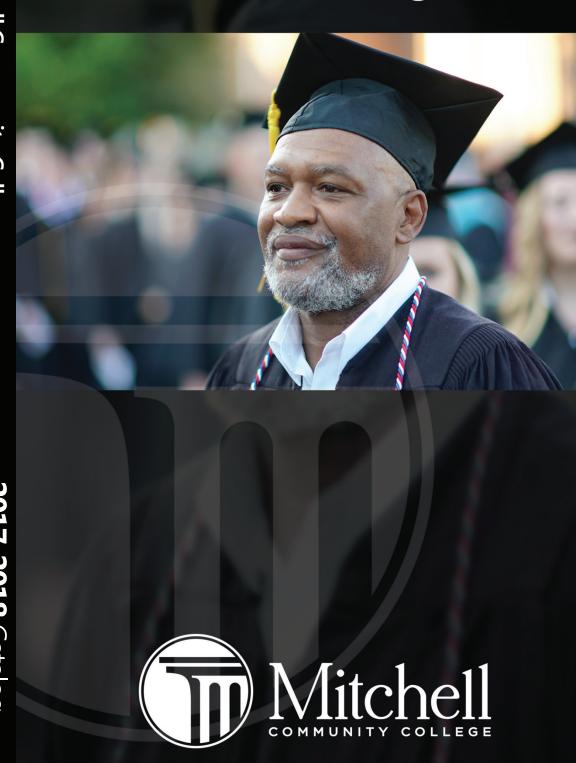
# **2017-2018** Catalog





# 2017-2018 Catalog

#### Statesville

#### **Statesville Campus**

500 W. Broad St., Statesville, NC 28677 (704) 878-3200 phone (704) 878-0872 fax

#### **Continuing Education Center**

701 W. Front St., Statesville, NC 28677 (704) 878-3220 phone (704) 878-4271 fax

#### **Cosmetic Arts Center**

3223 Taylorsville Hwy., Statesville, NC 28625 (704) 878-4374 phone

#### **Drake Street Center**

335 Drake St., Statesville, NC 28677

#### **Technology and Workforce Development Center**

701 W. Front St., Statesville, NC 28677 (704) 878-3224 phone (704) 878-3245 fax

#### Mooresville

#### Mooresville Campus

219 N. Academy St., Mooresville, NC 28115 (704) 663-1923 phone (704) 663-5239 fax

## mitchellcc.edu





Equal Opportunity College/Affirmative Action Employer

This catalog is a reference guide on policies and programs offered by Mitchell Community College. Statements in this publication are subject to change at any time without notice. This catalog should not be considered a contract between Mitchell Community College and any prospective student. Students should inquire about any updates or revisions.

This catalog was revised on December 15, 2017.

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## **Greetings**

Dear Potential Students and Visitors.

I am pleased to welcome you to Mitchell Community College-a college that is dedicated to helping our students to excel each and every day. Our faculty and staff are devoted to offering high quality instruction in a variety of courses and programs designed to help students prepare for the world of work or transfer to a four-year college.

Our campus in downtown Statesville on Broad Street, our Continuing Education and Workforce Development Center on Front Street, as well as our Mooresville

Campus in downtown Mooresville provide inviting and stimulating learning environments for both personal and professional development. In addition to our curriculum programs, Mitchell offers many educational opportunities including basic skills and literacy development, occupational training consistent with current fields of employment, and specialized training developed for business and industry.

As students you will also enjoy a wide range of opportunities in which to participate including clubs, organizations, activities and cultural events. These experiences, combined with high quality education programs, will expose you to a diverse learning experience that will enrich and enhance your skills. We want to be an integral part of your personal and professional development and strive to provide the best instructional experience at the most beautiful community college in the state.

After you have visited Mitchell Community College online and navigated through our website or through the pages of our catalog, I invite you to visit our campuses and explore all that we have to offer. You will find Mitchell offers many advantages and benefits to the serious-minded student or the casual lifelong learner. As a student at Mitchell Community College, you will enjoy a warm and inviting academic experience of the highest caliber.

Sincerely,

James T. Brewer, Ed.D.

President

# **Directory**

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

Admissions	(704) 878-3244/(704) 978-3111
Admissions/Counselors	(704) 878-3242/(704) 978-1351/(704) 978-5440/
	(704) 878-3288/(704) 878-3267/(704) 978-5417
Advancement Office	(704) 878-4321
Alumni Services	(704) 878-4321
Basic Skills	(704) 878-3232
Bookstore	(704) 878-3275
Career Center	(704) 878-3242
Cashier	(704) 878-4270
Continuing Education	(704) 878-3220
Cooperative Education and Student Job Placeme	nt(704) 878-4263
Disability Services	(704) 878-3364
Distance Learning	(704) 978-1304
Equal Employment/Affirmative Action Officer	(704) 878-4341
Financial Aid	(704) 978-5435
Financial Services	(704) 878-4396
General Information/Switchboard	(704) 878-3200
Library Services	(704) 878-3271
MIND Center	(704) 978-3116
Placement Testing	(704) 878-3242
President's Office	(704) 878-3205
Security	(704) 878-4367
Student Government Association	(704) 978-5426
Student Transcripts	(704) 878-3243
Veteran Services	(704) 878-3295
Vice President for Accounting/CFO	(704) 878-3212
Vice President for Administration and Auxiliary S	ervices(704) 878-3202
Vice President for Advancement	(704) 878-4321
Vice President for Instruction and Chief Academi	c Officer(704) 878-3264
Vice President for Student Services	(704) 878-3281
Vice President for Workforce Development and C	Continuing Education(704) 878-3225
Work-Based Learning	(704) 878-4263

Address correspondence to any office in care of: **Mitchell Community College** 500 W. Broad St. Statesville, NC 28677

mitchellcc.edu | f | V





# **Academic Calendar**

Fall Semester 2	2017
Aug. 1 (T)	Ten-month faculty return Orientation Day
Aug. 5 (S)	,
Aug. 11 (F)	Last day to receive 100% refund for 16-week, first 8-week, and first 4-week sessions
Aug. 14 (M)	Fall classes <b>begin</b> for 16-week, first 8-week, and first 4-week sessions
Aug. 14-16 (M-W)	Drop/Add for 16-week and first 8-week sessions
Aug. 15 (T)	Last day to receive 75% refund for first 4-week session
Aug. 17 (TH)	Last day to receive 75% refund for first 8-week session
Aug. 23 (W)	Last day to receive 75% refund for 16-week session
Aug. 28 (M)	Last day to withdraw from first 4-week session to ensure a grade of "W"
Sept 4 (M)	Labor Day (College Closed)
Sept. 7 (TH)	First 4-week session <b>ends</b>
Sept. 8 (F)	First 4-week grades due by 9 a.m.
Sept. 8 (F)	Last day to receive 100% refund for 12-week and second 4-week sessions
Sept. 11 (M)	12-week and second 4-week sessions begin
Sept. 12 (T)	Last day to receive 75% refund for second 4-week session
Sept. 15 (F)	Last day to withdraw from first 8-week session to ensure a grade of "W"
Sept. 18 (M)	Last day to receive 75% refund for 12-week session
Sept. 25 (M)	Last day to withdraw from second 4-week session to ensure a grade of "W"
Oct. 5 (TH)	Second 4-week session <b>ends</b>
Oct. 6 (F)	Second 4-week grades due by 9 a.m.
Oct. 6 (F)	First 8-week session <b>ends</b>
Oct. 9 (M)	First 8-week grades due by 9 a.m.
Oct. 9 & 10 (M&T)	Fall break (No Classes/College Open)
Oct. 10 (T)	Last day to receive 100% refund for second 8-week and third 4-week sessions
Oct. 11 (W)	Second 8-week and third 4-week sessions <b>begin</b>
Oct. 12 (TH)	Last day to receive 75% refund for third 4-week session
Oct. 16 (M)	Last day to receive 75% refund for second 8-week session
Oct. 23 (M)	Last day to withdraw from 16-week session to ensure a grade of "W"
Oct. 27 (F)	Last day to withdraw from third 4-week session to ensure a grade of "W"
Oct. 31 (T)	Last day to withdraw from 12-week session to ensure a grade of "W"
Nov. 7 (T)	Third 4-week session <b>ends</b>
Nov. 8 (W)	Third 4-week grades due by 9 a.m.
Nov. 8 (W)	Last day to receive 100% refund for fourth 4-week session
Nov. 9 (TH)	Fourth 4-week session <b>begins</b>
Nov. 13 (M)	Last day to receive 75% refund for fourth 4-week session
Nov. 13 (M)	Last day to withdraw from second 8-week session to ensure a grade of "W"
Nov. 22 (W)	Thanksgiving Holiday (No classes)
Nov. 23-25 (TH-SA)	Thanksgiving Holiday (College closed)
Nov. 30 (TH)	Last day to withdraw from fourth 4-week session to ensure a grade of "W"
Dec. 4 (M)	Last day of classes for 16-week session
Dec. 5-11 (T-M)	Final Exams for 16-week session
Dec. 8 (F)	12-week and second 8-week sessions <b>end</b>
Dec. 11 (M)	16-week and fourth 4-week sessions <b>end</b>
Dec. 12 (T)	All grades due by 3 p.m.
Dec. 18 (M)	Last day of spring registration before winter holiday break
Dec. 22-29 (F-F)	Winter Holiday (College closed)

Spring Semes	New Year's Holiday (College Closed)
Jan. 2 (T) Jan. 5 (F)	College reopens/spring registration resumes Orientation Day
Jan. 5 (F)	Last day to receive 100% refund for 16-week, first 12-week, first 8-week,
Jan. 5 (F)	and first 4-week sessions
Jan. 8 (M)	16-week, first 12-week, 8-week, and first 4-week sessions <b>begin</b>
Jan. 8-10 (M-W)	Drop/Add for 16-week, first 12-week and first 8-week sessions
Jan. 9 (T)	Last day to receive 75% refund for first 4-week session
Jan. 11 (TH)	Last day to receive 75% refund for first 8-week session
Jan. 15 (M)	Martin Luther King, Jr. Holiday (College Closed)
Jan. 16 (T)	Last day to receive 75% refund for first 12-week session
Jan. 18 (TH)	Last day to receive 75% refund for 16-week session
Jan. 22 (M)	Last day to withdraw from first 4-week session to ensure a grade of "W"
Feb. 1 (TH)	First 4-week session <b>ends</b>
Feb. 2 (F)	First 4-week grades due by 9 a.m.
Feb. 2 (F)	Last day to receive 100% refund for second 4-week session
Feb. 5 (M)	Second 12-week and second 4-week sessions begin
Feb. 6 (T)	Last day to receive 75% refund for second 4-week session
Feb. 9 (F)	Last day to withdraw from first 8-week session to ensure a grade of "W"
Feb. 12 (M)	Last day to receive 75% refund for second 12-week session
Feb. 19 (M)	Last day to withdraw from second 4-week session to ensure a grade of "W"
Feb. 26 (M)	Last day to withdraw from first 12-week session to ensure a grade of "W"
Mar. 1 (TH)	Second 4-week session <b>ends</b>
Mar. 2 (F)	Second 4-week grades due by 9 a.m.
Mar. 2 (F)	First 8-week session <b>ends</b>
Mar. 5 (M)	First 8-week grades due by 9 a.m.
Mar. 5-10 (M-SA)	Spring break (No Classes/College Open)
Mar. 9 (F)	Last day to receive 100% refund for second 8-week and third 4-week sessions
Mar. 12 (M)	Second 8-week and third 4-week sessions begin
Mar. 13 (T)	Last day to receive 75% refund for third 4-week session
Mar. 15 (TH)	Last day to receive 75% refund for second 8-week session
Mar. 26 (M)	Last day to withdraw from 16-week session to ensure a grade of "W"
Mar. 26 (M)	Last day to withdraw from third 4-week session to ensure a grade of "W"
Apr. 2 (M)	Last day to withdraw from second 12-week session to ensure a grade of "W"
Apr. 5 (TH)	Third 4-week session <b>ends</b>
Apr. 6 (F)	Third 4-week grades due by 9 a.m.
Apr. 6 (F)	Last day to receive 100% refund for fourth 4-week sessions
Apr. 9 (M)	First 12-week session <b>ends</b>
Apr. 9 (M)	Fourth 4-week session <b>begins</b>
Apr. 10 (T)	First 12-week grades due by 9 a.m.
Apr. 10 (T)	Last day to receive 75% refund for fourth 4-week session
Apr. 13 (F)	Last day to withdraw from second 8-week session to ensure a grade of "W"
Apr. 23 (M)	Last day to withdraw from fourth 4-week session to ensure a grade of "W"
Apr. 30 (M)	Last day of classes for 16-week session
May 1-7 (T-M)	Final Exams for 16-week session
May 3 (TH)	Fourth 4-week session <b>ends</b>
May 4 (F)	Fourth 4-week grades due by 9 a.m.
May 4 (F)	Second 12-week and second 8-week sessions <b>end</b>
, , ,	

May 8 (T)	Grades due/posted in computer by 3 p.m.
May 11 (F)	Curriculum Graduation

Summer Sem	ester 2018
May 18 (F)	Last day to receive 100% refund for 10-week session
May 21 (M)	10-week session <b>begins</b>
May 25 (F)	Last day to receive 75% refund for 10-week session
May 28 (M)	Memorial Day Holiday (No Classes/College Open)
Jun. 1 (F)	Last day to receive 100% refund for 8-week and first 4-week sessions
Jun. 4 (M)	8-week and first 4-week sessions <b>begin</b>
Jun. 4-5 (M-T)	Drop/Add for 8-week session
Jun. 5 (T)	Last day to receive 75% refund for first 4-week session
Jun. 7 (TH)	Last day to receive 75% refund for 8-week session
Jun. 18 (M)	Last day to withdraw from first 4-week session to ensure a grade of "W"
Jun. 28 (TH)	First 4-week session <b>ends</b>
Jun. 29 (F)	First 4-week grades due by 9 a.m.
Jul. 2 (M)	Second 4-week session <b>begins</b>
Jul. 3 (T)	Last day to withdraw from 10-week session to ensure a grade of "W"
Jul. 3 (T)	Last day to receive 75% refund for second 4-week session
Jul. 4 (W)	Independence Day Holiday (College Closed)
Jul. 9 (M)	Last day to withdraw from 8-week session to ensure a grade of "W"
Jul. 19 (TH)	Last day to withdraw from second 4-week session to ensure a grade of "W"
Jul. 30 (M)	8-week and second 4-week sessions <b>end</b>
Jul. 31 (T)	10-week session <b>ends</b>
Aug. 1 (W)	Grades due/posted in computer by 3 p.m.

## **General Information**

## **History**

Mitchell Community College was founded in 1852 as Concord Presbyterian Female College and later became Simonton Female College. In the early years, the emphasis was on music and fine arts programs. As the curriculum expanded the College hired Miss Margaret Mitchell, daughter of Dr. Elisha Mitchell of the University of North Carolina to teach botany. In 1875, the Board of Trustees selected Miss Mitchell's sister, Mrs. Eliza Mitchell Grant as president of the College. The institution thrived under their leadership. In 1917, the College was renamed Mitchell College in honor of Dr. Mitchell and his daughters. Growth continued and Mitchell became a "junior college" in 1924. In 1932, Mitchell opened enrollment to male students.

In 1973, Mitchell College joined the North Carolina Community College System as the fifty-seventh member and the only private college to be admitted. With the change came the new name Mitchell Community College. Today, Mitchell is a comprehensive, open-admissions college dedicated to meeting the postsecondary education and training needs of the citizens of Iredell County and the surrounding areas. Throughout its rich history, Mitchell has proven its commitment, perseverance, and ability to adapt to the changing educational and training needs of the community.

#### Mission

Mitchell Community College, a learning-centered institution, provides affordable, high quality educational and training programs and services to meet the changing and diverse lifelong learning needs of a multi-culturally diverse citizenry who live and work in a global society.

#### **Purpose**

Mitchell Community College commits its resources to:

- Provide associate degree, diploma, and certificate programs to meet the pre-service and in-service workforce development needs for industry, business, government, and service occupations
- Provide associate degree programs for the first two years of academic courses leading to baccalaureate and professional degrees
- Provide each student the opportunity to develop the skills and values necessary to succeed in college
- Provide student development services including admissions, financial aid, counseling, and career planning, job placement, testing, and student activities
- Provide educational opportunities to meet the professional, personal, and cultural needs of the community
- Serve the adult population with basic education and salable skills; to enhance personal development through general and continuing education

#### **Belief Statements**

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

- · Students and student success are the focal points of all efforts of the college;
- We are a community college that respects and celebrates diversity and inclusion:
- We have a responsibility to enhance the social, civic, cultural and economic development of our community and its place in a global society;
- We provide educational opportunities for those who might otherwise not have them;
- · We make data driven decisions and monitor our progress toward stated goals;
- That we provide our employees with a safe and supportive work environment with the
  opportunity to grow and learn;
- We must foster an environment of trust and teamwork as we move toward a common goal;
- We must perform each day with competence, innovation and integrity;
- We make a positive difference in the lives of our students, our employees and our community...our work matters.

#### **Values**

- Integrity—We demonstrate integrity through professional, ethical, transparent and consistent behavior in both our decision-making and in our treatment of others; being accountable for our work and actions is the basis of trust.
- Caring—We demonstrate caring through attentive and responsive action to the needs
  of students and others. We listen with open minds, speak kindly and foster relationships
  based on mutual respect and trust.
- Collaboration—We demonstrate collaboration through the mutual commitment of individuals and organizations who come together for a common cause, encouraging selfreflection, teamwork and respect for ourselves and others.
- **Quality**—We demonstrate quality through innovation in the continuous improvement of all processes and services, encouraging students and others to become creative thinkers.
- Inclusion—We demonstrate inclusion by seeking involvement and providing access for those with diverse backgrounds to work toward a culture of equality while maintaining differences in a peaceful way.
- Service—We demonstrate service by striving to make the communities we serve great
  places to live, work and learn through our involvement, both as an organization and as
  individuals
- **Leadership**—We demonstrate leadership by nurturing the full development of those we serve, identifying and empowering individuals' greatest strengths.

Approved by Mitchell Community College Board of Trustees May 27, 2015.

#### Accreditation

Mitchell 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 Mitchell Community College. Note: The Commission on Colleges should be contacted only if there is evidence that appears to support an institution's significant non-compliance with a requirement or standard.

**Commission of Colleges of the Southern Association of Colleges and Schools (SACS-COC)** 1866 Southern Lane, Decatur, Georgia 30033-4097, Phone (404) 679-4501, www.sacscoc.org

Commission on Accreditation of Allied Health Education Programs (CAAHEP) 1361 Park Street, Clearwater, FL 33756, Phone (727) 210-2350, www.caahep.org

#### National Association of Education for Young Children (NAEYC)

1313 L Street NW Suite 500, Washington, DC 20005, Phone (202) 232-8777, www.naevc.org

#### **Accreditation Commission for Education in Nursing**

3343 Peachtree Road NE, Suite 850, Atlanta, Georgia 30326, Phone (404) 975-5000, Fax (404) 975-5020, www.acenursing.org

Accreditation information is published to enable interested constituents (1) to learn about the accreditation status of the institution, (2) to file a third-party comment at the time of the institution's decennial review, or (3) to file a complaint against the institution for alleged non-compliance with a standard or requirement. Normal inquiries about Mitchell Community College, such as admissions requirements, financial aid, educational programs, etc., should be addressed directly to Mitchell Community College and not the listed accrediting organizations.

## Memberships

American Association of Collegiate Registrars and Admissions Officers

American Community College Business Officers

American Association of Community Colleges

American Association of Community Colleges President Academy

American Association of Medical Assistants

American Association of Women in Community Colleges

Association of Community College Business Officers

Carolinas Association of Collegiate Registrars and Admissions Officers

College Stores Association of NC Commission on Accreditation of Allied Health Programs Community College Humanities Association Community College Planning and Research Organization Cooperative Education Association Council for Higher Education Accreditation Greater Statesville Chamber of Commerce International Association of Administrative Professionals League for Innovation in the Community College Mooresville-South Iredell Chamber of Commerce National Association of Education for Young Children (NAEYC) National Association of Student Financial Aid Administrators National Council on Black American Affairs National League for Nursing: Associate Degree Nursing North Carolina Association of Community College Trustees North Carolina Association of Coordinators of Veteran Affairs North Carolina Association of Student Financial Aid Administrators NC College and University Personnel Association Organization for Associate Degree Nursing Southern Association of Colleges and Schools Southern Association of Colleges with Associate Degrees The College Board

#### **Endowment for Excellence**

The Mitchell Community College Endowment for Excellence is a 501(c)(3) nonprofit organization that enables the College to respond to changing education and economic environments. Proceeds support low-cost programs for a growing student population, underfunded and unfunded programs and services, response to industry and community needs for workforce training and faculty/staff development. To find out about giving opportunities, contact the Office for Advancement.

#### Alumni

The Alumni Association strives to stay in touch with graduates, help graduates connect with one another and to share information about personal and professional accomplishments. All graduates are invited to an annual alumni reunion held in May. Email alumni@mitchellcc.edu.

#### Veterans

Refer to section on Veteran Affairs.

## **EEO/Affirmative Action**

Mitchell Community College does not discriminate on the basis of race, color, religion, gender, national origin, age, disability or genetic information in any of its policies, procedures, or practices. This nondiscrimination policy covers admission of students, employment actions and all campus programs, services and activities. Mitchell Community College does not discriminate on the basis of sex in admission to or employment in its education programs or activities. Inquiries concerning the application of Title IX and implementation of its regulations may be referred to the Director of Human Resources, who serves as the Title IX Coordinator, or the Assistant Director of Financial Aid, who serves as the Deputy Title IX Coordinator, located at 500 West Broad Street, Statesville, NC 28677-5264; or, by contacting the Office for Civil Rights, District of Columbia Office, U.S. Department of Education: Telephone (202) 453-6020 email ocr. dc@ed.gov.

## **Disability Support Services**

The Mission of Disability Services is to lead the Campus Community in the creation of an inclusive learning and working environment; and facilitate access, discourse, and involvement through innovative services, programs, and partnerships. Students should contact Disability Services as soon as possible before the first day of class for which accommodations are needed.

Students seeking assistance must provide recent documentation which includes relevant medical, psychological, educational and/or emotional diagnostic tests or evaluations that verify the need for accommodation. Students will need to meet with Disability Services to complete an accommodation plan each semester. For more information, please contact the Coordinator for Disability Services in the Counseling office, room 103 in Student Services Center on the main campus, (704) 878-3242. Disability Services provides reasonable academic accommodations to students with a documented disability under the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1972.

## Mitchell Community College 2016 Performance Measures North Carolina Community College System

Success rate of developmental students in subsequent college-level English courses

- State Average: 48.4%Mitchell Outcome: 44.6%
- Success rate of developmental students in subsequent college-level Math courses
  - State Average: 27.6%Mitchell Outcome: 27.5%
- **First Year Progression** 
  - State Average: 67.6%Mitchell Outcome: 71.1%
- **Curriculum Completion Rate** 
  - State Average: 43.7%Mitchell Outcome: 47.1%
- **Licensure Pass Rate**
- State Average: 84.4%Mitchell Outcome: 83.1%
- Transfer Student Performance:
  - State Average: 82.4%Mitchell Outcome: 80.7%

## Information about the College

Information about crime on the College campus, graduation rates and other consumer information can be found at mitchellcc.edu/consumer-info.

## **Admissions**

#### Overview

Mitchell Community College has an "open door" admissions policy and accepts students without regard to race, religion, sex, color, creed, national origin, age or disability. Mitchell is open to anyone 18 years old or older or high school graduates younger than 18. Admission to the College does not guarantee acceptance to the program of your choice or guarantee continued enrollment in the College.

Mitchell offers four college transfer programs for students who plan to continue their education at a senior institution:

- Associate in Arts (A.A.)
- · Associate in Science (A.S.)
- Associate in Fine Arts (A.F.A.)
- · Associate in Engineering

Mitchell offers Associate in Applied Science (A.A.S.) degrees, diplomas, and certificates for students who intend to enter the workforce after graduation.

## **Admissions Requirements for Degree Seeking Students**

Degree-seeking students must present proof of high school graduation or high school equivalency diploma.

- · High school graduates
  - In order to be admitted as a degree-seeking students, applicants must present transcripts from a public, private, or home school that is recognized under state law at the time of graduation. Note: Online high schools must meet the additional requirement of being accredited by a recognized accrediting agency at the time of graduation. A list of recognized accrediting agencies may be found on the following websites:
    - www.chea.org
    - ope.ed.gov/accreditation
    - www.advanc-ed.org
- · High school equivalency students

In order to be admitted as a degree-seeking students, applicants must present proof of high school equivalency diploma.

## Admissions Requirements for Special Credit Students

• Minimum age of 18 with or without a high school diploma.

## **How to Apply**

- Complete an application for admission.
- Submit official copies of transcripts or records from high schools and all postsecondary schools attended, or acceptable high school equivalency scores. If an associate degree or higher has been earned, high school transcripts/high school equivalency scores are not required.
- Take the College Placement Test (CPT). Testing requirements for specific programs of study
  are available from the Admissions Office. An applicant may be exempt from placement tests
  depending on past college credit earned. Also, applicants who have graduated high school
  within 5 years of college application who meet the following criteria may be exempt from
  placement testing under the NCCCS Multiple Measures for Placement Policy:
  - 1. Minimum unweighted GPA of 2.6 and four years of high school math including Algebra I, Geometry, Algebra II and an acceptable senior level math.
  - 2. Minimum scores for ACT and/or SAT.
- · Meet an admissions counselor to discuss placement needs.

#### **Readmitted Students**

Applicants who have not attended for one or more years must submit a new application. Applicants must meet with an admissions counselor to determine if any placement testing is needed. Applicants will discuss any changes to the curriculum since their last date of attendance

with a counselor and/or an advisor. Applicants for readmission to limited enrollment programs must follow regular admission procedures for those programs.

#### **Transfer Students**

Transfer students may enter Mitchell after meeting all admission requirements. Mitchell will accept credits (with equivalent credit hours and course content) from all institutions within the North Carolina Community College System and from other accredited colleges. Students may transfer credits earned at other institutions if the grades meet Mitchell's academic standards and if Mitchell receives documentation proving that equivalent competencies were met. Mitchell must receive official transcripts for the student to receive transfer credit. Final acceptance or rejection is at the discretion of the College. Applicants must meet with an admissions counselor to determine if any placement testing is needed. A minimum of 25% of the credits required for a degree, diploma or certificate must be earned at Mitchell, in order to be eligible for graduation.

## **Visiting Students**

Students accepted by or enrolled at another institution may enroll at Mitchell as a visiting student. Visiting students must complete an application and should have the permission from an official at their home institution. This official should specify the courses the student can take at Mitchell. The student should only enroll in courses specified by their home institution and must meet any required prerequisites or their equivalents.

## **Special Credit Students**

An individual who does not want to earn a degree, diploma or certificate, can enroll as a special credit student. The student should complete an application and indicate SPECIAL CREDIT STUDENT as the program of interest. Special credit students must meet prerequisites or corequisites. Special credit students must meet with an admissions counselor to have an educational plan created. Students who wish to convert from "special" to "degree-seeking" must complete the full admissions process including placement testing. Degree requirements are based on the catalog in effect at the time of the status change.

## **Auditing/Non-Degree Students**

Students who wish to audit a course must register and receive the approval from the instructor. Audit students do not receive credit and must adhere to attendance policies and meet prerequisites and corequisites. Students cannot change an audit course to a credit course or a credit course to an audit course after drop/add. Students cannot receive credit for an audit course toward a certificate, diploma, or degree. Curriculum students will have priority over audit students for registration. Students who register for a course as audit work but then withdraw will receive a grade of "W" for the course. The fees for audit courses are the same as those taken for credit.

## **High School Students Career and College Promise**

Mitchell Community College provides several programs for high school students. All public, private, charter, and home school students are encouraged to take advantage of dual enrollment opportunities at the College. There is no charge for tuition, but students must pay fees and purchase books and materials. High school students interested in taking courses at Mitchell Community College must meet program eligibility requirements.

- College Transfer Pathways provide up to 41 hours of course credits toward the Associate
  in Arts, Associate in Science, or Associate in Engineering that will transfer seamlessly to any
  public or participating private college or university, saving successful students time and
  money in pursuing four-year degrees. Interested students should contact their high school
  counselor. Students are dually enrolled at their high school and Mitchell.
- Career and Technical Education Pathways allow students to earn credits at Mitchell
  Community College toward a job credential, certificate, or diploma in a technical career.
  Interested students should contact their high school counselor. Students are dually enrolled
  at their high school and Mitchell.

Through an alliance with our public school partners, Mitchell Community College also offers opportunities for high students through three early college high schools. Students take high school and college classes over 5 years (grades 9-13) in pursuit of a high school diploma and an

associate degree or up to 2 years of college credit. Interested students should contact their high school counselor. The application is open to all eighth graders in Iredell County.

- CCTL (The Collaborative College for Technology and Leadership) is located on the Statesville Campus and provides a technology-enriched, leadership-focused curriculum. The curriculum is designed to meet the individual needs of students, ensuring that they are fully prepared to enter the workforce or to continue their education at a four-year institution.
- Crossroads Arts and Science Early College is located on the campus of Statesville High School. Crossroads offers a traditional honors curriculum in conjunction with college course work. Crossroads provides a variety of Fine Arts electives for students, along with CTE options like Entrepreneurship and Project Management.
- Agriculture and Science Early College is located on the campus of North Iredell High School
  and has a strong focus in agriculture and science. Agriculture students are enrolled in college
  courses aligned with high school CTE classes and will have the opportunity to participate
  in North Iredell High School's extensive Future Farmers of America program. In addition,
  students will also have the option of earning credits toward a traditional transfer degree.

## **Continuing Education Students**

Students who are high school graduates or 18 years old or 16 years old with special permission are eligible to enter a continuing education program. For more information, see the Continuing Education section.

## Residency

To qualify as a resident for in-state tuition, a person must become a legal resident and remain a legal resident for at least twelve months immediately before enrolling. For more information, see the section on Tuition and Fees.

Veterans who have separated from the service within the last three years may qualify for Section 702 of the Choice Act. Please see the School Certifying official for more information regarding In-state tuition.

## **Placement Testing**

Applicants to associate level programs of study as well as all Career and College Promise students are required to show competence in English and mathematics. Diploma and certificate level students are required to take placement testing if any course within the diploma or certificate has English or math prerequisites. Applicants may do one of the following:

- Take the Accuplacer, Computerized Placement Tests (CPT). Students are placed in courses based on their scores.
- Have successfully completed a college level math, English and computer course at another institution.
- Achieve minimum scores on ACT or SAT.
- Applicants who have graduated high school within 5 years of college application who meet
  the following criteria may be exempt from placement testing under the NCCCS Multiple
  Measures for Placement Policy: Minimum unweighted GPA of 2.6 and four years of high
  school math including Algebra I, Geometry, Algebra II and an acceptable senior level math.
- Career and College Promise students may demonstrate proficiency using other approved achievement and/or placement tests. High school students should speak with their guidance counselor for more details.

Mitchell encourages prospective students to 'review' before taking placement tests. Counselors can provide information on review opportunities. Placement test scores are valid for three years. New students may retake the placement test one time before enrolling in coursework.

#### Orientation

Mitchell encourages new students to participate in orientation programs offered at the beginning of each semester. Orientation gives students an opportunity to:

- Meet staff and other students
- · Learn about resources, services, activities and policies
- Help students take full advantage of opportunities on campus
- Gain access to Internet tools

## **Change of Program**

Students who change from one program to another within the institution will have credit hours and quality points transferred based on requirements of the new program. Students must meet with an admissions counselor to fill out the change of program form. Students who change programs must follow the program requirements in the current catalog.

## **College Level Examination Program**

Mitchell may allow credit for college work based on appropriate scores on the CLEP General Examination if the work is relevant to the student's program of study. A minimum of 25% of the credits required for a degree, diploma or certificate must be taken at Mitchell in order to graduate.

## **College Board Advanced Placement Program**

Mitchell may allow credit for college work based on exams as given through the College Board Advanced Placement Program if the work is relevant to the student's program of study. Scores on the exams must be three, four or five. A minimum of 25% of the credits required for a degree, diploma or certificate must be taken at Mitchell in order to graduate.

## **Military Service Experience**

Veterans may receive credit for USAFI courses and for service school training where appropriate to the student's program and where a comparable course is offered by the College. USAFI courses are evaluated on the basis of the catalog of the USAFI.

School Service Training is evaluated on the basis of "A Guide to the Evaluation of Educational Experiences in the Armed Services," published by the American Council on Education. Credit, not to exceed two semester hours, is allowed for physical education to veterans upon presentation of discharge or separation papers appropriate to the veteran's course of study. Final acceptance or rejection of the credit lies with Mitchell.

## **Competitive Enrollment Programs**

For these programs, applicants must meet additional requirements that may include mathematics and science courses, certifications, physical (medical) exams, etc. Some of these programs have more applicants than available space and may have specific application deadlines. Competitive enrollment programs include:

- Associate Degree Nursing
- Medical Assisting
- Medical Laboratory Technology (with Southwestern Community College)
- Dietetic Technician (with Gaston College)
- Speech Language Pathology Assistant (with Caldwell Community College and Technical Institute)
- Health Information Technology (with Pitt Community College)

## **Associate Degree Nursing**

The Department of Nursing understands and accepts the concept of the open-door policy for general admission to Mitchell Community College. Admission to the College does not, however, guarantee admission to the Associate Degree Nursing program. Admission into the nursing program is competitive. In addition to the College's requirements for admission, the following are minimum requirements for admission to the Associate Degree Nursing program:

- **1. Mitchell Community College Application:** Applicants must complete the College application for admission and submit to Student Services.
- **2. High School or high school equivalency transcript:** Graduation from a high school as specified under admission requirements for degree seeking students, complete high school transcript, or equivalent as established by a high school equivalency test.
- **3. College Transcripts:** Official transcripts from all previously attended colleges must be received by the College. To be considered official, transcripts must be in a sealed envelope. Grades less than C are not transferable into the Associate Degree Nursing Program.

- **4. Required GPA:** Applicants must have a minimum 2.5 cumulative grade point average. All course work toward the A.A.S. Nursing degree must be completed with a grade of C or better.
- **5. Biology Course:** Applicants must have completed with a grade of C or better, one year of high school biology and/or BIO 110 Principles of Biology, BIO 111, General Biology I, or BIO 168 Anatomy and Physiology I or equivalent or demonstration of competency. A biology course must be current within five years.
- **6. Chemistry Course:** Applicants must have completed with a grade of C or better, one year of high school chemistry and/or CHM 131 and 131A lab, Introduction to Chemistry or equivalent or demonstration of competency.
- **7. TEAS Testing:** Applicant must achieve a minimum adjusted individual test score of 63 percent on the Test of Essential Academic Skills. For more information about the TEAS Exam, see the official website at http://www.atitesting.com/default.aspx. TEAS Review Books may be purchased through the Mitchell Community College Bookstore.
- **8. Associate Degree Nursing Program Application:** Applicant must complete Program Application with assigned nursing advisor.
- 9. Nursing Assistant I: Applicant must be listed as a Nursing Assistant I on the Nurse Aide I Registry with no substantiated findings, from the N.C. Department of Health and Human Services Division of Health Service Regulation: Health Care Personnel Registry prior to the first day of NUR 111 or demonstrate competency as evidenced by licensed practical nurse (LPN).
- **10. Physical and Emotional Health:** Applicant will provide validation of satisfactory physical and emotional health and current immunizations after receipt of conditional acceptance and prior to final admission into the nursing program. Required immunizations include:
  - 2 MMR vaccines (measles, mumps, rubella)
- 2 varicella vaccines or positive titer
- 2-step tuberculosis skin test
- Tdap within last ten years (tetanus, diphtheria, pertussis)
- Annual influenza immunization
- · Hepatitis B immunization
- **11. CPR Certification:** Applicant must hold current CPR certification by the American Heart Association at the Healthcare Provider level by time of enrollment into the clinical nursing component and maintained throughout the NUR course sequence.
- **12. Background Check and Drug Screen:** Meet requirements as prescribed by clinical agencies. Students who have not lived in North Carolina for the last five years will need to provide fingerprints (available from the Iredell County Sheriff Department).
- **13. Student must be 18 years of age prior to clinical component** (clinical agency requirement).
- **14. Student must carry personal health insurance** (clinical agency requirement).
- **15.** Nursing students are required to have an electronic mobile device with access to the **Internet.** For specific requirements see electronic mobile device policy.

A limited number of openings exist in the Associate Degree Nursing program. Admissions consideration begins January 1 of each year. Applications will be accepted until February 15 of each year. Qualified applicants will be ranked. Points will be awarded in several categories including: TEAS score, related courses and grades earned, and previous post-secondary degrees. Students applying for re-admission are required to meet the current admission criteria. No student is considered to be a nursing student at Mitchell Community College until the student receives official, written notification of admission as given by the Admissions Office and the student enrolls in the nursing courses. Mitchell Community College does not use waiting lists for the nursing program. Applicants must re-apply for each year they wish to be considered for admission.

#### **Qualifications of Graduates for Examination**

Upon graduation from the nursing program and to be eligible for licensure by examination, the graduate shall make application to the Board of Nursing and shall submit to the Board an application fee and written evidence, verified by oath, sufficient to satisfy the Board that the applicant has graduated from a course of study approved by the Board and is mentally and physically competent to practice nursing.

#### **Technology Requirement**

The Associate Degree Nursing curriculum is taught using a concept based model. Students are expected to have reliable access to the Internet and an electronic mobile device is required. The program utilizes e-textbooks and many assessments are completed online.

The Associate Degree Nursing program is accredited by the **Accreditation Commission for Education in Nursing** (ACEN) http://www.acenursing.org, 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326, Phone (404) 975-5000,

## **Medical Assisting**

Medical Assisting understands and accepts the concept of the open-door policy for general admission to Mitchell Community College. Admission to the College does not, however, guarantee admission to the Medical Assisting diploma program. The Medical Assisting curriculum is structured as a 1+1 technical program that ultimately leads to an A.A.S. degree. After successful completion of the externship practicum, the student graduates with a diploma in Medical Assisting and may be eligible to take the certification examination. The A.A.S. degree can be completed at a later time.

In addition to the College's admission requirements, the following are minimum requirements for admission into the Medical Assisting Diploma program:

- **1. Mitchell Community College Application:** Applicants must submit the College application for admission and meet all entrance requirements.
- **2. High School or high school equivalency transcript:** Graduation from a high school as specified under admission requirements for degree seeking students, complete high school transcript, or equivalent as established by a high school equivalency test.
- 3. College Transcripts: Official transcripts from all previously attended colleges must be received by the College. To be considered official, transcripts must be in a sealed envelope. Grades less than C are not transferable into the Medical Assisting program. Anatomy and Physiology must be current within the most recent five years and MED prefix coursework must be from another CAAHEP accredited program and current within the most recent five years. Students requesting MED prefix course transfer credits from other CAAHEP accredited programs will be asked to show proficiency through competency testing for MAERB Cognitive, Psychomotor and Affective Domains. If the student is unable to show competency in the Cognitive, Psychomotor and Affective Domains for the requested transfer course, the course will need to be repeated in the Medical Assisting program.
- **4. Required GPA:** Applicants must have a minimum 2.0 cumulative grade point average. All course work toward the MED diploma and subsequent A.A.S. curriculum must be completed with a grade of C or better.
- **5. Medical Assisting Program Application:** Applicant must complete program application and submit in a sealed envelope to the Program Specialist in the Division of Nursing, Natural, and Health Sciences.
- **6. Computer Proficiency:** Applicant must demonstrate proficiency in basic computer skills through completed course work in CIS 110 Introduction to Computers or equivalent.
- 7. CPR Certification and First Aid: Applicant must hold both American Red Cross First Aid Certification and CPR certification by the American Heart Association at the Healthcare Provider level prior to enrolling in medical assisting clinical courses and current through the last day of the externship practicum. This certification must include hands-on skills components, AED use, and other lifesaving skills.
- **8. Physical and Emotional Health:** Applicant will provide validation of satisfactory physical and emotional health and current immunizations prior to enrolling in medical assisting clinical courses. Required immunizations include:
  - 2 MMR vaccines (measles, mumps, rubella)
  - 2-step tuberculosis skin test (PPD)
  - Tdap within last ten years (tetanus, diphtheria, pertussis)
  - Hepatitis B immunization
  - Annual influenza immunization (strongly suggested)
- 9. Background Check and Drug Screen: Meet requirements as prescribed by clinical agencies for placement into the externship practicum. The student will bear this cost. If any clinical agency refuses to allow the student to participate in externship practicum experiences, for any reason, the student will not be able to complete the program.

- 10. Student must be 18 years of age prior to clinical component (externship agency requirement).
- 11. Student must carry personal health insurance (externship agency requirement).

