and neck, and thorax and adapting procedures to meet patient variations. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

#### **RAD 171 RAD Clinical Ed III** 0 12 4 Prerequisites: State, RAD 112, RAD 121, and RAD 161

Corequisites: State, RAD 122 and RAD 131

This course provides experience in patient management specific to fluoroscopic and advanced radiographic procedures. Emphasis is placed on applying appropriate technical factors to all studies and mastering positioning of gastrointestinal and urological studies. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

# **Lecture Lab/Clinic Work Exp. Credit RAD 211 RAD Procedures III**2 3 0 3

Prerequisites: State, RAD 122; Local, RAD 131 and RAD 171

Corequisites: State, RAD 231, RAD 241, and RAD 251

This course provides the knowledge and skills necessary to perform standard and specialty radiographic procedures. Emphasis is placed on radiographic specialty procedures, sectional anatomy, and advanced imaging. Upon completion, students should be able to demonstrate an understanding of these areas.

# **RAD 231 Radiographic Physics II** 1 3 0 2 Prerequisites: State, RAD 171 or RAD 131; Local, RAD 122, RAD 131, and RAD 171

Corequisites: Local, RAD 211, RAD 241, and RAD 251

This course provides advanced principles of radiation characteristics and production including digital imaging and Computed Tomography (CT). Emphasis is placed on imaging equipment. Upon completion, students should be able to demonstrate an understanding of radiation characteristics and production.

# RAD 241 Radiobiology/Protection 2 0 0

Prerequisites: State, RAD 122, RAD 131, and RAD 171 Corequisites: State, RAD 211, RAD 231, and RAD 251

This course covers the principles of radiation protection and radiobiology. Topics include the effects of ionizing radiation on body tissues, protective measures for limiting exposure to the patient and personnel, and radiation monitoring devices. Upon completion, students should be able to demonstrate an understanding of the effects and uses of radiation in diagnostic radiology.

# **RAD 245 Image Analysis** 1 3 0 2

Prerequisites: State, RAD 211, RAD 231, RAD 241 and RAD 251

Corequisites: State, RAD 261; Local, RAD 271

This course provides an overview of image analysis and introduces methods of quality management. Topics include image evaluation, pathology, quality control, and quality assurance. Upon completion, students should be able to demonstrate a basic knowledge of image analysis and quality management.

# **RAD 251 RAD Clinical Ed IV** 0 21 0 7

Prerequisites: State, RAD 122, RAD 131, and RAD 171 Corequisites: State, RAD 211, RAD 231, and RAD 241

This course provides the opportunity to continue mastering all basic radiographic procedures and to attain experience in advanced areas. Emphasis is placed on equipment operation, pathological recognition, pediatric and geriatric variations, and a further awareness of radiation protection requirements. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

# **RAD 261 RAD Clinical Ed V** 0 21 0 7

Prerequisites: State, RAD 251; Local, RAD 211, RAD 231, and RAD 241

Corequisites: State, RAD 245; Local, RAD 271

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.

#### Lecture Lab/Clinic Work Exp. Credit **RAD 271 Radiography Capstone** 0 Prerequisites: State, RAD 211, RAD 231, RAD 241, RAD 251 Corequisites: State, RAD 245, RAD 261 This course provides an opportunity to exhibit problem-solving skills required for certification. Emphasis is placed on critical thinking and integration of didactic and clinical components. Upon completion, students should be able to demonstrate the knowledge required of any entry-level radiographer.

# READING

#### **RED 080 Intro to College Reading** 9 0 4

Prerequisites: Local, Placement assessment score of 1-62

This course introduces effective reading and inferential thinking skills in preparation for RED 090. Emphasis is placed on vocabulary, comprehension, and reading strategies. Upon completion, students should be able to determine main ideas and supporting details, recognize basic patterns of organization, draw conclusions, and understand vocabulary in context. This course does not satisfy the developmental reading prerequisite for ENG 111.

#### **RED 090 Improved College Reading** 0 4

Prerequisites: State, RED 080 or placement assessment score of 63-79

This course is designed to improve reading and critical thinking skills. Topics include vocabulary enhancement; extracting implied meaning; analyzing author's purpose, tone, and style; and drawing conclusions and responding to written material. Upon completion, students should be able to comprehend and analyze college-level reading material. This course satisfies the developmental reading prerequisite for ENG 111.

# RELIGION

# **REL 110 World Religions**

This course introduces the world's major religious traditions. Topics include Primal religions, Hinduism, Buddhism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

#### 3 **REL 111 Eastern Religions**

This course introduces the major Asian religious traditions. Topics include Hinduism, Buddhism, Taoism, Confucianism, and Shinto. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religious studied. This course has been approved for the transfer under the CAA as a general education course in Humanities/Fine Arts.

# **REL 112 Western Religions**

This course introduces the major western religious traditions. Topics include Zoroastrianism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

# REL 211 Intro to Old Testament 3 0 0 3 This course is a survey of the literature of the Hebrews with readings from the law, prophets, and other writings. Emphasis is placed on the use of literary, historical, archeological, and cultural analysis. Upon completion, students should be able to use the tools of critical analysis to read and understand Old Testament literature. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**REL 212 Intro to New Testament** 3 0 0 3 This course is a survey of the literature of first-century Christianity with readings from the gospels, Acts, and the Pauline and pastoral letters. Topics include the literary structure, audience, and religious perspective of the writings, as well as the historical and cultural context of the early Christian community. Upon completion, students should be able to use the tools of critical analysis to read and understand New Testament literature. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

# **INFORMATION SYSTEMS SECURITY**

# SEC 110 Security Concepts 2 2 0 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.

# **SOCIOLOGY**

**SOC 210 Introduction to Sociology** 3 0 0 3 3 This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.* 

**SOC 213 Sociology of the Family** 3 0 0 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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

**SOC 220 Social Problems** 3 0 0 3 This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

# **SOC 225 Social Diversity** 3 0 0 3 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. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

Lecture

Lab/Clinic Work Exp.

Credit

# **SOC 230 Race and Ethnic Relations** 3 0 0 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 inter-group relationships. Upon completion, students should be able to identify and analyze relationships among racial and ethnic groups within the larger society. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# **SPANISH**

# **SPA 110 Introduction to Spanish** 2 0 0 2 This course provides an introduction to understanding, speaking, reading, and writing Spanish. Emphasis is placed on pronunciation, parts of speech, communicative phrases, culture, and skills for language acquisition. Upon completion, students should be able to identify and apply basic grammar concepts, display cultural awareness, and communicate in simple phrases in Spanish.

# **SPA 111 Elementary Spanish I** 3 0 0 3 This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

# **SPA 112 Elementary Spanish II** 3 0 0 3 Prerequisites: State, SPA 111

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

# **SPA 141 Culture and Civilization** 3 0 0 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. This course is taught in English. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# Lecture Lab/Clinic Work Exp. Credit SPA 151 Hispanic Literature 3 0 0 3 Prerequisites: State, ENG 111 This course includes selected readings by Hispanic writers. Topics include fictional and non-ficti

This course includes selected readings by Hispanic writers. Topics include fictional and non-fictional works by representative authors from a variety of genres and literary periods. Upon completion, students should be able to analyze and discuss selected texts within relevant cultural and historical contexts. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

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# **SPA 181 Spanish Lab 1** 0 2 0

Corequisites: Local, SPA 111

This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# **SPA 182 Spanish Lab 2** 0 2 0 Proposocial test State SPA 181

Prerequisites: State, SPA 181 Corequisites: Local, SPA 112

This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# **SPA 211 Intermediate Spanish I** 3 0 0 3

Prerequisites: State, SPA 112

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

# **SPA 212 Intermediate Spanish II** 3 0 0 3

Prerequisites: State, SPA 211

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

# **SPA 281 Spanish Lab 3** 0 2 0

Prerequisites: State, SPA 182 Corequisites: Local, SPA 211

This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts through the use of various supplementary learning media and materials. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# Lecture Lab/Clinic Work Exp. Credit SPA 282 Spanish Lab 4 0 2 0 1

Prerequisites: State, SPA 281 Corequisites: Local, SPA 212

This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts through the use of various supplementary learning media and materials. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

# SUSTAINABILITY TECHNOLOGIES

# SST 110 Intro to Sustainability 3 0 0

This course introduces sustainability issues and individual contributions toward environmental sustainability. Topics include management processes needed to maximize renewable/non-renewable energy resources, economics of sustainability, and reduction of environmental impacts. Upon completion, students should be able to demonstrate an understanding of their effectiveness and impacts.