Medical Assisting is a limited enrollment program beginning each year in the fall; resources such as clinical externship sites and faculty limit the number of applicants accepted into the program. Students who have completed minimum requirements should submit the application beginning March 1st of each year. The first eighteen (18) qualified applicants will be accepted for the fall until the class is full. After that, an alternate list will be established. An alternate may be admitted to the program if an applicant originally accepted declines admission. The Program Coordinator will notify candidates of their acceptance or their placement on the alternate list in late April. The alternate list does not carry over to the next year; therefore, alternates who are not accepted must reapply to the Medical Assisting Program for the following year. While waiting to be accepted, applicants are encouraged to take BIO 163, CIS 110, ENG 111, OST 134, OST 135, BUS 137, PSY 150, MAT 143, COM 231, and one Humanities elective in advance.

No student is considered to be a medical assisting student at Mitchell Community College until the student receives official, written notification of admission as given by the Admissions Office and the student enrolls in medical assisting courses. The Medical Assisting Diploma program is accredited by the Commission on Accreditation of Allied Health Education Programs (www. caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB). CAAHEP, 25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763, Phone (727) 210-2350; Fax (727) 210-2354.

## Medical Laboratory Technology (MLT) (A.A.S.)

General admission information is found in the Southwestern Community College catalog and website, www.southwesterncc.edu. The online collaborative program is limited to the current practicing, certified phlebotomist. The MLT program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL 60018-5119, (847) 939-3597, (773) 714-8880, (773) 714-8886 (FAX). Website: www.naacls.org.

## **Dietetic Technician (A.A.S.)**

General admission information can be found in the Gaston College catalog and website, www. gaston.edu. The Dietetic Technician program at Gaston College is accredited by the Commission on Accreditation for Dietetics Education (CADE), American Dietetic Association, 120 South Riverside Plaza, Suite 2000, Chicago, Illinois 60606-6995, (312) 899-0040 ext. 5400. Website: www.eatright.org/ACEND.

## Speech Language Pathology Assistant (A.A.S.)

General admission information can be found in the Caldwell Community College and Technical Institute catalog and website, www.cccti.edu. The Speech Language Pathology Assistant program is regulated by the N.C. Board of Examiners for Speech and Language Pathologists and Audiologists, P. O. Box 16885, Greensboro, N.C. 27416-0885, (336) 272-1828.

## Health Information Technology (A.A.S.)

General admission information can be found in the Pitt Community College catalog and website, www.pittcc.edu/index.html. The Health Information Technology Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) 233 N. Michigan Avenue, 21st Floor, Chicago, IL 60601-5800. Website: www.cahiim.org.

## **Tuition and Fees**

Tuition and fees are subject to change without notice by action of the North Carolina General Assembly.

#### **Tuition**

Tuition and fees for each semester are payable on or before the tuition due date deadlines located at mitchellcc.edu/payment-due-dates. Registration is not final until the student pays tuition and fees. For tuition purposes, a full-time student is enrolled in 16 credit hours or more. Regular tuition charges apply for classes taken for audit.

**In-State Tuition** \$76.00 per credit hour

\$1,216.00 per semester maximum (full-time)

Out-of-State Tuition \$268.00 per credit hour

\$4,288.00 per semester maximum (full-time)

Tuition and fee rates associated with courses identified as "self-supported" are determined by the Mitchell Community Board of Trustees and may differ from that set forth by the state for the Fall and Spring Semesters.

## **Required Student Fees**

All curriculum students pay required student fees each semester.

**Student Activity Fee\*** \$2.50 per credit hour for 1 – 8 credit hours

\$25.00 for 9 or more credit hours

Student Access Fee\$25.00 per semesterTechnology Fee\$3.00 per credit hour

\$48.00 for 16 or more credit hours

Accident Insurance Fee \$1.25 per semester

Administrative Fee \$10 per semester

## **Specific Fees**

Specific fees, in addition to tuition, may be charged in some courses to cover the costs of supplies, facility charges, and materials. Students may also be required in certain courses to purchase tools and supplies. All specific fees charged for each term will be identified in the class schedule and are subject to change without notice. Fees are only refundable if the associated course is dropped before the first day of the academic term. For more information regarding refunds, please refer to the refund policy.

#### **Books**

The cost of books varies from program to program. Most students pay an estimated \$1,400 for books and required materials for the academic year. Bookstore policies and procedures are covered in the *Student Handbook*.

## **Payment**

Tuition and fees must be paid in full by the payment due date unless payment has been guaranteed by financial aid or a sponsor authorization agreement. Please refer to mitchellcc.edu/payment-due-dates for payment due dates.

**Payment Through WebAdvisor**—Full payments are accepted online via WebAdvisor. Students may select the WebAdvisor link under My Mitchell on the College's website: www. mitchellcc.edu. MasterCard, VISA, American Express, and Discover are acceptable payment methods.

<sup>\*</sup>Student Activity Fee is assessed in the Fall and Spring semesters only.

**In-Person Payment**—Cash, check, money order, MasterCard, VISA, American Express, and Discover credit cards are accepted at: (1) the Statesville Campus in the Eason Student Services Center, Room 200 or (2) the Mooresville Campus, Building A, Room 104. To pay by credit card, the person whose name is on the credit card must be present. Please note that starter checks are not accepted.

**Sponsor Payment (ESC, Vocational Rehabilitation, Employer, etc.)**—A new authorization form is required for each semester. The sponsor authorization should be mailed to Cashier, Mitchell Community College, 500 West Broad St., Statesville, NC 28677-5264 or faxed to (704) 978-5405 as early as possible before the semester begins, but no later than five days before the student plans to see their advisor and register.

Nelnet Business Solutions Online Payment Plan (Available Fall and Spring Semesters only)—The Nelnet Payment Plan provides students the option of contracting with Nelnet Business Solutions (NBS), a third party online payment company, to arrange full payment or schedule monthly tuition payments. It can be used to budget curriculum tuition and fees only— no books. The payment plan option requires a \$2.00 enrollment fee for full payment or a \$25.00 enrollment fee for scheduled payments. These enrollment fees are charged per semester and are nonrefundable. A valid bank account, which allows Automatic Bank Payment (ACH) or Credit/Debit Card is required. A link to "Create a Payment Plan" is available through WebAdvisor under Financial Information. For students who opt to use the payment plan option, the student will be considered "PAID" once the student successfully completes the online application and once the associated payments process successfully.

## **Fulfillment of Financial Obligations**

Students with an outstanding balance are not eligible for re-registration and cannot graduate, receive a diploma, certificate, transcript, or have their records sent to another institution until they settle their account.

## **Refund Policy**

Mitchell Community College issues tuition refunds according to the North Carolina state policy as published in section 2D.0300 of the NC Administrative Code. Students may receive a full tuition refund if they officially withdraw before the first day of the academic term. Students may receive a 75 percent tuition refund if they officially withdraw before the official ten percent (10%) point of the academic term. No refunds will be issued for withdrawals after the ten percent (10%) point. All required fees and specific course fees are nonrefundable if the student withdraws after the first day of the academic term. For the refund schedule, please refer to: http://www.mitchellcc.edu/paying-college/refund-dates-and-liability-schedule. Students will receive full refunds for the classes canceled by Mitchell Community College. Please refer to Withdrawal Policy on page 30. If a student dies during the semester, Mitchell refunds all tuition and fees to the estate of the deceased.

#### **Returned Checks**

A \$25.00 service fee will be charged to the student's accounts receivable file for all checks returned from the bank due to insufficient funds or closed accounts.

## Residency

To qualify for in-state tuition, applicants must provide information regarding his or her length of residency in North Carolina. A legal resident must have maintained his or her domicile in North Carolina for at least twelve months prior to his or her classification as a resident for tuition purposes. Copies of the applicable law (G.S. 116-143.1) and implementing regulation are available in the Admissions Office. Initial classification of residency for tuition purposes is made in the Admissions Office. Students may appeal to the Director of Admissions.

## **Financial Aid**

The purpose of the Mitchell Financial Aid Office is to provide access for students who would otherwise be unable to attend Mitchell without assistance.

## **How to Apply**

A student can apply for financial aid by completing the Free Application for Federal Student Aid (FAFSA) at www.fafsa.gov. The simplest way to complete the FAFSA online is by using the IRS Data Retrieval Tool (DRT). The DRT is a feature that allows students and parents to access the IRS tax return information needed to the complete the FAFSA, and transfer the data directly into the FAFSA. The student should indicate Mitchell Community College's federal school code (002947) on the FAFSA. Once the FAFSA is submitted online, the U.S. Department of Education will send the student a Student Aid Report (SAR) summarizing their application information. Mitchell will also receive a copy of this report electronically and will contact the student requesting additional information if a Mitchell Community College Admissions Application is on file. If no additional documentation is needed, the student will be notified of their eligibility by email.

#### **Deadlines**

To guarantee the use of financial aid during early registration each semester, a student must submit all documentation as requested to the Financial Aid Office by the following dates:

- 2017 Fall Semester —June 30
- 2018 Spring Semester—November 3
- 2018 Summer Semester—April 4

## **Types of Financial Aid**

Following is a list of financial aid available to students. A student may receive several different awards.

- Federal Pell Grant (FPELL)
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Work-Study Program (FWS)
- North Carolina Community College Grant (NCCCG)
- North Carolina Education Lottery Scholarship (NCELS)
- Scholarships
- Veterans Education Benefit (See Veteran's Coordinator)
- Child Care Grant (see Child Care contact)
- Alternative Loan Program(s)

## **Scholarships**

Mitchell awards financial aid scholarships without regard to race, religion, sex, age, disability, or national origin. To be considered for a scholarship and retain a scholarship, a student must:

- Complete the Free Application for Federal Student Aid form (FAFSA) at www.fafsa.gov
- Complete a Mitchell Community College Scholarship Application
- Have a 2.0 or higher GPA
- · Be enrolled for nine or more credit hours

Donors may provide specific criteria for awarding their scholarships. Mitchell may release information on scholarship recipients to the press.

#### Distribution

Recipients of FPELL, FSEOG, FWS, NCCCG, NCELS, and Scholarships may charge their tuition, fees, books, and supplies against their financial aid eligibility for the semester for which they are registering, if the student received an award letter for the current academic year. In order to charge, Mitchell's Financial Aid Office will apply applicable financial aid proceeds to your account for tuition, fees, books, and supplies. Mitchell will mail a check to the student if their financial aid is greater than the expenses charged to the address listed on the Mitchell Admissions Application.

#### **Student Rights and Responsibilities**

- Financial aid is not complete until the student receives an award letter from the Financial Aid Office via the student's Mitchell email account. Students who do not receive an award letter are responsible for paying tuition and fees as well as for books, and supplies.
- Financial aid applications remain valid for one academic year. Students must re-apply annually for financial aid for the next academic year.
- Award amounts may be subject to change based on enrollment status, available funding and/or regulatory changes.
- The duration of eligibility to receive Federal Pell Grant is limited to 12 semesters (or its equivalent) under the new Pell lifetime eligibility used (LEU) regulation.
- Financial aid students may not receive financial aid from more than one institution during
  the same semester within the same academic year. You must notify your FA Specialist if you
  have attended any other college, this school year, using financial aid prior to the College
  finalizing your award for Mitchell.
- Students may charge books and school supplies in the Mitchell Bookstore against financial
  aid prior to the beginning of each semester. This service is provided as a convenience to
  financial aid students. Students are not required to purchase books this way. Financial
  aid students wanting to purchase books from another vendor will need to pay for those
  purchases on their own and those costs will not be deducted from their financial aid.
- Financial aid will not pay for a class a student audits or receives credit by examination.
- Financial aid will only pay for one retake of any previously passed course.
- Awards are conditional upon enrollment in an eligible program for financial aid.
- Awards are conditional upon receipt of an official high school transcript or high school equivalency by the Admissions Office.
- A student may only receive financial aid for courses that count toward graduation requirements in the declared major as listed by the Admissions Office.
- The Financial Aid Office reserves the right to review, revise or cancel an award due to professional judgment decisions, or change of academic program.
- Awards are based on students continued satisfactory academic progress (SAP).
- Students are responsible for paying any tuition, fees, books and other outstanding charges not covered by financial aid if 'Ineligible' under Mitchell's financial aid SAP standards.
- Federal, state and scholarship funds committed in an award letter are contingent upon actual receipt of the funds by Mitchell.
- The FA Award Notification is divided equally into two academic semesters. The award, based
  on full-time enrollment, will be prorated each semester according to the actual number of
  hours enrolled.
- Any remainder of a semester's award will be disbursed, by check, and mailed from Financial Services after enrollment is confirmed for the semester.
- If a student withdraws or if an instructor withdraws the student from all courses during a semester, the student will be subject to the Return of Title IV funds policy and may have to repay funds to Mitchell and/or the U.S. Department of Education.
- Students who complete a fast track class offered in the first four or eight weeks and withdraw from all other classes that span an entire semester are subject to the Return of Title IV funds policy.
- The Financial Aid Office may release information pertaining to financial aid to any contact person, firm or government agency that requires such information as allowed by the Family Educational Rights and Privacy Act (FERPA).
- If a student has a payment plan and was awarded financial aid, it is the student's responsibility to notify the cashier's office of their award.

## **Repeated Coursework**

Repeated coursework may count towards enrollment status, one-time only, if course was previously passed.

#### No Show

If a student is a "No Show," the student's financial aid will be calculated based on the actual number of hours enrolled and attending. Students may also be subject to being responsible for the tuition and fee charges for the class(es) reported as "No Show."

#### **Transfer Students**

If a student transfers to Mitchell from another school, Mitchell's federal school code (002947) must be listed on the FAFSA.

#### **Short Sessions**

If a student registers for a short session that has a later start date during the semester than the first day of the semester, award funds will not be available until enrollment is confirmed in class(es).

#### **Exclusions**

Financial Aid does not pay for audited courses, independent study courses, credit by exams and courses not in current program of study. If a student receives Title IV funds and then decides to audit a class or receive a credit by exam, the student may be liable for repayment of those funds.

#### 12 Semester Lifetime Limit for Federal Pell Grant and State Aid

The consolidated Appropriations Act of 2012 enacted changes that reduce the duration of a student's eligibility to receive a Federal Pell Grant to 12 semesters (or its equivalent). This change went into effect for the 2012-2013 Award Year and applies to all Federal Pell Grant eligible students and to all N.C. State Grant eligible students.

## **Eligible Programs for Financial Aid**

Not all diploma and certificate programs qualify as eligible programs to award financial aid. See the Financial Aid Office.

#### **Satisfactory Academic Progress Standard**

Financial aid applicants must comply with the 2011 U.S. Department of Education's statutory requirement guidelines (34 CFR 668.34) on maintaining Satisfactory Academic Progress (SAP) to be eligible for financial aid. Mitchell's policy applies SAP standards to all federal, state, and institutional financial aid programs. To accurately measure a student's satisfactory academic progress, the policy requires a qualitative measure of progress and a quantitative measure of progress.

**Qualitative Measure** (Grade point requirement)—Students must maintain a 2.0 cumulative grade point average (GPA) as calculated by the Financial Aid Office. This GPA may be different than what appears on a student's transcript. For example, developmental courses are not included in a transcripts GPA, but are included for financial aid. Students must have a "C" average at the end of two academic years to graduate. A student must not be suspended according to the College's academic satisfactory academic progress policy

**Quantitative Measure** (Completion requirement)—Students must successfully progress through their educational programs at a specific pace to ensure program completion within maximum timeframe. Pace is calculated by dividing the cumulative number of hours the student has successfully completed by the cumulative number of hours the student has attempted, regardless of enrollment status. Transfer credits are included in both the attempted and completed hours. If a student successfully earns 67 percent of the total cumulative credits hours attempted in their program of study, the student should complete their program within maximum timeframe. Pace is measured at the end of each semester by the Financial Aid Office. Pace calculation example: Student attempts 12 credits in the fall semester and successfully completes 12 credits. The student has earned 100 percent of the credits attempted. In the spring, the student attempts 18 credits and successfully completes 15. Student has a cumulative total of 27 credits completed. The cumulative total of attempted credits is 30. **Pace**: 27÷30=90 percent.

**Maximum Time Frame (MTF)**—A financial aid student's maximum time frame to complete a program cannot exceed 150 percent of the published length of the program. For example, if an academic program requires 68 credit hours to complete a degree, the student may attempt a maximum of 102 credit hours before the student exceeds their eligibility for

financial aid. A student's entire academic history, including transfer hours accepted from other institutions is considered when evaluating academic progress within the established timeframe. Developmental education courses are excluded from this calculation. If a student changes majors, the total hours continue to accrue regardless of program completion. Students who decide to change majors are advised to do this early in their academic program. Students who double major must also adhere to the 150% maximum timeframe requirement. The maximum attempted credit hours allowable for financial aid will be based on the degree that requires the most credit hours.

#### **Grades and SAP**

**Withdrawal**—Students who receive a "W" or "WF" will have those credits included in the number of attempted hours and will not count as successful completed hours.

**Incomplete**—Students who receive an "I" will have those credit hours included in the number of attempted hours. If the "I" becomes an actual grade, the credit hours attempted and earned will be used in the computation to determine satisfactory academic progress.

**Repeated Course**—The highest grade is recorded as the final grade for a repeated course. The grade points and credit hours earned will be used in the computation of satisfactory academic progress.

**Developmental Education Course**—Developmental Education courses are included in the computation of satisfactory academic progress. However, only up to one academic year's worth, equivalent to 30 semester hours, can be counted in the student's enrollment status for federal aid. Developmental credit hours earned in excess of 30 semester hours cannot be counted towards enrollment status for federal and state grants.

## **Evaluation of Satisfactory Academic Progress**

To ensure financial aid applicants and recipients of financial aid are making sufficient progress both quantitative and qualitative, students' progress will be evaluated by the Financial Aid Office at the end of each semester.

## Satisfactory Academic Progress Statuses

**Satisfactory**—Students are placed on satisfactory who meet the qualitative and quantitative measure and MTF requirements.

**Financial Aid Warning**—Students are placed on Financial Aid Warning for one semester the first time the student fails to meet SAP standards. Students may continue to receive financial aid for one semester on this status. No appeal is necessary. The student is responsible for meeting SAP standards by the end of the warning period.

**Financial Aid Suspension**—Students are placed on Financial Aid Suspension who fail to regain SAP the next semester enrolled. Students are no longer eligible for financial aid and their financial aid is terminated.

**Financial Aid Probation**—Students are placed on Financial Aid Probation when his or her financial aid is reinstated as result of an approved appeal. Students must follow and meet the conditions of their Academic Plan developed during the appeal process to remain on continued probation.

**Maximum Timeframe**—Students are placed on Maximum Time Frame when the 150 percent of the published length of the educational program is exceeded.

**Notification**—Students will be notified by the Financial Aid Office of his/her SAP status for financial aid by letter and/or email.

**Reinstating Eligibility**—Financial aid assistance can be regained when the student:

(1) Attends college and pays on his or her own without receiving federal or state aid and meets the qualitative and quantitative components of the SAP policy. Once SAP is met by the student, financial aid, depending upon eligibility and availability of funds, will be reinstated for the beginning of the next semester of attendance. **OR** 

(2) Through the Financial Aid Appeal Process. Students may appeal 'financial aid suspension' or 'maximum time frame' by completing a Satisfactory Academic Progress Appeal form, available in the Financial Aid Office and online on Mitchell's website, explaining why he or she did not meet SAP standards and explain what has changed in his or her situation that will allow SAP to be met by the next SAP evaluation period. Appeals must be submitted to the Financial Aid Office with supporting documentation to verify mitigating or extenuating circumstances surrounding the appeal. Examples of mitigating or extenuating circumstances include but are not limited to the death of a family member, separation or divorce, an accident or an illness. Appeals submitted without supporting documentation will not be reviewed. The Financial Aid Committee will review appeal requests and the student will be notified by letter of the committee's decision. Decisions of the Financial Aid Committee are final. Students should be prepared to pay tuition and fees by the Financial Services published tuition and fees deadline. If the appeal is approved after tuition and fees are paid, students may be reimbursed based on their eligibility and credit hours enrolled.

**Academic Plan**—Students who appeal will be given an academic plan to follow that will put the student on track to successful program completion. Academic Plans may be individualized and may, for example, require the student to earn and maintain a minimum 2.5 semester GPA and to have a 100 percent completion rate. (Example: A student who attempts 12 credit hours and successfully completes 12 has a 100 percent completion rate (12 divided by 12 = 100 percent)). It may be as complicated as a course by course plan toward degree completion. There may be other conditions included in the academic plan depending on the student's individual situation.

#### **Return of Title IV Funds**

The Higher Education Amendments of 1998, Public Law 105-244 require colleges to calculate the Return of Title IV Funds Policy when a recipient of Title IV aid (new or returning) completely withdraws from the college through the 60 percent point during a payment period. The institution must calculate the amount(s) of Title IV aid the student earned and return the unearned portion(s) of the Title IV fund(s) to the Title IV program(s). The institution and student will be required to return unearned Title IV funds to the Title IV programs.

Students officially begin the withdrawal process when they notify the Admissions/Records Office. Students are given an official withdrawal form to complete, sign and date. The Financial Aid Office verify with the Admissions Office the students last day of attendance in all class(es). Unofficial withdrawal dates are also determined when an instructor enters a "W" or "WF" and the last date of attendance on the student's record. A daily report is run by the Admissions Office and is monitored weekly by the Financial Aid Office to determine if a student has totally withdrawn from all classes for the semester.

The Financial Aid Office must determine if the student was a recipient of Title IV funds who withdrew prior to the 60 percent point and perform the Return of Title IV Funds calculation. Under this policy, the school must determine the amount of Title IV funds a student has earned and return the unearned portion. The Financial Aid Office is required to send written notification to the student informing the student of the amount owed. This notification must be sent to the student, no later than thirty calendar days after the date the Financial Aid Office is notified the student withdrew.

If the Return of Title IV Funds calculation is performed and it determines that the student received less Title IV funds than the amount earned, the institution must make a post-withdrawal disbursement to the student of the earned aid that was not received. In order to make a postwithdrawal disbursement for incurred educational costs, the school must have received the student's valid Institutional Student Information Record (ISIR) with an official Expected Family Contribution (EFC). Students must also have submitted all documentation requested to the Financial Aid Office. To be eligible for a post-withdrawal disbursement, the student must meet all Federal Guidelines outlined by the Department of Education.

Under the October 29, 2010, final regulations, effective July 1, 2011, for all programs offered in modules, a student is a withdrawal for Title IV purposed is the student ceases attendance at any point prior to completing the payment period or period of enrollment, unless the school obtains written confirmation from the student at the time of the withdrawal that he or she will attend a module that begins later in the same payment period or period of enrollment.

## **Veterans Affairs**

The Mitchell Community College Veterans Affairs Coordinator helps veterans and eligible family members seeking access to educational benefits provided by the Veterans Administration. The coordinator can provide clarification of Veterans Administration regulations, and certification for pay to the correct Department of Veterans Administration office.

#### **Veterans Education Benefits**

Educational assistance may be available to:

- Members of the armed forces who entered active duty on July 1, 1985, and contributed to their education under the Montgomery GI Bill
- Members of the armed forces who have served at least 90 days since September 11, 2001
- Eligible members of the Selective Reserves and the National Guard
- Service people who contributed toward their education through the Veterans Education Assistance Program while on active duty
- · Individuals discharged from active duty for a service-connected disability
- Sons, daughters, wives and husbands of deceased or totally and permanently disabled veterans whose death or disability happened while in military service

## **Eligibility**

Individuals enrolled in an approved program at Mitchell will be eligible to receive Veterans Education Benefits if they qualify. The student must have a completed admissions file, follow their program plan and maintain satisfactory academic progress, attendance and conduct.

## **How to Apply**

- · Apply for education benefits online at www.gibill.va.gov
- Complete the Mitchell Community College application for admission
- Submit official copies of transcripts or records from high schools, or acceptable high school
  equivalency scores and official transcripts for all post-secondary schools attended.
- Submit official transcript from Joint Services for military credit. Request transcript at https://jst.doded.mil/smart/welcome.do
- Provide the Admissions and Records Office with service schools or tests which may be evaluated for credit
- Contact the Veterans Coordinator to schedule an appointment to complete required paperwork for certification

## Military Service Experience

Veterans may receive credit for USAFI courses and for service school training where appropriate to the student's program and where a comparable course is offered by Mitchell. USAFI courses are evaluated based on the catalog of the USAFI.

School Service Training is evaluated based on "A Guide to the Evaluation of Educational Experiences in the Armed Services," published by the American Council on Education. Credit (not to exceed two semester hours) is allowed for physical education to veterans upon presentation of discharge or separation papers appropriate to the veteran's course of study. Final acceptance or rejection of the credit lies with Mitchell.

## **Payment**

Mitchell does not participate in the Advance Payment Program. Recipients of Veterans Education Benefits must pay all tuition and fees at registration, except for those veterans receiving 100 percent rate of Chapter 33 (Post 9/11) benefits. Students receive payments directly from the Department of Veterans Affairs for the period the veteran is in attendance in an eligible program. Veteran students not attending 12 or more credits in term will receive prorated funds. Veteran students registered for all online classes may only be eligible for half of the monthly stipend.

#### **Attendance**

Recipients are paid while in class attendance. A student must notify the Veterans Affairs Coordinator for any reason for absences. If a student withdraws from class, they must notify the Veterans Coordinator immediately to avoid overpayment.

- Students receiving either the Montgomery GI BILL Active duty or Selected Reserve MUST
  also verify their enrollments monthly to receive payments. This verification can be done
  either by using the WEB Automated Verification of Enrollment (WAVE) application at www.
  gibill.va.gov or by using an automated telephone service (IVR) at 1-(877) 823-2378 and
  following the prompts.
- · You are expected to attend and participate in class meetings
- Students who drop or withdraw from class must notify Mitchell's Veteran Affairs Coordinator
  of this change. Benefits will be reduced for the remainder of the semester.
- Tuition for dropped classes may be required to be paid to Mitchell.

#### **Exclusions**

The following will not be used in calculating hours for payment purposes:

- · Audited courses
- Independent study courses
- Independent stu
   Credits by exam
- · Courses taken outside the curriculum
- · Courses for which transfer credit has been awarded
- Repeated courses where the student received a passing grade
- · Study abroad
- Courses not counted toward graduation—Students can be paid for remedial courses as determined by College Placement Exams

## **Satisfactory Academic Progress**

Students receiving veterans' benefits through the Department of Veterans Affairs must meet the requirements for Satisfactory Academic Progress defined as a cumulative 2.0 grade point average (CGPA). Students whose CGPA falls below 2.0 at the end of a term will be placed on Academic Probation 1. Students on Probation 1 must meet the minimum Term 2.0 GPA or the student will move to Probation level 2. If the student fails to maintain the 2.0 Term GPA while on probation 2, benefits will be suspended due to unsatisfactory progress. Satisfactory progress towards completion of training objective can be met if the student on probation successfully completes each term with a GPA 2.0 or higher.

## **U.S. Army Reserve Officers Training Program**

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

## **Continuing Education—GED® Testing**

Mitchell's GED® Testing is directed by the N.C. Community College System and the State Board of Community Colleges. To ensure the programs comply with standards established for the Department of Veterans Affairs, GI Bill education benefits contained in CFR 38, 21.4253 and 4254, this institution administers the following procedures:

- This institution complies with requirements outlined in the GED Testing Procedures Manual.
- Records for clock-hour programs and semester-hour programs are complete and adequate
  to ensure compliance with the Department of Veteran Affairs reporting requirements
  (attendance, progress and rate of pursuit).

## Standards of Progress

For students receiving Veterans Education Benefits while enrolled in this program, progress will be measured monthly and be measured against State or institutional test results (minimum grade equivalent to 70 percent). Student's progress will be classified as satisfactory or unsatisfactory at the end of the month. Students will be placed on probation when progress is determined to be unsatisfactory.

#### **Probation**

The following probation standards will be administered for students eligible for Veteran Education Benefits:

- For attendance, two-month probation, maximum
- For standards of progress, two months maximum probation for clock-hour or semester-hour program

If a student has not met standards by the end of probation, he or she will be decertified and lose benefits.

#### Recertification

Students may be recertified only after supervisors determine conditions have returned to a satisfactory status. If benefits are interrupted two times, the student may not be recertified.

#### **Veterans Services**

Mitchell Community College is honored to welcome veterans, reservists, and active duty students to our campuses. Our Veterans Support Team is available to assist you with a variety services including: Academic Advising, VA Education Benefits (GI Bill), Financial Aid, Disability Accommodations, and acclimation to college. For assistance with Admissions, Advising, and Disability Accommodations, contact the Academic Advising Center in Room 103 of the Student Services Center or (704) 878-3242. For assistance with VA Education Benefits and Financial Aid, contact the VA Coordinator in the Student Services Center, or call (704) 878-3295.

**Note:** Students who qualify to receive education benefits from the Department of Veteran Affairs and Financial Aid are asked to attend an orientation session and communicate with their instructors at least once a week. Veterans who have separated from the service within the last three years may qualify for Section 702 of the Choice Act. Please see the School Certifying official for more information regarding In-state tuition.

## **Academic Policies**

#### Semester System

Mitchell operates on a three-semester system. Credit of one semester hour is awarded for each:

- 16 hours of class work
- 32 or 48 hours of laboratory work
- · 48 hours of clinical practice
- 160 hours of work experience such as cooperative education, practicum, and internships

## Registration

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

#### **Course Load**

A student registered for 12 semester hours is considered full-time. These requirements are the minimum in order to receive full VA benefits. The normal course load for an A.A., A.S., or A.F.A. degree is 16 credit hours per semester. The normal course load for A.A.S. technical degrees is 18 credit hours per semester. Students may not register for more than 21 credit hours without approval of the Vice President for Student Services. Approval to carry more hours will be based on past academic achievement. Students who are employed while attending college should consult with their faculty advisor to determine an appropriate course load.

#### Change of Schedule

Changes in a class schedule after the last day of drop/add must be made in the office of the Director of Admissions/Registrar. The last day that courses may be added is stated on the Academic Calendar. Students wishing to drop a course must complete the drop form, which is processed through the Academic Advisor and the Admissions and Records Office.

#### Classification

Studentsare classified as freshmen from initial enrollment until they earn 30 semester hours credit. After that, they are classified as sophomores. For student activities purposes, students must have been enrolled for a minimum of two semesters before they are classified as sophomores.

## **Attendance Policy**

In order to remain enrolled in an online course a student must be in attendance (verified by completion of the syllabus quiz) on or before the census date. For all other classes, a student must be physically present in the class on or before census date. A no show grade of 'NS' will be assigned to those students who fail to attend class(es) before the census date. Attendance begins on the first scheduled day of class, even for students who register late. Students are expected to attend all scheduled classes. Absences from class, which may cause the student to be unable to meet course objectives, do not relieve the student from meeting all the requirements of the course. Making up missed work is the student's responsibility. Absences do adversely affect grades. Instructors are responsible for informing students, in writing, of the class attendance policy at the beginning of each semester. When a student fails to comply with the attendance policy of the class or fails to attend for two consecutive weeks without arrangements being made with the instructor, the instructor will process a withdrawal for the student resulting in a grade of W or WF. (See Withdrawal Policy)

## Withdrawal Policy

To withdraw from a single course, a student should submit a completed Drop Form to Student Services. To officially withdraw from school, a student must submit a completed withdrawal form to the Admissions and Records Office. The form must be signed by the instructor, the advisor and the Financial Aid Office. The last day to withdraw from a course or from all courses without any academic penalty is at the 60 percent point of the semester. The exact date is published on

the Academic Calendar. A student may withdraw from a course or withdraw from all courses up to and including the published date with a grade of "W." After the 60 percent point, the student will receive a "W" if passing on the last date of attendance or a "WF" if failing on the last date of attendance. A "WF" carries the same academic penalty as a grade of "F". Failure to attend class or to notify the instructor does not constitute an official withdrawal.

## **Grading System**

A unit of credit is measured in semester credit hours. For the credit value of a given course, see the course description in this catalog.

## **Grade Point Average**

The grade point average is calculated by dividing the total number of quality points earned by the total number of semester hours attempted, including both courses passed and failed, unless the courses have been repeated. When a course is repeated, the highest grade earned will be included in calculating the GPA. All courses attempted will be shown on the official transcript. A "C" average is required for graduation. Following is a list of letter grades—

Letter		Quality	
<u>Grade</u>	<u>Description</u>	<u>Points</u>	
Α	Excellent	4.0	
В	Good	3.0	
C	Fair	2.0	
D	Pass	1.0	
F	Fail	0.0	
I	Incomplete		
CE	Credit by Examination		
NC	No Credit (student does not pass credit by examination)		
W	Withdrawal		
WF	Withdrawal Fail		
AU	Audit (no points)		
TR	Transfer Credit		
NS	No Show (student registered but did not attend at least one class)		
#	Academic Forgiveness (grade not computed in grade point average)		
R	Repeat DMA course		
Р	Pass DMA course		

For an Incomplete, the student must satisfactorily complete the work within the next semester. In certain exceptions, the instructor may approve an extension of up to one year from the closing date of the course. If the "I" has not been removed by the designated date, the student will receive a "E"

## **Grade Reports**

Mitchell keeps records of progress and furnishes final grades to all students at the end of each semester through students' WebAdvisor accounts.

## **Grade Appeal**

The course instructor is responsible for determining the grade a student earns for the course. The grade determination should be based on the course grading policy as detailed in the course syllabus. Occasionally, a student may disagree with the final course grade as assigned by the instructor. In those cases, the student should follow the steps as outlined below:

- 1. The student should meet with the course instructor and discuss the grade. This meeting must take place within 30 calendar days of the initial assignment of the grade.
- 2. If the student still feels the grade has been incorrectly assigned then the student should meet with the instructor's curriculum division dean. After confirming that an effort has been made between student and instructor to reach an agreeable outcome regarding the grade in question, the dean will:
  - a. Listen to the student's explanation of why he or she thinks that the grade is in error,

- Talk with the instructor to confirm that the instructor can either demonstrate the grade was correctly assigned or to confirm that, upon reexamination, a grade change is in order,
- c. Communicate to the student the result of the dean/instructor discussion. If the student is dissatisfied with the outcome, a meeting will be arranged to include the instructor, the student and the dean to determine whether or not an agreeable outcome can be reached.
- 3. If the student remains dissatisfied with the outcome, he or she should state the reason(s) that the grade is believed to be in error in a written appeal addressed to the Vice-President for Instruction. This written appeal must be submitted within ten calendar days after the meeting between the student, instructor, and dean. Upon receipt of a written appeal, the Vice President for Instruction will convene the Grade Appeal Committee. The Grade Appeal Committee will be comprised of one faculty member from each of the four curriculum divisions, to be chosen by the full-time faculty in their respective divisions. For each appeal, the committee will select one member to serve as non-voting chair and recorder for the appeal.
- 4. The student and instructor will be given an opportunity to address the committee and to answer questions. After reviewing all relevant information presented, the committee will render a decision reflecting the popular opinion of the committee. The committee will report its decision to the Vice President for Instruction who will notify the student and the instructor of the outcome.
- 5. The decision of the Grade Appeal Committee will be final.
- 6. As per procedure, should any portion of the process result in the need to change the grade the instructor will submit an Authorization to Change Grade form.

## **Academic Forgiveness**

A student may request Academic Forgiveness for courses in which no credit was earned during that last enrollment. The request must be made through the student's academic advisor after a student has completed at least 12 credit hours. Forgiveness of past "no credit" may be granted one time only. The Academic Forgiveness Policy consists of the following:

- 1. All failing grades, i.e., F, WF, or I, will not be counted in calculation of the Grade Point Average (GPA).
- 2. All passing grades, i.e., A, B, C, D, for all courses required in a student's present curriculum will count toward graduation requirements unless other policies supersede this policy; however, the grades will not be used to calculate the GPA.
- 3. Prior to implementation of the Academic Forgiveness Policy, the student must enroll in the college and complete a minimum of 12 consecutive semester credit hours with a minimum GPA of 2.00. The 12 credit hours must be hours that are included in the calculation of GPA.
- For some programs, there may be additional or specific requirements related to admissions criteria, i.e. Allied Health programs.
- 5. The student's GPA will be calculated based upon the time of re-enrollment and all requirements being met.
- 6. Grades for all Mitchell courses will be on the student's transcript with the appropriate indication of calculation of the student's GPA.

**Note:** Students planning to transfer to another college or university are cautioned that the receiving institution may use all grades earned in computing grade-point averages for admission or other purposes. The application of this policy will not affect the Financial Aid Satisfactory Progress measurement.

#### Steps:

- Student enrolls and achieves a minimum GPA of 2.00, with successful completion of at least 12 hours taken consecutively.
- 2. Student fills out a formal written request form and submits to his or her academic advisor.
- 3. The form is approved by the division dean and then sent to the Director of Admissions/ Registrar.
- 4. The Director of Admissions/Registrar evaluates the transcript and determines appropriate courses to be included in the forgiveness process.
- 5. Student is notified by a letter from the Director of Admissions/Registrar about the outcome of the process.
- A copy of the evaluation is included in the permanent student record and reflected in the student's transcript.

#### **Course Examinations for 16-week Sections**

The exam schedule for 16-week sections is published by the Director of Admissions and Records/ Registrar. All exams and/or final projects are required to be held during the published exam hours.

#### Dean's List

The Dean's List is published at the end of each semester and is based on the following criteria—

**Full-Time Dean's List** applies to any student enrolled for at least 12 semester hours of 100 and 200 level courses and earning a grade point average of 3.5 or better with no grade below "C"

**Part-Time Dean's List** applies to any student enrolled for at least six semester hours of 100 and 200 level courses, but less than twelve, and earning a grade point average of 3.5 or better with no grade below "C."

**Note:** Developmental classes are not included in calculation of GPA.

## **Satisfactory Academic Progress**

To be considered in good academic standing and making satisfactory academic progress toward a degree, diploma, or certificate, a student must maintain a cumulative grade point average (GPA) of 2.0 or higher.

Total hours attempted are used in the computation of the overall cumulative GPA. This includes both passed and failed courses, with the exception of courses that have been repeated. For repeated courses, only the highest grade earned will be included in the calculation of the grade point average.

#### **Academic Probation**

Since 2.0 is the minimum cumulative grade point average (GPA) required to graduate, curriculum students who fail to maintain a cumulative 2.0 GPA at the completion of any semester will be placed on academic probation for the following academic term. The Director of Admissions/ Registrar will notify students and their advisors by college email or letter of probationary status and will advise those students to make an appointment with their academic advisor or, if a Special Credit student, to make an appointment with a counselor.

## **Academic Suspension**

A student who does not maintain a cumulative GPA of 2.0 or above for two consecutive semesters will be placed on academic suspension. A suspended student is prohibited from enrolling in the College until he or she has petitioned the Academic Review Board to receive permission to re-enroll.

#### **Academic Re-Instatement**

Suspended students seeking readmission must petition the Academic Review Board prior to the beginning of the semester. This written statement should include the reasons he or she would like to be admitted, his or her work schedule, proposed course load, educational goals and any other information that might provide an explanation of the circumstances that led to the academic suspension.

The Academic Review Board will review the letter and any other supporting documentation submitted by the student and will make its decision. Re-enrollment may be contingent on the student taking specific courses or activities as required by the Academic Review Board. The sole intent of the Board will be to provide the student the greatest possible opportunity for academic success. The petition and any supporting documents should be mailed to:

#### **Director of Admissions/Registrar**

Mitchell Community College 500 West Broad Street Statesville, NC 28677-5264 **Important Note for Students Receiving Financial Aid:** The Academic Review Board can grant permission to re-enroll but does not make decisions regarding financial aid eligibility. Students who have been granted permission to re-enroll will need to contact the Financial Aid Office to discuss the status of their financial aid.

## **Course Requirements**

There are prerequisite and co-requisite requirements for selected courses. This is to ensure that students have adequate preparation to successfully complete the course.

## **Prerequisite and Co-Requisite Waiver Policy**

Any student wishing to enroll in a course for which he/she doesn't have the appropriate coor pre-requisite coursework must satisfy the course instructor or area coordinator that she/ he has the necessary knowledge or skills required for admission to the course. Further, the student will be made aware that the lack of the appropriate requisite course(s) may affect the student's performance in the course for which the requisite(s) exist. In order for the student to be registered in the course, the appropriate division dean must enter a requisite override on the student's record. The dean will electronically note who approved the waiver and the justification.

## **Credit by Examination**

Students whose special knowledge/skills qualify them to accelerate in their studies and who are currently enrolled at Mitchell may receive credit by examination. To receive credit by examination, a student must demonstrate convincing evidence of competency in knowledge and/or skills in the specific course outcomes. A written, oral, and/or performance examination will be developed and administered by an instructor who is a subject matter expert in the specific course discipline. The examination is subject to the approval of the division dean/director. Not all courses offered at Mitchell allow credit by examination. Students may challenge up to 20 percent of the courses in any program of study. Students may not challenge a course in which they are currently enrolled or in which they have received a grade of "D" or "F." A course may be challenged through credit by examination only once. A student who successfully completes a credit by examination will be awarded a grade of "CE" and credit hours for the course. Quality points will not be awarded; therefore, the grade is not included in the calculation of grade point average. A grade of "C" or better must be earned on the exam to receive credit. If a grade less than a "C" is earned, the student will receive a grade of "NC" (no credit awarded). Credit by exam hours cannot be used in calculating enrollment status for payment of Financial Aid or Veteran Educational Benefits. Mitchell Community College cannot guarantee the transferability of "CE" grades to other institutions.

Students requesting this type of credit should use the following procedure:

- Check with the course instructor for approval to attempt the credit by examination
- Obtain a Credit by Examination approval form. This form requires signatures of the administering instructor and the appropriate Curriculum Division Dean.
- With the appropriate signatures, take the form to Student Services. The Director of Admissions/Registrar will determine payment required.
- Pay any required tuition and present the receipt to the Director of Admissions and Records for final signature.
- Once all signatures have been obtained, present the Credit by Examination approval form to the instructor administering the exam.
- After the exam, the instructor will notify the Records Office of the results. If successful, a grade of CE will be entered on the transcript. If unsuccessful, a grade of NC will be recorded.

## **Advanced Placement for High School Courses**

Advanced placement credit based on high school achievement may be allowed to students enrolling in specified programs. Details concerning specific requirements are available from counselors at the high schools and at Mitchell.

Students enrolled in the nursing programs should refer to the *Nursing Policy and Procedure Manual*.

## **Auditing Classes**

Classes may be audited with permission of the instructor: however, no class may be audited more than once. The audit may occur either before or after taking the course for credit. Priority will be given to regular credit students. Any class with more than 50 percent audits may not be taught. No one will be allowed to audit an independent study or independent studio course.

Participation in class discussion and examinations is at the option of the instructor. No credit by examination can be allowed for courses that have been audited. A grade of "AU" will be recorded with no credit hours or quality points awarded. Registration or changes in registration for audits must be completed during the regular registration or change periods. Regular tuition and fees will be charged.

#### **Course Repeats**

If a student repeats a course, the highest grade is recorded as the final grade and will be the only grade used in calculating grade point averages or hours towards graduation. All courses attempted will be shown on the official transcript. If a course in which the student received an "F" is not offered during the remainder of that student's program, an equivalent course may be substituted if approved by the Vice President for Instruction. While Mitchell only counts the highest grade, other institutions may use both grades to arrive at a grade point average for transfer.

#### Course Substitutions

No course substitutions may be made and no graduation requirements may be waived without recommendation from the division dean and the Vice President for Instruction

## **Transcripts**

A student can request to have an official transcript sent to an institution or employer by completing a transcript request. No transcript will be released until all financial obligations to Mitchell have been met.

## **Mitchell Essential Learning Outcomes (MELOs)**

The faculty at Mitchell Community College believe that students should demonstrate the following Mitchell Essential Learning Outcomes (MELOs):

- Construct sustained, coherent arguments, narratives, and/or explications of technical processes.
- Compute accurate and relevant calculations and/or present valid interpretation of quantitative information.
- 3. Interpret personal, social, and/or global issues/ideas from different perspectives.
- 4. Assemble evidence relevant to a problem/question and/or evaluate the significance of a problem/question and/or apply evidence to analyze a problem/question.

To ensure that our students attain these MELOs by graduation, Mitchell Community College requires that students:

- Complete the general education core requirements listed in the students' major program of study (see these courses/skills listed in the General Catalog/Student Handbook under the headings of "degree program") and
- Reinforce these goals through a series of courses and learning experiences encountered by our students from their freshman experiences up to their graduation from the College.

## **Graduation Requirements**

The following requirements apply to programs. Some divisions may have additional requirements.

- Students in associate degree programs are required to make satisfactory scores on the reading placement test or successfully complete reading requirements.
- Students may graduate under the catalog upon which they enter or any subsequent catalog in effect while they remain in continuous enrollment. If a student changes from one program to another, he/she must graduate under the catalog in effect at the time of

the change or any subsequent catalog while he/she remains in continuous enrollment. Continuous enrollment excludes summer semester.

- Students must earn a cumulative grade point average (GPA) of 2.0 and must receive a
  passing grade in all required courses to be eligible for graduation.
- Students must complete an Application for Graduation prior to registration for the semester in which the program will be completed. Students completing during the Summer term must apply during the preceding Spring term's registration.
- A minimum of 25% of the credits required for a degree, diploma or certificate must be earned at Mitchell.
- To be eligible for graduation, the student must fulfill all financial obligations to Mitchell.

### **Graduation Honors**

Students with at least 50 percent of their curriculum requirements completed at Mitchell are eligible for honors at graduation.

**High Honors** —Students who have a cumulative grade point average of 3.75 or greater.

**Honors**—Students who have a cumulative grade point average of 3.50 to 3.74.

Certificate programs do not qualify for honors.

#### **Graduation Marshals**

Freshmen enrolled in a program of study and who have the highest grade point averages and have earned a minimum of 12 semester hours credit are selected marshals.

### **Academic Honesty**

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

#### State Authorization

All U.S. states require post-secondary educational institutions to be legally authorized to provide post-secondary educational instruction in their states. Many of these state laws and regulations also apply to online, distance, and correspondence educational instruction offered in that state.

Mitchell Community College is working to achieve compliance as established in HEOA 600.9 (c).

If an institution is offering postsecondary education through distance or correspondence education to students in a State in which it is not physically located or in which it is otherwise subject to State jurisdiction as determined by the State, the institution must meet any State requirements for it to be legally offering postsecondary distance or correspondence education in that State. An institution must be able to document to the Secretary [of Education] the State's approval upon request. (Authority: 20 U.S.C. 1001 and 1002)

Mitchell Community College desires to resolve student grievances, complaints and concerns in an expeditious, fair and amicable manner. Students residing outside of the State of North Carolina while attending Mitchell who desire to resolve a grievance should follow the College's Student Grievance Procedure that is available on the college website as well as in the Student Services Centers located on both the Mooresville and Statesville campuses.

If a complaint cannot be resolved after exhausting the institution's grievance procedure, the individual may file a complaint with the following office: Post-Secondary Education Complaints, c/o Assistant Director of Licensure and Workforce Studies, University of North Carolina General Administration. 910 Raleigh Road, Chapel Hill, NC 27514, telephone (919) 962-4558, studentcomplaint@northcarolina.edu. The individual may contact UNC General Administration for further details.

Students residing out of state and taking classes online at Mitchell Community College may choose to file a complaint with their state of residence. Please visit the Distance Learning section of the college website to view a complete listing of state authorization agencies.

# **Support Services**

### **Advising Center**

TheAdvising Center provides the initial advising session to new students. Advisors help students confirm their academic degree choice and career goals, review students' programs of study, instruct on the navigation and use of WebAdvisor, and assist with course registration. Advisors also inform students of college processes, including the requirement of having the educational plan updated with faculty advisors during Advising Months. The Advising Center is located in the Student Services Center, Statesville Campus, and maintains scheduled office hours at the Mooresville Campus by appointment. Please call (704) 878-3242.

### Counseling

Professionally-trained counselors are available to provide admissions information, counseling services and other academic support services to students. Counselors help students identify and meet their educational and career goals. They are also available to help students resolve problems of a personal nature that might affect progress toward meeting educational goals. The Counseling Center is located in the Student Services Center on Statesville Campus and can be reached by phone at (704) 878-3242. Counseling can also be accessed at the Mooresville Campus and the Mooresville Campus Counselor can be reached by phone at (704) 978-5415.

### **Career Counseling**

The Counseling Center can assist students with career counseling, exploration and assessment, labor market research, job search skills and career-related workshops. For one-on-one career counseling, students can make an appointment by visiting the Counseling Center or calling (704) 878-3242.

### **Disability Support Services**

The Mission of Disability Services is to lead the Campus Community in the creation of an inclusive learning and working environment; and facilitate access, discourse, and involvement through innovative services, programs, and partnerships. Students should contact Disability Services as soon as possible before the first day of class for which accommodations are needed. Students seeking assistance must provide documentation which includes relevant medical, psychological, educational and/or emotional diagnostic tests or evaluations that verify the need for accommodation. Students will need to meet with Disability Services to complete an accommodation plan each semester. For more information, please contact the Coordinator for Disability Services in the Counseling office, room 103 in Student Services Center on the Statesville Campus, (704) 878-3664. Disability Services provides reasonable academic accommodations to students with a documented disability under the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1972.

### **Faculty Advisors**

After completing the admissions process, students are assigned a faculty advisor in their chosen area of study. Students meet with their advisor each semester to review educational goals, update career plans, and make course selections. Advisors are available at other times to provide support. Students need to be familiar with the Mitchell Catalog and are responsible for making final decisions on academic matters. To locate your faculty advisor's contact information, log into your WebAdvisor account and select the "my profile" link.

### **Veterans Services**

Mitchell Community College is honored to welcome veterans, reservists, and active duty students to our campuses. Our Veterans Support Team is available to assist you with a variety services including: Academic Advising, VA Education Benefits (GI Bill), Financial Aid, Disability Accommodations, and acclimation to college. For assistance with Admissions, Advising, and Disability Accommodations, contact the Academic Advising Center in Room 103 of the Student Services Center or (704) 878-3242. For assistance with VA Education Benefits and Financial Aid, contact the VA Coordinator in the Student Services Center, or call (704) 878-3295.

### Work-Based Learning (WBL) Program

This academic program integrates classroom study with practical experience in business, education, and industry. Through this experience, students practice the theories and principles related to their major course of study in an actual work environment. The Work-Based learning work experience occurs concurrently with academic studies, may be paid or unpaid, and awards academic credit. A maximum of six credit hours may be earned through this program. One credit hour equals 160 hours of work experience per semester. Credit is awarded based on evaluations and assignments from the student's supervisor at work, faculty advisor, and the Work-Based Learning Director. Employers must agree to assist with evaluations with their individual student's progress. All curriculums except Nursing, Cosmetology, and Medical Assisting may participate in Work-Based Learning.

#### Eligibility

To be accepted, students must:

- Be enrolled in a Mitchell curriculum or degree program in which Work-Based Learning is allowed.
- Have a minimum 2.0 GPA
- · Be recommended by the student's faculty advisor
- Be approved by the Work-Based Learning Office
- Have successfully completed at least nine semester hours of college-level work in their major area of study including any specific courses required by the program
- Have completed all required developmental courses

#### **Currently Employed Students**

Students may qualify to receive Work-Based Learning academic credit if they are already employed provided they:

- Are acquiring significant new skills or knowledge related to their academic field of study
- Are developing recently-learned skills or applying recently-learned knowledge related to their academic fields of study
- Are receiving increased levels of responsibility related to their academic field of study

For more information on how to participate as a Work-Based Learning student or employer, contact the Work-Based Learning Office located in Main Building.

#### **Bookstore**

The Mitchell Community College Bookstore is located in the Montgomery Student Union. The Bookstore's website is available online for inquiry and purchasing. The electronic Bookstore provides the title, author, edition and price of the textbook(s) needed for each course. The information is provided by semester for curriculum as well as continuing education classes.

To use the electronic Bookstore for ordering textbooks, a credit card must be used for payment. There is the option for textbooks to be shipped UPS, to be picked up at the Statesville Campus Bookstore or at the Mooresville campus.

Students planning to participate in the graduation ceremony may purchase a cap, gown, and tassel set at the Bookstore. The Bookstore will also offer announcements, class rings, and degree frames for graduates to purchase.

### **Huskins Library**

The J.P. & Mildred Library provides resources which support and enhance instructional programs at Mitchell. Library services include reference assistance, book selection, group or individual library orientation, interlibrary loans, Internet access, and a coin-operated copier. Audiovisual services include equipment for viewing and listening.

### **Distance Learning**

Mitchell Community College offers several distance learning opportunities for students. Distance education is an educational process in which the majority of instruction (interaction between students and instructors and among students) in a course occurs when students and instructors are not in the same place. These classes provide students with more flexibility than a traditional classroom setting. Students are expected to have access to the Internet, possess

sufficient computer skills to be able to send and receive email (including file attachments) and have access to course specific software. Students taking online courses receive the same credit, must satisfy the same course prerequisites, experience the same course content, and are assessed the same tuition as traditional students. For online courses, all the course content and class communication over the Internet. Orientation may be on-line or by voluntary oncampus session. Students may have to come to campus to purchase books and/or to pay tuition. Instructors of Internet based courses are available to students via email, telephone, or by scheduled appointments.

For hybrid courses, courses offer a mix of traditional on-campus and on-line instruction. Actual on-campus times vary from minimal contact to over 50 percent required on-campus meetings. Specific requirements will be either posted in the schedule listing on Web Advisor or communicated in the course syllabus.

### **North Carolina Information Highway**

The Information Highway network brings together groups of students at distant sites, or students in the information highway room can receive instruction from another site that is equipped with the same technology. This is a traditional class in every respect except that the instructor is teaching from another site, or Mitchell Community College may be broadcasting the class to other sites. Students interact with other students and with the instructor at a distance using microphones, video cameras, and television monitors.

### The MIND Center for Learning and Teaching

The MIND Center provides quality academic support services and tutoring that enable students to:

- Develop, enhance, and maximize their learning skills
- Improve their understanding, achievement, and enjoyment of course work
- Become proficient in using computer software and equipment
- · Employ successful learning strategies

The Tutoring Center offers free peer tutoring in any course by appointment with additional academic support for writing, mathematics, and other courses. Centers are located in both Statesville and Mooresville.

### **Developmental Education Program**

Founded on the "open door" admissions philosophy, Mitchell provides developmental education courses to ensure that students at all ability levels may be successful learners. Developmental education courses promote the cognitive and affective growth of students at all levels of the learning continuum, thereby ensuring educational opportunity for each post-secondary learner. In addition, developmental education courses ensure high academic standards by enabling learners to acquire competencies needed for success in mainstream college courses.

### **Tech Prep Articulation Credit**

Mitchell formally identifies, recognizes and awards College Tech Prep placement credit (college credit) for courses in the N.C. High School to Community College Articulation Agreement if the college course for which credit is being sought is listed in this catalog. To receive credit, a student must meet both the grade and CTE post-assessment score requirements. Mitchell must receive official documentation of a student's eligibility from the student's high school. For a complete list of the courses and requirements, please contact your high school or a counselor at Mitchell.



# Student Rights and Responsibilities

Mitchell Community College strives to offer social and cultural activities that build well-rounded persons as well as a comprehensive program in academics. Students are expected to conduct themselves in accordance with federal, state, and local statutes. Mitchell will cooperate with the respective law enforcement agencies in their enforcement. The Code of Student Conduct and Student Appeals procedure is detailed in the Student Handbook, which is available online to each student enrolled in a curriculum program or course.

### **Student Responsibility**

Mitchell provides counseling services and academic advising to students. Course selection and a field of study should be considered carefully by the student with the support of counselors, academic advisors, administrators, faculty and staff. The student is responsible for his or her persistence in pursuing a program of study to completion and for planning entry into a career or transfer to a senior institution.

## **Student Records and Privacy Rights**

Mitchell must maintain accurate and confidential student records and must recognize the rights of students to have access to their educational and personal records in accordance with existing College policy and the Family Educational Rights and Privacy Act (FERPA). College officials responsible for the proper maintenance of educational records include the Director of Admissions/Registrar and the Vice President for Student Services. FERPA provides safeguards regarding the confidentiality of and access to student records. Students and former students have the right to inspect and review their official records and to request a hearing if they challenge the contents of these records. No records shall be made available to unauthorized personnel or groups outside Mitchell without the written consent of the student involved, except to the extent that FERPA authorizes disclosure without consent. Students have the right to file a complaint with the U.S. Department of Education concerning alleged failures by Mitchell to comply with the requirements of the Act. The name and address of the Office that administers FERPA is Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202-5901.

"Educational Records" include files, documents, and other materials, which contain information directly related to students. The term "educational records" does not include the following:

- Records and documents of institutional personnel which are kept apart from educational records.
- Records on the student which are made or maintained by a physician, psychiatrist, psychologist, counselor, or other recognized professionals or paraprofessionals acting in their official capacity.
- Financial records on the parents of the student.
- Records of instructional, supervisory and administrative personnel kept in their sole
  possession provided they are "not accessible or revealed to any other person except a
  substitute."

#### **Release of Student Educational Records**

The following "Directory Information" may be made available to the public by Mitchell without the student's written permission unless the student notifies the Vice President for Student Services in writing by the third week of the semester that such information concerning themselves is not to be made available.

- Student's name, address, e-mail address, and telephone number
- · Major field of study or program, club and sport activities
- Dates of attendance, degrees, diplomas, honors, or awards received and the most recent previous educational institution

School officials who demonstrate a legitimate educational interest will be permitted to look at the official student file for a particular student. School officials include those employed by Mitchell in an administrative, supervisory, academic or research, or support staff position; a person or company with whom Mitchell has contracted as its agent to provide a service instead of using Mitchell employees; a person serving on the Board of Trustees; or a student serving on

an official committee or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her responsibilities for Mitchell.

Requests for confidential information shall not be honored without proper written consent. The written consent must specify the records or the specific data to be released and to whom it is to be released, and each request must be handled separately. Exceptions to this policy are:

- Requests for confidential information will be honored without prior consent of the student in connection with an emergency.
- Official requests in connection with the audit and evaluation of federal or state supported programs or in connection with enforcement of federal or legal requirements which relate to such programs.
- An official order of a court of competent jurisdiction.
- Subpoena. (Students will be notified immediately by registered mail that their records are being subpoenaed.)
- Persons or organizations providing financial aid to the student or determining financial aid decisions

#### Services to Individuals with Disabilities

Mitchell operates programs, activities, and services to ensure that no qualified individuals with disabilities are excluded from participating in, denied the benefit of, or subjected to discrimination in College programs, activities, or services solely by reason of their disability. By federal law, a person with a disability is any person who:

- Has a physical or mental impairment
- Has a record of such impairment
- Is regarded as having such an impairment which substantially limits one or more major life activities such as walking, seeing, hearing, speaking, or learning

All students with disabilities have the responsibility of meeting each program's essential technical and academic standards. Reasonable accommodations, academic adjustments, and/or auxiliary aids are determined on a case-by-case basis. Mitchell shall select among equally effective and appropriate accommodations, adjustments, and/or auxiliary aids. Mitchell has a right to deny a request for accommodation if the documentation

- · Does not identify a specific disability
- · Fails to verify the need for the requested
- · Is not provided in a timely manner

Mitchell can also deny a request for accommodation if the desired accommodation would

- Pose an undue administrative or financial burden on the College
- Fundamentally alter the course or program

In the event a requested accommodation would pose an undue burden, the College will endeavor to make an equally effective accommodation that would allow the requesting party equal access to programs. Guidelines for appropriate documentation of disabilities are available from the disabilities coordinator upon request.

While the College will provide auxiliary aids and services, the College cannot provide attendant care services/personal assistants or items for personal use such as wheelchairs, other mobility aids or hearing aids. The disabilities coordinator can refer the student to a community resource for assistance.

It is the student's responsibility to initiate requests for accommodations. Students requiring services or requesting classroom accommodations should contact the Office of Disability Services at the beginning of each semester. All requests should be made as far in advance as possible, as some accommodations will require time and resources to provide.

### **Special Populations**

The purpose of the Carl D. Perkins Vocational and Technology Education Act of 1998 (P.L. 105-332) is to develop more fully the academic, vocational, and technical skills of secondary and post-secondary students who elect to enroll in vocational and technical education programs.

# **Corporate and Continuing Education**

Mitchell Community College's Corporate and Continuing Education division provides academic and occupational programs to meet the needs of Iredell and surrounding counties. Courses are for those who need to train, retrain, and update their vocational or professional skills, grow in basic knowledge, or develop leisure time activities, and are scheduled continuously throughout the year.

### Registration

Pre-registration is required for all Continuing Education courses. Classes are filled on a first-come, first-served basis. A prospective student should contact the Continuing Education Center for registration information. Registration is not official until fees are paid. Students are urged to complete registration and pay fees at least three business days prior to the first class meeting. Registration forms are available at www.mitchellcc.edu/continuing-education/ or at the Continuing Education office. The registration form may be mailed to the Continuing Education Division along with the registration fee. Insufficient enrollment will result in cancellation of the specific class.

### **Cancellation and Refund Policy**

Mitchell reserves the right to cancel a class due to lack of enrollment. If this occurs, preregistered/prepaid students will receive a full refund. Preregistered/prepaid students who officially withdraw from a course prior to its beginning will receive a full refund. Students who officially withdraw from a course prior to the 10 percent point will receive a 75 percent refund. Students who withdraw from a course after the 10 percent point are ineligible for a refund.

### **Fees and Supplies**

Registration fees are established by the N.C. State Board of Community Colleges and are subject to change. These fees vary according to instructional time, course content and equipment requirements. Additional expenses may be required for books, supplies and materials. The charges for self-supporting classes are based on the cost of course delivery.

### Credits (CEUs)

Continuing Education Units (CEUs) are awarded to those students who satisfactorily complete any of the courses listed as offering a specified number of CEUs. One CEU is defined as ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction. A permanent record of each student's CEUs will be maintained by Mitchell. Transcripts are available upon written request. Not all Continuing Education courses are accredited for CEU recognition.

#### **Attendance**

The attendance requirement for most classes is 80 percent. Other criteria may be necessary to satisfactorily complete the course.

### **Corporate and Continuing Education Programs**

#### **Community Service**

These programs are designed to appeal to the avocational and special interests of adults in our community. Classes include cake decorating, painting, photography, pottery, sewing, stained glass, and other topics. The community services program also sponsors various special events.

#### **Occupational Extension**

These programs are specifically designed to upgrade the skills of those currently employed and prepare other individuals to enter the work force. Pre-licensing, certification and continuing education course requirements for numerous occupations such as real estate, notary public, building contractors, welding, HVAC, and vehicle safety and emissions inspection are scheduled on a regular basis.

#### **Allied Health**

These programs provide training in medical fields such as nurse assistant (CNA) and emergency medical training (EMT) and prepare students for state certification. Coursework is offered for initial certification, recertification and job upgrade.

#### **Fire Protection Technology**

This program provides fire and rescue training. Registration fees are currently waived for active members of fire or rescue departments.

#### **Human Resources Development (HRD)**

This program provides employability skills training for unemployed and under-employed adults and is beneficial for dislocated workers, anyone seeking employment or advancement, or those interested in returning to school for re-training. Topics include the impact of technology in the workplace, re-employment procedures, effective communication skills, resume writing, interviewing strategies, college preparation, study skills, and career exploration.

#### Career Readiness Certificate (CRC)

This program provides a portable credential that certifies skill attainment for an individual, and confirms to employers that an individual possesses certain workplace skills. CRC participants are assessed in Reading for Information, Locating Information, and Applied Math. Students in the program may take the nationally recognized WorkKeys Test and earn a Bronze, Silver, or Gold Certificate that will demonstrate proficiency in these three areas.

### **Business and Industry Services**

#### **Training Programs**

General and customized training programs are available to business and industry. These programs are designed to meet specific business or industry needs. They may be held at the business location or at the College. Programs often address technical skills, computer operations, team development, supervision and leadership. The cost of these courses varies.

#### **WorkKeys Employment Assessments and Job Profiling**

These services are available to employers who need an EEOC-compliant method for assessing current or potential employees. Assessments are completed using WorkKeys, a nationally recognized system for determining the skill sets and work-related competencies that are critical to job success. Job profiling is also available to provide a tailored description of any specific job and to identify the skill requirements relevant to that position.

#### **Small Business Center**

The Small Business Center (SBC) supports the economic growth of Iredell County by providing training and counseling for existing and prospective small business owners and employees. The SBC offers seminars, workshops and courses each semester. The SBC also provides a wide array of computer courses including word processing, spreadsheets, databases, desktop publishing, computerized accounting, and presentation programs. In addition to educational programs, the Center provides networking opportunities to assist the small business owner.

#### **Customized Training Programs**

This program provides training for companies new to Iredell County and for existing companies undergoing an expansion that will result in the addition of twelve or more new production jobs. These training programs are customized and designed cooperatively with the industry and local college personnel. Training is administered by the College and is available to the service area of Iredell County. This program also serves the training needs of an existing industry's skilled and semi-skilled workforce through a cooperative effort in assessing training needs and delivery of training associated with industrial occupations.

### **Basic Skills Programs**

The Adult Basic Skills Program is based on the philosophy that every student, regardless of functional level, is teachable, capable of self-improvement, and should have the opportunity to participate in continuing educational activities.

Basic Skills Programs provide educational opportunities for adults 18 years or older who have not completed high school or who would like assistance with basic education skills. This includes reading, writing, speaking, problem-solving, or mathematics at a level necessary to function in society, on a job, or in the family. Sixteen- and 17-year-olds who are out of school may enter only under special regulations. High school graduates who would like to enroll in refresher courses are welcome. All classes are FREE of charge.

Adult Basic Education (ABE) provides adults reading, writing, and math instruction.

**High School Equivalency (HSE)** is a high school equivalency program designed to test a student's knowledge in English, math, reading, natural science and social studies. Upon satisfactory completion of the tests, the student receives an HSE (high school equivalency diploma) issued by the State Board of Community Colleges. The HSE is recognized as the equivalent of a high school diploma. To qualify for this program, students must be at least 18 years old. Special need 16-17 year olds may be served upon completion of Minor Release Form that requires notarized parental permission, and release from the public school system. The HSE examiner should be contacted for further information. Students have the option to complete the program online.

**English as a Second Language (ESL)** teaches reading, writing and speaking English to adults for whom English is not their primary language.

**Basic Skills in the Workplace** is designed to meet the needs of the employer and the employee in the performance of their work. Employees receive instruction in areas such as reading, computation, problem solving, communication skills and team-working skills. Workplace vocabulary, safety procedures, workplace forms, recording time cards and various computer-assisted instructions using workplace software may be incorporated in the curricula.



# **Programs of Study 2017-2018**

	Program
College Transfer Programs	Code
Associate in Arts	
Associate in Arts/Pre-Nursing	A10100NR
Associate in Arts/Pre-RIBN	
Associate in Engineering	
Associate in Science	
Associate in Science/Pre-Nursing	A10400NR
Associates in Fine Arts Art	
Associate in Fine Arts in Music	
Associate in Applied Science Degrees (A.A.S.)	
Accounting	A25100
Agribusiness Technology	A15100
Associate Degree Nursing	A45110
Business Administration	A25120
Criminal Justice Technology	A55180
Culinary Arts	
Dietetic Technician (Collaborative Program)	
Digital Media Technology	
Early Childhood Education	
Electrical Systems Technology	
Electronics Engineering Technology	
Emergency Medical Services	A45340
Emergency Medical Services Bridging Option	
Fire Protection Technology	
General Occupational Technology	
Healthcare Management Technology	A25200
Health Information Technology (Collaborative Program)	
Human Services Technology	
Information Technology-Networking	
Information Technology-Service/Support	
Information Technology-Software Development	
Mechanical Engineering Technology	A40320
Mechatronics Engineering Technology	
Medical Assisting	
Medical Laboratory Technology (Collaborative Program)	
Speech-Language Pathology Assistant (Collaborative Program)	
Welding Technology	A50420
Diploma Programs	D05400
Accounting	
Air Conditioning, Heating, and Refrigeration Technology	
Cosmetology	
Early Childhood Education	
Electrical Systems Technology	D55130
General Occupational Technology	D55280
Information Technology	D25590
Medical Assisting	
Robotics	
Welding	D3U4ZU

### **Certificate Programs**

Accounting	C25100A
Agriculture Business Certificate	C15100A
Agriculture Science Certificate	
Agriculture Sustainable Farming Methods Certificate	C15100D
Air Conditioning, Heating, and Refrigeration	C35100A
Analog Electronics	
Banking	
Basic Law Enforcement Training	
BLET Preparation Certificate	
CAD Drafting	C40320C
Cosmetology Instructor	C55160
Digital Media	
Digital Media Technology Essentials	
Early Childhood Administration	
Early Childhood Education	
Electrical Maintenance	
Electrical Systems	
Embedded Microprocessors Design	C40200B
Essentials of the Criminal Justice System Certificate	C40200B
Esthetics Technology	
Fire Protection Technology Fire Services Manager	
Human Services	
Human Resources Management	C4556UFI
Income Tax Preparer	C2312UHK
Infant/Toddler Care Information Technology-Cisco	
Information Technology-Database FoundationsInformation Technology-Software Development Foundations	
Information Technology-Software Development Foundations	C25590F
Information Technology-Foundations	C25590F1
Information Technology-JAVA	
Information Technology-Mobile App Development	C25590J
Information Technology-Nobile App Development	C25590IVI
Investigations Certificate	
Loss Prevention Certificate	CEE1001
Machining	
Management Manicuring/Nail Technology	CZ31ZUA
Manufacturing	C40220A
Marketing Mechanical Fabrication	C23120IVI
Medical Assisting	
Medical Assisting	C45400
Nurse Aide	
Office Administration	
Parent Educator Certificate	
Refrigeration and Heating Servicing	C33220F
Robotics Certificate	
Social Work	
Special Education Certificate	
Substance Abuse	
Welding	
vvciuiiy	СЭО42000

Associate in General Education.......A10300
Pre-Medical Assisting........A10300M

# Associate in Arts—A.A. [A10100]

### **Degree Requirements**

#### **Universal General Education Transfer Component**

(All Universal General Education Transfer Component courses will transfer for equivalency credit.)

<b>English Compositi</b>	ion (6	SHC
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ENG	111	Writing and Inquiry	3
ENG	112	Writing/Research in the Disciplines	3

3
3
3
3
3
3
3
3
3
3
3
3
3

#### Social/Behavioral Sciences (9 SHC)

	,		
Select	three	courses from two different disciplines.	
ECO	251	Principles of Microeconomics	3
ECO	252	Principles of Macroeconomics	3
HIS	111	World Civilizations I	3
HIS	112	World Civilizations II	3
HIS	131	American History I	3
HIS	132	American History II	3
POL	120	American Government	3
PSY	150	General Psychology	3
SOC		Introduction to Sociology	

#### Math (3-4 SHC)

Select one group.

or

PHY

MAT	143	Quantitative Literacy3
MAT	152	Statistical Methods I4
MAT	171	Precalculus Algebra4

#### Natural Science (4 SHC)

AST 111 Descriptive Astronomy and ......3 111A Descriptive Astronomy Lab ......1 AST or 110 Principles of Biology......4 BIO or 111 General Biology I......4 BIO or CHM 151 General Chemistry I.....4

110A Conceptual Physics Lab ......1 Additional General Education Hours (14 SHC)

110 Conceptual Physics and ......3

An additional 14 SHC of courses should be selected from the following additional general education list below or from unselected general education core courses offered above in this program that are classified as general education within the Comprehensive Articulation Agreement. Students should select these courses based on their intended major and transfer university.

ANT	210	General Anthropology	3
		Elementary ASL I	
		Elementary ASL II	

۸CI	211	Intermediate ASL I3
ASL	211	
ASL	212	Intermediate ASL II3
BIO	112	General Biology II4
BIO	120	Introductory Botany4
BIO	130	Introductory Zoology4
BIO	140	Environmental Biology3
BIO	1404	Environmental Biology Lab1
CHI		Flamentary Chinasa I
	111	Elementary Chinese I
CHI	112	Elementary Chinese II3
CHI	211	Intermediate Chinese I3
CHI	212	Intermediate Chinese II3
CHM	131	Introduction to Chemistry3
CHM	131A	Introduction to Chemistry Lab1
CHM	132	Organic and Biochemistry4
СНМ	152	General Chemistry II4
CIS	110	Introduction to Computers3
CIS	115	Introduction to Prog and Logic3
		Introduction to Frog and Logic3  Introduction to Communication3
COM	110	
COM	120	Intro to Interpersonal Communication3
COM	140	Intro to Intercultural Communication3
DRA	111	Theatre Appreciation3
ENG	113	Literature-Based Research3
ENG	114	Professional Research and Reporting3
ENG	233	Major American Writers3
ENG	241	British Literature I3
ENG	242	British Literature II
	242	Major British Writers
ENG		Major British writers3
ENG	261	World Literature I3
ENG	262	World Literature II3
FRE	111	Elementary French I3
FRE	112	Elementary French II3
FRE	211	Intermediate French I3
FRE	212	Intermediate French II3
GEO	111	World Regional Geography3
GEO	112	Cultural Geography3
GEO	130	General Physical Geography3
GER	111	
		Elementary German I3
GER	112	Elementary German II3
GER	211	Intermediate German I3
GER	212	Intermediate German II3
HIS	121	Western Civilization I3
HIS	122	Western Civilization II3
HUM	115	Critical Thinking3
HUM	120	Cultural Studies3
HUM	130	Myth in Human Culture3
HUM	150	American Womens Studies3
	160	Introduction to Film
HUM		Throduction to Film
LAT	111	Elementary Latin I3
LAT	112	Elementary Latin II3
LAT	211	Intermediate Latin I3
LAT	212	Intermediate Latin II3
MAT	172	Precalculus Trigonometry4
MAT	263	Brief Calculus4
MAT	271	Calculus I4
MAT	272	Calculus II4
MAT	273	Calculus III4
MUS	210	History of Rock Music3
MUS	211	History of Country Music3
PHI	230	Introduction to Logic3
PHY	151	College Physics I4
PHY	152	College Physics II4
PHY	251	General Physics I4
PHY	252	General Physics II4
POL	210	Comparative Government3
POL	220	International Relations3
PSY	241	Developmental Psychology3
PSY	281	Abnormal Psychology3
REL	110	World Religions3
NEL	110	vvolia neligiotis3

REL	211	Introduction to Old Testament	3
REL	212	Introduction to New Testament	3
REL	221	Religion in America	3
SOC	213	Sociology of the Family	3
SOC	220	Social Problems	3
SOC	225	Social Diversity	3
SPA	111	Elementary Spanish I	3
SPA	112	Elementary Spanish II	3
SPA	211	Intermediate Spanish I	3
SPA	212	Intermediate Spanish II	3
		•	

### Total General Education Hours Required .......45

### **Other Required Hours**

### Academic Transition (1 SHC)

ACA 122 College Transfer Success ......1

An additional 14 SHC of courses should be selected from unselected general education core courses offered in this program above or courses classified as pre-major or elective courses within the Comprehensive Articulation Agreement below. Students should select these courses based on their intended major and transfer university.

ACC	120	Principles of Financial Accounting4
ACC	121	Principles of Managerial Accounting4
ART	121	Two-Dimensional Design3
ART	122	Three-Dimensional Design3
ART	131	Drawing I3
ART	132	Drawing II3
ART	135	Figure Drawing I3
ART	171	Computer Art I3
ART	231	Printmaking I3
ART	232	Printmaking II3
ART	240	Painting I3
ART	241	Painting II3
ART	261	Photography I3
ART	262	Photography II3
ART	266	Videography I3
ART	267	Videography II3
ART	271	Computer Art II3
ART	281	Sculpture I3
ART	282	Sculpture II3
ART	283	Ceramics I3
ART	284	Ceramics II3
BIO	143	Field Biology Minicourse2
BIO	145	Ecology4
BIO	150	Genetics in Human Affairs3
BIO	155	Nutrition3
BIO	163	Basic Anatomy and Physiology5
BIO	168	Anatomy and Physiology I4
BIO	169	Anatomy and Physiology II4
BIO	250	Genetics4
BIO	275	Microbiology4
BUS	110	Introduction to Business3
BUS	115	Business Law I3
BUS	137	Principles of Management3
CHM	251	Organic Chemistry I4
CHM	252	Organic Chemistry II4
CJC	111	Introduction to Criminal Justice3
CJC	121	Law Enforcement Operations3
CJC	141	Corrections3
COM	111	Voice and Diction I3
COM	150	Introduction to Mass Communication3
CSC	134	C++ Programming3
CTS	115	Info Systems Business Concepts3
DRA	124	Readers Theatre3
DRA	130	Acting I3
DRA	131	Acting II3
EGR	150	Introduction to Engineering2
EGR	210	Intro to Elec/Comp Engineering Lab2

EGR	212	Logic System Design I3
ENG	125	Creative Writing I3
ENG	126	Creative Writing II3
GEO	131	Physical Geography I4
HEA	110	Personal Health/Wellness3
HEA	112	First Aid and CPR2
HEA	120	Community Health3
HIS	151	Hispanic Civilization3
HIS	221	African-American History3
HIS	226	The Civil War3
HIS	231	Recent American History3
HIS	236	North Carolina History3
HUM	180	International Cultural Exploration3
MAT	280	Linear Algebra3
MAT	285	Differential Equations
MUS	111	Fundamentals of Music3
	121	Music Theory I4
MUS		
MUS	122	Music Theory II4
MUS	131	Chorus I1
MUS	132	Chorus II1
MUS	221	Music Theory III4
MUS	222	Music Theory IV4
MUS	231	Chorus III1
MUS	232	Chorus IV1
PED	110	Fit and Well for Life2
PED	111	Physical Fitness I1
PED	113	Aerobics I1
PED	117	Weight Training I1
PED	121	Walk, Jog, Run1
PED	122	Yoga I1
PED	123	Yoga II1
PED	125	Self-Defense: Beginning1
PED	128	Golf—Beginning1
PED	130	Tennis—Beginning1
PED	132	Racquetball—Beginning1
PED	134	Wrestling1
PED	137	Badminton1
PED	139	Bowling—Beginning1
PED	142	Lifetime Sports
PED	143	Volleyball—Beginning1
PED	145	Basketball—Beginning1
PED	152	Swimming—Beginning1
PED	153	Swimming—Intermediate1
PED	154	Swimming for Fitness1
PED	155	Water Aerobics1
PED	160	Canoeing—Basic1
PED	171	Nature Hiking1
PED	175	Horseback Riding I1
PED	176	Horseback Riding II1
PED	186	Dancing for Fitness1
PED	216	Indoor Cycling1
PED	217	Pilates I1
PED	233	Ju-Jitsu1
PED	239	Kickboxing1
PED	252	Officiating/Baseball/Softball2
PED	254	Coaching Basketball2
PED	255	Coaching Football2
PED	256	Coaching Baseball2
PED	257	Coaching Soccer2
PED	260	Lifeguard Training2
POL	130	State and Local Government3
PSY	246	Adolescent Psychology
P31	240	Adolescent Psychology3

### Total Credit Hours Required for A.A. Degree .......60

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

# Associate in Engineering—A.E. [A10500]

### **Curriculum Description**

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

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

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

### **Degree Requirements**

#### **Universal General Education Transfer Component**

(Universal General Education Transfer Component (UGETC) courses will transfer for equivalency credit to all UNC institutions.) \*Exceptions (i.e. courses which are not classified as UGETC) are italicized.

#### **English Composition (6 SHC)**

Required

ENG	111	Writing and Inquiry3
ENG	112	Writing/Research in the Disciplines3

#### **Humanities/Fine Arts (3 SHC)**

Select	one	course.
--------	-----	---------

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

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

### Fine Arts and Communication (3 SHC)

Select	one	course.
--------	-----	---------

ART	111	Art Appreciation	3
ART		Art History Survey I	
ART		Art History Survey II	
		Public Speaking	
		Music Appreciation	
		Introduction to Jazz	3

### Social/Behavioral Sciences (6 SHC)

ECO 251 Principles of Microscopomics

#### Required

ECO	231	Principles of Microeconomics	>
Select	one co	ourse.	
HIS	111	World Civilizations I	3
HIS	112	World Civilizations II	3
HIS	131	American History I	3
HIS	132	American History II	3
POL	120	American Government	3
PSY	150	General Psychology	3
SOC	210	Introduction to Sociology	3

		L2 SHC)
Calcul	us I is	the lowest level math course that will be accepted by the engineering programs for transfer as a
math (	credit.	Students who are not calculus-ready will need to take additional math courses.
Requir		
MAT		Calculus I4
MAT	272	Calculus II4
MAT	273	Calculus III4
		Science (12 SHC)
Requi		
		General Chemistry I4
PHY		General Physics I4
PHY	252	General Physics II4
Tota	l Ger	neral Education Hours Required42
Otho	r Po	equired Hours
		•
		c Transition (1 SHC)
ACA	122	College Transfer Success1
Dua	:-	ou Floating (2 SUC)
		or Elective (2 SHC)
EGR	150	Introduction to Engineering2
Othe	er Ge	eneral Education and Pre-major Elective Hours (11 SHC)
		of courses from the following courses classified as pre-major, elective, or general education courses
		comprehensive Articulation Agreement. (Students must meet the receiving university's foreign
		nd/or health and physical education requirements, if applicable, prior to or after transfer to the senior
institu	_	ay or rectain and physical education requirements, if applicable, prior to or after transfer to the serior
		ould choose courses appropriate to the specific university and engineering major requirements.
DFT		Engineering Graphics3
EGR		Intro to Elec/Comp Engineering Lab2
EGR		Logic System Design I3
EGR	220	Engineering Statics3
		ective
Select		SHC of courses from the following courses.
BIO	111	General Biology I4
CHM		General Chemistry II4
COM		Introduction to Communication3
CSC		C++ Programming3
CSC		JAVA Programming3
ECO	252	Principles of Macroeconomics3
MAT		Linear Algebra3
MAT	285	Differential Equations3
_		
Tota	l Cre	dit Hours Required for A.F. Dearee 60

# Associate in Fine Arts in Visual Art—A.F.A. [A10600]

**Curriculum Description** 

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

### **Degree Requirements**

Engl Requi		Composition (6 SHC)
ENG ENG	111 112	Writing and Inquiry3 Writing/Research in the Disciplines3
Com	mur	nication/Literature (3 SHC)
СОМ	231	
ENG	231	, ,
ENG	232	American Literature II3
ENG		Major American Writers3
ENG	241	British Literature I3
ENG	242	British Literature II3
Histo	ory	(3 SHC)
HIS		World Civilizations I3
HIS		World Civilizations II3
HIS		American History I3
HIS	132	American History II3
Hun	nanit	ties/Fine Arts (3 SHC)
MUS	110	Music Appreciation3
MUS	112	Introduction to Jazz3
PHI	215	
PHI	240	Introduction to Ethics3
Socia	al/Be	ehavioral Sciences (3 SHC)
ECO		Principles of Microeconomics3
ECO		Principles of Macroeconomics3
POL		American Government3
PSY SOC		General Psychology3 Introduction to Sociology3
300	210	Introduction to Sociology
Mat	h (3-	4 SHC)
		uantitative Literacy3
		atistical Methods4
		ecalculus Algebra4
		Iculus I4
IVIAI 2	:/2 Ca	lculus II4
		Science (4 SHC)
		in introductory mathematics and one course, including the accompanying laboratory work, from the
		nd physical science courses are required.
AST		Descriptive Astronomy
AST BIO		N Descriptive Astronomy Lab
BIO		General Biology I4
CHM		General Chemistry I4
PHY	110	•

110A Conceptual Physics Lab ......1

Total General Education Hours Required ......25-26

Acac	iemi	ic Iransition (15HC)
ACA	122	College Transfer Success1
Art I	Maio	or Cara Paguirad (15 SUC)
		or Core Required (15 SHC)
ART		Art History Survey I3
ART	115	Art History Survey II
ART	121	Two-Dimensional Design3
ART		Three-Dimensional Design3
ART	131	Drawing I3
Addi	ition	al Required Electives (Select 19 SHC)
ART	132	Drawing II3
ART	135	Figure Drawing I3
ART	171	Computer Art I3
ART	231	Printmaking I3
ART	232	Printmaking II3
ART	240	Painting I3
ART	241	Painting II3
ART	261	Photography I3
ART	262	Photography II3
ART	266	Videography I3
ART	267	Videography II3
ART	271	Computer Art II3
ART	281	Sculpture I3
ART	282	Sculpture II3
ART	283	Ceramics I3
ART	284	Ceramics II3
MAT	172	Precalculus Trigonometry4
Tota	l Cre	dit Hours Required for A.F.A Degree60-61

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

# Associate in Fine Arts in Music [A10700]

### **Curriculum Description**

The Associate in Fine Arts degree shall be granted for planned programs of study consisting of a minimum of 60 and a maximum of 61 semester hours of approved college transfer courses. (Ref. 23 NCAC 2E.0204) Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers.