# **SST 120 Energy Use Analysis** 2 2 0

This course introduces the principles of analyzing energy use, energy auditing tools and techniques, conservation techniques, and calculating energy savings. Topics include building system control theory, calibrating digital controls, energy loss calculation, and applicable conservation techniques. Upon completion, students should be able to demonstrate and understanding of energy use, audits, and controls in the analysis of energy consumption.

# SST 130 Modeling Renewable Energy 2 2 0 3

This course introduces software and other technologies used for modeling renewable energy systems. Topics include renewable energy modeling software applications, data analysis, renewable energy sources, and cost of renewable energy systems. Upon completion, students should be able to use appropriate technology to model the effectiveness of renewable energy systems.

# SST 140 Green Building Concepts 1 3 0

This course introduces green building design, LEED® (Leadership in Energy and Environmental Design) and comparable certifications, and their significance in modern building construction. Topics include LEED certification or similar rating systems, energy efficiency, indoor environmental quality, and sustainable building materials. Upon completion, students should be able to incorporate ecological awareness and sustainable principles within the context of design and construction.

# SST 210 Issues in Sustainability 3 0 0 3

Prerequisites: State, SST 110

This course introduces the long-term impacts and difficulties of applying sustainability concepts in an organization, business, or society. Topics include the application of sustainable technologies and the analysis of affordability, efficiencies, recycling, and small and large-scale design. Upon completion, students should be able to recognize the possible limitations of sustainable technologies and be prepared to reconcile such conflicts.

# SST 250 Sustain Capstone Project 1 6 0 3

Prerequisites: State, SST 110

This course introduces an integrated team approach to sustainability topic of interest to students, faculty, or professional community. Topics include problem identification, proposal preparation, conceptual design, and an effective project work schedule. Upon completion, students should be able to integrate the many facets of topic based on environmental sustainability into a completed project.

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#### Lab/Clinic Work Exp. Lecture Credit

# SURGICAL TECHNOLOGY

## **SUR 110 Intro to Surg Tech**

3 0 Prerequisites: Local, Admission into the Surgical Technology Program (D45740)

Corequisites: State, SUR 111; Local, BIO 163

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.

# **SUR 111 Periop Patient Care**

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Prerequisites: Local, Admission into the Surgical Technology Program (D45740)

Corequisites: State, SUR 110; Local, BIO 163

This course provides the surgical technology student the theoretical knowledge required to function in the pre-operative, intra-operative, and post-operative 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.

## **SUR 122 Surgical Procedures I**

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Prerequisites: State, SUR 110 and SUR 111; Local, BIO 163

Corequisites: State, SUR 123; Local, BIO 275

Corequisites: State, SUR 122; Local, BIO 275

This course provides an introduction to selected basic and intermediate surgical specialties that students are exposed to 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.

#### **SUR 123 Sur Clinical Practice I**

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Prerequisites: State, SUR 110 and SUR 111; Local, BIO 163

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.

## **SUR 134 Surgical Procedures II**

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Prerequisites: State, SUR 123; Local, BIO 275, SUR 122

Corequisites: Local, SUR 135 and SUR 137

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.

#### Lab/Clinic Work Exp. Lecture Credit **SUR 135 Sur Clinical Practice II** 12 0 4 Prerequisites: State, SUR 123; Local, BIO 275, SUR 122

Corequisites: State, SUR 134

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 and the operative setting. Upon completion, students should be able to function in the role of an entry-level surgical technologist.

#### **SUR 137 Prof Success Prep** 0 0 1

Prerequisites: State, SUR 123; Local, BIO 275, SUR 122

Corequisites: State, SUR 134, SUR 135

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.

# SOCIAL WORK

#### 0 SWK 110 Intro to Social Work 3 0 3

Prerequisites: Local, RED 090

This course examines the historical development, values, orientation, and professional standards of social work and focuseson the terminology and broader systems of social welfare. Emphasis is placed on the various fields of practice includingthose agencies whose primary function is financial assistance, corrections, mental health, and protective services. Upon completion, students should be able to demonstrate an understanding of the knowledge, values, and skills of the social work professional.

#### **SWK 113 Working with Diversity** 0 3

This course examines and promotes understanding, sensitivity, awareness, and knowledge of human diversity. Emphasis is placed on professional responsibilities, duties, and skills critical to multicultural human services practice. Upon completion, students should be able to integrate and expand knowledge, skills, and cultural awareness relevant to diverse populations.

#### **SWK 115 Community Resources** 3

This course introduces community resources essential to social work practice. Emphasis is placed on awareness of and interaction with community service personnel. Upon completion, students should be able to identify resources and assess critical community needs. This course is a unique concentration requirement of the Social Service concentration in the Human Services Technology program.

#### 3 0 0 3 **SWK 214 Social Work Law**

Prerequisites: State, SWK 110

This course introduces the major provisions of social services law, current trends, legislative developments, and court procedures. Emphasis is placed on the interpretation of the laws and court decisions related to various social services populations. Upon completion, students should be able to interpret these laws and their implications for social services practice. This course is a unique concentration requirement of the Social Service concentration in the Human Services Technology program.

# Lecture Lab/Clinic Work Exp. Credit SWK 220 SWK Issues in Client Services 3 0 0 3 Representation Level SWK 110

Prerequisites: Local, SWK 110
This course introduces the prof

This course introduces the professional standards, values, and issues in social services. Topics include confidentiality, assessment of personal values, professional responsibilities, competencies, and ethics. Upon completion, students should be able to understand and discuss multiple ethical issues applicable to social work and apply various decision-making models to current issues. This course is a unique concentration requirement of the Social Service concentration in the Human Services Technology program.

# WEB TECHNOLOGIES

# **WEB 110 Internet/Web Fundamentals** 2 2 0 3 This course introduces World Wide Web Consortium (W3C) standard markup language and services of the Internet. Topics include creating web pages, search engines, FTP, and other related topics. Upon completion, students should be able to deploy a hand-coded website created with mark-up

# **WEB 115 Web Markup and Scripting** 2 2 0 3 This course introduces Worldwide Web Consortium (W3C) standard client-side Internet programming using industry-established practices. Topics include JavaScript, markup elements, stylesheets, validation, accessibility, standards, and browsers. Upon completion, students should be able to develop hand-coded web pages using current markup standards.

# **WEB 180 Active Server Pages** 2 2 0 3 Prerequisites: State, CIS 115

language, and effectively use and understand the function of search engines.

This course introduces Active Server Programming. Topics include Jscript, VBScript, HTML 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.

# WELDING

# **WLD 110 Cutting Processes** 1 3 0 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.

# **WLD 112 Basic Welding Processes** 1 3 0 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.

# WLD 115 SMAW (Stick) Plate 2 9 0 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.

	Lecture	Lab/Clinic	Work Exp.	Credit
WLD 115A SMAW (Stick) Plate	1	6	0	3
WLD 115B SMAW (Stick) Plate Prerequisites: Local, WLD 115A WLD 115A and WLD 115B are the equiva	l	3 D 115	0	2
WLD 116 SMAW (Stick) Plate/Pipe	1	9	0	4
Prerequisites: State, WLD 115				

This course is designed to enhance skills with the shielded metal arc (stick) welding process. Emphasis is placed on advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be able to perform groove welds on carbon steel with prescribed electrodes in the flat, horizontal, vertical, and overhead positions.