### **Degree Requirements**

#### **General Education**

The general education core includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition. All Universal General Education Component courses will transfer for equivalency credit.

equiva	iency c	realt.
		Composition (6 SHC)
<b>Requi</b> ENG		Writing and Inquiry3
ENG	112	Writing/Research in the Disciplines3
EING	112	writing/Research in the Disciplines
Hun	nanit	ties/Fine Arts (3 SHC)
		ourse from the following disciplines:
ART	111	Art Appreciation3
СОМ	231	Public Speaking3
ENG	231	American Literature I3
ENG	232	American Literature II3
ENG	241	British Literature I3
ENG	242	British Literature II3
MUS	110	Music Appreciation3
MUS	112	Introduction to Jazz3
PHI	215	Philosophical Issues
PHI	240	Introduction to Ethics3
LLII	240	Introduction to Ethics
Soci	al/R	ehavioral Sciences (6 SHC)
		ourses from two different subject areas:
ECO	251	Principles of Microeconomics3
ECO	252	Principles of Macroeconomics3
HIS	111	World Civilizations I3
HIS	111	World Civilizations II
HIS	131	American History I3
HIS	132	American History II3
		American Government3
POL	120	
PSY	150	General Psychology3
SOC	210	Introduction to Sociology3
Note	ual 6	Science (4 SHC)
		ourse including the accompanying laboratory work
AST	111	Descriptive Astronomy3
AST		A Descriptive Astronomy Lab1
BIO	110	- 1
BIO	111	
CHM	151	General Chemistry I4
PHY	110	Conceptual Physics3
PHY	1104	A Conceptual Physics Lab1
Mət	h (3	8-4 SHC)
MAT	143	,
MAT	171	Precalculus Algebra4
IVIAI	1/1	riecaiculus Algebia4

Add	ition	al Gen Ed Requirement 3 SHC)
An ad	dition	al 3 SHC of courses should be selected from the following list of UGETC courses with the exception of
foreig		uage. Students should select a course based on their intended major and Transfer University.
ART		Art Appreciation3
СОМ	231	Public Speaking3
ENG	231	American Literature I3
ENG	232	American Literature II3
ENG	241	
ENG	242	
MUS	110	
MUS	112	Introduction to Jazz3
PHI	215	Philosophical Issues3
PHI	240	Introduction to Ethics3
educa	tion /l	s are required to take one foreign language course, any foreign language course classified as genera numanities on the Comprehensive Articulation transfer course list.
Tota	l Ge	neral Education Hours Required25-26
Othe	er Re	quired Hours
		c Transition (1 SHC)
ACA	122	College Transfer Success1
Mus	ic Th	neory Core (16 SHC Required)
MUS	121	
MUS	122	
MUS	221	
MUS	222	
App	lied	Music Core (8 SHC Required)
MUS	161	Applied Music I2
MUS	162	Applied Music II2
MUS	261	Applied Music III2
MUS	262	Applied Music IV2
Fnse	mbl	e Core (3 SHC Required)
MUS	131	Chorus I1
MUS	132	Chorus II
MUS	133	Band I
MUS	134	Band II1
MUS	135	Jazz Ensemble I
MUS	136	Jazz Ensemble II
MUS	137	Orchestra I1
MUS	138	Orchestra II
MUS	141	Ensemble I
MUS	142	Ensemble II
MUS	231	Chorus III
MUS	232	Chorus IV1
MUS	233	Band III
MUS	234	Band IV1
MUS	235	Jazz Ensemble III
MUS	236	Jazz Ensemble IV1
MUS	237	Orchestra III
MUS	238	Orchestra IV
MUS	241	Ensemble III
MUS	242	Ensemble IV
	- 12	2.002

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### Total Credit Hours Required for A.F.A Degree ......60-61

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

# Associate in General Education—A.G.E. [A10300]

### **Curriculum Description**

The Associate in General Education curriculum is designed for the academic enrichment of students who wish to broaden their education, with emphasis on personal interest, growth and development. All courses in the program are college-level transferable courses; however, the program is not principally designed for college transfer.

Coursework includes study in the areas of humanities and fine arts, social and behavioral sciences, Natural Science and mathematics, and English composition. Opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers will be provided.

Through these skills, students will have a sound base for lifelong learning. Graduates are prepared for advancements within their field of interest and become better qualified for a wide range of employment opportunities.

### **Degree Requirements**

### **English Composition (6 SHC)**

#### Required

ENG 111 Writing and Inquiry .......3 ENG 112 Writing/Research in the Disciplines ........3

#### Humanities/Fine Arts (3 SHC)

One course from the following discipline areas: art, foreign languages, interdisciplinary humanities, literature, music. philosophy, and reliaion are reauired.

music,	prillo	sopny, ana religion are requirea.
ART	111	Art Appreciation3
ART	114	Art History Survey I3
ART	115	Art History Survey II3
ENG	231	American Literature I3
ENG	232	American Literature II3
ENG	233	Major American Writers3
ENG	241	British Literature I3
ENG	242	British Literature II3
ENG	243	Major British Writers3
ENG	261	World Literature I3
ENG	262	World Literature II3
FRE	211	Intermediate French I3
FRE	212	Intermediate French II3
GER	211	Intermediate German I3
GER	212	Intermediate German II3
HUM	110	Technology and Society3
HUM	115	Critical Thinking3
HUM	120	Cultural Studies3
HUM	130	Myth in Human Culture3
HUM	150	American Womens Studies3
HUM	160	Introduction to Film3
LAT	211	Intermediate Latin I3
LAT	212	Intermediate Latin II3
MUS	110	Music Appreciation3
MUS	111	Fundamentals of Music3
MUS	112	Introduction to Jazz3
MUS	121	Music Theory I4
MUS	122	Music Theory II4
MUS	210	History of Rock Music3
MUS	211	History of Country Music3
PHI	215	Philosophical Issues3
PHI	240	Introduction to Ethics3
REL	110	World Religions3
REL	211	Introduction to Old Testament3
REL	212	Introduction to New Testament3
SPA	211	Intermediate Spanish I3
SPA	212	Intermediate Spanish II3
		P

#### Social/Behavioral Sciences (3 SHC)

One course from the following discipline areas: anthropology, economics, geography, history, political science, psychology, and sociology are required.

Payern	nogy,	and sociology are required.	
ANT	210	General Anthropology	3
ECO	251	Principles of Microeconomics	3
ECO	252	Principles of Macroeconomics	3
GEO	111	World Regional Geography	
GEO	112	Cultural Geography	3
GEO	130	General Physical Geography	3
GEO	131	Physical Geography I	4
HIS	111	World Civilization I	3
HIS	112	World Civilization II	3
HIS	121	Western Civilization I	
HIS	122	Western Civilization II	3
HIS	131	American History I	
HIS	132	American History II	
HIS	151	Hispanic Civilization	
HIS	221	African-American History	3
HIS	226	The Civil War	
HIS	231	Recent American History	
HIS	236	North Carolina History	
POL	120	American Government	
POL	130	State and Local Government	
POL	210	Comparative Government	
POL	220	International Relations	
PSY	150	General Psychology	3
PSY	241	Developmental Psychology	3
PSY	246	Adolescent Psychology	3
PSY	281	Abnormal Psychology	3
SOC	210	Introduction to Sociology	3
SOC	213	Sociology of the Family	3
SOC	220	Social Problems	3
SOC	225	Social Diversity	3

#### Natural Science/Mathematics (3-4 SHC)

One course from the following discipline areas: astronomy, biology, chemistry, mathematics, and physics are required.

AST	111	Descriptive Astronomy	3
AST	111A	Descriptive Astronomy Lab	1
BIO	110	Principles of Biology	4
BIO	111	General Biology I	
BIO	112	General Biology II	4
BIO	120	Introductory Botany	4
BIO	130	Introductory Zoology	4
BIO	140	Environmental Biology	3
BIO	140A	Environmental Biology Lab	1
BIO	143	Field Biology Minicourse	2
BIO	163	Basic Anatomy and Physiology	5
BIO	168	Anatomy and Physiology I	4
BIO	169	Anatomy and Physiology II	4
BIO	275	Microbiology	4
CHM	131	Introduction to Chemistry	3
CHM	131A	Introduction to Chemistry Lab	1
CHM	132	Organic and Biochemistry	4
CHM	151	General Chemistry I	4
CHM	152	General Chemistry II	4
MAT	143	Quantitative Literacy	3
MAT	152	Statistical Methods I	4
MAT	171	Precalculus Algebra	4
MAT	172	Precalculus Trigonometry	4
MAT	263	Brief Calculus	4
MAT	271	Calculus I	4
MAT	272	Calculus II	4
MAT	273	Calculus III	4
MAT	280	Linear Algebra	3
MAT	285	Differential Equations	3
PHY	110	Conceptual Physics	3

PHY	110A	Conceptual Physics Lab	1
PHY	151	College Physics I	4
PHY	152	College Physics II	4
PHY	251	General Physics I	4
PHY		General Physics II	

#### Other Required Hours (49 SHC)

Other required hours may be chosen from courses listed below or unselected general education core courses offered above in this program. A maximum of 7 SHC in health, physical education, college orientation, and/or study skills may be included as other required hours.

		nay be included as other required nours.	
ACA	122	College Transfer Success	1
ACC	120	Principles of Financial Accounting	4
ACC	121	Principles of Managerial Accounting	4
ART	122	Three-Dimensional Design	3
ART	135	Figure Drawing I	
ART	231	Printmaking I	
ART	232	Printmaking II	
ART	267	Videography II	
ART	282	Sculpture II	
ART	284	Ceramics II	3
ASL	111	Elementary ASL I	3
ASL	112	Elementary ASL II	3
BIO	155	Nutrition	
BUS	110	Introduction to Business	3 2
BUS	115	Business Law I	
		business Law I	3
BUS	137	Principles of Management	≾
CHI	111	Elementary Chinese I	3
CHI	112	Elementary Chinese II	
CIS	110	Introduction to Computers	3
CIS	115	Introduction to Prog and Logic	3
CJC	111	Introduction to Criminal Justice	. 3
CJC	121	Law Enforcement Operations	
CJC	141	Corrections	J
COM	110	Introduction to Communication	
COM	120	Intro to Interpersonal Communication	
COM	231	Public Speaking	
CSC	134	C++ Programming	3
CSC	151	JAVA Programming	3
CTS	115	JAVA ProgrammingInfo Systems Business Concepts	3
DFT	170	Engineering Graphics	o
		A sting of T	ر د
DRA	131	Acting II	
EGR	150	Introduction to Engineering	2
EGR	210	Intro to Elec/Comp Engineering Lab	2
EGR	212	Logic System Design I	3
EGR	215	Network Theory I	3
EGR	216	Logic and Network Lab	1
EGR	220	Engineering Statics	
EGR	225	Engineering Dynamics	3 2
	228	Introduction to Colid Machanics	J
EGR		Introduction to Solid Mechanics	
ENG	114	Professional Research and Reporting	
ENG	126	Creative Writing II	
FRE	111	Elementary French I	
FRE	112	Elementary French II	3
GER	111	Elementary German I	3
GER	112	Elementary German II	
HEA	110	Personal Health/Wellness	
HEA	112	First Aid and CPR	
HEA	120	Community Health	
HUM	180	International Cultural Exploration	
LAT	111	Elementary Latin I	3
LAT	112	Elementary Latin II	3
MUS	131	Chorus I	
MUS	132	Chorus II	
MUS	133	Band I	
MUS	134	Band II	
MUS	135	Jazz Ensemble I	
MUS	136	Jazz Ensemble II	
MUS	141	Ensemble I	1

MUS	142	Ensemble II	
MUS	151	Class Music I	1
MUS	152	Class Music II	1
MUS	161	Applied Music I	2
MUS	162	Applied Music II	
MUS	221	Music Theory III	
MUS	222	Music Theory IV	4
MUS	231	Chorus III	1
MUS	232	Chorus IV	
MUS	233	Band III	
MUS	234	Band IV	
MUS	235	Jazz Ensemble III	
MUS	236	Jazz Ensemble IV	
MUS	241	Ensemble III	
MUS	242	Ensemble IV	
MUS	261	Applied Music III	
MUS	262	Applied Music IV	
MUS	271	Music History I	3
MUS	272	Music History II	3
OST	134	Text Entry and Formatting	3
OST	135	Advanced Text Entry and Formatting	3
PED	110	Fit and Well for Life	2
PED	111	Physical Fitness I	
PED	113	Aerobics I	
PED	117	Weight Training I	
PED	121	Walk, Jog, Run	
PED	122	Yoga I	
PED	123	Yoga II	
PED	125	Self-Defense: Beginning	±
		Calf Basianian	I
PED	128	Golf—Beginning	I
PED	130	Tennis—Beginning	<u>1</u>
PED	134	Wrestling	
PED	137	Badminton	
PED	139	Bowling—Beginning	
PED	142	Lifetime Sports	
PED	143	Volleyball—Beginning	1
PED	145	Basketball—Beginning	1
PED	152	Swimming—Beginning	1
PED	153	Swimming—Intermediate	1
PED	154	Swimming for Fitness	1
PED	155	Water Aerobics	
PED	160	Canoeing—Basic	
PED	171	Nature Hiking	
PED	175	Horseback Riding I	
PED	176	Horseback Riding II	1
PED	186	Dancing for Fitness	1
PED	216	Indoor Cycling	
PED	217	Pilates I	
PED	219		
		Disc Golf	
PED	233	Ju-Jitsu	
PED	239	Kickboxing	
PED	252	Officiating/Baseball/Softball	
PED	254	Coaching Basketball	
PED	255	Coaching Football	
PED	256	Coaching Baseball	
PED	257	Coaching Soccer	
PED	260	Lifeguard Training	2
SPA	111	Elementary Spanish I	3
SPA	112	Elementary Spanish II	



# Associate in Science—A.S. [A10400]

### **Degree Requirements**

#### **Universal General Education Transfer Component**

(All Universal General Education Transfer Component courses will transfer for equivalency credit.)

ENG	111	Writing and Inquiry3	í
ENG	112	Writing/Research in the Disciplines3	,

### Humanities/Fine Arts (6 SHC)

nun	ıanıı	iles/Fine Arts (6 SHC)	
Select	two co	ourses from two different disciplines.	
ART	111	Art Appreciation	3
ART	114	Art History Survey I	3
ART	115	Art History Survey II	3
COM	231	Public Speaking	3
ENG	231	American Literature I	3
ENG	232	American Literature II	3
ENG	241	British Literature I	3
ENG	242	British Literature II	3
MUS	110	Music Appreciation	3
MUS	112	Introduction to Jazz	3
PHI	215	Philosophical Issues	3
PHI	240	Introduction to Ethics	3

### Social/Behavioral Sciences (6 SHC)

Select	two co	ourses from two different disciplines.	
ECO	251	Principles of Microeconomics	3
ECO	252	Principles of Macroeconomics	3
HIS	111	World Civilizations I	3
HIS	112	World Civilizations II	3
HIS	131	American History I	3
HIS	132	American History II	3
POL	120	American Government	3
PSY	150	General Psychology	3
SOC	210	Introduction to Sociology	3

#### Math (8 SHC)

MAT	171	Precalculus Algebra	4
		Precalculus Trigonometry	
		Brief Calculus	
MAT	271	Calculus I	4
MAT	272	Calculus II	4

#### Natural Science (8 SHC)

		(0.0110)	
Select	one gr	oup.	
BIO	111	General Biology I and	4
BIO	112	General Biology II	4
or			
CHM	151	General Chemistry I and	4
CHM	152	General Chemistry II	4
or			
PHY	151	College Physics I and	4
PHY	152	College Physics II	4
or			
PHY	251	General Physics I and	4
PHY	252	General Physics II	4
or			
BIO	110	Principles of Biology and	4
PHY	110	Conceptual Physics and	3
PHY		Conceptual Physics Lab	

### Additional General Education Hours (11 SHC)

An additional 11 SHC of courses should be selected from the following additional general education list below or from unselected general education core courses offered above in this program that are classified as general education within the Comprehensive Articulation Agreement. Students should select these courses based on their intended major and transfer university.

ANT	210	General Anthropology3
ASL	111	Elementary ASL I3
ASL	112	Elementary ASL II3
ASL	211	Intermediate ASL I3
ASL	211	Intermediate ASL II
AST	111	Descriptive Astronomy3
AST		Descriptive Astronomy Lab1
BIO	120	Introductory Botany4
BIO	130	Introductory Zoology4
BIO	140	Environmental Biology3
BIO	140A	Environmental Biology Lab1
CHI	111	Elementary Chinese I3
CHI	112	Elementary Chinese II3
CHI	211	Intermediate Chinese I3
CHI	212	Intermediate Chinese II3
CHM	131	Introduction to Chemistry3
CHM	131A	Introduction to Chemistry Lab1
CHM	132	Organic and Biochemistry4
CIS	110	Introduction to Computers3
CIS	115	Introduction to Prog and Logic3
COM	110	Introduction to Communication3
COM	120	Intro to Interpersonal Communication3
COM	140	Intro to Interpersonal Communication3
DRA	111	Theatre Appreciation3
	111	
ENG		Literature-Based Research
ENG	114	Professional Research and Reporting3
ENG	233	Major American Writers3
ENG	241	British Literature I3
ENG	242	British Literature II3
ENG	243	Major British Writers3
ENG	261	World Literature I3
ENG	262	World Literature II3
FRE	111	Elementary French I3
FRE	112	Elementary French II3
FRE	211	Intermediate French I3
FRE	212	Intermediate French II3
GEO	111	World Regional Geography3
GEO	112	Cultural Geography3
GEO	130	General Physical Geography3
GER	111	Elementary German I3
GER	112	Elementary German II3
GER	211	Intermediate German I3
GER	212	Intermediate German II
HIS	121	Western Civilization I
	121	Western Civilization II
HIS		
HUM	115	Critical Thinking3
HUM	120	Cultural Studies3
HUM	130	Myth in Human Culture3
HUM	150	American Womens Studies3
HUM	160	Introduction to Film3
HUM	220	Human Values and Meaning3
LAT	111	Elementary Latin I3
LAT	112	Elementary Latin II3
LAT	211	Intermediate Latin I3
LAT	212	Intermediate Latin II3
MAT	143	Quantitative Literacy3
MAT	152	Statistical Methods4
MAT	272	Calculus II4
MAT	273	Calculus III4
MUS	210	History of Rock Music3
MUS	211	History of Country Music3
PHI	230	Introduction to Logic3
POL	210	Comparative Government3
POL	220	International Relations
PSY	241	Developmental Psychology3
PSY	281	Abnormal Psychology3
REL	110	World Religions3
REL	211	Introduction to Old Testament3
KEL	ZII	introduction to Oid Testament3

REL SOC SOC SOC SPA	212 221 213 220 225 111	Religion in America3
SPA	112	
SPA	211	Intermediate Spanish I3
SPA	212	Intermediate Spanish II3
Tot	al Ge	neral Education Hours Required45
	demi	equired Hours ic Transition (1 SHC) College Transfer Success1
this p Agre	orogran ement	al 14 SHC of courses should be selected from unselected general education core courses offered in a above or courses classified as pre-major or elective courses within the Comprehensive Articulation below. Students should select these courses based on their intended major and transfer university.  Principles of Financial Accounting4

ENG	125	Creative Writing I3
ENG	126	Creative Writing II3
ENG	235	Survey of Film as Literature3
GEO	131	Physical Geography I4
		Personal Health/Wellness3
HEA	110	
HEA	112	First Aid and CPR2
HEA	120	Community Health3
HIS	151	Hispanic Civilization3
HIS	221	African-American History3
HIS	226	The Civil War3
HIS	231	Recent American History3
HIS	236	North Carolina History3
HUM	170	The Holocaust3
HUM	180	International Cultural Exploration3
MAT	280	Linear Algebra3
MAT	285	Differential Equations3
MUS	111	Fundamentals of Music3
MUS	121	Music Theory I4
MUS	122	Music Theory II4
MUS	131	Chorus I
MUS	132	Chorus II1
MUS	221	Music Theory III4
MUS	222	Music Theory IV4
MUS	231	Chorus III1
MUS	232	Chorus IV1
		CHOIUS IV
PED	110	Fit and Well for Life2
PED	111	Physical Fitness I1
PED	113	Aerobics I1
PED	117	Weight Training I1
PED	121	Walk, Jog, Run1
PED	122	Yoga I
PED	125	Self-Defense: Beginning1
PED	128	Golf—Beginning1
PED	130	Tennis—Beginning1
PED	132	Racquetball—Beginning1
PED	134	Wrestling1
PED	137	
		Badminton1
PED	139	Bowling—Beginning1
PED	142	Lifetime Sports1
PED	143	Volleyball—Beginning1
PED	145	Basketball—Beginning1
PED	152	Swimming—Beginning1
		Swimming—Degrining1 Swimming—Intermediate1
PED	153	
PED	154	Swimming for Fitness1
PED	155	Water Aerobics1
PED	160	Canoeing—Basic1
PED	171	Nature Hiking1
PED	175	Horseback Riding I1
	176	Horseback Riding II
PED		
PED	186	Dancing for Fitness1
PED	216	Indoor Cycling1
PED	217	Pilates I1
PED	233	Ju-Jitsu1
PED	239	Kickboxing1
		Officiating/Baseball/Softball2
PED	252	
PED	254	Coaching Basketball2
PED	255	Coaching Football2
PED	256	Coaching Baseball2
PED	257	Coaching Soccer2
PED	260	Lifeguard Training2
		State and Local Government3
POL	130	
PSY	246	Adolescent Psychology3
PSY	263	Educational Psychology3

# Total Credit Hours Required for A.S. Degree......60

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.

# Below are electives that can apply in the A.A.S. programs:

### **Humanities/Fine Arts Courses**

ART	111	Art Appreciation	3
ART	114	Art History Survey I	3
ART	115	Art History Survey II	3
ENG	231	American Literature I	3
ENG	232	American Literature II	
ENG	233	Major American Writers	3
ENG	241	British Literature I	3
ENG	242	British Literature II	
ENG	261	World Literature I	3
ENG	262	World Literature II	
HUM	115	Critical Thinking	3
HUM	120	Cultural Studies	3
HUM	130	Myth in Human Culture	3
HUM	150	American Womens Studies	3
HUM	160	Introduction to Film	3
MUS	110	Music Appreciation	3
PHI	215	Philosophical Issues	3
PHI	240	Introduction to Ethics	
REL	110	World Religions	3
REL	211	Introduction to Old Testament	3
REL	212	Introduction to New Testament	3

#### **Social/Behavioral Sciences Courses**

ANT	210	General Anthropology
ECO	251	Principles of Microeconomics
ECO	252	Principles of Macroeconomics
GEO	111	World Regional Geography
GEO	112	Cultural Geography
GEO	113	Economic Geography
GEO	130	General Physical Geography
HIS	111	World Civilization I
HIS	112	World Civilization II
HIS	113	Economic Geography
HIS	121	Western Civilization I
HIS	122	Western Civilization II
HIS	131	American History I
HIS	132	American History II
HIS	151	Hispanic Civilization
HIS	221	African-American History
HIS	226	The Civil War
HIS	231	Recent American History
POL	120	American Government
POL	130	State and Local Government
POL	210	Comparative Government
POL	220	International Relations
PSY	150	General Psychology
SOC	210	Introduction to Sociology
SOC	213	Sociology of the Family
SOC	220	Social Problems
SOC	225	Social Diversity

# **Accounting**

### A.A.S. Degree [A25100] Diploma Program [D25100] Certificate Programs [C25100A and C25100I]

#### **Curriculum Description**

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

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

Graduates should qualify for entry-level accounting positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies. With work experience and additional education, an individual may advance in the accounting profession. Students may be awarded a non-degree credential (i.e., certificate, diploma) after completing a specific portion of the Associate degree program.

Cour	se a	nd Hour Requirements	Class	Lab	Clinic/Exp	Credits
Conc	wal I	Education Boguinad Courses	Ciass	Lau	Cillic/Exp	Credits
COM	2 <b>ra</b> i 1 110	Education Required Courses Introduction to Communication or				
COM			3	0	0	3
ECO	252		3	0	0	3
ENG		Writing and Inquiry	3	0	0	3
MAT		Quantitative Literacy or	2	2	Ö	3
MAT		Precalculus Algebra	(3	2	0	4)
		Humanities/Fine Arts Elective	3	0	0	3
		(See page 70 for HFA electives)				
Total	Gei	neral Education Required Hours	5			15-16
Maio	r Re	equired Courses				
ACC	120		3	2	0	4
ACC	121		3	2	0	4
ACC	122	Principles of Financial Accounting II	3	0	0	3
ACC	129	Individual Income Taxes	2	2	0	3
ACC	130	Business Income Taxes	2	2	0	3 2 2
ACC	140	Payroll Accounting	1	2	0	2
ACC	149	Introduction to Accounting Spreadsheet	1	2	0	2
ACC		Accounting Software Applications	1	2	0	2
ACC		Advanced Software Applications	1	2	0	2
ACC		Intermediate Accounting I	3	2	0	4
ACC		Intermediate Accounting II	3	2	0	4
ACC	227	9	3	0	0	3
BUS		Introduction to Business	3	0	0	3
BUS	115		3	0	0	3 3 3 3
CIS	110		2	2	0	3
ECO	251	Principles of Microeconomics	3	0	0	3
N/aia	El	a atin ca a				
		ectives al of 3 credits				
BUS	a 101a		,			
BUS	260					
BUS		Professional Development3				
DBA	110	Database Concepts3				
MKT	120					
						51
iotai	ivia	jor Required Hours	••••••	••••••	••••••	эт
T-4 1		J'allana Banahad Gan A A C B				cc c=
iotai	Cre	dit Hours Required for A.A.S. D	egree	••••••	••••••	00-0/

## **Suggested Curriculum by Semesters**

Applies to day offerings. Due to time restraints, evening students should expect to have fewer offerings each semester.

First Y		er Credits
ACC	120	4
BUS	110	3
CIS	110	3
COM	110 d	or
COM	231	3
ENG	111	3
		16
Spring	g Sem	ester
ACC	121	4
ACC	122	3
ACC	149	2
ACC	150	2
MAT	143 c	or3
MAT	171	(4)
		14-15
		mester Fine Arts3
Hullia	ilities/	3
Secon Fall Se		
ACC	129	3
ACC	140	2
ACC	152	2
ACC	220	4
BUS	115	3
ECO	251	3
LCO	231	18
Spring	ı Sem	ester
ACC	130	3
ACC	221	4
ACC	227	3
ECO	252	3
		/es3
		16

# Diploma [D25100]

			Class	Lab	Clinic/Exp	Credits
ACC	120	Principles of Financial Accounting	3	2	0	4
ACC	121	Principles of Managerial Accounting	3	2	0	4
ACC	122	Principles of Financial Accounting II	3	0	0	3
ACC	129	Individual Income Taxes	2	2	0	3
ACC	130	Business Income Taxes	2	2	0	3
ACC	149	Introduction to Accounting Spreadsheet	1	2	0	2
ACC	150	Accounting Software Applications	1	2	0	2
BUS	110	Introduction to Business	3	0	0	3
BUS	115	Business Law I	3	0	0	3
CIS	110	Introduction to Computers	2	2	0	3
ENG	111	Writing and Inquiry	3	0	0	3
MAT	143	Quantitative Literacy or	2	2	0	3
MAT	171	Precalculus Algebra	(3	2	0	4)
Total Credit Hours Required for Diploma Program36-37						

# **Certificate Options**

			Class	Lab	Clinic/Exp	Credits
Acco	ounti	ing Certificate [C25100A]				
ACC		Principles of Financial Accounting	3	2	0	4
ACC	121	Principles of Managerial Accounting	3	2	0	4
ACC	129	Individual Income Taxes	2	2	0	3
ACC	140	Payroll Accounting	1	2	0	2
ACC	150	Accounting Software Applications	1	2	0	2
BUS	110	Introduction to Business	3	0	0	3
Total Credit Hours Required for Certificate Program18						18
. • • • •				<b>,</b>		0
Inco	ma T	Tax Preparer Certificate [C251	OOTI			
			التمم	2	0	4
ACC	120	Principles of Financial Accounting	3	2	0	4
ACC	122	Principles of Financial Accounting II	3	0	0	3
ACC	129	Individual Income Taxes	2	2	0	3
ACC	130	Business Income Taxes	2	2	0	3
CIS	110	Introduction to Computers	2	2	0	3
Tota	l Cre	dit Hours Required for Certific	cate Prog	gram	•••••	16

# **Agribusiness Technology**

#### A.A.S. Degree [A15100] Certificate Programs [C15100A, C15100B & C15100C]

#### **Curriculum Description**

The Agribusiness Technology curriculum is designed to provide the entrepreneurial and technical skills necessary to manage a profitable, environmentally sound, community based small farm or agricultural business. The objective is the development of a workforce knowledgeable in sustainable agriculture practices.

Students will learn the fundamentals of agriculture, focusing on crop production and business. Emphasis is placed on entrepreneurial and field training. Students will also learn the basic principles of our economic system and government policies and programs relating to agriculture.

Graduates should qualify for a variety of jobs in agricultural businesses such as equipment, feed, and agricultural supply sales; store management; farm operations; wholesale and retail produce management; nursery operations; and environmental and agricultural education.

Agribusiness Technology is a program that prepares individuals to manage agricultural businesses and agriculturally related operations within diversified corporations. Potential course work includes instruction in agriculture, agricultural specialization, business management, accounting, finance, marketing, planning, human resources management, and other managerial responsibilities. Students may be awarded a non-degree credential (i.e., certificate, diploma) after completing a specific portion of the Associate degree program.

#### **Course and Hour Requirements**

Cou	13C a	na modi nequirements				
		•	Class	Lab	Clinic/Exp	Credits
Gen	eral	Education Required Courses				
BIO	111	General Biology I	3	3	0	4
ENG	111	Writing and Inquiry	3	0	0	3
ENG	112	Writing/Research in the Disciplines	3	0	0	3
		Humanities/Fine Arts Elective	3	0	0	3
		(See page 70 for HFA electives) Social/Behavioral Sciences Elective (See page 70 for SBS electives)	3	0	0	3
Tota	l Ge	neral Education Required Hou	ırs	•••••	•••••	16

#### **Major Required Courses**

110	Agricultural Economics	3	0	0	3
111	Basic Farm Maintenance	1	3	0	2
139	Introduction to Sustainable Agriculture	3	0	0	3
140	Agricultural Chemicals	2	2	0	3
150	Ag-O-Metrics	3	0	0	3
170	Soil Science	2	2	0	3
210	Agricultural Accounting	1	4	0	3
212	Farm Business Management	3	0	0	3
213	Agriculture Law and Finance	3	0	0	3
214	Agricultural Marketing	3	0	0	3
261	Agronomy	2	2	0	3
110	Animal Science	3	0	0	3
110	Introduction to Business	3	0	0	3
137	Principles of Management	3	0	0	3
110	Introduction to Computers	2	2	0	3
111	Work-Based Learning I or	0	10	0	1
112	Work-Based Learning I	(0	20	0	2)
	Agribusiness Major Electives				6
	(See major electives below)				
	111 139 140 150 170 210 212 213 214 261 110 137 110	111 Basic Farm Maintenance 139 Introduction to Sustainable Agriculture 140 Agricultural Chemicals 150 Ag-O-Metrics 170 Soil Science 210 Agricultural Accounting 212 Farm Business Management 213 Agriculture Law and Finance 214 Agricultural Marketing 261 Agronomy 110 Animal Science 110 Introduction to Business 137 Principles of Management 110 Introduction to Computers 111 Work-Based Learning I or 112 Work-Based Learning I 114 Agribusiness Major Electives	111         Basic Farm Maintenance         1           139         Introduction to Sustainable Agriculture         3           140         Agricultural Chemicals         2           150         Ag-O-Metrics         3           170         Soil Science         2           210         Agricultural Accounting         1           212         Farm Business Management         3           213         Agriculture Law and Finance         3           214         Agricultural Marketing         3           261         Agronomy         2           110         Animal Science         3           110         Introduction to Business         3           137         Principles of Management         3           110         Introduction to Computers         2           111         Work-Based Learning I or         0           112         Work-Based Learning I Agribusiness Major Electives	111       Basic Farm Maintenance       1       3         139       Introduction to Sustainable Agriculture       3       0         140       Agricultural Chemicals       2       2         150       Ag-O-Metrics       3       0         170       Soil Science       2       2         210       Agricultural Accounting       1       4         212       Farm Business Management       3       0         213       Agriculture Law and Finance       3       0         214       Agricultural Marketing       3       0         261       Agronomy       2       2         210       Animal Science       3       0         110       Introduction to Business       3       0         137       Principles of Management       3       0         110       Introduction to Computers       2       2         111       Work-Based Learning I or       0       10         112       Work-Based Learning I Agribusiness Major Electives	111       Basic Farm Maintenance       1       3       0         139       Introduction to Sustainable Agriculture       3       0       0         140       Agricultural Chemicals       2       2       0         150       Ag-O-Metrics       3       0       0         170       Soil Science       2       2       2         210       Agricultural Accounting       1       4       0         212       Farm Business Management       3       0       0         213       Agriculture Law and Finance       3       0       0         214       Agricultural Marketing       3       0       0         216       Agronomy       2       2       2       0         110       Animal Science       3       0       0       0         110       Introduction to Business       3       0       0       0         137       Principles of Management       3       0       0       0         137       Principles of Management       3       0       0       0         138       Principles of Management       3       0       0       0         110 <t< td=""></t<>

Total Major Required Hours......51-52

#### **Agribusiness Electives**

#### 

Sug	ges	tea Curriculum by Sei	nesters				
Applie	es to d	ay offerings. Due to time restraints,	evenina student	s should ex	pect to have	fewer offerinas e	ach
semes		.,	J			J	
First \	/ear						
	emest	er (	Credits				
AGR	139		3				
ANS	110		3				
BIO	111		4				
ENG	111		3				
Social	/Behav	vioral Sciences	3				
			16				
	_	_					
	g Sem		2				
AGR	110 150						
AGR							
AGR AGR	170						
	261						
CIS ENG	110						
EING	112		 <b>18</b>				
			10				
Secon	ıd Yea	r					
Fall S	emest	er (	Credits				
AGR	111		2				
AGR	140		3				
AGR	210		3				
AGR	213		3				
AGR	214		3				
AGR E	lective						
			17				
Sprin	g Sem	octor					
AGR		estei	2				
BUS	110						
BUS	137						
WBL		or					
WBL	112	J					
		Fine Arts	. ,				
	,	1 110 7 11 05					
, , , , , ,			16-17				
Cer	tific	ate Options					
		ate options					
	_		Class	Lab	Clinic/Exp	Credits	
Agri	cultu	re Business Certificate [C]	L5100A]				
AGR	110	Agricultural Economics	3	0	0	3	
AGR	210	Agricultural Accounting	1	4	0	3	
AGR	212	Farm Business Management	3	0	0	3	
AGR	213	3	3	0	0	3	
AGR	214	3	3	0	0	3	
WBL	112	Work-Based Learning I	0	20	0	2	

Total Credit Hours Required for Certificate Program ......17

Total Credit Hours Required for A.A.S. Degree......67-68

 AGR
 262
 Weed ID and Control
 3

 AGR
 265
 Organic Crop Production: Spring
 3

 AGR
 266
 Organic Crop Production: Fall
 3

te [C15100B]			
le Agriculture or (3	0	0	3)
2	2	0	3
2	2	0	3
2	2	0	3
3	0	0	3
3	3	0	4
for Certificate Proc	ıram		16
	,		
de Cortificato [C151	000		
as cei unicate [CISI	ي المون	0	2
ent 3	0	0	
le Agriculture 3	0		2
	()	0	3
2	2	0	3 3 3
2	0 2 2	0 0	3 3 3
Spring 2 Fall 2	0 2 2 2	0 0 0 0	3 3 3 3
	ole Agriculture or (3 2 2 2 2 3 3 3 3 4 5 Certificate Progression 1 3 2 2 2 3 3 3 4 5 Certificate Progression 1 3 2 2 2 3 3 3 4 5 2 2 3 3 3 4 5 2 2 2 3 3 3 4 5 2 2 2 3 3 3 4 5 2 2 2 3 3 3 4 5 2 2 2 2 3 3 3 4 5 2 2 2 2 2 3 3 3 3 4 5 2 2 2 2 2 2 3 3 3 3 4 5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ble Agriculture or (3 0 2 2 2 2 2 2 2 2 3 3 0 3 3 3 4 6 Certificate Program	ble Agriculture or (3 0 0 0 2 2 0 0 2 2 0 0 2 2 0 0 2 2 0

# Air Conditioning, Heating, and Refrigeration Technology

# Diploma Program [D35100] Certificate Programs [C35100A and C35100R]

#### **Curriculum Description**

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

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

Diploma graduates should be able to assist in the start up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems. AAS degree graduates should be able to demonstrate an understanding of system selection and balance and advanced systems. Students may be awarded a non-degree credential (i.e., certificate) after completing a specific portion of the diploma program.

Cou	rse a	nd Hour Requirements	Class	Lab	Clinic/Exp	Credits
Gon	orali	Education Required Courses				
COM		Introduction to Communication General Education Electives (See Gen Ed electives below)	3	0	0	3
Tota	l Gei	neral Education Required Hou	ırs			6
Maio	or Re	equired Courses				
AHR		Introduction to Refrigeration	2	6	0	5
AHR	111	HVACR Electricity	2	2	0	3
AHR	112	Heating Technology	2	4	0	4
AHR	113	Comfort Cooling	2	4	0	4
AHR	114	Heat Pump Technology	2	4	0	4
AHR	133	HVAC Servicing	2	6	0	4
AHR	151	HVAC Duct Systems I	1	3	0	2
AHR	160	Refrigerant Certification	1	0	0	1
AHR	180	HVACR Customer Relations	1	0	0	1
AHR	211	Residential System Design	2	2	0	1 3 3
CIS	110	Introduction to Computers	2	2	0	3
WBL	111*	*Work-Based Learning I	0	0	10	1
WBL	115*	*Work-Based Learning Seminar I	1	0	0	1
Tota	l Ma	jor Required Hours			•••••	36
		•				

#### **General Education Electives**

Select	3-4 cr	redits	
ENG	111	Writing and Inquiry	3
MAT	110	Mathematical Measurements	3
MAT	143	Quantitative Literacy	3
MAT	171	Precalculus Algebra	4

#### Total Credit Hours Required for Diploma Program .......42

<sup>\*\*</sup> WBL 111 and WBL 115 should be taken during the program of study after the completion of a minimum of 12 core semester hours.