WLD 116A SMAW (Stick) Plate/Pipe	1	3	0	2
WLD 116B SMAW (Stick) Plate/Pipe Prerequisites: Local, WLD 116A WLD 116A and WLD 116B are the equivalent	0 at of WLD 116	6	0	2

# **WLD 121 GMAW (MIG) FCAW/Plate** 2 6 0

This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions.

# **WLD 122 GMAW (MIG) Plate/Pipe** 1 6 0 3

Prerequisite: State, WLD 121

This course is designed to enhance skills with the gas metal arc (MIG) welding process. Emphasis is placed on advancing skills with the GMAW process making groove welds on carbon steel plate and pipe in various positions. Upon completion, students should be able to perform groove welds with prescribed electrodes on various joint geometry.

# **WLD 131 GTAW (TIG) Plate** 2 6 0 4

This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials.

# **WLD 132 GTAW (TIG) Plate/Pipe** 1 6 0 3

Prerequisites: State, WLD 131

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.

# WLD 141 Symbols & Specifications 2 2 0 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.

# WLD 143 Welding Metallurgy

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This course introduces the concepts of welding metallurgy. Emphasis is placed on basic metallurgy, effects of welding on various metals, and metal classification and identification. Upon completion, students should be able to understand basic metallurgy, materials designation, and classification systems used in welding.

### WLD 151 Fabrication I

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This course introduces the basic principles of fabrication. Emphasis is placed on safety, measurement, layout techniques, cutting, joining techniques, and the use of fabrication tools and equipment. Upon completion, students should be able to perform layout activities and operate various fabrication and material handling equipment.

### WLD 215 SMAW (Stick) Pipe

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4

Prerequisites: State, WLD 115 or WLD 116

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.

# WLD 221 GMAW (MIG) Pipe

1

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3

Prerequisites: State, WLD 122

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 GMAW welds to applicable codes on pipe with prescribed electrodes in various positions.

# WLD 231 GTAW (TIG) Pipe

1

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Prerequisites: State, WLD 132

This course covers gas tungsten are welding on pipe. Topics include joint preparation and fit up with emphasis placed on safety, GTAW welding technique, bead application, and joint geometry. Upon completion, students should be able to perform GTAW welds to applicable codes on pipe with prescribed electrodes and filler materials in various pipe positions.

#### WLD 251 Fabrication II

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Prerequisites: State, WLD 151

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.

#### **WLD 261 Certification Practices**

1

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Prerequisites: State, WLD 115, WLD 121, and WLD 131

This course covers certification requirements for industrial welding processes. Topics include techniques and certification requirements for pre-qualified joint geometry. Upon completion, students should be able to perform welds on carbon steel plate and/or pipe according to applicable codes.

#### WLD 262 Inspection & Testing

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2

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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.

# **BOARD OF TRUSTEES 2013-2014**

Mr. Grady E. Bethel, Chairman Mr. James B. MacNeill, Vice Chairman Expiration of Term

## APPOINTED BY THE GOVERNOR

Mrs. Brenda Canup	June 30, 2014
Mr. Charles Coward	June 30, 2013
Mrs. Rebecca H. Davidson	June 30, 2015
Mr. Luther E. Ledford, Jr.	June 30, 2016

### APPOINTED BY LENOIR COUNTY BOARD OF EDUCATION

Mr. Hermon Carraway	June 30, 2014
Mr. Rod Evans	June 30, 2016
Mr. Randy Smith	June 30, 2013
Mr. Thomas White	June 30, 2015

### APPOINTED BY LENOIR COUNTY BOARD OF COMMISSIONERS

Mr. Grady E. Bethel	June 30, 2014
Mr. James L. Hardison	June 30, 2016
Mr. W. Earl Heath	June 30, 2015
Mr. Thomas Salter	June 30, 2013

#### APPOINTED BY GREENE COUNTY BOARD OF COMMISSIONERS

Mr. Denny Garner	June 30, 2013
Mr James B. MacNeill	June 30, 2015

# APPOINTED BY JONES COUNTY BOARD OF COMMISSIONERS

Mr. Bobby L. Daughety	June 30, 2013
Mrs. Carol M. Hood	June 30, 2015

President, Student Government Association Ex Officio

# **COLLEGE STAFF 2013-2014**

### GENERAL ADMINISTRATION

Briley, Brantley President

A.A.—Lenoir Community College B.S., M.A.Ed.—East Carolina University

Ed.D.—North Carolina State University

Carraway, Jimmy (Jay) Vice President of Continuing Education

B.S., M.A., Ed.D.—East Carolina University

Grimes, Deborah Vice President of Academic and Student Services

B.S., M.A.Ed., Ed.D.—East Carolina University

Sutton, Deborah Vice President of Administrative Services

A.A.—Lenoir Community College B.S.—East Carolina University C.P.A.—NC State Board of C.P.A.'s

Black, John Paul Dean of Student Services

B.A.—Elon University

M.A.Ed., Ed.D-East Carolina University

Huneycutt, Richy Director of Marketing, Recruiting and Communications/

Assistant to the President

B.A.—East Carolina University

Kennedy, Jeanne Director of Institutional Advancement/

Assistant to the President

A.A.—Lenoir Community College B.S.—North Carolina Wesleyan College

Certificate in Nonprofit Management—Duke University

M.A.—Liberty University

#### ADMINISTRATORS OF INSTRUCTIONAL PROGRAMS

Clements, Gary Dean of Business, Industry and Emerging Technologies

A.A.S.—Lenoir Community College

B.S.—Mount Olive College

M.S.A.—Central Michigan University

Kelly, Evelyn Dean of Arts and Sciences

A.A.—University of Maryland—College Park B.A.—Armstrong Atlantic State University M.A.—North Carolina Central University

Ph.D.—University of North Carolina at Greensboro

Welch, Alexis Dean of Health Sciences and Nursing

B.S.N.—Atlantic Christian College M.A.E.—East Carolina University Ed.D.—North Carolina State University

### ADMINISTRATIVE SUPPORT AND PROFESSIONAL SUPPORT

Atkinson-King, La Verne Cooperative Education Coordinator

A.A.S.—Lenoir Community College B.S.—North Carolina Central University

Banks, Carl Chief GED Examiner

A.A.S.—Lenoir Community College

B.S.—Mount Olive College

Barrow, Lisa Human Resources Officer

A.A., A.A.S.—Lenoir Community College B.S.B.A.—East Carolina University

Battle, Paula Basic Skills Assessment Specialist/Recruiter

B.S.—North Carolina A & T State University

Blackwell, Judith Veterans Affairs Coordinator/Financial Aid Advisor

A.A.S.—Lenoir Community College B.S.—East Carolina University

Blow, Sharnette Career Readiness Specialist

A.A.S.—Burlington Community College A.A.S.—Lenoir Community College

B.S.—Rutgers University

Brock, Mary Workforce Investment Act Career Consultant

A.A.S.—Lenoir Community College B.S.—North Carolina Wesleyan College

Brown, Eric Distance Education Coordinator

A.A.S—Lenoir Community College

Bynum, Faith Associate Dean of Continuing Education

A.A.S.—Lenoir Community College

B.S.—North Carolina A & T State University

M.A.Ed.—East Carolina University Ed.D.—Nova Southeastern University

Carlisle, Randall NC Motorcycle Safety Education Program Equipment/

Communications Coordinator B.A.—Appalachian State University

Carter, Crystal PC Technician

A.A.S.—Lenoir Community College A.A.S.—College of the Albemarle

Carter, Wesley Occupational Extension and Curriculum Instructor—

**Emergency Medical Services** 

A.A.S.—Lenoir Community College B.S.—North Carolina Wesleyan College Chatman, Ada Workforce Investment Act Career Consultant

> A.A.S.—Craven Community College A.A.S.—Lenoir Community College

B.S.—East Carolina University

Cline, Angela Assistant Director of Financial Aid

B.A., M.P.A.—East Carolina University

Coats, Benny Occupational Extension Instructor—

> Greene County Prison Programs B.S.—East Carolina University

Cotto, Carlos Director of Occupational Extension

B.S.—Embry-Riddle Aeronautical University

M.S.—Central Michigan University

Davis, Carenado Director of Learning Resources Center

B.S.B.A.—East Carolina University

M.L.S.—North Carolina Central University

Deaver, Larisa Webmaster

A.A.S.—Lenoir Community College

Deaver, Reekitta Academic Advisor

> A.A.S.—Lenoir Community College B.S.—North Carolina Wesleyan College M.S.—East Carolina University

Edwards, Iris Nurse Assistant Coordinator

A.A.S.—Lenoir Community College

Egleton, Tezra Greene County Prison Programs Coordinator

B.S.B.A.—Fayetteville State University

Emerson, Claudia Basic Skills Instructor

A.A.—Lenoir Community College

B.A.—University of North Carolina at Wilmington

M.Ed.—East Carolina University

Emory, Phoebe Director of Collge Events and Foundation Annual Fund

B.S., M.A.Ed.—East Carolina University

Farley, Alyce Emergency Medical Science Program Chair/

Instructor and Occupational Extension Instructor

B.S.—East Carolina University

Gale, Susan Director of Continuing Education Special Programs

A.B.—Lenoir-Rhyne College

Gardner, Biscello (Lee) Director of Safety Gaskins, Frances Director of Cooperative Education and Job Placement

B.S.—East Carolina University

Graham, Sheila Distance Education Coordinator

A.S.—Lenoir Community College B.S.B.E.—East Carolina University

Grant, Ika Workforce Investment Act Career Consultant

B.A.—North Carolina Central University
M.S.—Central Michigan University

Gray, Sharolyn Basic Skills Instructor—Greene County Prison Programs

B.A.—East Carolina University M.A.—University of Phoenix

Gutierrez, Oscar Systems Manager

B.S.—East Carolina University

Hannibal, Gregor Director of Small Business Center/

Microenterprise Loan Program Agent B.A.—North Carolina Central University

Harrison, Douglas Graphic Arts and Imaging Technology Instructor—

Greene County Center B.A.—NC State University

Harrison, Holly Workforce Investment Act Youth Career Consultant

B.A.—East Carolina University M.A.—East Carolina University

Hill, Judy ABE/GED Coordinator

A.A.S.—Lenoir Community College

B.S.—Mount Olive College

Hill, Karen Director of Planning, Research and Institutional Effectiveness

B.S.B.A., M.A.Ed.—East Carolina University\*\*\*

Hill, Kimberly Enrollment Management Coordinator

B.A.—University of North Carolina

Hill, Walter Basic Skills Instructor

B.S.—Mount Olive College

Johnson, Tasha Chief Human Resources Officer

B.S.—Mount Olive College

Keel, Nancy Occupational Extension Coordinator

B.S.—Greensboro College

Kennedy, Gary Emergency Medical Services Coordinator—

Greene County Center B.S.—Trinity College

King, Sharon Occupational Extension Coordinator

A.A.S.—Lenoir Community College

B.S.—Mount Olive College

Koonce, B. J. Director of Environmental Services/Equipment Coordinator

A.A.—Lenoir Community College

Kornegay, Joan Workforce Investment Act Lead Case Manager

B.S.—North Carolina Central University

Lanier, Bradley Desktop Manager

A.A.S.—Lenoir Community College

B.S.—Mount Olive College M.S.—East Carolina University

Leonard, Janice Compensatory Education, ESL and Family Literacy Coordinator

Lemon, Johnnie Basic Skills Instructor—Greene County Prison Programs

B.A.—North Carolina Central University

M.S.—East Carolina University

Lovick, Reed Director of Maintenance

Diploma—School of Interior Design, Atlanta

Diploma—PCDI

School of Home Inspections License—North Carolina State

Home Inspector

Lynch, Felecia Enrollment Management Specialist

A.A.S.—Lenoir Community College B.S.—East Carolina University

May, Brian Network Administrator

A.A.S.—Pitt Community College B.S.—East Carolina University

Mazingo, Pam Executive Assistant to Vice President of Academic

and Student Affairs

B.A.—Wake Forest University
M.A.Ed.—East Carolina University

McLawhorn, Daniel Director of Basic Law Enforcement Training/Instructor

A.A.S.—Lenoir Community College

McMahon, Jessica Director of Financial Services

A.A., A.A.S.—Lenoir Community College B.S.B.A.—East Carolina University

McNeal, Andy Aerospace Manufacturing Instructor

Merritt, Bobby Director of Workforce Development and Industry Training

B.S.—Mount Olive College

Miller, Jason Director of Greene County Center

B.S.—East Carolina University M.A.—East Carolina University

Moye, Hannah Literacy Education Information System Data Specialist

A.A., A.A.S.—Lenoir Community College

Moye, Misty Director of La Grange Center

B.S.—Mount Olive College M.S.—University of Phoenix

Murphy, Bryan Occupational Extension and Curriculum Instructor—

**Emergency Medical Services** 

Nobles, Robert System Administrator

A.A., A.S.—Lenoir Community College

B.S.—East Carolina University

Nobles, Susan Research Coordinator

A.A.S.—Lenoir Community College Diploma—Lenoir Community College Certificate—Lenoir Community College

Novicki, Sue Student Recruiter

B.S.—East Carolina University
M.A.Ed.—East Carolina University

Parson, Bruce Business Manager

B.A., M.A.Ed.—East Carolina University

Parson, Tad Student Recruiter

(Women's Basketball Head Coach) B.S.—East Carolina University M.S.—Nova Southeastern University

Phillips, Patricia Quality Enhancement Plan Academic Coach

A.A.—Coastal Carolina Community College

B.A.—University of North Carolina at Wilmington

Phillips-Williams, Donna Student Services Manager

A.A.—Lenoir Community College B.S.—Mount Olive College M.B.A.—Liberty University

Pridgen, John Basic Skills Instructor—Greene County Prison Programs

B.A.—North Carolina Wesleyan College

M.A.—University of North Carolina at Chapel Hill

Reece, Edward (Buddy) Director of Facilities Systems

Rhodes, Jennings (Trey) Occupational Extension and Curriculum Instructor—

**Emergency Medical Services** 

Certificate—Wayne Community College

Rhodes, Kenneth Occupational Extension Coordinator/Fire Instructor

A.A.S.—Coastal Carolina Community College

Riggs, Pamela College Liaison-Greene County Early College High School

B.A., M.A.Ed.—East Carolina University

Rummings, Wayne Director of Public Safety Programs

A.A.S.—Coastal Carolina Community College

Seymour, Fred Basic Skills Instructor/Recruiter—Jones County Center

B.B.A.—Roanoke College

Smith, Gina Counselor

B.S.—Appalachian State University

Smith, Jason Interim Director of Basic Skills

A.A.—Lenoir Community College

Solomon, Olene Basic Skills Instructor—Greene County Prison Programs

B.S.—Fayetteville State University

Stanley, Erica Instructional Coordinator—Jones County Center

B.S.—East Carolina University M.A.—East Carolina University

Sutton, Aniya ADA/Evening Counselor

B.A.—Winston-Salem State University

M.A.—Liberty University

Sutton, Renée Dean of Continuing Education

B.S.—University of North Carolina at Wilmington

M.A.—Liberty University

Taft, Samara Assistant Registrar

A.A.S.—Lenoir Community College B.S.—North Carolina Wesleyan College

Taylor, Christine Occupational Extension and Curriculum Instructor—

**Emergency Medical Services** 

A.A.S.—Lenoir Community College

Taylor, Jimmy Marketing Assistant

B.S.—Mount Olive College

Taylor, Reid Occupational Extension Coordinator—Public Safety Programs

A.A.S.—Lenoir Community College

B.S.—Mount Olive College

M.A.—Central Michigan University

Tilghman, Gary Occupational Extension and Basic Skills Coordinator—

Greene County Center

B.S.—East Carolina University

Wagner, Bob Director of NC Motorcycle Safety Education Program

A.A.—Hutchinson Community College B.F.A.,B.S.—Emporia State University M.F.A.—University of Minnesota