# **Suggested Curriculum by Semesters**

First \			
Fall Se		ter	Credits
AHR	110		5
AHR	111		3
AHR	112		4
			12
Spring	g Sem	nester	
AHR	113		4
AHR	114		4
AHR	160		1
AHR	180		1
AHR	211		3
			13
Sumn	ner Se	emester	
AHR	133		4
AHR	151		2
			6
Secon	ıd Yea	ır	
Fall Se	emest	ter	Credits
CIS	110		3
СОМ	110		3
WBL	111		1
WBL	115		
GenEc			
2320			11

# **Certificate Options**

Certificate Options							
	Class	Lab	Clinic/Exp	Credits			
Air Conditioning, Heating, and Refrige	eration Te	chnolog	y Certifica	ate [C35100	OA]		
AHR 110 Introduction to Refrigeration	2	6	0	5	_		
AHR 111 HVACR Electricity	2	2	0	3			
AHR 113 Comfort Cooling	2	4	0	4			
AHR 114 Heat Pump Technology	2	4	0	4			
AHR 160 Refrigerant Certification	1	0	0	1			
AHR 180 HVACR Customer Relations	1	0	0	1			
Total Credit Hours Required for Certificate Program 18							
Refrigeration and Heating Servicing Certificate [C35100R]							
	ei ui icate	[C22TO	ערן	F			
AHR 110 Introduction to Refrigeration	2	9	0	5			
AHR 111 HVACR Electricity	2	2	0	3			
AHR 112 Heating Technology	2	4	0	4			
AHR 133 HVAC Servicing	2	6	0	4			
AHR 151 HVAC Duct Systems I	1	3	0	2			
Total Credit Hours Required for Certificate Program18							

# **Basic Law Enforcement Training**

#### **Certificate Program [C55120]**

#### **Curriculum Description**

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

This program utilizes State commission-mandated topics and methods of instruction. General subjects include, but are not limited to, criminal, juvenile, civil, traffic, and 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.

#### **Course and Hour Requirements**

		Class	Lab	Clinic/Exp	Credits
Major R	lequired Courses				
CJC 100	Basic Law Enforcement Training	9	30	0	20
<b>Total Cr</b>	edit Hours Required for Certi	ficate Proc	ıram		20

Subject	Contact Hours
Motor Vehicle Law	
Preparing for Court and Testifying in C	
Elements of Criminal Law	24
Juvenile Laws and Procedures	۷
Arrest, Search, and Seizure/Constitutio	
ABC Laws and Procedures	
Techniques of Traffic Law Enforcement	2/
Explosives and Hazardous Materials En	nergencies 12
Traffic Crash Investigation	
In-Custody Transportation	
Crowd Management	
Patrol Techniques	
Law Enforcement Radio Procedures	20
and Information Systems	0
Rapid Deployment	
Anti-Terrorism	
Responding to Victims and the Public	
Domestic Violence Response	
Ethics for Professional Law Enforcemen	
Indiv. with Mental Illness or Develop. D	
Crime Prevention Techniques	
Communication Skills for Law Enforcer	
Fingerprinting and Photographing Arre	
Field Note-Taking and Report Writing.	
Criminal Investigation	
Interviews: Field and In-Custody	
Controlled Substances	
First Responder	
Firearms	
Law Enforcement Driver Training	40
Physical Fitness Training	
Subject Control Arrest Techniques	40
Civil Process	74
Sheriffs' Responsibilities: Detention Du	ıties 4
Sheriffs' Responsibilities: Court Duties	6
Course Orientation	
Human Trafficking	
Testing	
Students successfully completing a Rasi	c Law Enforcemer

Students successfully completing a Basic Law Enforcement Training Course accredited by the North Carolina Criminal Justice Education and Training Standards Commission may receive credit for the following courses: CJC-120, CJC-121, CJC-131, CJC-132, CJC-221, CJC-225, for a total of 18 semester hours that may be counted toward the Associate in Applied Science degree in Criminal Justice Technology. To qualify, students must have successfully passed the Criminal Justice Commission's comprehensive certification exam and must have completed BLET since 1985.

# **Business Administration**

## A.A.S. Degree [A25120] Certificate Program [C25120A, C25120B, C25120HR and C25120M]

#### **Curriculum Description**

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

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

Through these skills, students will have a sound business education base for lifelong learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and large to small business or industry. Students may be awarded a non-degree credential (i.e., certificate, diploma) after completing a specific portion of the Associate degree program.

Course and Hour Requirements	Clinic/Exp	Credits					
	Lab	Cillic/Exp	Credits				
General Education Required Courses							
English Composition: ENG 111 Writing and Inquiry 3	0	0	3				
ENG 111 Writing and Inquiry 3  Communication electives:	U	U	5				
COM 110 Introduction to Communication or							
COM 231 Public Speaking 3	0	0	3				
Humanities/Fine Arts electives:	U	U	3				
ART 111 Art Appreciation or							
HUM 115 Critical Thinking or							
MUS 110 Music Appreciation 3	0	0	3				
Social/Behavioral Sciences electives:	Ü	Ü	3				
ECO 252 Principles of Macroeconomics or							
PSY 150 General Psychology or							
SOC 210 Introduction to Sociology or 3	0	0	3				
Mathematics electives:	-	-	-				
MAT 110 Math Measurement & Literacy or (2	2	0	3)				
MAT 143 Quantitative Literacy or (2	2	0	3)				
MAT 152 Statistical Methods I or (3	2	0	4)				
MAT 171 Precalculus Algebra 3	2	0	4				
J .							
Total General Education Required Hours	••••••	••••••	15-16				
Major Required Courses							
ACC 120 Principles of Financial Accounting 3	2	0	4				
ACC 121 Principles of Managerial Accounting 3	2	0	4				
BUS 110 Introduction to Business 3	0	0	3				
BUS 115 Business Law I 3	0	0	3				
BUS 121 Business Math 2	2	0	3 3				
BUS 137 Principles of Management 3	0	0	3				
BUS 153 Human Resource Management 3	0	0	3 2 3				
BUS 239 Business Applications Seminar 1	2	0	2				
BUS 260 Business Communication 3	0	0					
BUS 270 Professional Development 3	0	0	3 3				
CIS 110 Introduction to Computers 2	2	0	3				
ECO 251 Principles of Microeconomics 3	0	0	3				
MKT 120 Principles of Marketing 3	0	0	3				
MKT 223 Customer Service 3	0	0	3				
Major Electives			6				
(See major electives below)							
Total Major Required Hours49							

#### **Major Electives** Students may select 6 credits from one of the three combinations below: General Business Administration 110 Principles of Banking..... BUS 253 Leadership and Management Skills........3 Human Resources Management BUS 217 Employment Laws and Regulations.......3 258 Compensation and Benefits.....3 Marketing MKT 122 Visual Merchandising......3 MKT 123 Fundamentals of Selling......3 Students may select 6 credits from among the three concentrations listed directly above: 110 Principles of Banking.....3 BAF 217 Employment Laws and Regulations.......3 BUS BUS 253 Leadership and Management Skills........3 BUS 258 Compensation and Benefits......3

#### Total Credit Hours Required for A.A.S. Degree......64-65

#### **Suggested Curriculum by Semesters**

Applies to day offerings. Due to time restraints, evening students should expect to have fewer offerings each semester.

16

First Year		
Fall Semeste	er Cred	dits
BUS 110		3
CIS 110		3
ENG 111		3
BUS 121		3
MKT 120		3
		15
Spring Sem	ester	
BUS 137		3
BUS 153		
COM 110 or		5
COM 231		3
ECO 251		3
MAT 110 or		3
MAT 143 or		(3)
MAT 152 or		(4)
MAT 171		(4)
	15	-16
Summer Se	mester	
	Fine Arts	3
		3
Second Year Fall Semeste		ditc
ACC 120	er Crec	
BUS 115		
BUS 260		
	vioral Sciences	
	/e/	
ajo. Electiv		

Spring Sem	ester	
ACC 121		4
BUS 239		2
BUS 270		3
MKT 223		3
Major Electiv	ve	3
,		15

# **Certificate Options**

Class	Lab	Clinic/Exp	Credits
3	0	0	3
3	0	0	3
	2	0	3
			3
3	0	0	3
2	0	0	3
3	Ü	U	3
cate Prog	jram	•••••	18
2	2	0	4
			4
			3
		-	3
3	0	0	3
cate Proc	ıram		16
	,		
3	0	0	3
3	0	0	3
		0	3
			3
	-	-	3
-	-	-	
cate Prog	jram	••••••	18
	1201101		
			2
			3
			3
			3
	0	Ö	3
3	0	0	3
cate Prog	jram	•••••	18
	3 3 2 3 3 3 3 3 3 cate Prog	3 0 0 2 2 3 0 0 3 0 0 0 0 0 0 0 0 0 0 0	3 0 0 0 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0

# Cosmetology

#### Diploma Program [D55140]

#### **Curriculum Description**

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

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

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

Course	and Hour Requirements				
	•	Class	Lab	Clinic/Exp	Credits
Genera	<b>Education Required Courses</b>				
COM 11		3	0	0	3
PSY 15	General Psychology	3	0	0	3
Total G	eneral Education Required Ho	urs			6
Maior F	Required Courses				
,	Cosmetology Concepts I	4	0	0	4
COS 11.	2 Salon I	0	24	0	8
COS 11	B Cosmetology Concepts II	4	0	0	4
COS 11	4 Salon II	0	24	0	8
COS 11	Cosmetology Concepts III	4	0	0	4
COS 11	Salon III	0	12	0	4
COS 11	7 Cosmetology Concepts IV	2	0	0	2
COS 11	3 Salon IV	0	21	0	7
Total M	ajor Required Hours	•••••	•••••	•••••	41
	P. I. D. I. I. D. I.	_			
Iotal Ci	edit Hours Required for Diplo	ma Progra	am	••••••	47
_					

# Suggested Curriculum by Semesters

Fall Se	emest	er Credits
COS	111	4
COS	112	8
		12
Spring	g Sem	ester
COS	113	4
COS	114	8
		12
Summ	ner Se	mester
COM	110	3
PSY	150	3
		6
Fall Se	emest	er
COS	115	4
COS	116	4
COS	117	2
COS	118	7
		17

# **Cosmetology Instructor**

#### **Certificate Program [C55160]**

#### **Curriculum Description**

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.

#### **Course and Hour Requirements** Class Lab Clinic/Exp Credits **General Education Required Courses** None **Major Required Courses** COS 271 Instructor Concepts I 0 COS 272 Instructor Practicum I 7 21 273 Instructor Concepts II COS 5 5 0 0 COS 274 Instructor Practicum II 21 7 Total Major Required Hours.....24

Total Credit Hours Required for Certificate Program ......24

## **Suggested Curriculum by Semesters**

Fall S	emest	ter	Credits
COS	271		5
COS	272		7
			12
Sprin	g Sem	nester	Credits
		nester	
	273		5

# **Criminal Justice Technology**

# A.A.S. Degree [A55180] Certificate Programs [C55180B, C55180E, C55180I, C55180L]

#### **Curriculum Description**

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

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

Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, county detention officer, state trooper, intensive probation/parole surveillance officer, correctional officer, and loss prevention specialist. Students may be awarded a non-degree credential (i.e., certificate, diploma) after completing a specific portion of the Associate degree program.

Cou	rse a	nd Hour Requirements				
		•	Class	Lab	Clinic/Exp	Credits
Gene	eral I	Education Required Courses				
		Public Speaking *	3	0	0	3
ENG		Writing and Inquiry	3	0	0	3
ENG		Professional Research and Reporting	3	0	0	3
MAT		Quantitative Literacy	2	2	0	3
POL	130	State and Local Government	3	0	0	3
Hun	nanit	ties/Fine Arts Electives				
		lits from				
ART		Art Appreciation or				
MUS		Music Appreciation or				
HUM	115	Critical Thinking	3	0	0	3
Tota	l Gei	neral Education Required Hou	rs	••••••	•••••	18
Maid	or Pa	equired Courses				
CIS		Introduction to Computers	2	2	0	3
CJC		Introduction to Computers Introduction to Criminal Justice	3	0	0	3
CJC		Criminology	3	0	0	3
CJC		Juvenile Justice	3	0	0	3
CJC		Interviews/Interrogations	1	2	Ö	2
CJC		Criminal Law	3	0	0	3
CJC		Court Procedure and Evidence	3	0	Ö	3
CJC		Corrections	3	0	0	3
CJC	151	Intro to Loss Prevention	3	0	0	3
CJC		Ethics and Community Relations	3	0	0	3
CJC	221	Investigative Principles	3	2	0	4
CJC	225	Crisis Intervention	3	0	0	3
CJC	231	Constitutional Law	3	0	0	3
POL	120	American Government	3	0	0	3
PSY	150	General Psychology	3	0	0	3
Othe	er Re	equired Courses				
		CH from				
CJC		Law Enforcement Operations or	3	0	0	3
WBL	111*	*Work-Based Learning I	0	0	10	1
WBL	115*	*Work-Based Learning Seminar I	1	0	0	1
Tota	l Ma	jor Required Hours	•••••	••••••	••••••	47-48
Tota	l Cro	dit Hours Required for A.A.S.	Degree			65-66
iota		art i louis required for A.A.S.	Degree	••••••	••••••	05-00

# **Suggested Curriculum by Semesters**

n (NO BLET)
II (INO BLET)
Credits
3
3
3
3
3
3
10
3
3
3
3
3
15
Credits
3
3
3
3
14-15
14-15
Credits
3
3
5-6
3 14-15
3 14-15
14-15
14-15 ted Degree Tracks if taking B
14-15 ted Degree Tracks if taking Bl Credits
14-15 ted Degree Tracks if taking Bl Credits3
ted Degree Tracks if taking Bl Credits33
ted Degree Tracks if taking B
ted Degree Tracks if taking Bl Credits 3 3 3 3 3 3 3 3
ted Degree Tracks if taking Bl Credits
ted Degree Tracks if taking Bl Credits 3 3 3 3 3 3 3 3
ted Degree Tracks if taking Bl Credits
ted Degree Tracks if taking Bl Credits 3 3 3 3 15
14-15  ted Degree Tracks if taking Bl  Credits
14-15  ted Degree Tracks if taking Bl  Credits
14-15  ted Degree Tracks if taking Bl  Credits
14-15  ted Degree Tracks if taking Bl  Credits
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14-15  ted Degree Tracks if taking Bl  Credits
14-15  ted Degree Tracks if taking Bl  Credits
14-15  ted Degree Tracks if taking Bl  Credits

# BLET Program includes the following CJC 120 CJC 121 CJC 131 CJC 132 CJC 221 CJC 225 LS credits

Students successfully completing a Basic Law Enforcement Training Course accredited by the North Carolina Criminal Justice Education and Training Standards Commission may receive credit for the following courses: CJC-120, CJC-121, CJC-131, CJC-132, CJC-221, CJC-225, for a total of 18 semester hours that may be counted toward the Associate in Applied Science degree in Criminal Justice Technology. To qualify, students must have successfully passed the Criminal Justice Commission's comprehensive certification exam and must have completed BLET since 1985.

Cert	ifica	te Option				
		•	Class	Lab	Clinic/Exp	Credits
Inve	stiga	ntions Certificate[C55180I]				
ENG		Writing and Inquiry				
CJC	111	Intro to Criminal Justice	3	0	0	3
		Law Enforcement Operations	3	0	0	3
CJC			3	0	0	3
CJC		Constitutional Law	3	0	0	
Tota	ıl Cre	dit Hours Required for Certifi	cate Prog	ıram	••••••	12
		paration Certificate [C55180B				
CJC		Intro to Criminal Justice	3	0	0	3
CJC	112	Criminology	3	0	0	3
CJC	113	Juvenile Justice Ethics & Community Relations	3 3	0	0	3
		•	•	Ŭ	•	-
Iota	II Cre	dit Hours Required for Certifi	cate Prog	ıram	••••••	12
Loss	Drov	vention Certificate [C55180L]				
CJC		Interviews/Interrogations	1	2	0	2
CJC		Court Procedure & Evidence	3	0	0	3
CJC		Intro to Loss Prevention	3	0	0	3
CJC	221	Investigative Principles	3	2	0	4
Tota	I Cre	dit Hours Required for Certifi	cate Prod	ıram		12
				,		
Esse	ntial	s of the Criminal Justice Syste	m Certific	cate [C5	5180E]	
CJC	111	Intro to Criminal Justice	3	0	0	3
CJC	112	Criminology	3	0	0	3
CJC	131	Criminal Law	3	0	0	3
CJC	141	Corrections	3 3	0	0	3
CJC	151	Intro to Loss Prevention	•	0	0	-
Tota	I Cre	dit Hours Required for Certifi	cate Prog	ram	••••••	15

# **Culinary Arts**

#### A.A.S. Degree [A55150]

#### **Curriculum Description**

This 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 foodservice 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 may be available to graduates. With experience, graduates may advance to positions including sous chef, pastry chef, executive chef, or foodservice manager

**Course and Hour Requirements** 

		-	Class	Lab	Clinic/Exp	Credits
Gene	eral I	Education Required Courses				
СОМ	231		3	0	0	3
ECO	251	Principles of Microeconomics	3	0	0	3
ENG	111	Writing and Inquiry	3	0	0	3
HUM	115	Critical Thinking	3	0	0	3
MAT	110	Math Measurement & Literacy	2	2	0	3
Total	l Ger	neral Education Required Hours.				15
1000		.c.aaaaaaaccqacaca			••••••	
Majo	or Re	equired Courses				
CUL	110		2	0	0	2
CUL	112	Nutrition for Foodservice	3	0	0	3
CUL	130	Menu Design	2	0	0	2
CUL	135	Food & Beverage Service	2	0	0	2
CUL	140	Culinary Skills	2	6	0	5
CUL	160	Baking I	1	4	0	3
CUL	170	Garde Manger I	1	4	0	3
CUL	230	Global Cuisines	1	8	0	5
CUL	240	Culinary Skills II	1	8	0	5
CUL	260	Baking II	1	4	0	3
CUL	270	Garde Manger II	1	4	0	3
CUL	283	Farm-To-Table	2	6	0	5
HRM		Cost Control-Food & Beverage	3	0	0	3
HRM	245	Human Resource Management-Hospitality	3	0	0	3
WBL	111	Work-Based Learning I	0	0	10	1
WBL	121	Work-Based Learning II	0	0	10	1
Tota	l Ma	ior Required Hours				49

Total C	redit Hours	Required fo	r A.A.S.	Degree6	54
iotai C	i cuit i ioui s	neudiled 10	1 ~~~.	DCGI CC	,,

# **Suggested Curriculum by Semesters**

Einst Voor

First Y	ear		Secon	d Year	
Fall Se	emest	er Credits	Fall So	emest	er Credits
CUL	110	2	CUL	170	3
CUL	135		CUL	230	5
CUL	140		CUL	260	3
ENG	111	3	HUM	115	3
HRM	220	3	WBL	111	1
		15			15
Cnrine	c			_	
Shriid	g Sem	ester	Spring	g Sem	ester
COM	231	ester 3	CUL	g Sem 130	ester2
COM CUL		3	CUL CUL		2
СОМ	231	3	CUL	130	2
COM CUL	231 112		CUL	130 270	
COM CUL CUL	231 112 160		CUL CUL CUL	130 270 283	2
COM CUL CUL CUL	231 112 160 240		CUL CUL CUL ECO	130 270 283 251	

Cocond Voor

# **Dietetic Technician**

#### A.A.S Degree [A45310]

#### **Curriculum Description**

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, licensed dietician.

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 is an Associate Degree program offered in conjunction with Gaston College who awards the degree. Students may take courses marked with an asterisk (\*) at Mitchell Community College. All DET technical courses are offered online through Gaston College.

Cou	se a	nd Hour Requirements	Class	Lab	Clinic/Exp	Credits
Gone	aral I				S 224p	
		Education Required Courses Writing and Inquiry	3	0	0	3
		Writing/Research in the Disciplines	3	0	0	3
		Quantitative Literacy	2	2	0	3
IVIAI	173	(or higher level math)	2	2	O	J
*PSY	150	General Psychology	3	0	0	3
Hum		, ,,				
		lits from				
*ART		Art Appreciation	3	0	0	3
*ART		Art History Survey I	3	Ö	Ö	3
*ART		Art History Survey II	3	0	0	3
		American Literature I	3	Ö	Ö	3
		American Literature II	3	Ö	Ö	3
		Music Appreciation	3	Ö	0	3
		Introduction to Jazz	3	0	0	3
*PHI		Philosophical Issues	3	0	0	3
*PHI		Introduction to Ethics	3	0	0	3
			-	-	-	-
Iota	I Ger	neral Education Required Hours .	•••••	••••••	•••••	15
Majo *BIO		equired Courses Anatomy and Physiology I	3	3	0	4
*BIO		Anatomy and Physiology II	3	3	Ö	4
*BIO		Microbiology	3	3	Ö	4
		General, Organic, and Biochemistry and	3	0	0	3
		General, Organic, and Biochemistry Lab or	0	2	0	1
		Introduction to Chemistry and	3	0	0	3
		Introduction to Chemistry Lab	0	3	0	1
		Organic and Biochemistry	3	3	0	4
CUL		Sanitation and Safety	2	0	0	2
DET		Introduction to Nutrition	3	0	0	3
DET		Basic Food Science	3	0	0	3
DET			0	0	6	2
		Supervised Practice I	-		-	
DET		Food Mgt Systems and Nutrition Concepts		0	0	3
DET	117		5	0	0	5
DET		Supervised Practice II	0	0	12	4
DET		Nutrition Assessment and Skills Dev.	3	0	0	3
DET		Nutrition Counseling and Education	3	0	0	3
DET	224		0	0	6	2
DET		Profession of Dietetics	2	0	0	2
DET		Medical Nutrition Therapy	3	0	0	3
DET	227	Dietetics Overview	1	0	0	1
DET	228	Supervised Practice IV	0	0	6	2
*WBL	111	Work-Based Learning I	0	0	10	1

*ACA	111	C Transition (1 SHC) College Student Success or College Transfer Success		0	2	0	1
		or Required Hours	••••••				
Tota	l Cred	dit Hours Required for A	A.A.S. De	gree	••••••	•••••	71
Sug	gest	ted Curriculum by S	emeste	ers			
First Y	ear emeste	ar	Credits				
*BIO	168	•					
DET	112						
DET	113						
DET	114						
*ENG	111		3				
MAT	143						
			18				
	g Seme						
*BIO	169						
CUL	110						
DET	116						
DET	117						
DET	118						
*PSY	150		3 <b>21</b>				
Summ	ner Ser	nester					
*BIO	275		4				
*ENG			3				
			7				
	d Year						
	emeste		Credits				
CHM	130						
CHM							
DET	221						
DET	222						
DET	223						
DET	224						
*ENG	112		3 <b>18</b>				
Spring	g Seme	ester					
DET	225		2				
DET	226						
DET	227						
DET	228						
+DCV	241						

\*Humanities/Fine Arts......3

# **Digital Media Technology**

#### A.A.S. Degree [A25210] Certificate Program [C25210, C25120E]

#### **Curriculum Description**

The Digital Media program prepares students for entry-level jobs in the digital design and multimedia industry. Students learn to synthesize multimedia, hypertext, computer programming, information architecture, and client/server technologies using both Internet and non-network-based media.

Students develop skills in communication, critical thinking, and problem solving as well as interface design, multimedia formats, application programming, data architecture, and client/server technologies. The program develops technical skills through practical applications that employ current and emerging standards and technologies.

Graduates should qualify for employment as web designers, graphic artists/designers, multimedia specialists, web developers, web content specialists, media specialists, information specialists, digital media specialists, animation specialists, interface designers, and many new jobs yet to be defined in this expanding field. Students may be awarded a non-degree credential (i.e., certificate, diploma) after completing a specific portion of the Associate degree program.

Course and Hour Requirements	Class	Lab	Clinic/Exp	Credits
Company Education Paguinad Con		Lab	Clinic/Exp	Credits
General Education Required Cou	arses 3	0	0	2
ART 111 Art Appreciation COM 110 Introduction to Communicatio		U	U	3
COM 231 Public Speaking	3	0	0	3
ENG 111 Writing and Inquiry	3	0	Ö	3
MAT 110 Math Measurement and Litera		2	Ö	3
MAT 171 Precalculus Algebra	(3	2	0	4)
PSY 150 General Psychology or	(5	_	Ü	.,
SOC 210 Introduction to Sociology	3	0	0	3
<b>Total General Education Require</b>	d Hours			15-16
iotai General Luucation Require	:u поигз	••••••	•••••	12-10
Maior Dominal Corres				
Major Required Courses	•	_	•	_
ART 261 Photography I	0	6	0	3
BUS 110 Introduction to Business or	2	0	0	2
MKT 120 Principles of Marketing CIS 110 Introduction to Computers	3 2	0 2	0	3 3
•		3	0	3
CIS 115 Introduction to Programming DME 110 Introduction to Digital Media	and Logic 2	2	0	3 3 3 3
DME 115 Graphic Design Tools	2	2	0	2
DME 120 Introduction to Multimedia Ap		2	0	2
DME 130 Digital Animation I	2	2	0	3
DME 210 User Interface Design	2	2	0	3
DME 215 Advanced Graphic Design Too		2	0	3
DME 260 Emerging Technologies Digital		2	0	3
DME 270 Professional Practice Digital M	edia 2	2	Ö	3
DME 285 Systems Project	2	2	Ö	3
GRD 141 Graphic Design I	2	4	0	4
WEB 140 Web Development Tools	2	2	Ō	3
WEB 187 Prog for Mobile Devices	2	2	0	3
WEB 210 Web Design	2	2	0	3
Total Major Required Hours				52
iotai majoi nequilea mouis		••••••	••••••	JZ
<b>Total Credit Hours Required for</b>	A.A.S. Degree	••••••	••••••	67-68

# **Suggested Curriculum by Semesters**

First \	/ear emest	rer C	redits
CIS	110		
DME	110		
DME	115		
GRD	141		
WEB	140		
VVED	140		د <b>16</b>
			10
Sprin	a Sem	nester	
ART	261		3
DME	120		
DME	210		
DME	215		
ENG	111		
LING	111		15
Secon	ıd Yea	ır	13
Fall S	emest	ter C	redits
CIS	115		3
COM	110	or	
COM	231		3
DME	130		3
MAT	110	or	
MAT	171		(4)
WEB	187		
WEB	210		
			18-19
Sprin	g Sem	nester	
ART	111		3
BUS	110	or	
MKT	120		3
DME	260		3
DME	270		3
DME	285		
PSY	150		
			3
5000	210		
SOC	210		18

Certificate Option	<b>Certificate</b>	0	ption
--------------------	--------------------	---	-------

CEL	LITICO	ite Option				
		-	Class	Lab	Clinic/Exp	Credits
Digi	tal N	ledia [C25210]				
DME	110	Introduction to Digital Media	2	2	0	3
DME	115	Graphic Design Tools	2	2	0	3
DME	120	Introduction to Multimedia Application	2	2	0	3
WEB	140	Web Development Tools	2	2	0	3
WEB	210	Web Design	2	2	0	3
Total Credit Hours Required for Certificate Program						15
.044		ant riodis required for ecraine	utc : 10	9	•••••••	
Digi	tal N	ledia Technology Essentials [C2	25210E]			
DME	110	Intro to Digital Media	2 -	2	0	3
DME	115	Graphic Design Tools	2	2	0	3
DME	120	Intro to Multimedia Appl	2	2	0	3
DME	130	Digital Animation I	2	2	0	3
Tota	l Cre	dit Hours for Certificate				12
·Ju	10	are rivary for eer diffeate	•••••	***************	••••••	

# **Early Childhood Education**

# A.A.S. Degree [A55220] Diploma Program [D55220] Certificate Programs [C55220A, C55220E, C55220P and C55220S]

#### **Curriculum Description**

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.

Please contact the college and program coordinator for special requirements to enroll in this program. Students may be awarded a non-degree credential (i.e., certificate, diploma) after completing a specific portion of the Associate degree program.

#### **Course and Hour Requirements**

		•	Class	Lab	Clinic/Exp	Credits
Gen	eral I	Education Required Courses				
BIO		Principles of Biology or	3	3	0	4
MAT	143	Quantitative Literacy	(2	2	0	3)
COM	120	Intro to Interpersonal Communication	3	0	0	3
ENG	111	Writing and Inquiry	3	0	0	3
ENG	112	Writing/Research in the Disciplines	3	0	0	3
PSY	150	General Psychology	3	0	0	3
		Humanities/Fine Arts Elective	3	0	0	3
		(See nage 70 for HFA electives)				

#### Total General Education Required Hours ......18-19

#### **Major Required Courses**

CIS	110	Introduction to Computers	2	2	0	3
EDU	119	Introduction to Early Childhood Education	4	0	0	4
EDU	126	Early Childhood Seminar I	2	0	0	2
EDU	131	Child, Family, and 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, and Nutrition	3	0	0	3
EDU	162	Observation and Assessment in ECE	3	0	0	3
EDU	221	Children with Exceptionalities	3	0	0	3
EDU	234	Infants, Toddlers, and Twos	3	0	0	3
EDU	234A	Infants, Toddlers, and Twos Lab	0	2	0	1
EDU	259	Curriculum Planning	3	0	0	3
EDU	271	Educational Technology	2	2	0	3
EDU	280	Language and Literacy Experiences	3	0	0	3
EDU	284	Early Childhood Capstone Practices	1	9	0	4
		Major Electives				4
		(See major electives below)				

Total Major Required Hours......54

#### **Maior Electives**

Select	4 crea	lits	
EDU	154	Social/Emotional/Behavioral Dev	3
EDU	184	Early Childhood Intro. Practicum	2
EDU	216	Foundations of Education	4

EDU	223	Specific Learning Disabilities3
EDU	235	School-Age Dev. and Programs3
EDU	247	Sensory and Physical Disabilities3
EDU	248	Developmental Delays3
EDU	252	Math and Science Activities3
EDU	261	Early Childhood Administration I3
EDU	262	Early Childhood Administration II3
EDU	281	Inst. Strategies/Reading and Writing3
EDU	288	Adv. Issues/Early Childhood Education2
Tota	l Cre	dit Hours Required for A.A.S. Degree72-73
Sug	ges	ted Curriculum by Semesters
<b>-</b>		
First Y		er Credits
EDU	119	4
EDU	146	3
EDU	131	3
EDU	151	3
EDU	153	3
		12-13
Spring	Seme	ster
BIO		or4
MAT	143	3
CIS	110	3
EDU	162	3
EDU	221	3
ENG	111	3
		19
Sumn	ner Se	mester
COM	120	3
ENG	112	3
PSY	150	3
		9
Secon	d Yea	r
Fall Se		
EDU	126	3
EDU	144	3
EDU	145	
EDU EDU	280	3
LDU	200	15
Spring		
EDU	234	3
EDU EDU	234 <i>i</i> 259	\1 3
EDU	284	4
		/e4
·riajoi	_10001	15

Dipl	oma	a [D55220]				
•		-	Class	Lab	Clinic/Exp	Credits
COM	120	Intro to Interpersonal Communication	3	0	0	3
EDU	119	Introduction to Early Childhood Education		0	0	4
EDU	131	Child, Family, and Community	3	0	0	3
EDU	144	•	3	0	0	3
EDU EDU	145 146	Child Development II	3	0	0	3 3
EDU		Child Guidance Creative Activities	3 3	0	0 0	3
EDU		Health, Safety, and Nutrition	3	0	0	3
EDU		Observation and Assessment in ECE	3	0	0	3
EDU		Children with Exceptionalities	3	0	0	3
EDU	234	•	3	0	0	3
EDU	2344	Infants, Toddlers, and Twos Lab	0	2	0	1
EDU	280	Language and Literacy Experiences	3	0	0	3
ENG	111	Writing and Inquiry	3	0	0	3
Tota	l Cre	dit Hours Required for Diploma	Prog	ram	••••••	41
Cort	ifica	ate Options				
CCI	iiicc	ite Options	Class	Lab	Clinic/Exp	Credits
Early	, Chi	Idhood Administration Certifica	te [C	55220A1	•	
EDU	119	Introduction to Early Childhood Education	_	0	0	4
EDU	146	Child Guidance	3	Ö	Ö	3
EDU	153	Health, Safety, and Nutrition	3	0	0	3
EDU	261	Early Childhood Administration I	3	0	0	3
EDU	262	Early Childhood Administration II	3	0	0	3
Tota	l Cre	dit Hours Required for Certifica	te Pro	gram	••••••	16
Faul.	. Cl.:	Idla a al Falssatias Castificata [Cl	FF336	\F1		
•		Idhood Education Certificate [C		<b>JE]</b> 0	0	4
EDU EDU	119 131	Introduction to Early Childhood Education	3	0	0	4
EDU	146	Child, Family, and Community Child Guidance	3	0	0	3
EDU	151	Creative Activities	3	0	0	3
EDU	153	Health, Safety, and Nutrition	3	0	0	3
Tota	l Cre	dit Hours Required for Certifica	te Pro	gram	•••••	16
_	_			•		
		ducator's Certificate [C55220P]				
EDU	131	Child, Family, and Community	3	0	0	3
EDU	144	Child Development I	3 3	0	0	3 3
EDU EDU	145 146	Child Development II Child Guidance	3	0	0 0	3
EDU		Infants, Toddlers, and Twos	3	0	0	3
EDU		Infants, Toddlers, and Twos Infants, Toddlers, and Twos Lab	0	2	0	1
EDU		Adv. Issues/Early Childhood Education	2	0	0	2
		dit Hours Required for Certifica	te Pro	gram	•••••	18
		•				
Spec	ial E	ducation Certificate [C55220S]				
EDU		Child, Family, & Community	3	0	0	3
EDU	154	Social/Emotional/Behavioral Development		0	0	3
EDU	221	Children with Exceptionalities	3	0	0	3
EDU	223	Specific Learning Disabilities	3	0	0	3
EDU	247	Sensory & Physical Disabilities	3	0	0	3
EDU Tota	248	Developmental Delays	3 <b>4 D</b>	0	0	3
iota	ı Cre	dit Hours Required for Certifica	τe Pro	ogram	••••••	18

# **Electrical Systems Technology**

## A.A.S. Degree [A35130] Diploma Program [D35130] Certificate Program [C35130E]

#### **Curriculum Description**

This curriculum is designed to provide training for persons interested in the installation and maintenance of electrical systems found in residential, commercial, and industrial facilities.

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

Graduates should qualify for a variety of jobs in the electrical field as an on-the-job trainee or apprentice assisting in the layout, installation, and maintenance of electrical systems. Students may be awarded a non-degree credential (i.e., certificate, diploma) after completing a specific portion of the Associate degree program.

#### **Course and Hour Requirements**

		·	Class	Lab	Clinic/Exp	Credits
Gen	eral I	Education Required Courses				
COM	110	Introduction to Communication	3	0	0	3
ENG	111	Writing and Inquiry	3	0	0	3
MAT	110	Math Measurement & Literacy or	2	2	0	(3)
PHY	110	Conceptual Physics	3	0	0	3
PHY	110 <i>A</i>	Conceptual Physics Lab	0	2	0	1
		Humanities/Fine Arts Elective	3	0	0	3
		(See page 70 for HFA electives)				
		Social/Behavioral Sciences Elective	3	0	0	3
		(See page 70 for SBS electives)				

#### Total General Education Required Hours ......15-16

## **Major Required Courses**

ATR	214	Advanced PLCs	3	3	0	4
CIS	110	Introduction to Computers	2	2	0	3
ELC	113	Residential Wiring	2	6	0	4
ELC	114	Commercial Wiring	2	6	0	4
ELC	115	Industrial Wiring	2	6	0	4
ELC	117	Motors and Controls	2	6	0	4
ELC	119	NEC Calculations	1	2	0	2
ELC	131	Circuit Analysis I	3	3	0	4
ELC	131A	A Circuit Analysis I Lab	0	3	0	1
ELC	135	Electrical Machines	2	2	0	3
ELC	215	Electrical Maintenance	2	3	0	3
ELN	131	Analog Electronics I	3	3	0	4
ELN	133	Digital Electronics	3	3	0	4
ELN	260	Programmable Logic Controllers	3	3	0	4
		Major Electives				2-3

Total Major Hours50-	-5	1
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#### Total Credit Hours Required for A.A.S. Degree......65-66

#### **Major Electives**

Select 2-3 credits

DFT	151	CAD I	3
HYD	110	Hydraulics/Pneumatics I	3
ISC	112	Industrial Safety	2
		*Work-Based Learning I	
		*Work-Based Learning Seminar I	

<sup>\*\*</sup>WBL 111 and WBL 115 should be taken during the program of study after the completion of a minimum of 12 core semester hours.

# **Suggested Curriculum by Semesters for Completion of Associates**

First \	ear/	Credits
ELC	113	4
ELC	119	2
ELC	131	4
MAT	110	3
COM	110	3
COIVI	110	16
Sprine	9	
ELC .	114	4
ELC	115	4
ELC	135	3
ELC	131A	1
ENG	111	3
		15
Sumn	ner	
CIS	110	3
ELC	117	4
Secon	d Yea	7 r
Fall		
ELC	128	3
ELC	215	3
ELN	133	4
Major	Electiv	/e2-3
,		12-13
Spring	•	
ELN	131	4
ELN	260	4
		Elective3
Soc/B	ehavio	r Elective3
		14

,	Class	Lab	Clinic/Exp	Credits
<b>General Education Required Course</b>	es			
COM 110 Introduction to Communication	3	0	0	3
MAT 110 Math Measurement & Literacy or	2	0	0	(3)
PHY 110 Conceptual Physics	3	0	0	3
PHY 110A Conceptual Physics Lab	0	2	0	1
<b>Total General Education Required H</b>	lours			6-7
Major Required Courses				
ATR 214 Advanced PLCs	3	3	0	4
ELC 113 Residential Wiring	2	6	0	4
ELC 114 Commercial Wiring	2	6	0	4
ELC 115 Industrial Wiring	2	6	0	4
ELC 117 Motors and Controls	2	6	0	4
ELC 119 NEC Calculations	1	2	0	2
ELC 131 Circuit Analysis I	3	3	0	4
ELC 131A Circuit Analysis I Lab	0	3	0	1
ELC 215 Electrical Maintenance	2	3	0	3
ELN 133 Digital Electronics	3	3	0	4
ELN 260 Programmable Logic Controllers	3	3	0	4
Total Major Required Hours	••••••	•••••	••••••	38

Total Credit Hours Required for Diploma Program ......44

# **Suggested Curriculum by Semesters for Completion of Diploma**

These courses are offered as day-options. Recommended sequence after completing the Electrical Wiring Certificate.

Sumn	ner Se	mester	Credits
COM	110		3
ELC	117		4
			7
Fall Se	emest	er	
ELN	260		4
ELN	133		
MAT	110		
IVIZI	110		11-12
			11-12
Coming	. Cam	actor	
Spring			
ATR	214		
ELC	131A		
ELC	215		3
			8

**Electrical Systems Certificate Option [C35130E]** 

		•	•	Class	Lab	Clinic/Exp	Credits
ELC	113	Residential Wiring		2	6	0	4
ELC	114	Commercial Wiring		2	6	0	4
ELC	115	Industrial Wiring		2	6	0	4
ELC	119	NEC Calculations		1	2	0	2
ELC	131	Circuit Analysis I		3	3	0	4

Total Credits Hours Required for Certificate Program ......18

# Suggested Curriculum by Semesters for Certificate Evening Certificate Option

Fall S	emest	er	
ELC	113		4
ELC	119		2
ELC	131		4
			10
Sprin	g Sem	ester	
ELC	114		4
ELC	115		4
			Q

# **Electronics Engineering Technology**

# A.A.S. Degree [A40200] Diploma Program [D40200R]

#### Certificate Programs [C40200A, C40200B, C40200R and C40200N]

This program has two tracks-a Robotics Track and a UNCC Transfer Track. The Robotics Track is designed to give students the education and skills needed to get a job as an electronics technicians/technologist in the local electronics industry. The UNCC Transfer track is designed to transfer in UNCC to get a bachelor's degree in Electronics Engineering Technology. Graduates who complete a bachelor's degree in Electronics Engineering Technology at UNCC should qualify for employment as an electrical or electronics engineer.

#### **Curriculum Description**

This curriculum is 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.

A course of study that prepares the students to apply basic engineering principles and technical skills to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communication systems, and power electronic systems. Includes instruction in mathematics, basic electricity, solid-state fundamentals, digital concepts, and microprocessors or programmable logic controllers. Graduates should qualify for employment as electronics engineering technician, field service technician, instrumentation technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician. Students may be awarded a non-degree credential (i.e., certificate, diploma) after completing a specific portion of the Associate degree program.