Wallace-Koonce, Josephine Instructional Coordinator

A.A.S.—Lenoir Community College B.S.—North Carolina Wesleyan M.A.—Central Michigan University

Walston, Dustin Adult High School/GED Preparation/

Distance Education Instructor

B.S., M.A. Ed.—East Carolina University

Wetherington, Lee Chief Information Officer

A.A.—Lenoir Community College B.S.—East Carolina University

Whichard, Takara Lead Counselor

A.A.—Pitt Community College B.S., M.S.—East Carolina University

Wiggins, Gloria Occupational Extension and Basic Skills Coordinator—

Jones County Center

A.A.S.—Lenoir Community College

B.S.—Mount Olive College

Wiggins, Mary Margaret Basic Skills Instructor—Greene County Center

B.S.—Barton College

Wiggins, Shelia Interim Registrar

A.A.S.—Lenoir Community College

B.S.—Mount Olive College

Wilkins, Michael Aerospace Manufacturing Instructor

Wilson, Athena High School Programs Coordinator/College Liaison—

Lenoir County Early High School

B.S., M.S.—North Carolina A&T State University

Wilson, Deborah Jo Director of Distance Education

B.S.—East Carolina University

Wilson, Paula Basic Skills Coordinator—Greene County Center

B.A.—East Carolina University

Wilson, Kamesha Communications Resource Specialist

A.A.S.—Lenoir Community College

### **FACULTY**

Adams, Mickey Biology Instructor

B.A., M.A.—East Carolina University

Allen, Angela Natural Sciences Department Chair/

Chemistry Program Chair/Instructor B.A.—Albany State University

Ph.D.—North Carolina State University

Almengor, Dana Biology Instructor

B.S.—North Carolina State University M.A.T.—The University of West Alabama

Barker, Vicki Associate Degree Nursing Program Chair/Instructor

R.N., B.S.N.—University of Tennessee M.S.N.—East Carolina University

Barnes, Eric Developmental English/History Instructor

B.S., M.Ed.—Liberty University

Barnes, Laura Social/Behavioral Sciences Chair/Instructor

B.A., M.A.—Marist College

M.A.—East Carolina University\*\*

Barnes, Shelly Director of Student Support/

Health and Physical Education Instructor

B.S.—High Point University
M.A.—East Carolina University

Bates, Christine English Program Chair/Instructor

B.A., M.A.—East Carolina University

Becker, Michael Automotive Technology Instructor

A.S.T.—New Castle School of Trades

Berg, Carla Office Administration/

Medical Office Administration Program Chair/Instructor

B.S.—Barton College

M.A., C.A.S.—East Carolina University\*\*

Berg, Matthew Global Logistics Technology Program Chair/Instructor

A.S.—Lenoir Community College B.S.—East Carolina University

Bianchi-Hall, Cecilia Biology Instructor

B.S.—University of Buenos Aires

M.S., Ph.D.—North Carolina State University

Brothers, Jane Religion Instructor

B.A.—University of North Carolina at Chapel Hill

M.A.—East Carolina University

M. Div.—The General Theological Seminary

Brown, Alicia Nursing Instructor

A.D.N.—James Sprunt Community College B.S.N.,M.S.N.—East Carolina University

Brown, Maggie Director of Learning Assistance Programs

B.S., M.A.—East Carolina University

Brown, Stephanie Nursing Instructor

A.D.N—James Sprunt Community College B.S.N.,M.S.N.—East Carolina University

Byrd, Melissa Writing Center Coordinator/English Instructor

B.A.—Averett College

M.A.—East Carolina University

Callahan, Barbara Nursing Instructor

B.S.N.—North Carolina A & T State University M.Ed.—University of North Carolina at Greensboro

Campbell, Stewart Business Administration Department Chair/Instructor

B.A., M.B.A.—East Carolina University

Cavenaugh, Valerie Spanish Lead Instructor

B.S.—Southern Illinois University, Carbondale

M.S.—University of Tennessee

Chatman, Slade Automotive Technology Program Chair/Instructor

A.A.S.—Lenoir Community College

Crossland, Carolyn Music Program Chair/Instructor

A.A.—Anderson College B.A.—Campbell University M.M.—East Carolina University Westminster Choir College\*\* Additional Graduate Study:

Royal School of Church Music, London, England Haydn Conservatory, Eisenstadt, Austria Italian Organ Academy, Pistoia, Italy Pennsylvania State University

Illinois State University

Cullipher, Sterling English Instructor

B.S.—University of North Carolina at Wilmington

M.A.—East Carolina University

Dail, Becky Medical Assisting Program Chair/ Clinical Coordinator/

Instructor

A.A.S.—Lenoir Community College

Dams, William Accounting Instructor

B.S.B.A., M.B.A.—East Carolina University

Darden, Deborah Developmental Mathematics Instructor

B.S.—East Carolina University

Davis, Bethany Nursing Instructor

R.N., B.S.N.—Pensacola Christian College

M.S.N.—University of Phoenix

Dawson, Bobby Health and Physical Education Instructor

(Men's Basketball Head Coach)
B.S.—Fayetteville State University
M.S.—U. S. Sports Academy

DeVine, Jarret Biology Instructor

B.S.—Virginia Tech

M.S.—East Carolina University

Dolde, Nathan Art Program Chair/Instructor

B.F.A., M.F.A.—East Carolina University

Downie, Dwight Graphic Arts and Imaging Technology Program Chair/

Instructor/

Printing Department Head A.A.—Chowan College

B.S.—Appalachian State University

Edwards, Gail Computer Information Technology Program Chair/Instructor

A.A.S.—Lenoir Community College

B.S.—Barton College

B.S.—North Carolina Wesleyan College CISCO Certified Network Associate (CCNA) CISCO Certified Academy Instructor

Microsoft Office User Specialist

Ellis, Sandra Nursing Instructor

B.S.N.—East Carolina University

Felzer, Steven Mathematics / Engineering / Health and Physical Education

Chair/Instructor

B.A., M.A.—University of North Carolina at Wilmington

Ph.D.—North Carolina State University

Fuller, Annie Fine Arts/Humanities/Languages Chair/English Instructor

B.S., M.A.—East Carolina University

Futrell, Rita Developmental Mathematics Instructor

B.A.—University of North Carolina at Wilmington

M.A.Ed.—East Carolina University

Gridley, Jane Early Childhood Associate Program Chair/Instructor

B.S.—East Carolina University

Hargett, Grant Developmental Math Instructor

B.S., M.S.—Clark Atlanta University

Hill, Brandon Sustainability Technologies Program Chair/Instructor

B.S.—North Carolina State University

Hill, Paul Machining Technology Program Chair/Instructor

A.A.S.—Pitt Community College B.S.—Mount Olive College

M.S.A.—Central Michigan University

Honeycutt, Jacob Acting Radiography Instructional Coordinator

A.A.S.—Lenoir Community College

Ingram, Pamala Cosmetology Instructor

A.A.S.—Lenoir Community College

Licensed Instructor, North Carolina State Board of Cosmetic Arts

Jackson, Jo Early Childhood Associate Instructor

B.S.P., M.S.—East Carolina University

Jennings, Jeffrey Aviation Management and Career Pilot Technology Program

Chair/Instructor

A.A.S—Guilford Technical Community College B.S.—Embry-Riddle Aeronautical University

Johnson, Ana Psychology Instructor

B.A.—University of North Carolina at Charlotte

M.A.—East Carolina University

Jones, David Computer Engineering Technology Program Chair/Instructor

A.A.S.—Lenoir Community College B.S.—East Carolina University M.S.—East Carolina University

Jones, Tyrone Medical Assisting Instructor

A.A.S.—Lenoir Community College

B.S.—Miller-Motte College

Kantz, Dawn Office Administration/Medical Office Administration Instructor

B.S.B.A.—Youngstown State University M.A.Ed.—East Carolina University Certified Professional Coder (AAPC) Keffer, Ashley English Instructor

B.A., M.A.—East Carolina University

Kennedy, Alice Radiography Program Chair/Instructor

Certificate—Lenoir Memorial Hospital School of Radiography

B.S.—Mount Olive College
M.A.—East Carolina University

Koehler, Steven Massage Therapy Program Chair/Instructor

A.A.S.—Carteret Community College B.S.—North Carolina State University N.D.—Clayton College of Natural Health

Leonard, James Welding Technology Instructor—Greene County Center

A.A.S—Lenoir Community College

Mackey, Lysa Biology Instructor

B.S., M.A.—East Carolina University

Maddox, Timothy Music Instructor

B.A.—Southeastern Free Will Baptist College

M.M.—Bob Jones University

McMillion, Jamal Developmental English/ Reading Instructor

B.A.—Fort Valley State University

Nethercutt, Scott Cosmetology Program Chair/Instructor

Certificate—Lenoir Community College A.A.S—Lenoir Community College

Licensed Instructor, North Carolina State Board of Cosmetic Arts

Niles, Becky Nursing Instructor

B.S.N., M.S.N.—East Carolina University

Parker, Kevin Developmental Mathematics Instructor

A.A.—Strayer College

B.S.—University of Maryland M.B.A.—University of Phoenix

Pate, Jordan Occupational Extension and Curriculum Instructor—

**Emergency Medical Services** 

A.A.S.—Lenoir Community College

Payne, Beth Polysomnography Program Chair/Instructor

A.A.S.—James A. Rhodes State College Registered Polysomnographic Technologist

Registered Respiratory Therapist

Perry, Jason Physics/Astronomy Instructor

B.S.—North Carolina A & T University

M.S.—University of Georgia

Phipps, Marilyn Business Administration Instructor

A.A.S.—Lenoir Community College

B.A.—University of North Carolina at Chapel Hill

M.B.A.—East Carolina University

Quinn, Greta History/Political Science Instructor

B.S.—University of North Carolina at Chapel Hill

M.A.—East Carolina University

Riley, Christy Cosmetology Instructor

Certificate—Lenoir Community College

Licensed Instructor, North Carolina State Board of

Cosmetic Arts

Rodgers, Robbie Developmental English/Reading Instructor

B.S.—East Carolina University

Shaw, Lisa Learning Assistance Program Tutorial Lab Coordinator

B.A.—East Carolina University

B.A.—University of North Carolina at Greensboro

Spears, Jimi Surgical Technology Program Chair/Instructor

A.A.S., ADN-RN—Lenoir Community College

Certificate, Surgical Technology—Lenoir Community College

Statum, Kelly Graphic Arts and Imaging Technology Instructor

A.A.S.—Lenoir Community College

B.S.—Mount Olive College

Stewart, Lisa Occupational Extension and Curriculum Instructor—

Emergency Medical Services—Jones County Center

Certificate—Lenoir Community College

Taylor, Chris Welding Technology Program Chair/Instructor

A.A.S.—Lenoir Community College

Taylor, Tammy Office Administration/Medical Office Administration Instructor

A.A.S.—Lenoir Community College

B.S.—Mount Olive College M.B.A.—Campbell University

Taylor-Philyaw, Wendy Developmental Mathematics Lead Instructor

B.S.—East Carolina University

Thomas, Amy Horticulture Technology Program Chair/Instructor

A.A.S.—Lenoir Community College

Tilghman, C. C. Health and Physical Education Instructor

A.A.—Lenoir Community College B.S.—East Carolina University M.A.Ed.—University of Phoenix Turnage, Kimberly English Instructor

B.A.—East Carolina University

M.A., Ph.D.—State University of New York at Buffalo

Tyndall, Jonathan Engineering Program Chair/Mathematics Instructor

B.S.—North Carolina State University M.A.—East Carolina University

Tyndall, Kenneth History/Political Science Program Chair/Instructor

B.A., M.A.—East Carolina University

Tyson, Sarah Spanish Instructor

B.A.—University of North Carolina at Chapel Hill

M.A.—East Carolina University

Vargas, Albert Spanish Instructor

M.A.—New Mexico State University

Wallace, Robert Global Logistics Instructor

A.A.S.—Lenoir Community College B.S.—East Carolina University

Walston, Patricia Culinary Technology Instructor

A.A.S.—Wake Technical Community College

B.A.—East Carolina University

Welch, Alva Mathematics Lead Instructor

B.S.—Middle Tennessee State University M.S.—University of Tennessee\*\*\*

Whitley, Susan Practical Nursing Program Chair/Instructor

B.S.N., M.S.N.—East Carolina University

Williams, Wandra Computer Information Technology/

Computer Programming Instructor
A.A.S.—Lenoir Community College
B.S.—North Carolina Wesleyan
M.A.Ed.—East Carolina University

Ph.D.—Walden University

Wine, Stony Director of Athletic Operations/

Health and Physical Education Instructor

(Men's Baseball Head Coach) B.S.—Barton College

M.A.—East Carolina University

Wright, Patricia Criminal Justice Program Chair/Instructor

B.A.—William Jewell College J.D.—Campbell University

Yourdon, Jeff Culinary Technology Program Chair/Instructor

A.A.S.—Culinary Institute of America

Certified Executive Chef

\*\*Master's Degree Plus 30 Semester Hours \*\*\*Master's Degree Plus 60 Semester Hours