Cou	rse a	nd Hour Requirements			<b></b>	
			Class	Lab	Clinic/Exp	Credits
Gene	eral E	Education Required Courses				
COM COM	110 120 231 111	Introduction to Communication or Intro to Interpersonal Communication or Public Speaking Writing and Inquiry Precalculus Algebra Humanities/Fine Arts Elective HUM 115 or PHI 240 is recommended (See page 70 for HFA electives)	3 3 (3 3	0 0 2 0	0 0 0 0	3 3 4) 3
Soci	al/Re	ehavioral Sciences				
		ecommended				
Take 3						
ECO		Principles of Microeconomics	3	0	0	3
PSY		Interpersonal Psychology	3	0	0	3
PSY		General Psychology	3	0	0	3
SOC	210	Introduction to Sociology	3	0	0	3
Tota	l Ger	neral Education Required Hours	5			16
Maio	or Re	equired Courses				
CIS		Intro to Computers	2	2	0	3
ELC		Electrical Machines	2	2	0	3
ELC	131	Circuit Analysis I	3	3	0	4
ELC	133	Circuit Analysis II	3	3	0	4
ELN	131	Analog Electronics I	3	3	0	4
ELN	133		3	3	0	4
ELN		CAD for Electronics	1	3	0	2
ELN		Introduction to Microprocessors	3	3	0	4
ELN		Communication Systems	3	3	0	4
ELN		Programmable Logic Controllers	3	3	0	4
MAT		Precalculus Trigonometry	3	0	0	4
PHY		Conceptual Physics	3	0	0	3
PHY	TIUA	Conceptual Physics Lab	3	0	0	1
		r	viitcheii Cor	minunity Co	bliege <b>Catalo</b>	<b>og</b> 2017-2018 Page 99

	10 SHC 134 151 170 117 215 271	ajor Requirements  From: C++ Programming CAD I Engineering Graphics Motors and Controls Electrical Maintenance Calculus I College Phsics I		2 2 2 2 2 2 3 3	3 3 2 6 3 2 2	0 3 0 3 0 3 0 4 0 3 0 4 0 4
Tota	l Ma	ijor Required Hours				54-55
Tota Sug	ges	edit Hours Required for sted Curriculum by S	A.A.S. Deg	jree	•••••••	70-71
	emest		Credits			
CIS ENG						
ELN	150					
MAT	171					
PHY	110					
			14			
•	g Sem					
	110 120					
			2			
ELC						
ELN						
MAT	172					
		vioral Sciences				
Jocial	, Beria	violal sciences	17			
Sumn	ner Se	emester				
ELC	117					
			4			
	nd Yea	==				
	emest		Credits			
DFT						
ELC						
ELN	131					
ELN	260					
			15			

ELC 135 3 ELN 232 4 ELN 234 4 Humanities/Fine Arts Elective ......3

# **Suggested Curriculum by Semesters for UNCC Transfer Track**

#### Applies to day offerings

First \	ear/	
Fall Se	emester	Credits
CIS	110	3
ELN	150	2
ENG	111	3
Huma	nities/Fi	ne Arts3
MAT	171	4
PHY	110	3
PHY	110A	1
		19
C		A
COM	<b>Semes</b> 110 or	tter
COM	120 or	
COM		3
CSC		3
ELC		4
ELN		4
MAT		4
IVIAI	1/2	18
		10
Sumn MAT	ner Sem 271	ester
		pral Sciences3
Social	Dellavio	7
		,
Secon	d Year	
	emester	Credits
ELC	133	4
ELN		4
ELN		4
MAT		(4)
		commended to prevent deficiency at transferring institution
PHY		4
		16
Sprine	g Semes	ter
ELC		3
ELN		4
ELN		4
PHY		(4)
		ommended to prevent deficiency at transferring institution
CHIL	JZ 13 18C	11-15
		11-13

Robotics Diploma [D40200R]

- 10 10		- ipioiiia (2 102001)	Class	Lab	Clinic/Exp	Credits
COM	110	Introduction to Communication or			•	
COM	120	Intro to Interpersonal Communication or				
COM	231	Public Speaking	3	0	0	3
ELC	117	Motors and Controls	2	6	0	4
ELC	131	Circuit Analysis I	3	3	0	4
ELC	133	Circuit Analysis II	3	3	0	4
ELC	135	Electrical Machines	2	2	0	3
ELN	131	Analog Electronics I	3	3	0	4
ELN	133	Digital Electronics	3	3	0	4
ELN	260	Programmable Logic Controllers	3	3	0	4
MAT	171	Precalculus Algebra	(3	2	0	4)
MAT	172	Precalculus Trigonometry	3	2	0	4
Total Credit Hours Required for Diploma Program37						

#### **Certificate Options** Class Clinic/Exp Credits Lab Analog Electronics Certificate [C40200A] ELC 131 Circuit Analysis I 3 3 0 4 ELC 133 Circuit Analysis II 3 3 0 4 3 3 4 ELN 131 Analog Electronics I Total Credit Hours Required for Certificate Program ...... 12 **Embedded Microprocessors Design Certificate [C40200B]** 131 Circuit Analysis I 0 4 ELC 133 Circuit Analysis II 3 4 ELN 133 Digital Electronics 3 0 232 Introduction to Microprocessors 3 3 4 Total Credit Hours Required for Certificate Program ..... Robotics Certificate [C40200R] ELC 117 Motors and Controls 4 ELC 135 Electrical Machines 2 3 2 0 133 Digital Electronics ELN 3 3 0 4 ELN 260 Programmable Logic Controllers 3 3 4 Total Credit Hours Required for Certificate Program ...... 15 Electrical Maintenance Certificate [C40200N] 117 Motors and Controls ELC 2 6 0 4 ELC 3 3 0 4 131 Circuit Analysis I 2 2 **ELC** 135 Electrical Machines 0 3 215 Electrical Maintenance 2 3 3 Total Credit Hours Required for Certificate Program ......14

# **Emergency Medical Science**

# A.A.S. Degree [A45340]

#### **Curriculum Description**

The Emergency Medical Science curriculum provides individuals with the knowledge, skills and attributes to provide advanced emergency medical care as a paramedic for critical and emergent patients who access the emergency medical system and prepares graduates to enter the workforce.

Students will gain complex knowledge, competency, and experience while employing evidence based practice under medical oversight, and serve as a link from the scene into the healthcare system.

Graduates of this program may be eligible to take state and/or national certification examinations. Employment opportunities include providers of emergency medical services, fire departments, rescue agencies, hospital specialty areas, industry, educational and government agencies.

#### **Course and Hour Requirements**

		•	Class	Lab	Clinic/Exp	Credits
Gen	eral	<b>Education Required Cours</b>	es		-	
ENG		Writing and Inquiry	3	0	0	3
ENG		Writing/Research in the Disciplines	3	0	0	3
MAT	143	Quantitative Literacy	2	2	0	3
Hur	nani	ities/Fine Arts (3 credits)				
ART		Art Appreciation or				
HUM	115	Critical Thinking or				
MUS	110	Music Appreciation or				
PHI	240	Introduction to Ethics	3	0	0	3
Soc	ial/B	Sehavioral Science (3 credit	s)			
POL		State & Local Government or	•			
PSY	150	General Psychology or				
SOC	210	Introduction to Sociology	3	0	0	3
Tota	al Ge	eneral Education Required	Hours			15
		inciai zaacation regainea		•••••	•••••••	
Mai	or R	equired Courses				
Note:	Studei	nts must have BIO 110, BIO 111 OR High	school Biolog	av within 5	vears.	
BIO		Basic Anatomy & Physiology or	4	2	0	5
BIO	168	Anatomy and Physiology I and	(3	3	0	4)
BIO	169	Anatomy and Physiology II	(3	3	0	4)
EMS	110	EMT	6	6	0	8
EMS		EMS Clinical Practicum I	0	0	3	1
EMS		Pharmacology	3	3	0	4
EMS		Advanced Airway Management	1	2	0	2
EMS		Cardiology I	1	3	0	2
EMS		Cardiology II	2	3	0	3
EMS		EMS Clinical Practicum II	0	0	6	2
EMS		EMS Clinical Practicum III	0	0	9	3
EMS		Patients with Special Challenges	1	2	0	2
EMS		EMS Clinical Practicum IV	0	0	12	4
EMS		Medical Emergencies	1	3	0	2
EMS		Trauma Emergencies	1	3	0	2
EMS		Life Span Emergencies	2	3	0	3
EMS		EMS Capstone	1	3	0	2
MED	121	Medical Terminology I	3	0	0	3
MED	122	57	3	0	0	3
Tota	I Ma	jor Required Hours	•••••	••••••	••••••	.51-54
		-				

Total Credit Hours Required for A.A.S Degree......66-69

Suggested	Curriculum	by Semesters
Juggesteu	Carricalani	by beinesters

Sugg First \		ed Curriculum by Semesters
Fall Se		er Credits
EMS	110	8
MED	121	
MED	121	
BIO		or5
BIO	168	Jr
ENG	111	3 21-22
Spring	_	
MAT	143	3
EMS	130	4
EMS	131	2
BIO	169	4
EMS	160	2
EMS	122	1
		16
Sumn	ner Se	mester
EMS	250	4
EMS	260	2
EMS	221	2
		8
Secon	ıd Yea	r
Fall Se		
Huma	nities/	Fine Arts3
EMS	220	3
EMS	270	3
EMS	231	3
		12
Spring	g Sem	ester
ENG	112	3
Social	/Beha	vioral Science3
EMS	240	2
EMS	241	4
EMS	285	2
		14

# **Emergency Medical Science Bridge Program**

# A.A.S. Degree [A45340B]

# **Curriculum Description**

The Emergency Medical Science Bridging Option is designed to allow a currently certified, non-degreed Paramedic to earn an Associate of Applied Science in Emergency Medical Science by completing course requirements identified outside of the paramedic subject area. This program of study provides the student an opportunity to enhance learning already achieved through continuing education for Paramedic. Course work includes medical terminology, Biology, Mathematics, English, Humanities, and Social Sciences. Only Certified Paramedics are permitted in the Bridging Option. Contact the EMS Program Coordinator for prerequisites for admission requirements.

Course and Hour Requirements					
•	Class	Lab	Clinic/Exp	Credits	
<b>General Education Required Course</b>	25				
ENG 111 Writing and Inquiry	3	0	0	3	
ENG 112 Writing/Research in the Disciplines	3	0	0	3	
MAT 143 Quantitative Literacy	2	2	0	3	
Humanities/Fine Arts (3 credits)					
ART 111 Art Appreciation or					
HUM 115 Critical Thinking or					
MUS 110 Music Appreciation or					
PHI 240 Introduction to Ethics	3	0	0	3	
Social/Behavioral Science (3 credits	<b>s</b> )				
POL 130 State & Local Government or	•				
PSY 150 General Psychology or					
SOC 210 Introduction to Sociology	3	0	0	3	
<b>Total General Education Required Hou</b>	rs	•••••	••••••	15	
Major Required Courses					
*Note: Students must have BIO 110, BIO 111 OR High	school Riole	av within <sup>u</sup>	vears		
BIO 163 Basic Anatomy & Physiology or	4	2	0	5	
*BIO 168 Anatomy and Physiology I and	(3	3	0	4)	
BIO 169 Anatomy and Physiology II	(3	3	0	4)	
MED 121 Medical Terminology I	3	0	0	3	
MED 122 Medical Terminology II	3	0	0	3	
Total Major Required Hours11-14					
	_				
Total Credit Hours Required for A.A.S I	Degree	••••••	•••••••	25-29	
Suggested Comissulous by Samastons					

#### **Suggested Curriculum by Semesters**

Fall Semester Credits						
BIO	163	or5				
BIO	168	4				
ENG	111	3				
MED	121	3 (1st 8 weeks)				
MED	122	3 (2nd 8 weeks)				
		13-14				
Spring	Spring Semester					
BIO	169	4				
ENG	112	3				
Huma	Humanities/Fine Arts3					
		_				
MAT	143	3				
1417 (1		3				

# **Esthetics Technology**

#### **Certificate Program [C55230]**

#### **Curriculum Description**

The Esthetics Technology curriculum provides competency-based knowledge, scientific/artistic principles and hands-on fundamentals associated with the art of skin care. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional Esthetics Technology, business/human relations, product knowledge, and other related topics.

Graduates should be prepared to take the North Carolina Cosmetology State Board Licensing Exam and upon passing be licensed and qualify for employment in beauty and cosmetic/skin care salons, as a platform artist, and in related businesses.

#### **Course and Hour Requirements** Class Lab Clinic/Exp Credits **General Education Required Courses** None **Major Required Courses** COS 119 Esthetics Concepts I 0 COS 120 Esthetics Salon İ 18 0 COS 125 Esthetics Concepts II 2 0 0 2 COS 126 Esthetics Salon II 18 6 Total Major Required Hours......16 Total Credit Hours Required for Certificate Program ...... 16

## **Suggested Curriculum by Semesters**

Fall S	emest	er	Credits
COS	119		2
COS	120		6
			8
Sprin	g Sem	ester	
COS	125		2
COS	126		6
			•

# **Fire Protection Technology**

#### A.A.S. Degree [A55240] Certificate Programs [C55240, C55240FS]

#### **Curriculum Description**

The Fire Protection Technology curriculum is designed to provide individuals with technical and professional knowledge to make decisions regarding fire protection for both public and private sectors. It also provides a sound foundation for continuous higher learning in fire protection, administration, and management.

Course work includes classroom and laboratory exercises to introduce the student to various aspects of fire protection. Students will learn technical and administrative skills such as hydraulics, hazardous materials, arson investigation, fire protection safety, fire suppression management, law, and codes.

Graduates should qualify for employment or advancement in fire departments, governmental agencies, industrial firms, insurance rating organizations and educational organizations. Employed persons should have opportunities for skilled and supervisory-level positions within their current organizations. Students may be awarded a non-degree credential (i.e., certificate, diploma) after completing a specific portion of the Associate degree program.

Cou	rse a	nd Hour Requirements	Class	Lab	Clinia/Fran	Cua alita
Com	awal I	Education Bouried Courses	Class	Lab	Clinic/Exp	Credits
ENG		Education Required Courses Writing and Inquiry	3	0	0	3
ENG		Professional Research and Reporting	3	0	0	3
MAT		Quantitative Literacy or	2	2	Ö	3
MAT	171		(3	2	0	4)
Hum	nanit	ies/Fine Arts Electives (3 credi	ts)			
ART	111 (		,			
HUM	115 c	or				
HUM	160 d					
MUS	110 (	or	_		_	_
PHI	240		3	0	0	3
		ience Elective (3 credits)				
PSY		General Psychology or				
POL	130	State & Local Government or	2	•	•	2
SOC	210	Introduction to Sociology	3	0	0	3
Tota	l Ger	neral Education Required Hou	rs	••••••	••••••	15-16
Majo	or Re	quired Courses				
CIS	110	Introduction to Computers	2	2	0	3
EPT		Emergency Management	3	0	0	3
FIP		Introduction to Fire Protection	3	0	0	3
FIP		Fire Prevention and Public Education	3	0	0	3
FIP	128	9	3	0	0	3 3 3 3
FIP	132	Building Construction	3	0	0	3
FIP		Inspections and Codes	3	0	0	
FIP		Fire Protection Systems	3 3	2 0	0	4
FIP FIP	220	Fire Protection Law Fire Fighting Strategies	3	0	0	3 3 3
FIP	228	Local Government Finance	3	0	0	2
FIP		Fire Dynamics and Combustion	3	0	0	3
FIP	230	Chemistry of Hazardous Materials I	5	0	0	5
FIP	276	Managing Fire Services	3	0	0	3
		3 3	-	-	-	40
iota	ı ıvıd	jor Required Hours	•••••	••••••	••••••	40

#### **Major Electives** Select 9 credits

Total Credit Haves Bossisad for A A C Dosses					
l Maj	or Elective Required Hours	•••••	••••••	•••••	
244	Fire Protection Project	3			
240	Fire Service Supervision	3			
232	Hydraulics and Water Distribution	3			
230	Chemistry of Hazardous Materials I	5			
226*	Fire Officer I and II	4			
224*	Fire Instructor I and II	4			
221	Advanced Fire Figthing Strategies	3			
164	OSHA Standards	3			
	221 224* 226* 230 232 240 244	221 Advanced Fire Figthing Strategies	•	221 Advanced Fire Figthing Strategies3 224* Fire Instructor I and II	

# ..9 Total Credit Hours Required for A.A.S. Degree......64-65

# **Suggested Curriculum by Semesters**

_		-
	emest	
ENG	111	3
FIP	120	3
FIP	124	3
FIP	128	3
FIP	152	3
		15
Snrin	g Sem	ester
CIS	110	3
FIP	136	3
FIP	146	
		4 or3
MAT		
MAT	171	(4)
		13-14
Sumn	ner Se	mester
Huma	nities/	Fine Arts3
Major	electi	ves3-6
,		6-9
Secor	nd Yea	r
	emest	
	140	
FIP	132	
FIP	276	
Major	electi	ves3
		15
Sprin	g Sem	ester
FĪP	220	3
FIP	228	3
FIP	229	3
Social	Scien	ce3
		12

Credit for experience up to nine hours of credit:

- · Students may receive credit for FIP-136/Inspections and Codes if they hold a valid level 1 Fire Inspectors Certification from the NC Office of State Fire Marshall.
- · Students may receive credit for FIP-224/Fire Instructor I and II if they hold a valid Instructors Certification from the NC Office of State Fire Marshal.
- · Students may receive credits for FIP-226/Fire Officer I and II if they hold a valid Fire Office I and II Certification from the NC Office of State Fire Marshal.

# **Certificate Options**

			Class	Lab	Clinic/Exp	Credits		
Fire	Fire Protection Technology Certificate [C55240]							
FIP	120	Intro to Fire Protection	3	ō	0	3		
FIP	124	Fire Prevention & Public Ed	3	0	0	3		
FIP	132	Building Construction	3	0	0	3		
FIP	152	Fire Protection Law	3	0	0	3		
FIP	220	Fire Fighting Strategies	3	0	0	3		
FIP	228	Local Government Finance	3	0	0	3		
Tota	Total Credit Hours Required for Certificate Program							
				,				
Fire	Sen	vice Manager Certificate [	C55240FS	1				
CIS	110	Introduction to Computers	2	2	0	3		
ENG	111	Writing and Inquiry	3	0	0	3		
EPT	140	Emergency Management	3	0	0	3		
FIP	152	Fire Protection Law	3	0	0	3		
FIP	228	Local Government Finance	3	0	0	3		
FIP	276	Managing Fire Services	3	0	0	3		
Tota	Total Credit Hours Required for Certificate Program							

# **General Occupational Technology**

## A.A.S. Degree [A55280] Diploma Program [D55280]

#### **Curriculum Description**

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

The curriculum content will be customized for students according to occupational interests and needs. A program of study for each student will be selected from any non-developmental 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. Students may be awarded a non-degree credential (i.e., certificate, diploma) after completing a specific portion of the Associate degree program.

#### Communication

A.A.S. programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 3 semester hours of communications. Choose from the following to fulfill requirement:

COM	110	Introduction to Communication	3
COM	120	Intro to Interpersonal Communication	ı3
COM	140	Intro to Intercultural Communication .	3
COM	231	Public Speaking	3
ENG	111	Writing and Inquiry	3
ENG	112	Writing/Research in the Disciplines	3
ENG	114	Professional Research and Reporting	3

For the Degree program, choose at least one course from each of the following categories. For the diploma program choose one course from any of the following categories.

#### **Humanities/Fine Arts**

		,	
ART	111	Art Appreciation	3
ART	114	Art History Survey I	3
ART	115	Art History Survey II	3
DRA	111	Theatre Appreciation	3
DRA	124	Readers Theatre	
DRA	130	Acting I	3
ENG	125	Creative Writing I	3
ENG	231	American Literature I	3
ENG	232	American Literature II	3
ENG	233	Major American Writers	3
ENG	241	British Literature I	3
ENG	242	British Literature II	3
ENG	261	World Literature I	3
ENG	262	World Literature II	3
HUM	110	Technology and Society	3
HUM	120	Cultural Studies	
HUM	130	Myth in Human Culture	3
HUM	150	American Womens Studies	
HUM	160	Introduction to Film	3
MUS	110	Music Appreciation	3
PHI	215	Philosophical Issues	3
PHI	240	Introduction to Ethics	
REL	110	World Religions	3
REL	211	Introduction to Old Testament	
REL	212	Introduction to New Testament	3

#### Social/Behavioral Sciences 210 General Anthropology......3 ANT 251 Principles of Microeconomics......3 FCO ECO 252 Principles of Macroeconomics......3 111 World Regional Geography......3 GEO GEO 112 Cultural Geography......3 Economic Geography ......3 GEO 113 GEO 130 General Physical Geography......3 HIS World Civilization I......3 111 HIS 112 World Civilization II......3 121 HIS Western Civilization I ......3 122 Western Civilization II......3 HIS HIS 131 American History I ......3 HIS 132 American History II ......3 HIS 151 Hispanic Civilization ......3 HIS 221 African-American History......3 HIS 226 The Civil War ......3 HIS 231 Recent American History......3 POL 120 American Government......3 POL 130 State and Local Government......3 POL 210 Comparative Government......3 POL 220 International Relations ......3 PSY 150 General Psychology......3 SOC 210 Introduction to Sociology......3 SOC 213 Sociology of the Family......3 SOC Social Problems......3 220 SOC 225 Social Diversity......3 Natural Science/Mathematics 110 Principles of Biology.....4 RIO. 111 General Biology I ......4 BIO CHM 131 Introduction to Chemistry......3 CHM 131A Introduction to Chemistry Lab......1 CHM 151 General Chemistry I.....4 110 Introduction to Computers......3 CIS 110 Math Measurement & Literacy......3 MAT MAT 121 Algebra/Trigonometry I ......3 MAT 143 Quantitative Literacy......3 171 Precalculus Algebra.....4 MAT PHY 110 Conceptual Physics......3 110A Conceptual Physics Lab ......1 PHY

Total Major Hours Required for A.A.S	49 SHC
Total Major Hours Required for Diploma	30 SHC

#### **Other Required Hours**

Other required hours may be chosen from courses listed below or unselected general education core courses offered in this program.

Onch	- Cu 1111 Ci	ns program.	
ACA	111	College Student Success	1
ACA	122	College Transfer Success	1
ACC	115	College Accounting	4
ACC	120	Principles of Financial Accounting	4
ACC	121	Principles of Managerial Accounting	4
ACC	122	Principles of Financial Accounting II	
ACC	129	Individual Income Taxes	3
ACC	130	Business Income Taxes	3
ACC	140	Payroll Accounting	2
ACC	149	Intro. to Accounting Spreadsheet	2
ACC	150	Accounting Software Applications	2
ACC	220	Intermediate Accounting I	
ACC	221	Intermediate Accounting II	4
ACC	226	Advanced Managerial Accounting	3
ACC	227	Practices in Accounting	3
AGR	110	Agricultural Economics	
AGR	111	Basic Farm Maintenance	3
AGR	139	Intro. to Sustainable Agriculture	3
AGR	140	Agricultural Chemicals	3

AGR	150	Ag-O-Metrics3
AGR	160	Plant Science3
AGR	170	Soil Science3
AGR	210	Agricultural Accounting3
AGR	212	Farm Business Management3
AGR	213	Agriculture Law and Finance3
AGR	214	Agricultural Marketing3
AGR AGR	220 226	Agricultural Mechanization3
AGR	261	Maintaining and Servicing of Prod. Fac3 Agronomy3
AGR	262	Weed ID and Control3
AHR	110	Introduction to Refrigeration5
AHR	111	HVACR Electricity3
AHR	112	Heating Technology4
AHR	113	Comfort Cooling4
AHR	114	Heat Pump Technology4
AHR	133	HVAC Servicing4
AHR	151	HVAC Duct Systems I2
AHR	160	Refrigerant Certification1
AHR	180	HVACR Customer Relations1
AHR	211	Residential System Design3
ANS	110	Animal Science3
ART	121	Two-Dimensional Design3
ART	122	Three-Dimensional Design3
ART	131	Drawing I3
ART	132	Drawing II3
ART	135	Figure Drawing I3
ART	171	Computer Art I3
ART	231	Printmaking I3
ART	232	Printmaking II3
ART	240	Painting I3
ART	241	Painting II3
ART	261	Photography I3
ART	262	Photography II3
ART	266	Videography I3
ART	267	Videography II3
ART ART	271 281	Computer Art II3 Sculpture I3
ART	282	Sculpture II
ART	283	Ceramics I
ART	284	Ceramics II
ASL	111	Elementary ASL I
ASL	112	Elementary ASL II3
ASL	211	Intermediate ASL I3
ASL	212	Intermediate ASL II3
AST	111	Descriptive Astronomy3
AST		Descriptive Astronomy Lab1
ATR	112	Introduction to Automation3
ATR	214	Advanced PLCs4
BAF	110	Principles of Banking3
BIO	112	General Biology II4
BIO	120	Introductory Botany4
BIO	130	Introductory Zoology4
BIO	140	Environmental Biology3
BIO		Environmental Biology Lab1
BIO	143	Field Biology Minicourse2
BIO	155	Nutrition3
BIO	163	Basic Anatomy and Physiology5
BIO	168	Anatomy and Physiology I4
BIO	169	Anatomy and Physiology II4
BIO	275	Microbiology4
BUS	110	Introduction to Business
BUS	115 121	Business Law I
BUS BUS	121	Business Math3 Principles of Management3
BUS	153	Human Resource Management3
BUS	217	Employment Laws and Regulations3
BUS	238	Integrated Management3
505	230	integrated interrugerine it

BUS	253	Leadership and Management Skills3
BUS	258	Compensation and Benefits3
BUS	260	Business Communication3
BUS	270	Professional Development3
CHI	111	Elementary Chinese I3
CHI	112	Elementary Chinese II3
CHI	211	Intermediate Chinese I3
CHI	212	Intermediate Chinese II3
CHM	132	Organic and Biochemistry4
CHM	152	General Chemistry II4
CIS CJC	115 100	Intro. to Programming and Logic3 Basic Law Enforcement Training
CJC	111	Introduction to Criminal Justice3
CJC	112	Criminology3
CJC	113	Juvenile Justice3
CJC	120	Interviews/Interrogations2
CJC	121	Law Enforcement Operations3
CJC	122	Community Policing3
CJC	131	Criminal Law3
CJC	132	Court Procedure and Evidence3
CJC	141	Corrections3
CJC	151	Introduction to Loss Prevention3
CJC	160	Terrorism: Underlying Issues3
CJC	170	Critical Incident Man. for Public Safety3
CJC	212	Ethics and Community Relations3
CJC	215	Organization and Administration3
CJC	221	Investigative Principles4
CJC	222	Criminalistics3
CJC	223	Organized Crime3
CJC	225	Crisis Intervention3
CJC	231	Constitutional Law
CJC	255 111	
COS	111	Cosmetology Concepts I4 Salon I8
COS	113	Cosmetology Concepts II4
COS	113	Salon II8
COS	115	Cosmetology Concepts III4
cos	116	Salon III4
cos	117	Cosmetology Concepts IV2
COS	118	Salon IV7
cos	119	Esthetics Concepts I2
cos	120	Esthetics Salon I6
COS	121	Manicure/Nail Technology I6
COS	125	Esthetics Concepts II2
COS	126	Esthetics Salon II6
COS	222	Manicure/Nail Technology II6
COS	271	Instructor Concepts I5
COS	272	Instructor Practicum I7
COS	273	Instructor Concepts II5
COS	274	Instructor Practicum II7
CSC	134	C++ Programming3
CSC	151	JAVA Programming3
CTI	110	Web, Prog. and Database Foundation3
CTI	120	Network and Security Foundation3
CTS	115	Information systems Business Concepts.3
CTS CTS	120	Hardware/Software Support3 Spreadsheet3
DBA	130 110	Database Concepts
DDF	252	Advanced Solid Modeling3
DDF	110	Developmental Disabilities3
DFT	111	Technical Drafting I2
DFT	151	CAD I3
DFT	152	CAD II
DFT	153	CAD III
DFT	170	Engineering Graphics3
DFT	211	Gears, Cams, and Pulleys2
DME	110	Introduction to Digital Media3
DME	115	Graphic Design Tools3

DME	120	Introduction to Multimedia Application3
DME	130	Digital Animation I3
DME	210	User Interface Design3
DME	215	Advanced Graphic Design Tools3
DME	260	Emerging Tech Digital Media3
DME	270	Professional Practice Digital Media3
DME	285	Systems Project3
DRA	131	Acting II3
EDU	119	Intro. to Early Childhood Education4
EDU	126	Early Childhood Seminar I2
EDU	131	Child, Family, and Community3
EDU	144	Child Development I3
EDU	145	Child Development II3
EDU	146	Child Guidance3
EDU	151	Creative Activities3
EDU	153	Health, Safety, and Nutrition3
EDU	154	Social/Emotional/Behavioral Dev3
EDU	162	Observation and Assessment in ECE3
EDU	163	Classroom Man. and Instr Techniques3
EDU	184	Early Childhood Intro. Practicum2
EDU	216	Foundations of Education4
EDU	221	Children with Exceptionalities3
EDU	223	Specific Learning Disabilities3
EDU	234	Infant, Toddlers, and Twos3
EDU		Infant, Toddlers, and Twos Lab1
	235	
EDU		School-Age Dev. and Programs3
EDU	243	Learning Theory3
EDU	244	Human Growth/Development3
EDU	245	Policies and Procedures3
EDU	247	Sensory and Physical Disabilities3
EDU	248	Developmental Delays3
EDU	252	Math and Science Activities3
EDU	259	Curriculum Planning3
EDU	261	Early Childhood Administration I3
EDU	262	Early Childhood Administration II3
EDU	271	Educational Technology3
EDU	280	Language and Literacy Experiences3
EDU	281	Inst. Strategies/Reading and Writing3
EDU	284	Early Childhood Capstone Practices4
		Early Childhood Capstone Practices4
EDU	288	Adv. Issues/Early Childhood Education2
EGR	150	Introduction to Engineering2
EGR	210	Intro to Elec/Comp Engineering Lab2
EGR	212	Logic System Design I3
		Logic System Design I
EGR	215	Network Theory I3
EGR	216	Logic and Network Lab1
EGR	220	Engineering Statics3
EGR	225	Engineering Dynamics3
	228	Introduction to Solid Mechanics3
EGR		
EGR	250	Statics/Strength of Materials5
EGR	285	Design Project2
ELC	113	Residential Wiring4
ELC	114	Commercial Wiring4
ELC	115	Industrial Wiring4
ELC	117	Motors and Controls4
ELC	119	NEC Calculations2
ELC	131	Circuit Analysis I4
ELC		Circuit Analysis I Lab1
ELC	133	Circuit Analysis II4
ELC	135	Electrical Machines3
ELC	213	Instrumentation4
	215	Electrical Maintenance3
ELC		
ELN	110	Survey of Electronics3
ELN	131	Analog Electronics I4
ELN	133	Digital Electronics4
ELN	152	Fabrication Techniques2
ELN	232	Introduction to Microprocessors4
ELN	234	Communication Systems4
ELN	260	Programmable Logic Controllers4
		<u> </u>

ENG	126	Creative Writing II3
ENG	243	Major British Writers
EPT	140	EmergencyManagement3
FIP	120	Introduction to Fire Protection3
FIP	124	Fire Prevention and Public Education3
FIP	128	Detection and Investigation3
FIP	132	Building Construction3
FIP	136	Inspections and Codes3
FIP	146	Fire Protection Systems4
FIP	152	Fire Protection Law3
FIP	220	Fire Fighting Strategies3
FIP	221	Advanced Fire Fighting Strategies3
FIP	224	Fire Instructor I and II4
FIP	226	Fire Officer I and II4
FIP	228	Local Government Finance3
FIP	229	
		Fire Dynamics and Combustion3
FIP	230	Chemistry of Hazardous Materials I5
FIP	232	Hydraulics and Water Distribution3
FIP	240	Fire Service Supervision3
FIP	244	Fire Protection Project3
FIP	276	Managing Fire Services3
FRE	111	Elementary French I3
FRE	112	Elementary French II3
FRE	211	Intermediate French I3
FRE	212	Intermediate French II3
GEO	131	Physical Geography I4
GER	111	Elementary German I3
GER	112	Elementary German II3
GER	211	Intermediate German I
	212	Intermediate German II3
GER		
GRD	141	Graphic Design I4
GRO	120	Gerontology3
HEA	110	Personal Health/Wellness3
HEA	112	First Aid and CPR2
HEA	120	Community Health3
HIS	236	North Carolina History3
HMT	110	Introduction to Healthcare Management3
HMT	210	Medical Insurance3
HMT	211	Long-Term Care Administration3
HMT	220	Healthcare Financial Management4
HSE	110	Introduction to Human Services3
HSE	112	Group Process I2
HSE	123	Interviewing Techniques3
HSE	125	Counseling3
HSE	160	HSE Clinical Supervision I1
HSE	163	HSE Clinical Experience I3
HSE	210	Human Services Issues2
	220	
HSE		Case Management3
HSE	225	Crisis Intervention3
HSE	227	Children and Adolescents in Crisis3
HSE	240	Issues in Client Services3
HSE	260	HSE Clinical Supervision II1
HSE	263	HSE Clinical Experience II3
HUM	115	Critical Thinking3
HUM	180	International Cultural Exploration3
HYD	110	Hydraulics/Pneumatics I3
ISC	115	Construction Safety2
ISC	121	Environmental Health and Safety3
LAT	111	Elementary Latin I3
LAT	112	Elementary Latin II
LAT	211	Intermediate Latin I3
LAT	212	Intermediate Latin II
MAC	122	CNC Turning2
MAC	124	CNC Milling2
MAC	232	
	152	CAM: CNC Milling3 Statistical Methods I4
MAT	172	Precalculus Trigonometry3
MAT		Priof Calculus
MAT	263	Brief Calculus3

MAT	271	Calculus I4
MAT	272	Calculus II4
MAT	273	Calculus III4
MAT	280	Linear Algebra3
MAT	285	Differential Equations3
MEC	110	Introduction to CAD/CAM2
MEC	111	Machine Processes I3
MEC	130	Mechanisms3
MEC	145	Manufacturing Materials I3
MED	110	Orientation to Medical Assisting1
MED	118	Medical Law and Ethics2
MED	121	Medical Terminology I3
MED	122	Medical Terminology II3
MED	130	Administrative Office Procedures I2
MED	131	Administrative Office Procedures I2
MED	140	Exam Room Procedures I5
MED		Laboratory Procedures I5
	150	Laboratory Procedures 1
MED	232	Medical Insurance Coding2
MED	260	MED Clinical Practicum5
MED	270	Symptomatology3
MED	272	Drug Therapy3
MKT	120	Principles of Marketing3
MKT	122	Visual Merchandising3
MKT	123	Fundamentals of Selling3
MUS	111	Fundamentals of Music3
MUS	112	Introduction to Jazz3
MUS	121	Music Theory I4
MUS	122	Music Theory II4
MUS	131	Chorus I1
MUS	132	Chorus II1
MUS	133	Band I1
MUS	134	Band II
MUS	135	Jazz Ensemble I
MUS	136	Jazz Ensemble II
MUS	141	Ensemble I
MUS	141	
		Ensemble II
MUS	151	Class Music I
MUS	152	Class Music II1
MUS	161	Applied Music I2
MUS	162	Applied Music II2
MUS	210	History of Rock Music3
MUS	211	History of Country Music3
MUS	221	Music Theory III4
MUS	222	Music Theory IV4
MUS	231	Chorus III1
MUS	232	Chorus IV1
MUS	233	Band III1
MUS	234	Band IV1
MUS	235	Jazz Ensemble III1
MUS	236	Jazz Ensemble IV1
MUS	241	Ensemble III
MUS	242	Ensemble IV
MUS	261	Applied Music III
MUS		Applied Music IV2
	262	
MUS	271	Music History I
MUS	272	Music History II3
NAS	101	Nurse Aide I6
NAS	102	Nurse Aide II6
NAS	103	Home Health Care Nurse Aide6
NET	110	Networking Concepts3
NET	125	Introduction to Networks3
NET	126	Routing Basics3
NET	225	Routing and Switching I3
NET	226	Routing and Switching II3
NOS	110	Operating System Concepts3
NOS	120	Linux/UNIX Single User3
NOS	130	Windows Single User3
NOS	230	Windows Administration I3

			_
NOS	231	Windows Administration II	3
NUR	111	Introduction to Health Concepts	8
NUR	112	Health—Illness Concepts	
NUR	113		
		Family Health Concepts	
NUR	114	Holistic Health Concepts	
NUR	117	Pharmacology	2
NUR	211	Health Care Concepts	
NUR	212	Health System Concepts	
NUR	213	Complex Health Concepts	
OST	134	Text Entry and Formatting	3
OST	135	Advanced Text Entry and Formatting	3
OST	164	Text Editing Applications	
OST	181		
		Introduction to Office Systems	
OST	184	Records Management	3
OST	247	Procedure Coding	2
OST	248	Diagnostic Coding	2
OST	249	CPC Certification	
		Administrative Office Management	7
OST	289		
PED	110	Fit and Well for Life	2
PED	111	Physical Fitness I	1
PED	113	Aerobics I	
PED	117	Weight Training I	
PED	121	Walk, Jog, Run	
PED	122	Yoga I	1
PED	123	Yoga II	
PED	125	Self-Defense: Beginning	
PED	128	Golf—Beginning	Т
PED	130	Tennis—Beginning	
PED	134	Wrestling	1
PED	137	Badminton	
PED	139	Bowling—Beginning	
PED	142	Lifetime Sports	
PED	143	Volleyball—Beginning	1
PED	145	Basketball—Beginning	1
PED	152	Swimming—Beginning	
		Swiffing—beginning	1
PED	153	Swimming—Intermediate	
PED	154	Swimming for Fitness	1
PED	155	Water Aerobics	1
PED	160	Canoeing—Basic	
PED	171		
		Nature Hiking	
PED	175	Horseback Riding I	
PED	176	Horseback Riding II	1
PED	186	Dancing for Fitness	1
PED	216	Indoor Cycling	
PED	217	Pilates I	
PED	219	Disc Golf	1
PED	233	Ju-Jitsu	1
PED	239	Kickboxing	1
PED	252	Officiating/Baseball/Softball	
PED	254	Coaching Basketball	
PED	256	Coaching Baseball	2
PED	257	Coaching Soccer	2
PED	260	Lifeguard Training	
PHY	131	Physics—Mechanics	
PHY	151	College Physics I	4
PHY	152	College Physics II	4
PHY	251	General Physics I	
PHY	252	General Physics II	
PSY	241	Developmental Psychology	
PSY	246	Adolescent Psychology	
PSY	281	Abnormal Psychology	
SAB		Substance Abuse Overview	
	110		
SAB	135	Addictive Process	
SAB	210	Substance Abuse Counseling	3
SEC	110	Security Concepts	
SPA	111	Elementary Spanish I	
SPA	112	Elementary Spanish II	
SPA	211	Intermediate Spanish I	3

SPA	212	Intermediate Spanish II	3
SWK	110	Introduction to Social Work	
SWK	113	Working With Diversity	3
WBL	111	Work-Based Learning I	1
WBL	112	Work-Based Learning I	2
WBL	115	Work-Based Learning Seminar I	1
WBL	121	Work-Based Learning II	1
WEB	110	Internet/Web Fundamentals	3
WEB	140	Web Development Tools	3
WEB	187	Prog for Mobile Devices	3
WEB	210	Web Design	3
WLD	110	Cutting Processes	2
WLD	115	SMAW (Stick) Plate	5
WLD	116	SMAW (Stick) Plate/Pipe	4
WLD	121	GMAW (MIG) FCAW/Plate	4
WLD	122	GMAW (MIG) Plate/Pipe	3
WLD	131	GTAW (TIG) Plate	
WLD	132	GTAW (TIG) Plate/Pipe	3
WLD	141	Symbols and Specifications	3
WLD	151	Fabrication I	4
Total	I C	dit Harris Damrinad for A.A.	C Damma

Total Credit Hours Required for A.A.S. Degree	64
Total Credit Hours Required for Diploma Program	36

# **Health Information Technology**

## A.A.S. Degree [A45360]

**Curriculum Description** 

The Health Information Technology curriculum provides individuals with the knowledge and skills to process, analyze, abstract, compile, maintain, manage, and report health information.

Students will supervise departmental functions; classify, code, and index diagnoses and procedures; coordinate information for cost control, quality management, statistics, marketing, and planning; monitor governmental and non-governmental standards; facilitate research; and design system controls to monitor patient information security.

Graduates of this program may be eligible to write the national certification examination to become a Registered Health Information Technician (RHIT). Employment opportunities include hospitals, rehabilitation facilities, nursing homes, health insurance organizations, outpatient clinics, physicians' offices, hospice, and mental health facilities.

Health Information Technology is an Associate Degree and Diploma program offered in conjunction with Pitt Community College who awards the degree. Students may take courses marked with an asterisk (\*) at Mitchell Community College. All HIT technical courses, excluding professional practice (HIT 124 and HIT 224-clinical courses), are offered online through Pitt Community College. (You must apply for and be formally admitted to the HIT program to take any HIT courses.)