#### INSTRUCTIONAL ASSISTANTS

Albert, Audra Instructional Assistant—La Grange Center

B.A.—Temple University

Andrews, Crystal Instructional Assistant—Continuing Education

A.A.S.—Lenoir Community College

Barr, Barbara Instructional Assistant—Continuing Education

Deans, Jason Instructional Assistant—Continuing Education

B.S.—East Carolina University M.A.—East Carolina University

Dixon, Melissa Instructional Assistant—Greene County Center

A.A.S—Lenoir Community College

Grady, Denise Instructional Assistant—Basic Skills

A.A.S.—Lenoir Community College

Grady, Jennifer Instructional Assistant—Continuing Education

A.A.S.—Lenoir Community College

Koonce, Keely Instructional Assistant—Jones County Center

B.S.—North Carolina State University

Lane, Sarah Evening Instructional Assistant—Continuing Education

A.A.S.—Lenoir Community College

Meadows, Charlene Instructional Assistant—Health Sciences

Executive Secretary Certificate— Latter Day Saints Business College

Pridgen, Jullian Instructional Assistant — Continuing Education

B.A.—UNC Charlotte

Smith, Roxann Instructional Assistant—Arts and Sciences

Stancill, Lisa Instructional Assistant—Industrial Programs

A.A.S.—Lenoir Community College

Whitfield, Dawn Instructional Assistant—Workforce Development

A.A., A.A.S. —Lenoir Community College

Williams, Ozell Instructional Assistant—Business and Emerging Technologies

A.A., A.A.S.—Lenoir Community College

#### STAFF ASSISTANTS

Arnette, Kimberly Staff Assistant—Registrar

A.A.S.—Lenoir Community College

Biggins, Jennifer Accounting Assistant — Payroll

B.S. — Mount Olive College

Flores, Bessie Accounting Assistant

A.A.—Lenoir Community College

Gaskins, Ranita Library Assistant

A.A.S.—Lenoir Community College

Gibbs, Jeffrey Accounting Assistant—Accounts Receivable

Green, Maria Accounting Assistant—Accounts Payable

A.A.—Lenoir Community College

Hill, Justin Staff Assistant —Financial Aid

B.A. —Chapel Hill University

Hill, Thaddeus Accounting Assistant

B.S.B.A.—East Carolina University

Irsik, Sherry Development Coordinator

B.S.—Kansas State University

Jones, Cindy Staff Assistant—Business Office/Maintenance

A.A.S.—Lenoir Community College

Jones, Stephanie Cashier

A.A.S.—Lenoir Community College

Koonce, Virginia Staff Assistant—Financial Aid

A.A.S.—Pitt Community College

Madden, Candice Accounting Assistant

B.A.—Mount Olive College

Miller, Perry Accounting Assistant/Assistant Equipment Coordinator

A.A.S.—Lenoir Community College

Moore, Lindsay Graphic Designer

A.A.S.—Lenoir Community College

Morris, Sue Continuing Education Registrar/Cashier

Moss, Sharon Academic Records Specialist

A.A., A.A.S.—Lenoir Community College

B.A.—Mount Olive College

Neathery, Melissa Administrative Assistant—

Vice President of Academic and Student Services

B.A.—Mount Olive College

O'Neal, Ryan Accounting Assistant

B.S.B.A.—East Carolina University M.A.—East Carolina University

Perry, Betti Ann Staff Assistant—Admissions

A.A.S.—Wayne Community College

Pridgen, Carol Staff Assistant—NC Motorcycle Safety Education Program

Reeder, Rhonda Purchasing Agent

A.A.S.—Lenoir Community College

Simmons, Brandon Printing Technician

A.A.S.—Lenoir Community College

Sullivan, Rose Library Assistant

A.A.S.—Lenoir Community College

Taylor, Helen M. Staff Assistant—Learning Resources Center

A.A.S.—Lenoir Community College

Taylor, Linda Switchboard Operator/Receptionist

Varnell, Bobbie Staff Assistant—Student Services

A.A.—Lenoir Community College B.S.—East Carolina University

White, Debbie Accounting Assistant

A.A.S.—Lenoir Community College

Whittington, Linda Administrative Assistant to the President

A.A.S.—Lenoir Community College

#### **CUSTODIANS AND MAINTENANCE**

Atkinson, Rodney Environmental Services Technician

Bryant, Wallace Environmental Services Technician

Cobb, Ann Environmental Services Coordinator

Davis, Richard Environmental Services Technician

Davis, Thad Environmental Services Technician

Ellis, Cleve Evening Environmental Services Coordinator

Larenas, Ciceron Environmental Services Technician—Greene County Center

Minch, Timothy Grounds Coordinator

Palush, Lori Environmental Services Technician

Rivera, Paula Environmental Services Technician

Sanderson, Wayne Building Maintenance Coordinator

Thompson, Marvin Environmental Services Technician

Vasquez, Maribel Environmental Services Technician

Wooten, Presston Environmental Services Technician

# 2013/14 Lenoir Community College Catalog Addendum September 17, 2013

On page 251, the prerequisites and corequisites for CHM 094 should state the following:

#### CHM 094 Basic Biological Chemistry

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Prerequisites: State Take One Set: Set 1: MAT 060; Set 2: DMA 010, DMA 020, DMA 030, DMA 040; Set 3: MAT 060\* and MAT 080, Set 4: MAT 060\* and MAT-090, Set 5; MAT 090, Set 6; MAT 120, Set 7; MAT 121, Set 8; MAT 161, Set 9; MAT-171, Set 10; MAT 171. Corequisites: State Take One Set: Set 1; DMA 040, Set 2; MAT 060\* and MAT 070 Local: Take One Set: Set 1: MAT 070; Set 2: DMA 040, DMA 050 This course introduces the chemistry important to biological processes. Emphasis is placed on the aspects of general, organic, and biological chemistry that apply to biological systems and processes. Upon completion, students should be able to demonstrate an understanding of the

On page 22 the list of Skills Certificates should include:

Automotive Customizing Technology Skills Certificate
Computer-Integrated Machining Workforce Readiness Certificate
Culinary Arts Essential Skills Certificate

C60190K3 C50210K4

C55150K2

On page 324, the following should be inserted between OST-134 and OST-136:

basic biological chemistry necessary for success in college-level biology courses

# **OST 135 Adv Text Entry & Format**

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Prerequisites: State, OST 134

This course is designed to incorporate computer application skills in the generation of office documents. Emphasis is placed on advanced document production. Upon completion, students should be able to make independent decisions regarding planning, style, and method of presentation.

On page 61, in the list of pre-major program codes, A1010DA should be A10100DA.

On page 97, in the last sentence, A45100RB should be A45110RB.

On page 168, in the Healthcare Management Technology A25200 degree program, section E should be:

E. Humanities/Fine Arts: 3 Hours (select one course from the following)

Selected from the list of humanities /fine arts electives for the Associate in Applied

Science degree appearing in the current catalog.

On page 324, OST-141 should be listed as a choice of local perquisites for OST-148.

On page 278, ELC-131 DC/AC Circuit Analysis should read:

#### **ELC 131 DC/AC Circuit Analysis**

Corequisites: Local, Take One Set: Set 1: MAT 070; Set 2: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050; Set 3: MAT 060, DMA 040, DMA 050

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

On page 265 and 266, the following classes should read:

## CUL 160 Baking I

Prerequisites: State, CUL 110

This course covers basic ingredients, weights and measures, baking terminology, and formula calculations. Topics include yeast-raised products, quick breads, pastry dough, various cakes and cookies, and appropriate filling and finishing techniques. Upon completion, students should be able to prepare and evaluate baked products.

#### **CUL 170 Garde-Manger I**

Prerequisites: State, CUL 110

This course introduces basic cold food preparation techniques and pantry production. Topics include salads, sandwiches, appetizers, dressings, basic garnishes, cheeses, cold sauces, and related food items. Upon completion, students should be able to lay out a basic cold food display and exhibit an understanding of the cold kitchen and its related terminology.

#### **CUL 240 Adv Culinary Skills**

Prerequisites: State, CUL 110 and CUL 140

This course is a continuation of CUL 140. Emphasis is placed on meat fabrication and butchery; vegetable, starch, and protein cookery; compound sauces; plate presentation; breakfast cookery; and quantity food preparation. Upon completion, students should be able to plan, execute, and successfully serve entrees with complementary side items.

#### **CUL 260 Baking II**

Prerequisites: State, CUL-110 and CUL 160

This course is a continuation of CUL 160. Topics include specialty breads, pastillage, marzipan, chocolate pulled-sugar, confections, classic desserts, pastries, and cake decorating. Upon completion, students should be able to demonstrate pastry preparation and plating, cake decorating, and show-piece production skills.

#### **CUL 270 Garde Manger II**

Prerequisite: State, CUL 110, CUL 140, and CUL 170

This course is a continuation of CUL 170. Topics include pates, terrines, galantines, ice and tallow carving, chaudfroid/aspic work, charcuterie, smoking, canapés, hors d'oeuvres, and related food items. Upon completion, students should be able to design, set up, and evaluate a catering function to include a classical cold buffet with appropriate show pieces.

On page 230, above ALTERNATIVE ENERGY TECHNOLOGY should read:

## AIR CONDITIONING, HEATING, AND REFRIGERATION

#### AHR 211 Residential System Design

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

#### The following program changes should be added to the catalog on page 135:

#### **COSMETOLOGY A55140**

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.

# Cosmetology Associate in Applied Science A55140 Course and Hour Requirements

	Hours		Work	
Title	Class	Lab	Exp.	Credits
I. General Education Courses: 15 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 114 Prof Research and Reporting	3	0	0	3

B. Social/Behavior Sciences: 3 Hours

Selected from the list of social/behavioral science electives for the Associate in Applied Science degree appearing in the current catalog.

C. Humanities and Fine Arts: 3 Hours

Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog.

D. Math/Natural Sciences: 3 Hours

Selected from the list of natural sciences/mathematics electives for the Associate in Applied Science degree appearing in the current catalog.

# II. Major Courses: 49 Hours

A. Co	re: 34 Hours				
	COS 111 Cosmetology Concepts I	4	0	0	4
or	COS 111A Cosmetology Concepts IA and	2	0	0	2
	COS 111B Cosmetology Concepts IB	2	0	0	2
	COS 112 Salon I	0	24	0	8
or	COS 112A Salon IA	0	12	0	4
	and				
	COS 112B Salon IB	0	12	0	4
	COS 113 Cosmetology Concepts II	4	0	0	4
or	COS 113A Cosmetology Concepts IIA	2	0	0	2
	and				
	COS 113B Cosmetology Concepts IIB	2	0	0	2
	COS 114 Salon II	0	24	0	8
or	COS 114A Salon IIA	0	12	0	4
	and				
	COS 114B Salon IIB	0	12	0	4
		0	12	0	4

		Hours		Work	
Title		Class	Lab	Exp.	Credits
	COS 115 Cosmetology Concepts III	4	0	0	4
or	COS 115A Cosmetology Concepts IIIA	2	0	0	2
	and				
	COS 115B Cosmetology Concepts IIIB	2	0	0	2
	COS 116 Salon III	0	12	0	4
or	COS 116A Salon IIIA	0	6	0	2
	and				
	COS 116B Salon IIIB	0	6	0	2
	COS 117 Cosmetology Concepts IV	2	0	0	2
or	COS 117A Cosmetology Concepts IVA	1	0	0	1
	and				
	COS 117B Cosmetology IVB1	1	0	0	1
B. Oth	ner Required Courses: 15 hours selected from	m the foll	lowing	:	
	BUS 115 Business Law	3	0	0	3
	BUS 121 Business Math	2	2	0	3
	BUS 230 Small Business Management	3	0	0	3
	CIS 111 Basic PC Literacy	1	2	0	2
	COS 118 Salon IV	0	21	0	7
or	COS 118A Salon IVA	0	12	0	4
	and				
	COS 118B Salon IVB	0	9	0	3
	COS 250 Computerized Salon Ops	1	0	0	1
	SPA 111 Elementary Spanish I	3	0	0	3
III. Other Re	equired Courses: 1 Hour				
	ACA 111 College Student Success	1	0	0	1
<b>Total Credits</b>	=				65

# Cosmetology Diploma D55140 Course and Hour Requirements

			Hours		Work	
1	Title		Class	Lab	Exp.	Credits
I. Gene	eral Ed	ucation Courses: 6 Hours				
	A. Eng	lish: 3 Hours				
		ENG 111 Expository Writing	3	0	0	3
	B. Mat	h/Natural Sciences: 3 Hours				
	Selecte	d from the list of natural sciences/mathemati	cs for t	he Asso	ciate in	Applied Science degree
	appear	ing in the current catalog.	·			
II. Maj	or Cou	irses: 41 Hours				
	A. Cor	e: 34 Hours				
		COS 111 Cosmetology Concepts I	4	0	0	4
	or	COS 111A Cosmetology Concepts IA	2	0	0	2
		and				
		COS 111B Cosmetology Concepts IB	2	0	0	2
		•				

	COS 112 Salon I		0	24	0	8
or	COS 112A Salon IA		0	12	0	4
	and			10	0	
	COS 112B Salon IB		0	12	0	4
	COS 113 Cosmetology Concepts II		4	0	0	4
or	COS 113A Cosmetology Concepts 1	llA	2	0	0	2
	and	u.D	2	0	0	2
	COS 113B Cosmetology Concepts I	IIB	2	0	0	2
	COS 114 Salon II		0	24	0	8
or	COS 114A Salon IIA and		0	12	0	4
	COS 114B Salon IIB		0	12	0	4
	COS 114 D Saloil IID COS 115 Cosmetology Concepts III	ſ	4	0	0	4
or	COS 115 Cosmetology Concepts II		2	0	0	2
OI	and	шл	2	U	U	2
	COS 115B Cosmetology Concepts I	IIIB	2	0	0	2
	COS 116 Salon III		0	12	0	4
or	COS 116A Salon IIIA		0	6	0	2
01	and		Ü	Ü	Ü	_
	COS 116B Salon IIIB		0	6	0	2
	COS 117 Cosmetology Concepts IV	2	0	0	2	
or	COS 117A Cosmetology Concepts 1		1	0	0	1
	and					
	COS 117B Cosmetology Concepts 1	(VB	1	0	0	1
B. Ot	her Required Courses: 7 hours selected	ed from	the foll	lowing:		
	BUS 121 Business Math		2	2	0	3
	CIS 111 Basic PC Literacy		1	2	0	2
	COS 118 Salon IV		0	21	0	7
or	COS 118A Salon IVA	0	12	0	4	
	and					
	COS 118B Salon IVB	0	9	0	3	
	SPA 111 Elementary Spanish I		3	0	0	3
III Other Re	equired Courses: 1 Hour					
m. omer K	ACA 111 College Student Success		1	0	0	1
<b>Total Credit</b>	<u> </u>		-	<u>-</u>	<b>J</b>	48

# Cosmetology Skills Certificate C55140K1 Course and Hour Requirements

Title		Hours Class		Work Exp.	Credits				
I. General Ed	lucation Courses: 0 Hours								
II. Major Courses: 41 Hours									
A. Co	re: 34 Hours								
	COS 111 Cosmetology Concepts I	4	0	0	4				
or	COS 111A Cosmetology Concepts IA and	2	0	0	2				
	COS 111B Cosmetology Concepts IB	2	0	0	2				
	COS 112 Salon I	0	24	0	8				
or	COS 112A Salon IA	0	12	0	4				
	and								
	COS 112B Salon IB	0	12	0	4				
	COS 113 Cosmetology Concepts II	4	0	0	4				
or	COS 113A Cosmetology Concepts IIA	2	0	0	2				
	and								
	COS 113B Cosmetology Concepts IIB	2	0	0	2				
	COS 114 Salon II	0	24	0	8				
or	COS 114A Salon IIA	0	12	0	4				
	and								
	COS 114B Salon IIB	0	12	0	4				
	COS 115 Cosmetology Concepts III	4	0	0	4				
or	COS 115A Cosmetology Concepts IIIA	2	0	0	2				
	and								
	COS 115B Cosmetology Concepts IIIB	2	0	0	2				
	COS 116 Salon III	0	12	0	4				
or	COS 116A Salon IIIA	0	6	0	2				
	and								
	COS 116B Salon IIIB	0	6	0	2				
	COS 117 Cosmetology Concepts IV 2	0	0	2	_				
or	COS 117A Cosmetology Concepts IVA	1	0	0	1				
01	and	-	Ü	Ü	-				
	COS 117B Cosmetology Concepts IVB	1	0	0	1				
	COS 117B Cosmetology Concepts 17B	•	Ü	Ü	1				
	B. Other Required Courses: 7								
	COS 118 Salon IV	0	21	0	7				
or		12	0	4	,				
Oi	COS I IXA Salon IVA								
	COS 118A Salon IVA 0	12	U	7					
	and COS 118B Salon IVB 0	9	0	3					

#### The following courses should be added to the back of the College Catalog on page 259 and page 260.

COS 117 Cosmetology Concepts IV Class: 2 Lab: 0 Clinical: 0 Credit: 2

Corequisites: State, COS 118

This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements.

COS 117A Cosmetology Concepts IVA Class: 1 Lab: 0 Clinical: 0 Credit: 1

Corequisites: State, COS 118A

COS 117B Cosmetology Concepts IVB Class: 1 Lab: 0 Clinical: 0 Credit: 1

Corequisites: State, COS 118B

COS 117A and COS 117B are the equivalent of COS 117

COS 118 Salon IV Class: 0 Lab: 21 Clinical: 0 Credit: 7

Corequisite: State, COS 117

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

COS 118A Salon IVA Class: 0 Lab: 12 Clinical: 0 Credit: 4

Corequisites: State, COS 117A

COS 118B Salon IVB Class: 0 Lab: 9 Clinical: 0 Credit: 3

Corequisites: State, COS 117B

COS 118A and COS 118B are the equivalent of COS 118