Cours	se a	nd Hour Requirements				
			Class	Lab	Clinic/Exp	Credits
Gene	ral	Education Required Courses				
		Writing and Inquiry	3	0	0	3
		Writing/Research in the Disciplines	3	0	0	3
*HUM	115	Critical thinking	3	0	0	3
*MAT	143	Quantitative Literacy	2	2	0	3
*PSY	150	General Psychology	3	0	0	3
Total	Gei	neral Education Required Hou	ırs	••••••		15
Maio	r Re	equired Courses				
		College Student Success	1	0	0	1
		Anatomy and Physiology I	3	3	0	4
		Anatomy and Physiology II	3	3	0	4
		Basic PC Literacy	1	2	0	2
		Fundamentals of HIM	3	0	0	3
HIT	112	Health Law and Ethics	3	0	0	3
HIT	114	Health Data Systems/Standards	2	3	0	3
HIT	210	Healthcare Statistics	2	2	0	3
HIT	211	ICD Coding	2	6	0	4
		CPT/Other Coding Systems	1	3	0	2
HIT	215	Reimbursement Methodology	1	2	0	2 2 2
		Quality Management	1	3	0	2
		Management Principles in HIT	3	0	0	3
		Health Informatics & EHRs	1	2	0	2
		Healthcare Informatics	3	2	0	4
		Principles of Disease	3	0	0	3 2 3
		Professional Issues	2	0	0	2
		Medical Terminology I	3	0	0	3
		Medical Terminology II	3	0	0	3
OST	248	Diagnostic Coding	2	2	0	3
		onal Practice Experience				
		Professional Practice Experience II	0	0	3	1
HIT	224	Professional Practice Experience IV	0	0	6	2
Total	Ма	jor Required Hours	•••••	•••••	•••••	61
		-				
iotal	Cre	dit Hours Required for A.A.S.	Degree	••••••	•••••	74

# **Healthcare Management Technology**

## A.A.S. Degree [A25200]

#### **Curriculum Description**

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 various certification exams upon completion of the degree with a combination of a minimum of two years administrative experience. Eligible certifications include, but are not limited to, the Professional Association of Healthcare Office Managers (PAHCOM), the Healthcare Financial Management Association (HFMA), the Certified Patient Account Manager (CPAM) and the Certified Manager of Patient Accounts (CMPA) examinations.

Cours	Course and Hour Requirements									
		•	Class	Lab	Clinic/Exp	Credits				
Gene	ral I	Education Required Courses								
		position:								
		Writing and Inquiry	3	0	0	3				
		tion electives:								
COM	110	Introduction to Communication or								
COM	120	Intro to Interpersonal Communication or								
COM	231	Public Speaking	3	0	0	3				
Human	ities/	Fine Arts electives:								
ART	111	Art Appreciation or								
		Cultural Studies or								
		Music Appreciation	3	0	0	3				
		vioral Sciences electives:								
		General Psychology or								
		Introduction to Sociology or								
	213	Sociology of the Family	3	0	0	3				
		s electives:								
	110	Math Measurement & Literacy or								
	143	Quantitative Literacy or	(2	2	0	3)				
MAT	152	Statistical Methods I	3	2	0	4				
Total	Gar	aral Education Paguired Hours				15 16				
iotai	Ger	Total General Education Required Hours15-16								
N/a:a	D.	and its of Constant								
		equired Courses								
ACC	120	Principles of Financial Accounting	3	2	0	4				
ACC ACC	120 121	Principles of Financial Accounting Principles of Managerial Accounting	3	2	0	4				
ACC ACC BUS	120 121 137	Principles of Financial Accounting Principles of Managerial Accounting Principles of Management	3 3	2 0	0	4				
ACC ACC BUS CIS	120 121 137 110	Principles of Financial Accounting Principles of Managerial Accounting Principles of Management Introduction to Computers	3 3 2	2 0 2	0 0 0	4 3 3				
ACC ACC BUS CIS HMT	120 121 137 110 110	Principles of Financial Accounting Principles of Managerial Accounting Principles of Management Introduction to Computers Introduction to Healthcare Management	3 3 2 3	2 0 2 0	0 0 0 0	4 3 3 3				
ACC ACC BUS CIS HMT HMT	120 121 137 110 110 210	Principles of Financial Accounting Principles of Managerial Accounting Principles of Management Introduction to Computers Introduction to Healthcare Management Medical Insurance	3 3 2 3 3	2 0 2 0 0	0 0 0 0	4 3 3 3 3				
ACC ACC BUS CIS HMT HMT	120 121 137 110 110 210 211	Principles of Financial Accounting Principles of Managerial Accounting Principles of Management Introduction to Computers Introduction to Healthcare Management Medical Insurance Long-Term Care Administration	3 3 2 3 3 3	2 0 2 0 0	0 0 0 0 0	4 3 3 3 3 3				
ACC ACC BUS CIS HMT HMT HMT	120 121 137 110 110 210 211 220	Principles of Financial Accounting Principles of Managerial Accounting Principles of Management Introduction to Computers Introduction to Healthcare Management Medical Insurance Long-Term Care Administration Healthcare Financial Management	3 3 2 3 3 4	2 0 2 0 0 0	0 0 0 0 0 0	4 3 3 3 3 3 4				
ACC ACC BUS CIS HMT HMT HMT HMT	120 121 137 110 110 210 211 220 118	Principles of Financial Accounting Principles of Managerial Accounting Principles of Management Introduction to Computers Introduction to Healthcare Management Medical Insurance Long-Term Care Administration Healthcare Financial Management Medical Law and Ethics	3 3 2 3 3 3 4 2	2 0 2 0 0 0 0	0 0 0 0 0 0	4 3 3 3 3 4 2				
ACC ACC BUS CIS HMT HMT HMT HMT MED MED	120 121 137 110 110 210 211 220 118 121	Principles of Financial Accounting Principles of Managerial Accounting Principles of Management Introduction to Computers Introduction to Healthcare Management Medical Insurance Long-Term Care Administration Healthcare Financial Management Medical Law and Ethics Medical Terminology I	3 3 2 3 3 3 4 2 3	2 0 2 0 0 0 0 0	0 0 0 0 0 0 0	4 3 3 3 3 3 4 2 3				
ACC ACC BUS CIS HMT HMT HMT HMT MED MED MED	120 121 137 110 110 210 211 220 118 121 122	Principles of Financial Accounting Principles of Managerial Accounting Principles of Managerial Accounting Principles of Management Introduction to Computers Introduction to Healthcare Management Medical Insurance Long-Term Care Administration Healthcare Financial Management Medical Law and Ethics Medical Terminology I Medical Terminology II	3 3 2 3 3 4 2 3 3	2 0 2 0 0 0 0 0	0 0 0 0 0 0 0 0	4 3 3 3 3 4 2 3 3				
ACC ACC BUS CIS HMT HMT HMT MED MED OST	120 121 137 110 210 211 220 118 121 122 134	Principles of Financial Accounting Principles of Managerial Accounting Principles of Managerial Accounting Principles of Management Introduction to Computers Introduction to Healthcare Management Medical Insurance Long-Term Care Administration Healthcare Financial Management Medical Law and Ethics Medical Terminology I Medical Terminology II Text Entry and Formatting	3 3 2 3 3 4 2 3 3 2	2 0 2 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	4 3 3 3 3 4 2 3 3 3				
ACC ACC BUS CIS HMT HMT HMT MED MED OST	120 121 137 110 110 210 211 220 118 121 122	Principles of Financial Accounting Principles of Managerial Accounting Principles of Managerial Accounting Principles of Management Introduction to Computers Introduction to Healthcare Management Medical Insurance Long-Term Care Administration Healthcare Financial Management Medical Law and Ethics Medical Terminology I Medical Terminology II	3 3 2 3 3 4 2 3 3	2 0 2 0 0 0 0 0	0 0 0 0 0 0 0 0	4 3 3 3 3 4 2 3 3				
ACC ACC BUS CIS HMT HMT HMT HMT MED MED OST OST	120 121 137 110 110 210 211 220 118 121 122 134 181	Principles of Financial Accounting Principles of Managerial Accounting Principles of Management Introduction to Computers Introduction to Healthcare Management Medical Insurance Long-Term Care Administration Healthcare Financial Management Medical Law and Ethics Medical Terminology I Medical Terminology II Text Entry and Formatting Introduction to Office Systems	3 3 2 3 3 4 2 3 3 2	2 0 2 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	4 3 3 3 3 4 2 3 3 3				
ACC ACC BUS CIS HMT HMT HMT HMT MED MED OST OST	120 121 137 110 110 210 211 220 118 121 122 134 181	Principles of Financial Accounting Principles of Managerial Accounting Principles of Management Introduction to Computers Introduction to Healthcare Management Medical Insurance Long-Term Care Administration Healthcare Financial Management Medical Law and Ethics Medical Terminology I Medical Terminology II Text Entry and Formatting Introduction to Office Systems  ment Track	3 3 2 3 3 4 2 3 3 2 2	2 0 2 0 0 0 0 0 0 0 0 2 2 2 2 2 2 2 3 6 6 6 6 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7	0 0 0 0 0 0 0 0 0	4 3 3 3 3 4 2 3 3 3 3 3 3 3 3 3 3 3 3 3				
ACC ACC BUS CIS HMT HMT HMT MED MED OST Mana	120 121 137 110 110 210 211 220 118 121 122 134 181	Principles of Financial Accounting Principles of Managerial Accounting Principles of Management Introduction to Computers Introduction to Healthcare Management Medical Insurance Long-Term Care Administration Healthcare Financial Management Medical Law and Ethics Medical Terminology I Medical Terminology II Text Entry and Formatting Introduction to Office Systems  ment Track Introduction to Business	3 3 2 3 3 3 4 2 2 3 3 2 2	2 0 2 0 0 0 0 0 0 0 0 2 2 2	0 0 0 0 0 0 0 0 0 0	4 3 3 3 3 4 2 3 3 3 3 3 3 3 3 3 3 3 3 3				
ACC ACC BUS CIS HMT HMT HMT HMT MED MED OST OST	120 121 137 110 110 210 211 220 118 121 122 134 181	Principles of Financial Accounting Principles of Managerial Accounting Principles of Managerial Accounting Principles of Management Introduction to Computers Introduction to Healthcare Management Medical Insurance Long-Term Care Administration Healthcare Financial Management Medical Law and Ethics Medical Terminology I Medical Terminology II Text Entry and Formatting Introduction to Office Systems  ment Track Introduction to Business Business Law I	3 3 2 3 3 3 4 2 2 3 3 2 2	2 0 2 0 0 0 0 0 0 0 0 2 2 2	0 0 0 0 0 0 0 0 0 0	4 3 3 3 3 4 2 3 3 3 3 3 3 3 3 3 3 3 3 3				
ACC ACC BUS CIS HMT HMT HMT HMT MED MED OST OST	120 121 137 110 110 211 220 118 121 122 134 181 110 115 153	Principles of Financial Accounting Principles of Managerial Accounting Principles of Managerial Accounting Principles of Management Introduction to Computers Introduction to Healthcare Management Medical Insurance Long-Term Care Administration Healthcare Financial Management Medical Law and Ethics Medical Terminology I Medical Terminology II Text Entry and Formatting Introduction to Office Systems  Track Introduction to Business Business Law I Human Resource Management	3 3 2 3 3 3 4 2 2 3 3 2 2	2 0 2 0 0 0 0 0 0 0 0 2 2 2	0 0 0 0 0 0 0 0 0 0	4 3 3 3 3 4 2 3 3 3 3 3 3 3 3 3 3 3 3 3				
ACC ACC BUS CIS HMT HMT HMT HMT MED MED OST OST	120 121 137 110 210 221 220 118 121 122 134 181 110 115 153 253	Principles of Financial Accounting Principles of Managerial Accounting Principles of Managerial Accounting Principles of Management Introduction to Computers Introduction to Healthcare Management Medical Insurance Long-Term Care Administration Healthcare Financial Management Medical Law and Ethics Medical Terminology I Medical Terminology II Text Entry and Formatting Introduction to Office Systems  ment Track Introduction to Business Business Law I	3 3 2 3 3 3 4 4 2 3 3 3 2 2 2	2 0 2 0 0 0 0 0 0 0 0 0 0 2 2 2	0 0 0 0 0 0 0 0 0 0	4 3 3 3 3 4 2 3 3 3 3 3 3 3 3 3 3 3 3 3				

Tech	nical Track				•
OST	· · · · · · · · · · · · · · · · · · ·		3	0	0 3
OST OST			2	2	0 3
OST		ı	2	2 3	0 3 0 3
Tota	l Credit Hours Required for		Track		12
Tota	l Major Required Hours				53
Tota	l Credit Hours Required for	A.A.S. De	gree	•••••	68-69
	-				
_		_			
Sug	gested Curriculum by S	Semeste	ers		
First \		Cuadita			
ACC	emester 120	Credits			
CIS	110				
HMT					
MED	121 (Fast Track)				
MED	122 (Fast Track)	3			
		16			
Spring	g Semester				
ACC	121	4			
ENG	111	3			
HMT	210	3			
OST	134				
OST	247				
		15			
Sumn	ner Semester				
Huma	nities/Fine Arts:				
ART	111 or				
	120 or	2			
MUS	110	3			
PSY	/Behavioral Sciences: 150 or				
SOC	210 or				
SOC	213	3			
		6			
_	1.4				
	d Year emester	Credits			
	nunication:	Cieuits			
COM	110 or				
COM	120 or				
COM	231	3			
HMT	211	3			
	ematics:				
MAT	110 or	(2)			
MAT MAT	143 or	٠,			
MED	118				
OST	164				
OST	248				
		16-17			
Spring BUS	g Semester 137	2			
HMT BUS	137 220				
OST	181				
OST	249				
	-	14			

Lab Clinic/Exp Credits

Class

# **Human Services Technology**

## A.A.S. Degree [A45380] Certificate Programs [C45380H, C45380SW, C45380SA]

#### **Curriculum Description**

**Course and Hour Requirements** 

Canada Education Daminad Course

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. Students may be awarded a non-degree credential (i.e., certificate, diploma) after completing a specific portion of the Associate degree program.

Class

Lab

Clinic/Exp Credits

Gen	eral	Education Required Courses				
BIO	110	Principles of Biology or				
BIO	111	General Biology I or	3	3	0	4
MAT	143	Quantitative Literacy or	(2	2	0	3)
MAT	171	Precalculus Algebra	(3	2	0	4)
COM	231	Public Speaking	3	0	0	3
ENG	111	Writing and Inquiry	3	0	0	3
ENG	112	Writing/Research in the Disciplines	3	0	0	3
SOC	220	Social Problems	3	0	0	3
		Humanities/Fine Arts Elective	3	0	0	3
		(See page 70 for HFA electives)				
Tota	l Gei	neral Education Required Hou	urs	•••••	••••••	.18-19

Majo	or Re	equired Courses				
CIS	110	Introduction to Computers	2	2	0	3
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	160	HSE Clinical Supervision I	1	0	0	1
HSE	163	HSE Clinical Experience I	0	0	9	3
HSE	210	Human Services Issues	2	0	0	2
HSE	220	Case Management	2	2	0	3
HSE	225	Crisis Intervention	3	0	0	3
HSE	240	Issues in Client Services	3	0	0	3
HSE	260	HSE Clinical Supervision II	1	0	0	1
HSE	263	HSE Clinical Experience II	0	0	9	3
PSY	150	General Psychology	3	0	0	3
PSY	241	Developmental Psychology or				
PSY	281	Abnormal Psychology	3	0	0	3
SAB	110	Substance Abuse Overview	3	0	0	3
SOC	213	Sociology of the Family	3	0	0	3
		Major Electives				9
		(See major electives below)				
HSE HSE HSE PSY PSY PSY SAB	225 240 260 263 150 241 281 110	Crisis Intervention Issues in Client Services HSE Clinical Supervision II HSE Clinical Experience II General Psychology Developmental Psychology or Abnormal Psychology Substance Abuse Overview Sociology of the Family Major Electives	3 3	0 0 0 0	0	3 3 3

Majo	or Ele	ectives	
Select :	9 cred	dits	Credits
DDT	110	Developmental Disabilities	3
GRO	120	Gerontology	3
HSE	227	Children and Adolescents in Crisis.	3
SAB	135	Addictive Process	3
SAB	210	Substance Abuse Counseling	3
SWK	110	3	
SWK	113	Working with Diversity	
Total	l Cre		A.S. Degree71-72
Sug	ges	sted Curriculum by Ser	mesters
First Y			- W.
Fall Se			Credits
CIS			
ENG			
HSE	110		
PSY	150		3
HSE EI			
DDT GRO	110 c		
SAB	135 c		
SWK			2
JVVK	110		15
Spring	Sem	nester	
BIO	110 c	or	
BIO	111 (	or	(4)
MAT	143 c	or	(3)
MAT			
ENG	112		_
HSE			
HSE	225		······································
SOC	220		
			15-16
Summ	er Se	emester	
COM	231		3
PSY	241 c		
PSY			
SOC			
Humai	nities/	/Fine Arts	
			12
Secon	d Yea	ır	
Fall Se			Credits
HSE	112		2
HSE	125		3
HSE	160		1
HSE	163		3
SAB	110		3
HSE EI			
DDT	110 c		
GRO	120 c		
SAB	135 c		2
SWK	110		5

Sub	stand	ce Abuse [C45380SA]	_		•	-
٠.		AL (C45300CA)	Class	Lab	Clinic/Exp	Credits
Iota	ai Cre	edit Hours Required for Cert	ITICATE Prog	gram	••••••	18
		Working with Diversity		•	Ü	-
SWK SWK		Introduction to Social Work	3 3	0	0	3
HSE		Crisis Intervention	3	0	0	3
HSE		Counseling	2	2	0	3
HSE		Interviewing Techniques	2	2	0	3
Soci HSE		ork [C45380SW] Introduction to Human Services	2	2	0	3
			Class	Lab	Clinic/Exp	Credits
Tota	al Cre	edit Hours Required for Cert	ificate Prog	gram	••••••	17
HSE	240	Issues in Client Services	3	0	0	3
HSE	225	Crisis Intervention	3	0	0	3
HSE	125		2	2	0	3
HSE		Group Process I Interviewing Techniques	2	2	0 0	2
HSE HSE		Introduction to Human Services	2 1	2 2	0	3
		Services [C45380H]			_	_
		•	Class	Lab	Clinic/Exp	Credits
Cer	tifica	ate Options				
			15			
SWK	113					
SAB	210	~-				
HSE	227					
HSE	263 lective		3			
HSE	260					
HSE	240		3			
HSE	220		3			
HSE	210		2			
Sprin	g Sem	nester				

Jub	o car ic	e Abuse [CTSSOUSA]				
HSE	110	Introduction to Human Services	2	2	0	3
HSE	123	Interviewing Techniques	2	2	0	3
HSE	125	Counseling	2	2	0	3
HSE	225	Crisis Intervention	3	0	0	3
SAB	110	Substance Abuse Overview	3	0	0	3
SAB	135	Addictive Process or	3	0	0	3
SAB	210	Substance Abuse Counseling	(2	2	0	3)
Tota	l Cre	dit Hours Required for Cer	tificate Prog	ram	•••••••	18

# **Infant/Toddler Care**

### **Certificate Program [C55290]**

#### **Curriculum Description**

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 young children under the supervision of qualified teachers.

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 parents 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.

Course and Hour Requirements  Class Lab Clinic/Exp Cre								
<b>General Education Required (</b> None	_	idss	Lab	Сшисуехр	Credits			
Major Required Courses								
EDU 119 Introduction to Early Child	hood Education	4	0	0	4			
EDU 131 Child, Family, and Commun		3	0	0	3			
EDU 144 Child Development I	,	3	0	0	3			
EDU 153 Health, Safety, and Nutrition	on	3	0	0	3			
EDU 234 Infants, Toddlers, and Twos	5	3	0	0	3			
EDU 234A Infants, Toddlers, and Twos	5	0	2	0	1			
Total Major Required Hours	•••••	••••••	•••••••	•••••••	17			
<b>Total Credit Hours Required f</b>	or Certificate	e Progra	m	•••••	17			

# Information Technology

A.A.S. Degree [A25590N] Networking

A.A.S. Degree [A25590P] Software Development

A.A.S. Degree [A25590S] Service/Support

**Diploma** [D25590]

Certificate Program [C25590C, C25590I and C25590S]

#### **Curriculum Description**

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams. Students may be awarded a non-degree credential (i.e., certificate, diploma) after completing a specific portion of the Associate degree program.

# Information Technology—Networking A.A.S. Degree [A25590N] Course and Hour Requirements

	•	Class	Lab	Clinic/Exp	Credits
Gener	ral Education Required Courses				
	Composition:				
ENG 1	111 Writing and Inquiry	3	0	0	3
Commu	unication:				
COM 2	231 Public Speaking	3	0	3	3
Human	ities/Fine Arts electives:				
ART 1	111 Art Appreciation or				
MUS 1	110 Music Appreciation or				
PHI 2	240 Introduction to Ethics	3	0	0	3
Social/I	Behavioral Sciences electives:				
	(See page 70 for SBS electives)	3	0	0	3
Mather	natics electives:				
MAT :	143 Quantitative Literacy or	2	2	0	3
MAT 1	171 Precalculus Algebra	(3	2	0	4)

## Total General Education Required Hours ......15-16

Maj	or Re	equired Courses				
CIS	110		2	2	0	3
CIS	115	Introduction to Programing and Logic	2	3	0	3
CTI	110	Web, Programming, & Database Foundat	ion2	2	0	3
CTI	120	Network & Security Foundation	2	2	0	3
CTS	115	Information Systems Business Concepts	3	0	0	3
CTS	120	Hardware/Software Support	2	3	0	3
NET	110	Networking Concepts	2	2	0	3
NET	125	Networking Basics	1	4	0	3
NET	126	Routing Basics	1	4	0	3
NET	225	Routing and Switching I	1	4	0	3
NET	226	Routing and Switching II	1	4	0	3
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
NOS	230	Windows Administration I	2	2	0	3
NOS	231	Windows Administration II	2	2	0	3
SEC	110	Security Concepts	2	2	0	3

	I Major Required Hours	•••••	••••••	••••••	51	
Capsto NET	one Course required 289 Networking Project	1	4	0	3	
					co =0	
Tota	I Credit Hours Required for A.A.S	S. Degree	••••••	••••••	69-70	
Sug	gested Curriculum by Sem	esters				
First Y						
CIS	emester Cre 110	edits				
CIS	110					
CTI	120					
NOS	110					
NET	125	3				
		15				
Spring	g Semester					
CTS	115	3				
CTS	120					
NET	110	3				
NET	126	3				
NOS	130	3				
		15				
Summ	ner Semester					
ENG	111	3				
Social	/Behavior Elective					
		6				
Secon	nd Year					
Fall Se	emester Cre	edits				
CIS	115	3				
MAT	143 or					
MAT	171	(4)				
NET	225	_				
NOS	120					
NOS	230	3 <b>3-19</b>				
	<del>-</del> `	- 13				
	g Semester 231	2				
	nities/Fine Arts					
NET	226					
NET	289					
NOS	231					
		15				
				_		
	rmation Technology—Software I	Developme	ent A.A.S	. Degree	[A25590F	Ί
Cou	rse and Hour Requirements	Class	l ala	Clinia/Fran	Cuadita	
Com	aval Education Described Corress	Class	Lab	Clinic/Exp	Credits	
	eral Education Required Courses					
ENG	sh Composition: 111 Writing and Inquiry	3	0	0	3	
	nunication:	3	U	U	3	
	231 Public Speaking	3	0	3	3	
	anities/Fine Arts electives:	<b>J</b>	J	3	3	
ART	111 Art Appreciation or					
MUS	110 Music Appreciation or					
PHI	240 Introduction to Ethics	3	0	0	3	
Social	/Behavioral Sciences electives:					
	(See page 70 for SBS electives)	3	0	0	3	
	ematics electives:	-	_	_	_	
MAT	143 Quantitative Literacy or	2	2	0	3	
MAT	171 Precalculus Algebra	(3	2	0	4) 1 <b>.</b> 1 <b>.</b>	
iota	I General Education Required Ho	urs		•••••	T2-TQ	

B.4.: -		Class	Lab	Clinic/Exp	Credits
	equired Courses		_	_	_
	Introduction to Computers	2	2	0	3
CIS 115	3 3 3	2	3	0	3
	JAVA Programming	2	3	0	3
CTI 110	Web, Programming, & Database Found.	2	2	0	3
CTI 120	Network & Security Foundation	2	2	0	3
CTS 115	Information Systems Business Concepts	3	0	0	3
	Hardware/Software Support	2	3	0	3
DBA 120	• • • • • • • • • • • • • • • • • • • •	2	2	0	3
NET 110	3 3	2	2	0	3
	J 1	2	3	0	3
	Operating Systems Concepts				3
	Windows Single User	2	2	0	3
	Windows Administration I	2	2	0	3
SEC 110	Security Concepts	2	2	0	3
	SHC from the courses listed below:				
CSC 134	C++ Programming	2	3	0	3
CSC 234	Advanced C++ Programming	2	3	0	3
CSC 251	9 9	2	3	0	3
DBA 110	3 3	2	3	0	3
	Graphic Design Tools	2	2	0	3
	. 3	2	2	0	3
	Web Development Tools				2
WEB 151		2	2	0	3
	JAVA Web Programming	2	3	0	3
WEB 187	Programming for Mobile Devices	2	2	0	3
WEB 251	Mobile App Development II	2	2	0	3
fotal M	ajor Required Hours	•••••	••••••	•••••	51
C	C				
•	Course required  Programming Canstone Project or	1	4	0	3
csic 289  Total Cr  Sugge	Course required Programming Capstone Project or edit Hours Required for A.A.S. C sted Curriculum by Semes		4	0	3 <b>69-70</b>
Total Cr Sugge First Year Fall Semes CIS 115 CSC 151 CTI 120 NOS 110 Major Requ	Programming Capstone Project or edit Hours Required for A.A.S. D sted Curriculum by Semes eter Credit uired Elective	Degree ters	•		
Total Cr Sugge First Year Fall Semes CIS 115 CSC 151 CTI 120 NOS 110 Major Requision Spring Sei	Programming Capstone Project or edit Hours Required for A.A.S. Description of the control of the	Degree ters	•		
Total Cr Sugge First Year Fall Semes CIS 115 CSC 151 CTI 120 Major Requires Spring Sequences	Programming Capstone Project or edit Hours Required for A.A.S. E sted Curriculum by Semes ster Credit uired Elective	Degree ters	•		
Total Cr Sugge First Year Fall Semes CIS 115 CSC 151 CTI 120 NOS 110 Major Requ Spring Sei CIS 110 CTI 110 NET 110	Programming Capstone Project or edit Hours Required for A.A.S. Dested Curriculum by Semes eter Credit  uired Elective	Degree  ters  s 3 3 3 3 3 3 3 3 3 3 3	•		
Total Cri Sugge First Year Fall Semes CIS 115 CIS 115 CIS 110 Major Require Spring Sei CIS 110 CII 110 NET 110 NOS 130	Programming Capstone Project or edit Hours Required for A.A.S. Description of the control of the	Degree  ters	•		
Total Cri Sugge First Year Fall Semes CIS 115 CSC 151 CTI 120 Major Require Spring Ser CIS 110 CTI 110 NOS 130 Major Require	Programming Capstone Project or edit Hours Required for A.A.S. Description of the control of the	Degree	•		
Total Cri Sugge First Year Fall Semes CIS 115 CSC 151 CTI 120 Major Require Spring Ser CIS 110 CTI 110 NCS 130 Major Require	Programming Capstone Project or edit Hours Required for A.A.S. Description of the control of the	Degree	•		
Total Cr  Sugge  First Year Fall Semes CIS 115 CSC 151 CTI 120 NOS 110 Major Requ Spring Ser CIS 110 NOS 130 Major Requ	Programming Capstone Project or edit Hours Required for A.A.S. Description of the control of the	Degree	•		
Total Cri Sugge First Year Fall Semes CIS 115 CSC 151 CTI 120 NOS 110 Major Requiration NOS 110 NOS 130 Major Requiration Major Requiratio	Programming Capstone Project or edit Hours Required for A.A.S. Description of the control of the	Degree	•		
Total Cr  Sugge  First Year Fall Semes CIS 115 CSC 151 CTI 120 NOS 110 Major Requiration NOS 130 Major Requiration NOS 130 Major Requiration Major Requirati	Programming Capstone Project or edit Hours Required for A.A.S. Description of the control of the	Degree	•		
Total Crist Year Fall Semes CIS 115 CSC 151 CTI 120 NOS 110 Major Requiration NET 110 NOS 130 Major Requiration Major Requiration NET 110 NOS 130 Major Requiration Major Requ	Programming Capstone Project or edit Hours Required for A.A.S. Description of the control of the	ters	•		
Total Cri Sugge First Year Fall Semes CIS 115 CIS 115 CIS 115 CIS 116 CII 120 Major Requ Spring Sei CII 110 NET 110 NOS 130 Major Requ Major Requ Major Requ Major Requ Major Requ Major Requ Summer S ENG 111 Social/Beh Second Ye Fall Semes DBA 120	Programming Capstone Project or edit Hours Required for A.A.S. E sted Curriculum by Semes  ter Credit  uired Elective	begree	•		
Total Cri Sugge First Year Fall Semes CIS 115 CIS 115 CIS 110 Major Requilibria Spring Sel CIS 110 NOS 110 Major Requilibria Segundar Requilibria Requilibria Social/Beh Second Yee Fall Semes DBA 120 MAT 143	Programming Capstone Project or edit Hours Required for A.A.S. Description of the control of the	Degree	•		
Total Cri Sugge First Year Fall Semes CIS 115 CIS 115 CIS 110 Major Requilibria Spring Sel CIS 110 NOS 130 Major Requilibria Major Requilibria Requilibria Requilibria Scotial/Beh Second Yes Fall Semes DBA 120 MAT 143	Programming Capstone Project or edit Hours Required for A.A.S. Description of the control of the	Degree	•		
Total Cri Sugge First Year Fall Semes CIS 11:5 CIS 15:1 CIS 15:1 CIS 15:1 CIS 11:0 NOS 11:0 Major Requiration NOS 13:0 Major Requiration NOS 13:0 Major Requiration Major Requ	Programming Capstone Project or  edit Hours Required for A.A.S. D  sted Curriculum by Semes  eter Credit  uired Elective	Degree	•		
Total Cr  Sugge  First Year Fall Semes CIS 115 CSC 151 CTI 120 NOS 110 Major Requ  Spring Ser CIS 110 NET 110 NOS 130 Major Requ Major Requ Major Requ  Summer S ENG 111 Social/Beh  Second Ye Fall Semes DBA 120 MAT 143 MAT 171 NOS 230	Programming Capstone Project or  edit Hours Required for A.A.S. D  sted Curriculum by Semes  eter Credit  uired Elective	Degree  ters  s s s s s s s s s s s s s s s s s s	•		

Spring Semester           COM 231           CSC 289           CTS 115           CTS 120           Humanities/FA Elective           1	3 3 3 3			
	Class	Lab	Clinic/Exp	Credits
Database Foundations Certificate [C258] CSC 151 JAVA Programming CSC 251 Advanced JAVA Programming CTI 110 Web, Programming, & Database Found. DBA 110 Database Concepts DBA 120 Database Programming WEB 179 JAVA Web Programming Total Credit Hours Required for Certific	2 2 2 2 2 2 2	3 3 2 3 2 3	0 0 0 0 0	3 3 3 3 3 3
Software Development Foundations Co	ortificato	IC2559	0F1	
CIS 115 Introduction to Programming and Logic CSC 134 C++ Programming CSC 151 JAVA Programming CSC 234 Advanced C++ Programming CSC 251 Advanced JAVA Programming CTI 110 Web,Programming, & Database Found.  Total Credit Hours Required for Certific	2 2 2 2 2 2	3 3 3 3 3 2	0 0 0 0 0	3 3 3 3 3 <b>18</b>
lovo Cortificato (C2EE001)				
Java Certificate [C25590J]  CIS 115 Introductin to Programing and Logic  CSC 151 JAVA Programming  CSC 251 Advanced JAVA Programming  WEB 151 Mobile App Development I  WEB 179 JAVA Web Programming  WEB 251 Mobile App Development II	2 2 2 2 2 2	3 3 2 3	0 0 0 0 0	3 3 3 3
WEB 251 Mobile App Development II  Total Credit Hours Required for Certific	_	_	-	
Mobile Application Development [C25!  DME 115 Graphic Design Tools  WEB 140 Web Development Tools  WEB 151 Mobile App Development I  WEB 179 Java Web Programming  WEB 187 Programming for Mobile Devices  WEB 251 Mobile App Development II  Total Credit Hours Required for Certific	590M] 2 2 2 2 2 2 2 2 2	2 2 2 3 2 2	0 0 0 0 0	3 3 3 3 3
Information Technology—Service/Supp Course and Hour Requirements General Education Required Courses English Composition:	port A.A.	S. Degr	ee [A2559	0S]
ENG 111 Writing and Inquiry Communication:	3	0	0	3
COM 231 Public Speaking  Humanities/Fine Arts electives:  ART 111 Art Appreciation or  MUS 110 Music Appreciation or	3	0	3	3
PHI 240 Introduction to Ethics	3	0	0	3
Social/Behavioral Sciences electives: (See page 70 for SBS electives) Mathematics electives:	3	0	0	3
MAT 143 Quantitative Literacy or MAT 171 Precalculus Algebra	2 (3	2 2	0	3 4)

Total General Education Required Hours ......15-16

Mai	or Da	oguired Courses				
CIS		equired Courses Introduction to Computers	2	2	0	3
CIS	115	Introduction to Computers  Introduction to Programing and Logi		3	0	3
CTI		Web, Programming, & Database Fou		2	0	3
CTI		Network & Security Foundation	2	2	Ö	3
CTS	115			0	0	3
CTS	120	Hardware/Software Support	2	3	0	3
CTS	130	Spreadsheet	2	2	0	3
CTS	155	Tech Support Functions	2	2	0	3
CTS	220	Adv Hard/Software Support	2	3	0	3
DBA	110	•	2	3	0	3
NET	110	Networking Concepts	2	2	0	3
NET		Wireless Technology	2	2	0	3
NOS		Operating Systems Concepts	2	3	0	3
NOS NOS		Linux/UNIX Single User	2 2	2 2	0 0	3
NOS		Windows Single User Windows Administration I	2	2	0	3
SEC	110	Security Concepts	2	2	0	3
		•	=	_	-	
Tota	ıl Ma	jor Required Hours	••••••	••••••	••••••	51
Caps	tone C	ourse required				
CTS		System Support Project	1	4	0	3
Tota	l Cro	dit Hours Required for A.A.S	Degree			69-70
104		art rours required for A.A.	. Degree	••••••	•••••••	05 70
Suc	ages	ted Curriculum by Sem	esters			
		,				
First	Year emest	o., C.,	edits			
CIS	emest 110					
CIS	115					
CTI	110					
CTI	120					
NOS	110					
			15			
Sprin	g Sem	ester				
CTS	115		3			
CTS	120		3			
CTS	130		3			
NET	110		3			
NOS	130					
			15			
Sumr	ner Se	mester				
ENG	111					
Socia	l/Beha	vior Elective				
			6			
Seco	nd Yea	r				
Fall S	emest	er Cro	edits			
CTS	220		3			
DBA	110					
MAT		or				
MAT	171					
NOS	120					
NOS	230					
SEC	110		3 <b>18</b>			
٠.						
Sprin COM	g <b>Sem</b> 231	ester	3			
CTS	155					
CTS	289					
NET	175					
		/FA Elective				
			15			

# Information Technology Diploma [D25590]

	Class	Lab	Clinic/Exp	Credits
CIS 110 Introduction to Computers	2	2	0	3
CIS 115 Introduction to Programing and Logic	2	3	0	3
COM 231 Public Speaking	3	0	3	3
CTI 110 Web, Programming, & Database Found		2	0	3
CTI 120 Network & Security Foundation	2	2	0	3
CTS 115 Information Systems Business Concept		0	0	3
CTS 120 Hardware/Software Support	2	3	0	3
DBA 110 Database Concepts	2	3	0	3
ENG 111 Writing and Inquiry	3	0	0	3
NET 110 Networking Concepts	2	2	0	3
NOS 110 Operating Systems Concepts NOS 130 Windows Single User	2 2	3 2	0 0	3
3	2	2	0	3 3
	2	2	0	3
				42
Total Credit Hours Required for Diplo	na Progr	dIII	••••••	42
Certificate Option				
•	Class	Lab	Clinic/Exp	Credits
Cisco Certificate [C25590C]				
CTI 120 Network & Security Foundation	2	2	0	3
NET 110 Networking Concepts	2	2	0	3
NET 125 Networking Basics	1	4	0	3
NET 126 Routing Basics	1	4	0	3
NET 225 Routing and Switching I	1	4	0	3
NET 226 Routing and Switching II	1	4	0	3
<b>Total Credit Hours Required for Certifi</b>	cate Pro	aram		18
		<b>J</b>		
<b>Information Technology Foundations</b>	Certifica	to ICSEE	OOTI	
		ie [C255:	ווטכ	
CIS 110 Introduction to Computers	2	د <b>و رح</b> 255: 2	0	3
CIS 110 Introduction to Computers CTI 110 Web, Programming, & Database Found	2 I. 2	2 2		3
	2 I. 2 2	2 2 2	0	3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept	2 I. 2 2 s 3	2 2 2 2	0 0 0 0	3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support	2 I. 2 2 s 3 2	2 2 2 0 3	0 0 0 0 0	3 3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts	2 d. 2 2 s 3 2 2	2 2 2 0 3 3	0 0 0 0 0	3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support	2 d. 2 2 s 3 2 2	2 2 2 0 3 3	0 0 0 0 0	3 3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certification	s 3 2 2 (cate Pro	2 2 2 0 3 3	0 0 0 0 0	3 3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certificate  Operating Systems Certificate [C2559]	i. 2 2 3 2 2 (cate Pro	2 2 2 0 3 3 3	0 0 0 0 0 0	3 3 3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certificate   C2559 CTS 115 Information Systems Business Concept	1. 2 2 2 3 3 2 2 2 (cate Pro	2 2 2 0 3 3 3 <b>gram</b>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 <b>18</b>
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certificate Operating Systems Certificate [C2559] CTS 115 Information Systems Business Concept NOS 110 Operating Systems Concepts	2 2 3 3 2 2 2 (icate Pro	2 2 2 0 3 3 3 <b>gram</b>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 <b>18</b>
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certificate  Operating Systems Certificate [C2559] CTS 115 Information Systems Business Concept NOS 110 Operating Systems Concepts NOS 120 Linux/UNIX Single User	1. 2 2 2 3 3 2 2 2 5 (cate Pro	2 2 2 0 3 3 3 <b>gram</b>	0 0 0 0 0 0	3 3 3 3 3 <b>18</b>
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certificate CTS 115 Information Systems Business Concept NOS 110 Operating Systems Concepts NOS 120 Linux/UNIX Single User NOS 130 Windows Single User	i. 2 2 3 3 2 2 2 2 (icate Pro	2 2 2 0 3 3 3 <b>gram</b>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 <b>18</b> 3 3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certificate CTS 115 Information Systems Business Concept NOS 110 Operating Systems Concept NOS 120 Linux/UNIX Single User NOS 130 Windows Single User NOS 230 Windows Administration I	i. 2 2 3 3 2 2 2 2 2 2 5 5 3 2 2 2 5 5 3 2 2 2 2	2 2 2 0 3 3 3 <b>gram</b>	0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certificate Information Systems Business Concept CTS 115 Information Systems Business Concept NOS 110 Operating Systems Concepts NOS 120 Linux/UNIX Single User NOS 130 Windows Single User NOS 230 Windows Administration I NOS 231 Windows Administration II	i. 2 2 3 3 2 2 2 2 2 2 5 5 3 2 2 2 5 5 3 2 2 2 2	2 2 2 0 3 3 3 <b>gram</b>	0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certificate CTS 115 Information Systems Business Concept NOS 110 Operating Systems Concept NOS 120 Linux/UNIX Single User NOS 130 Windows Single User NOS 230 Windows Administration I	i. 2 2 3 3 2 2 2 2 2 2 5 5 3 2 2 2 5 5 3 2 2 2 2	2 2 2 0 3 3 3 <b>gram</b>	0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certificate Information Systems Business Concept CTS 115 Information Systems Business Concept NOS 110 Operating Systems Concepts NOS 120 Linux/UNIX Single User NOS 130 Windows Single User NOS 230 Windows Administration I NOS 231 Windows Administration II	i. 2 2 3 3 2 2 2 icate Pro	2 2 2 0 3 3 3 <b>gram</b>	0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certificate IC2559 CTS 115 Information Systems Business Concept NOS 110 Operating Systems Concepts NOS 120 Linux/UNIX Single User NOS 130 Windows Single User NOS 230 Windows Administration I NOS 231 Windows Administration II  Total Credit Hours Required for Certificate IC2559 Total Credi	i. 2 2 3 3 2 2 2 icate Pro	2 2 2 0 3 3 3 <b>gram</b>	0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certificate [C2559] CTS 115 Information Systems Business Concept NOS 110 Operating Systems Concepts NOS 120 Linux/UNIX Single User NOS 130 Windows Single User NOS 230 Windows Administration I NOS 231 Windows Administration II  Total Credit Hours Required for Certificate [T1]  Thelp Desk Foundations Certificate [T2559]	i. 2 2 3 3 2 2 5 6 6 6 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	2 2 2 0 3 3 3 <b>gram</b>	0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certificate Information Systems Business Concept Operating Systems Certificate IC2559 CTS 115 Information Systems Business Concept NOS 110 Operating Systems Concepts NOS 120 Linux/UNIX Single User NOS 130 Windows Single User NOS 230 Windows Administration I NOS 231 Windows Administration II Total Credit Hours Required for Certificate ICTS 120 Hardware/Software Support	2 2 2 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 0 3 3 3 <b>gram</b>	0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certificate Information Systems Business Concept CTS 115 Information Systems Business Concept NOS 110 Operating Systems Business Concept NOS 120 Linux/UNIX Single User NOS 130 Windows Single User NOS 230 Windows Administration I NOS 231 Windows Administration II Total Credit Hours Required for Certificate  THelp Desk Foundations Certificate I CTS 120 Hardware/Software Support CTS 155 Tech Support functions	icate Process  (C25590H	2 2 2 0 3 3 3 <b>gram</b>	0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certificate Information Systems Business Concept NOS 115 Information Systems Business Concept NOS 110 Operating Systems Concepts NOS 120 Linux/UNIX Single User NOS 130 Windows Single User NOS 230 Windows Administration I NOS 231 Windows Administration II Total Credit Hours Required for Certificate  THelp Desk Foundations Certificate I CTS 120 Hardware/Software Support CTS 155 Tech Support functions CTS 220 Adv Hard/Software Support	i. 2 2 3 3 2 2 5 5 6 6 6 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8	2 2 2 2 0 0 3 3 3 3 3 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certificate IC2559 CTS 115 Information Systems Business Concept NOS 110 Operating Systems Concepts NOS 120 Linux/UNIX Single User NOS 130 Windows Single User NOS 230 Windows Administration I NOS 231 Windows Administration II  Total Credit Hours Required for Certificate ICTS 120 Hardware/Software Support CTS 120 Hardware/Software Support CTS 120 Adv Hard/Software Support NET 110 Networking Concepts	icate Process  (C25590H	2 2 2 0 3 3 3 <b>gram</b>	0 0 0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
CTI 110 Web, Programming, & Database Found CTI 120 Network & Security Foundation CTS 115 Information Systems Business Concept CTS 120 Hardware/Software Support NOS 110 Operating Systems Concepts  Total Credit Hours Required for Certificate Information Systems Business Concept CTS 115 Information Systems Business Concept NOS 110 Operating Systems Concepts NOS 120 Linux/UNIX Single User NOS 130 Windows Single User NOS 230 Windows Administration I NOS 231 Windows Administration II Total Credit Hours Required for Certificate Information II  Tot	i. 2 2 3 3 2 2 5 5 6 6 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8	2 2 2 0 3 3 3 <b>gram</b> 0 3 2 2 2 2 2 2 2 2 2 3 3 3	0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

# Manicuring/Nail Technology

## **Certificate Program [C55400]**

#### **Curriculum Description**

The Manicuring/Nail Technology curriculum provides competency-based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the nail technology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional nail technology, business/computer principles, product knowledge, and other related topics.

Graduates should be prepared to take the North Carolina Cosmetology State Board Licensing Exam and upon passing be licensed and qualify for employment in beauty and nail salons, as a platform artist, and in related businesses.

Course and Hour Requirements	Class	Lab	Clinic/Exp	Credits
<b>General Education Required Cours</b> None		Lab	Сшистехр	credits
Major Required Courses				
COS 121 Manicure/Nail Technology I	4	6	0	6 6
COS 222 Manicure/Nail Technology II	4	6	0	6
Other Required courses				
BUS 110 Introduction to Business	3	0	0	3
BUS 270 Professional Development	3	0	0	3
Total Major Required Hours	***************************************	**************	••••••	18
Total Credit Hours Required for Ce	ertificate Prog	ıram	•••••	18

# **Mechanical Engineering Technology**

## A.A.S. Degree [A40320] Certificate Programs [C40320A, C40320C, C40320F and C40320M]

This program has two tracks- the Technical Track and the UNCC Transfer Track. The Technical Track is designed to give you the education and skills needed to get a job as a Mechanical Engineering technician/technologist in the local Mechanical, Manufacturing, and Drafting industry's as well as many other similar job opportunities. The UNCC Transfer Track is designed to transfer in UNCC to get a bachelor's degree in Mechanical Engineering Technology (2+2 Program). Graduates who complete their bachelor's degree in Mechanical Engineering Technology at UNCC should qualify for employment as a Mechanical/Manufacturing engineer and will have many other career paths to choose from. UNCC graduates that finish Mitchell Community Colleges program first will have an associate's degree that will compliment there UNCC degree. This makes you more desirable to employers!

#### **Curriculum Description**

These curriculums are designed to prepare students through the study and application of principles from mathematics, Natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, Natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, industrial and technology managers, or research technicians.

A course of study that prepares the students to use basic engineering principles and technical skills to design, develop, test, and troubleshoot projects involving mechanical systems. Includes instruction in principles of mechanics, applications to specific engineering systems, design testing procedures, prototype and operational testing and inspection procedures, manufacturing system-testing procedures, test equipment operation and maintenance, computer applications, critical thinking, planning and problem solving, and oral and written communications. Graduates of the curriculum will find employment opportunities in the manufacturing or service sectors of engineering technology. Engineering technicians may obtain professional certification by application to organizations such as ASQC, SME, and NICET. Students may be awarded a non-degree credential (i.e., certificate, diploma) after completing a specific portion of the Associate degree program.

# Course and Hour Requirements TECHNICAL TRACK

ILC	41	CAL HACK			<b></b>	
			Class	Lab	Clinic/Exp	Credits
Gen	eral I	Education Required Courses				
COM	110	Introduction to Communication or				
COM	231	Public Speaking	3	0	0	3
ENG	111	Writing and Inquiry	3	0	0	3
MAT	171	Precalculus Algebra	3	0	0	3
MAT	172	Precalculus Trigonometry	3	2	0	4
		Humanities/Fine Arts Elective	3	0	0	3
		(See page 70 for HFA electives)				
		Social/Behavioral Sciences Elective	3	0	0	3
		(See page 70 for SBS electives)				
Tota	l Gei	neral Education Required Hour	c			19
IOta	ı GCı	ierai Ladaation Required Flour	J	••••••	••••••	±3
Mai	au Da	autired Courses				
		equired Courses	2	2	0	2
DDF		Advanced Solid Modeling	2	2	0	3
DFT	151	CAD I (High School Articulation only) or	2	3	0	3
DFT	152	CAD II	2	3	0	3
DFT	153	CAD III	2	3	0	3
EGR		Statics/Strength of Materials	4	3	0	5
ELC	131	Circuit Analysis	3	3	0	4
HYD	110	Hydraulics/Pneumatics I	2	3	0	3
ISC	112	Industrial Safety	2	0	0	2
MAC	122	CNC Turning	1	3	0	2
MAC	124	CNC Milling	1	3	0	2
MAC	232	CAM: CNC Milling	1	4	0	3
MEC	110	Introduction to CAD/CAM	1	2	0	2
MEC	111	Machine Processes I	1	4	0	3

MEC 130 Mechanisms MEC 145 Manufacturing Materials I PHY 151 College Physics I Major Electives (See major electives)  Total Major Required Hours	2 2 3	2		3 3 4 2-4 <b>50-52</b>
Major Electives  Select 2-4 credits  WLD 110 Cutting Processes  WLD 115 SMAW (Stick) Plate  WLD 121 GMAW (MIG) FCAW/Plate  WLD 131 GTAW (TIG) Plate  WLD 141 Symbols and Specifications	2 5 4			
Technical Track Total Credit Hours R	equired for	A.A.S. De	egree	70-74
Suggested Curriculum by Sem	nesters fo	r Techni	cal Trac	:k
Applies to day offerings. Due to time restraints, esemester.	evening student	ts should exp	ect to have	fewer offerings each
First Year				

First \		
Fall S	emest	er Credits
DFT	151	3
MAT	171	4
MEC	110	2
MEC	111	3
Major	Electi	ve2-4
		14-16
Sprin	g Sem	ester
DFT	152	3
ELC	131	4
MAT	172	4
MEC	130	3
MEC	145	3
		17
Sumn	ner Se	mester
COM	110	or
COM	231	3
Huma	nities/	Fine Arts3
Social	/Beha	vioral Sciences3
		9
Secon	ıd Yea	r
Fall S	emest	er Credits
DFT	153	or
DFT	170	3
EGR	250	5
ENG	111	3
MAC	124	2
PHY	151	4
		17
Sprin	g Sem	ester
DDF	252	3
HYD	110	3
ICC	112	2

## **Course and Hour Requirements**

ISC

112 .....2 MAC 122 ......2 MAC 232 .....3

#### **UNCC TRANSFER TRACK** Class Lab Clinic/Exp Credits General Education Required Courses COM 110 Introduction to Communication or COM 231 Public Speaking 0 3 (Students transferring to a 4-year institution should take COM 231) ENG 111 Writing and Inquiry 3 0 3 MAT 171 Precalculus Algebra 3 Humanities/Fine Arts Elective 0 3 (See page 70 for HFA electives) 3 Social/Behavioral Sciences Elective 0 3 (See page 70 for SBS electives) Total General Education Required Hours ......16 **Major Required Courses** 2 3 0 2 3 0 2 3 0 2 2 0 4 3 0 3 3 0 2 3 0 1 3 0 1 3 0 1 3 0 1 2 0 1 2 0 1 4 0 2 2 0 2 3 0 CSC 134 C++ Programming 3 151 CAD I 3 0 0 0 0 0 153 CAD III OR DFT (3) 170 Engineering Graphics EGR 250 Statics/Strength of Materials ELC 131 Circuit Analysis HYD 110 Hydraulics/Pneumatics I MAC 122 CNC Turning MAC 124 CNC Milling 2 MAT 172 Precalculus Trigonometry MEC 110 Introduction to CAD/CAM 2 MEC 111 Machine Processes I MEC 130 Mechanisms MEC 145 Manufacturing Materials I PHY 151 College Physics I PHY 152 College Physics II Major Electives 3-4 (See major electives below) Total Major Required Hours......51-52 **Major Electives** Select 3-4 credits DDF 252 Advanced Solid Modeling.....3 MAC 232 CAM: CNC Milling.....3 MAT 271 Calculus I.....4 **College Transfer Track** Total Credit Hours Required for A.A.S. Degree .......67-68

Suggested Curriculum by Semesters for College Transfer Track

Applies to day offerings. Due to time restraints, evening students should expect to have fewer offerings each semester.

First Year				
Fall Semester	Credits			
DFT 151	3			
ENG 111	3			
MAT 171	4			
MEC 110	2			
MEC 111	3			
	15			
Spring Semester				
ELC 131	4			
HYD 110	_			
MAT 172	4			
MEC 130	_			
MEC 145	3			
	17			
Summer Semester				
Humanities/Fine Arts	3			
Social/Behavioral Sciences				
Social/ beriavioral Sciences	6			
Second Year	Cradita			
Fall Semester CSC 134	Credits			
DFT 153 OR	2			
DFT 170				
EGR 250				
MAC 124PHY 151				
PHY 151	43 <b>17</b>			
	17			
Spring Semester				
COM 110 or				
COM 221				
COM 231	3			
MAC 122				
	2			
MAC 122 PHY 152	2 4			
MAC 122	2 4			
MAC 122 PHY 152 Major Electives	2 4 3-4			
MAC 122 PHY 152 Major Electives	2 4 3-4			
MAC 122 PHY 152	2 4 3-4	Lab	Clinic/Exp	Credits
MAC 122 PHY 152 Major Electives  Certificate Options	243-4 12-13	Lab	Clinic/Exp	Credits
MAC 122 PHY 152 Major Electives  Certificate Options  Manufacturing Certificate [C403]	2			
MAC 122 PHY 152 Major Electives  Certificate Options  Manufacturing Certificate [C403 DFT 151 CAD1	243-43-43-2 Class 20A]	3	0	3
MAC 122 PHY 152 Major Electives  Certificate Options  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR	2 	3 3	0 0	3 (3)
MAC 122 PHY 152 Major Electives  Certificate Options  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics	243-4 12-13  Class 20A]  2 2 2	3 3 2	0 0 0	3 (3) 3
MAC 122 PHY 152 Major Electives  Certificate Options  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics MAC 122 CNC Turning		3 3 2 3	0 0 0 0	3 (3) 3 2
MAC 122 PHY 152 Major Electives  Major Electives  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling		3 3 2 3 3	0 0 0 0	3 (3) 3 2 2
MAC 122 PHY 152 Major Electives  Certificate Options  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling MEC 110 Introduction to CAD/CAM		3 3 2 3 3 2	0 0 0 0 0	3 (3) 3 2 2 2
MAC 122 PHY 152 Major Electives  Certificate Options  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling MEC 110 Introduction to CAD/CAM MEC 111 Machine Processes I		3 3 2 3 3 2 4	0 0 0 0 0	3 (3) 3 2 2 2 2 3
MAC 122 PHY 152 Major Electives  Certificate Options  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling MEC 110 Introduction to CAD/CAM MEC 111 Machine Processes I MEC 145 Manufacturing Materials I		3 3 2 3 3 2 4 3	0 0 0 0 0 0	3 (3) 3 2 2 2 2 3 3
MAC 122 PHY 152 Major Electives  Certificate Options  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling MEC 110 Introduction to CAD/CAM MEC 111 Machine Processes I		3 3 2 3 3 2 4 3	0 0 0 0 0 0	3 (3) 3 2 2 2 2 3
MAC 122 PHY 152 Major Electives  Certificate Options  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling MEC 110 Introduction to CAD/CAM MEC 111 Machine Processes I MEC 145 Manufacturing Materials I  Total Credit Hours Required for C		3 3 2 3 3 2 4 3	0 0 0 0 0 0	3 (3) 3 2 2 2 2 3 3
MAC 122 PHY 152 Major Electives  Major Electives  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling MEC 110 Introduction to CAD/CAM MEC 111 Machine Processes I MEC 145 Manufacturing Materials I  Total Credit Hours Required for CAD CAD Drafting Certificate [C40320]	Class  20A]  2 2 2 1 1 1 1 2  Certificate Pro  0C]	3 3 2 3 3 2 4 3 gram	0 0 0 0 0 0 0	3 (3) 3 2 2 2 2 3 3 3
MAC 122 PHY 152 Major Electives  Certificate Options  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling MEC 110 Introduction to CAD/CAM MEC 111 Machine Processes I MEC 145 Manufacturing Materials I  Total Credit Hours Required for C CAD Drafting Certificate [C40320] DDF 252 Advanced Solid Modeling	2	3 3 2 3 3 2 4 3 <b>gram</b>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 (3) 3 2 2 2 3 3 3 <b> 15</b>
MAC 122 PHY 152 Major Electives  Certificate Options  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD II OR DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling MEC 110 Introduction to CAD/CAM MEC 111 Machine Processes I MEC 145 Manufacturing Materials I  Total Credit Hours Required for C CAD Drafting Certificate [C40320 DFF 252 Advanced Solid Modeling DFT 151 CAD I (High School Articulation)	Class  20A]  Class  20A]  2 2 2 2 1 1 1 1 2  Certificate Pro  OC] 2 only) 2	3 3 2 3 3 2 4 3 <b>gram</b>	0 0 0 0 0 0 0 0	3 (3) 3 2 2 2 3 3 3 <b> 15</b>
MAC 122 PHY 152 Major Electives  Major Electives  Manufacturing Certificate [C403 DFT 151 CAD I DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling MEC 110 Introduction to CAD/CAM MEC 111 Machine Processes I MEC 145 Manufacturing Materials I  Total Credit Hours Required for C  CAD Drafting Certificate [C40320 DDF 252 Advanced Solid Modeling DFT 151 CAD I (High School Articulation DFT 152 CAD II	Class  20A]  Class  20A]  2 2 2 1 1 1 1 2  Certificate Pro  OC]  only)  2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 2 3 3 2 4 3 3 <b>gram</b>	0 0 0 0 0 0 0 0	3 (3) 3 2 2 2 3 3 3 <b>15</b>
MAC 122 PHY 152 Major Electives  Major Electives  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling MEC 110 Introduction to CAD/CAM MEC 111 Machine Processes I MEC 145 Manufacturing Materials I Total Credit Hours Required for C CAD Drafting Certificate [C40320 DDF 252 Advanced Solid Modeling DFT 151 CAD I (High School Articulation DFT 152 CAD III DFT 153 CAD III OR	Class  20A]  Class  20A]  2 2 2 1 1 1 1 2  Certificate Pro  OC]  only)  2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 2 3 3 2 4 3 3 <b>gram</b>	0 0 0 0 0 0 0 0	3 (3) 3 2 2 2 2 3 3 3 <b>15</b>
MAC 122 PHY 152 Major Electives  Major Electives  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling MEC 110 Introduction to CAD/CAM MEC 111 Machine Processes I MEC 145 Manufacturing Materials I  Total Credit Hours Required for C  CAD Drafting Certificate [C40320 DF 252 Advanced Solid Modeling DFT 151 CAD I (High School Articulation DFT 152 CAD II DFT 153 CAD III OR DFT 170 Engineering Graphics OR	Class  Class  20A]  2 2 2 1 1 1 1 1 2  Certificate Pro  OC]  only)  2 2 2 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 2 3 3 2 4 3 <b>gram</b>	0 0 0 0 0 0 0 0	3 (3) 3 2 2 2 2 3 3 3 <b>15</b>
MAC 122 PHY 152 Major Electives  Major Electives  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling MEC 110 Introduction to CAD/CAM MEC 111 Machine Processes I MEC 145 Manufacturing Materials I  Total Credit Hours Required for C  CAD Drafting Certificate [C40320 DF 252 Advanced Solid Modeling DFT 151 CAD I (High School Articulation DFT 152 CAD III OR DFT 170 Engineering Graphics OR MEC 110 Introduction to CAD/CAM	Class  Class  20A]  2 2 2 1 1 1 1 1 2  Certificate Pro  OC]  only)  2 2 2 1 1 1 2  Certificate Pro  OC] 1 2 2 2 1 1 1 1 2 1 1 1 2 1 1 1 1 2 1 1 1 1 1 1 1 2 1	3 3 2 3 3 2 4 3 <b>gram</b>	0 0 0 0 0 0 0 0	3 (3) 3 2 2 2 2 3 3 3 <b>15</b>
MAC 122 PHY 152 Major Electives  Major Electives  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling MEC 110 Introduction to CAD/CAM MEC 111 Machine Processes I MEC 145 Manufacturing Materials I  Total Credit Hours Required for C  CAD Drafting Certificate [C40320 DF 252 Advanced Solid Modeling DFT 151 CAD I (High School Articulation DFT 152 CAD II DFT 153 CAD III OR DFT 170 Engineering Graphics OR	Class  Class  20A]  2 2 2 1 1 1 1 1 2  Certificate Pro  OC]  only)  2 2 2 1 1 1 2  Certificate Pro  OC] 1 2 2 2 1 1 1 1 2 1 1 1 2 1 1 1 1 2 1 1 1 1 1 1 1 2 1	3 3 2 3 3 2 4 3 <b>gram</b>	0 0 0 0 0 0 0 0	3 (3) 3 2 2 2 2 3 3 3 <b>15</b>
MAC 122 PHY 152 Major Electives  Major Electives  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling MEC 110 Introduction to CAD/CAM MEC 111 Machine Processes I MEC 145 Manufacturing Materials I  Total Credit Hours Required for C CAD Drafting Certificate [C40320 DF 252 Advanced Solid Modeling DFT 151 CAD I (High School Articulation DFT 152 CAD III DFT 153 CAD III OR DFT 170 Engineering Graphics OR MEC 110 Introduction to CAD/CAM  Total Credit Hours Required for C	Class  20A]  Class  20A]  2 2 2 1 1 1 1 2  Certificate Pro  OC]  only)  2 2 2 1 Certificate Pro  Certificate Pro  Cortificate Pro  Cortificate Pro  Certificate	3 3 2 3 3 2 4 3 <b>gram</b>	0 0 0 0 0 0 0 0	3 (3) 3 2 2 2 2 3 3 3 <b>15</b>
MAC 122 PHY 152 Major Electives  Major Electives  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling MEC 110 Introduction to CAD/CAM MEC 111 Machine Processes I MEC 145 Manufacturing Materials I  Total Credit Hours Required for C CAD Drafting Certificate [C40320] DFT 151 CAD I (High School Articulation DFT 152 CAD III DFT 153 CAD III OR DFT 170 Engineering Graphics OR MEC 110 Introduction to CAD/CAM Total Credit Hours Required for C	Class  20A]  Class  20A]  2 2 2 1 1 1 1 2  Certificate Pro  OC]  only)  2 2 2 1 Certificate Pro  CFI	3 3 2 3 3 2 4 3 3 <b>gram</b>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 (3) 3 2 2 2 2 3 3 3 <b>15</b>
MAC 122 PHY 152 Major Electives  Major Electives  Manufacturing Certificate [C403 DFT 151 CAD I DFT 153 CAD III OR DFT 170 Engineering Graphics MAC 122 CNC Turning MAC 124 CNC Milling MEC 110 Introduction to CAD/CAM MEC 111 Machine Processes I MEC 145 Manufacturing Materials I  Total Credit Hours Required for C CAD Drafting Certificate [C40320 DF 252 Advanced Solid Modeling DFT 151 CAD I (High School Articulation DFT 152 CAD III DFT 153 CAD III OR DFT 170 Engineering Graphics OR MEC 110 Introduction to CAD/CAM  Total Credit Hours Required for C	Class  20A]  Class  20A]  2 2 2 1 1 1 1 2  Certificate Pro  OC]  only)  2 2 2 1 Certificate Pro  Conly)  2 2 2 2 1 Certificate Pro  Oci  Oci  Only)  2 2 2 2 1 Certificate Pro  Oci  Oci  Oci  Oci  Oci  Oci  Oci  Oc	3 3 2 3 3 2 4 3 <b>gram</b>	0 0 0 0 0 0 0 0	3 (3) 3 2 2 2 2 3 3 3 <b>15</b>

DFT DFT MEC MEC WLD WLD	153 170 110 111 110 121	CAD III OR Engineering Graphics Introduction to CAD/CAM Machine Processes I Cutting Processes GMAW (MIG) FCAW/Plate dit Hours Required for Certific	2 2 1 1 1 2	3 2 2 4 3 6	0 0 0 0 0	3 2 3 2 4	
iota	Cie	ait riours required for certific	ate Fit	grain	•••••	1	
Mac	hinir	ng Certificate [C40320M]					
DFT	151	0, 12 1	2	3	0	3	
DFT	153	CAD III OR	2	3	0	3	
DFT	170	Engineering Graphics OR	2	2	0	3	
MAC	122	CNC Turning	1	3	0	2	
MAC	124	CNC Milling	1	3	0	2	
MAC	232	CAM: CNC Milling	1	4	0	3	
MEC	110	Introduction to CAD/CAM	1	2	0	2	
MEC	111	Machine Processes I	1	4	0	3	
MEC	145	Manufacturing Materials I	2	3	0	3	
Tota	Total Credit Hours Required for Certificate Program						

# **Mechatronics Engineering Technology**

## A.A.S Degree [A40350]

#### **Curriculum Description**

The Mechatronics Engineering Technology curriculum prepares students to use basic engineering principles and technical skills in developing and testing automation systems including, electrical, electronic, servo, mechanical, fluid power, and other electromechanical systems.

Courses emphasize instruction in prototype testing, manufacturing and operational testing, systems analysis and maintenance procedures with an emphasis on automated systems startup, maintenance, and troubleshooting at the systems level.

Graduates should be qualified for employment in industrial maintenance and manufacturing including assembly, testing, startup, troubleshooting, repair, process improvement, and control systems, and should qualify to sit for Packaging Machinery Manufacturers Institute (PMMI) mechatronics or similar industry examinations. Students may be awarded a non-degree credential (i.e., certificate, diploma) after completing a specific portion of the Associate degree program.

#### **Course and Hour Requirements**

Cou	se a	na nour requirements	Class	Lab	Clinic/Exp	Credits
Gen	aral I	Education Required Courses				
COM		Introduction to Communication or				
COM		Intro to Interpersonal Communication or				
COM	231	Public Speaking	3	0	0	3
ENG		Writing and Inquiry	3	0	Ō	3
HUM		Critical Thinking	3	0	0	3
MAT		Precalculus Algebra	2	2	0	3
PSY	150	General Psychology	3	0	0	3
Tota	l Ger	neral Education Required Hours	S			15
		iciai zaacationi required i ioai.		••••••	••••••	
Maio	or Re	equired Courses				
ATR	112		2	3	0	3
ATR	214	Advanced PLCs	3	3	0	4
CIS	110	Introduction to Computers	2	2	0	3
DFT	170	Engineering Graphics	2	3	0	3
ELC	117	Motor and Controls	2	6	0	4
ELC	131	Circuit Analysis I	3	3	0	4
ELC		Circuit Analysis I Lab	0	3	0	1
ELC	133	Circuit Analysis II	3	3	0	4
ELC	213	Instrumentation	3	2	0	4
ELC		Electrical Maintenance	2	3	0	3
ELN		Digital Electronics	3	3	0	4
ELN	260	Programmable Logic Controllers	3	3	0	4
HYD		Hydraulics/Pneumatics I	2	3	0	3
ISC		Industrial Safety	3	0	0	2
MEC		Mechanisms	2	2	0	3
PHY	110	Conceptual Physics	3	0	0	3
		llege Physics	3	2	0	4
Tota	l Ma	jor Required Hours	••••••	••••••	••••••	55

# Total Credit Hours Required for A.A.S. Degree......70

## **Suggested Curriculum by Semesters**

First \	⁄ear		
Fall S	emest	er	Credits
CIS	110		3
DFT	170		3
ENG	111		3
MAT	171		3
PHY	110		3
			15

Spring	g Sem	ester
COM	110,	120, 2313
ELC	131	4
ELN	133	4
HYD	110	3
MEC	130	3
		14
Sumn	ner Se	mester
ELC	117	4
HUM	115	3
PSY	150	3
		10
_		
Secon		
Fall Se	emest	er Credits
Fall Se ATR	emest 112	er Credits
Fall Se ATR ELC	112 133	er Credits
Fall Se ATR ELC ELN	112 133 260	er Credits
Fall Se ATR ELC	112 133	er Credits 3
Fall Se ATR ELC ELN	112 133 260	er Credits
Fall So ATR ELC ELN PHY	112 133 260 151	er Credits
Fall So ATR ELC ELN PHY	112 133 260 151	er Credits
Fall So ATR ELC ELN PHY Spring ATR	112 133 260 151 <b>Sem</b> 214	er Credits
Fall Se ATR ELC ELN PHY Spring ATR ELC	112 133 260 151 <b>Sem</b> 214 213	er Credits
Fall So ATR ELC ELN PHY Spring ATR ELC ELC	112 133 260 151 <b>Sem</b> 214 213 215	er Credits
Fall Se ATR ELC ELN PHY Spring ATR ELC	112 133 260 151 <b>Sem</b> 214 213	er Credits

<sup>\*\*</sup>WBL 111 and WBL 115 should be taken during the program of study after the completion of a minimum of 12 core semester hours.

# **Medical Assisting**

## A.A.S Degree [A45400] Diploma Program [D45400] Certificates [C45400, C45400S]

#### **Curriculum Description**

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

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

Graduates of CAAHEP-accredited medical assisting programs may be eligible to sit for the American Association of Medical Assistants' Certification Examination to become Certified Medical Assistants. Employment opportunities include physicians' offices, health maintenance organizations, health departments, and hospitals. Students may be awarded a non-degree credential (i.e., certificate, diploma) after completing a specific portion of the Associate degree program.

### **Course and Hour Requirements**

		•	Class	Lab	Clinic/Exp	Credits
Gen	eral I	Education Required Courses			_	
COM	231	Public Speaking •	3	0	0	3
ENG	111	Writing and Inquiry	3	0	0	3
ENG	112	Writing/Research in the Disciplines	3	0	0	3
MAT	143	Quantitative Literacy	2	2	0	3
PSY	150	General Psychology	3	0	0	3
		Humanities/Fine Arts Elective	3	0	0	3
		(See page 70 for HFA electives)				

### Total General Education Required Hours ......18

Maj	jor Re	quired	<b>Courses</b>
			atomy and I

RIO	163	Basic Anatomy and Physiology or	4	2	0	5	
BIO	168	Anatomy and Physiology I and	(3	3	0	4)	
BIO	169	Anatomy and Physiology II	(3	3	0	4)	
MED	110	Orientation to Medical Assisting	1	0	0	1	
MED	118	Medical Law and Ethics	2	0	0	2	
MED	121	Medical Terminology I	3	0	0	3	
MED	122	Medical Terminology II	3	0	0	3	
MED	130	Administrative Office Procedures I	1	2	0	2	
MED	131	Administrative Office Procedures II	1	2	0	2	
MED	140	Exam Room Procedures I	3	4	0	5	
MED	150	Laboratory Procedures I	3	4	0	5	
MED	232	Medical Insurance Coding	1	3	0	2	
MED	260	MED Clinical Practicum	0	0	15	5	
MED	270	Symptomatology	2	2	0	3	
MED	272	Drug Therapy	3	0	0	3	
OST	134	Text Entry and Formatting	2	2	0	3	
OST	135	Advanced Text Entry and Formatting	3	2	0	4	
OST	184	Records Management	2	2	0	3	
Total Major Required Hours51							

# 

## **Suggested Curriculum by Semesters**

## First Year

	Fall Semes
5	BIO 163
3	ENG 111
1	MED 110
2	MED 118
(Fast track)3	MED 121
(Fast track)3	MED 122
2	MED 130
3	OST 134
22	

Spring	a Sem	ester				
MED	131		2			
MED	140		5			
MED	150		5			
MED	232		2			
OST	135					
PSY	150					
		21	L			
Sumn	ner Se	mester				
MED	260		5			
		į	5			
Secon	ıd Yea	r				
Fall Se	emest	er Credit:	S			
ENG			-			
MED						
MED	212					
	_		-			
Spring	-	ester	<b>)</b>			
MAT OST	143 184					
		/Fine Arts				
		9				
<b>.</b> .		ID 45 4001				
Dipl	loma	a [D45400]				
DIO	1.00	Dania Amatana and Dhamialana	Class	Lab	Clinic/Exp	Credits
BIO BIO	163 168	Basic Anatomy and Physiology or	4 (3	2 3	0 0	5 4)
BIO		Anatomy and Physiology I and Anatomy and Physiology II	(3	3	0	4)
ENG		Writing and Inquiry	3	0	0	3
MED		Orientation to Medical Assisting	1	Ö	Ō	1
MED	118	Medical Law and Ethics	2	0	0	2
MED	121	Medical Terminology I	3	0	0	3
MED		Medical Terminology II	3	0	0	3
MED		Administrative Office Procedures I	1	2	0	2
MED		Administrative Office Procedures II	1	2	0	2
MED MED		Exam Room Procedures I	3 3	4 4	0	5 5
MED		Laboratory Procedures I Medical Insurance Coding	1	3	0	2
MED		MED Clinical Practicum	0	0	15	5
OST		Text Entry and Formatting	2	2	0	3
OST	135		3	2	0	4
PSY	150	General Psychology	3	0	0	3
Tota	I Cre	dit Hours Required for Diplom	a Progr	am	•••••	48
Med	lical	Assisting Certificate [C45400]				
Succes	sful co	empletion of the certificate does not constitu	ute comple	etion of the	accredited me	edical assisting diploma
		d the student will not be eligible to take any		ion exam. C	ompletion of	the certificate also does
		ee admission into the Medical Assisting Pro	-	•	•	•
MED		Medical Law and Ethics	2	0	0	2
MED MED	121 122	Medical Terminology I Medical Terminology II	3 3	0 0	0 0	3 3
OST	134	Text Entry and Formatting	2	2	0	3
OST		Advanced Text Entry and Formatting	3	2	0	4
		dit Hours Required for Certific				15
iota	CIC	dit Hours Required for Certific	ate	••••••	••••••	13
Mad	lical	Scribe Certificate [C45400S]				
		Scribe Certificate [C454005] Scribe Certificate is a post-Medical Assistin	a Dinloma	nroaram		
CIS		Introduction to Computers	у <i>Бірі</i> отіа 2	i program. 2	0	3
MED	122	Medical Terminology II	3	0	0	3
MED	134	Medical Transcription	2	2	2	3
MED	232	Medical Insurance Coding	1	3	0	2
MED	270	Symptomatology	2	2	0	3
MED	272	Drug Therapy	3	0	0	3

Total Credit Hours Required for Certificate...... 17

# **Medical Laboratory Technology**

## A.A.S Degree [A45420]

#### **Curriculum Description**

The Medical Laboratory Technology curriculum prepares individuals to perform clinical laboratory procedures in chemistry, hematology, microbiology, and immunohematology that may be used in the maintenance of health and diagnosis/treatment of disease.

Course work emphasizes mathematical and scientific concepts related to specimen collection, laboratory testing and procedures, quality assurance and reporting/recording and interpreting findings involving tissues, blood, and body fluids.

Graduates may be eligible to take examinations given by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists or the Certifying Agency. Employment opportunities include laboratories in hospitals, medical offices, industry, and research facilities.

Medical Laboratory Technology is an Associate Degree program offered in conjunction with Southwestern Community College who awards the degree. Students may take courses marked with an asterisk (\*) at Mitchell Community College. All MLT technical courses are offered online through Southwestern Community College. (This collaboration is geared towards certified practicing phlebotomists.)

Course and Hour Requirements  Class Lab Clinic/Exp Credits								
<b>General Education Required Courses</b>								
*ENG 111 Writing and Inquiry	3	0	0	3				
*ENG 114 Professional Research and Reporting	3	0	0	3				
HUM 110 Technology & Society or	3	U	U	3				
HUM 115 Critical Thinking	3	0	0	3				
*MAT 143 Quantitative Literacy	2	2	Ö	3				
*PSY 150 General Psychology	3	0	0	3				
* Humanities/Fine Arts Elective	3	0	0	3				
(See page 70 for HFA electives)	3	Ü	Ü	3				
<b>Total General Education Required Hou</b>	ırc			19				
Total General Education Required Floc	11 3	•••••	•••••••	±3				
Major Poguired Courses								
Major Required Courses	2	0	0	2				
*CHM 131 Introduction to Chemistry and	3	0	0	3				
*CHM 131A Introduction to Chemistry Lab and	0 3	3 3	0	1 4				
*CHM 132 Organic Chemistry MLT 110 Introduction to MLT	3 2	3	0 0	3				
MLT 110 Introduction to MLT MLT 111 Urinalysis and Body Fluids	1	3	0	2				
MLT 116 Anatomy and Medical Terminology	(5	0	0	5)				
MLT 118 Medical Laboratory Chemistry	3	0	0	3				
MLT 120 Hematology/Hemostasis I	3	3	0	4				
MLT 125 Immunohematology I	4	3	0	5				
MLT 130 Clinical Chemistry I	3	3	0	4				
*BIO 275 Microbiology or	3	3	0	4				
MLT 140 Introduction to Microbiology	(2	3	0	3)				
MLT 215 Professional Issues	1	0	Ö	1				
MLT 220 Hematology/Hemostasis II	2	3	Ö	3				
MLT 240 Special Clinical Microbiology	2	3	0	3				
MLT 253 MLT Practicum I	0	0	9	3				
MLT 263 MLT Practicum II	0	0	9	3				
MLT 271 MLT Practicum III	0	0	3	1				
MLT 272 MLT Practicum III	0	0	6	2				
MLT 273 MLT Practicum III	0	0	9	3				
MLT 274 MLT Practicum III	0	0	12	4				
Total Major Required Hours	•••••	•••••	••••••	52-59				
Other Required Hours								
ACA 111 College Student Success	1	0	0	1				
ACA 111 College Student Success	1	U	U	1				
Total Credit Hours Required for A.A.S. Degree69-76								

# **Suggested Curriculum by Semesters**

First Y		
Fall Se	meste	r Credits
ACA	111	1
*CHM	131	3
*CHM	131A	1
MAT	143	3
MLT	110	3
MLT	111	2
MLT	116	5
		18
C		
Spring		
MLT	120	4
MLT	126	2
MLT	130	4
MLT	251	1
MLT	253	3
*BIO	275 o	
MLT	140	(3)
		17-18
Summ	er Sei	nester
*ENG	111	3
*HUM		r3
*HUM	115	(3)
PSY	150	3
131	130	9
Secon		
Fall Se		
*ENG	114	3
MLT	127	3
MLT	220	3
MLT	230	3
MLT	240	3
		15
Spring	Seme	ester
MLT	215	1
MLT	261	1
MLT	263	3
MLT	273	
MLT	276	6
	_, 0	14
		<b>-</b> •

# **Associate Degree Nursing**

## A.A.S. Degree [A45110]

#### **Curriculum Description**

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.

Note: See Admission requirements for the ADN program outlined in the "Admissions" section beginning on page 12.

Cou	Course and Hour Requirements								
			Class	Lab	Clinic/Exp	Credits			
General Education Required Courses									
BIO	275	Microbiology	3	3	0	4			
ENG	111	Writing and Inquiry	3	0	0	3			
ENG	112	Writing/Research in the Disciplines	3	0	0	3			
PSY	150	General Psychology	3	0	0	3			
Choos	e one	of the following Humanities/Fine Arts Elec	ctives:						
ART		Art Appreciation							
ART	114	Art History Survey I							
ART	115	Art History Survey II							
HUM		Critical Thinking							
MUS		Music Appreciation							
MUS		Introduction to Jazz							
PHI	215	Philosophical Issues							
PHI	240	Introduction to Ethics	3	0	0	3			
Tota	l Gei	neral Education Required Hou	rs			16			
Maj	or Re	equired Courses							
BIO		Anatomy and Physiology I	3	3	0	4			
BIO	169	Anatomy and Physiology II	3	3	0	4			
NUR	111	Introduction to Health Concepts	4	6	6	8			
NUR	112	Health-Illness Concepts	3	0	6	5			
NUR	113	Family Health Concepts	3	0	6	5			
NUR	114	Holistic Health Concepts	3	0	6	5 5 2			
NUR	117	Pharmacology	1	3	0	2			
NUR	211	Health Care Concepts	3	0	6	5			
NUR	212	Health System Concepts	3	0	6	5			
NUR	213	Complex Health Concepts	4	3	15	10			
PSY	241	Developmental Psychology	3	0	0	3			
Tota	l Ma	jor Required Hours				56			
Tota	Total Credit Hours Required for A.A.S. Degree								

# **Suggested Curriculum by Semesters**

First \		er Credits						
BIO	168	4						
NUR	111	8						
NUR	117	2						
PSY	150	3						
		17						
Spring	g Sem	ester						
BIO	169	4						
NUR	112	5	(1st 8 weeks)					
NUR	114	5	(2nd 8 weeks)					
PSY	241	3						
		17						
Sumn BIO ENG	ner Se 275 111	mester43						
	Second Year							
Fall Se								
ENG	112	3						
NUR	113	-	()					
NUR	211	5	(8 weeks)					
		13						
	Spring Semester							
NUR		5	(12 weeks)					
NUR	213	10						
Huma	nities/	Fine Arts3						

## **Nurse Aide**

### **Certificate Program [C45840]**

### **Curriculum Description**

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

Topics include growth and development, personal care, vital signs, communication, nutrition, medical asepsis, therapeutic activities, accident and fire safety, household environment and equipment management, family resources and services, and employment skills.

Upon completion, the student may be eligible for listing as a Nurse Aide I and other selected Nurse Aide registries as determined by the local program of study.

Course and Hour Requirements	Class	Lab	Clinic/Exp	Credits			
<b>General Education Required Courses</b> None	Class	Lab	Cillio, Exp	Cledits			
Major Required Courses							
NAS 101 Nurse Aide I	3	4	3	6			
NAS 102 Nurse Aide II	3	2	6	6			
NAS 103 Home Health Care Nurse Aide	4	4	0	6			
Total Major Required Hours	•••••	•••••	••••••	18			
Total Credit Hours Required for Certificate Program							

# **Office Administration**

## **Certificate Program [C25370]**

Cert	tificate	<b>Proc</b>	ıram

		_	Class	Lab	Clinic/Exp	Credits			
Office Administration [C25370]									
CIS	110	Introduction to Computers	2	2	0	3			
OST	134	Text Entry and Formatting	2	2	0	3			
OST	135	Office Editing	2	2	0	4			
OST	164	Text Editing Applications or	3	0	0	3			
OST	184	Records Management	(2	2	0	3)			
OST	181	Office Procedures	2	2	0	3			
Total Credit Hours Required for Certificate Program									

## Speech-Language Pathology Assistant

### A.A.S. Degree [A45730]

### **Curriculum Description**

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

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

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

Speech-Language Pathology Assistant is an Associate Degree program offered in conjunction with Caldwell Community College and Technical Institute who awards the degree. Students may take courses marked with an asterisk (\*) at Mitchell Community College. PSY 265 and all SLP technical courses are offered over the North Carolina Information Highway (NCIH) at Mitchell Community College.

### **Course and Hour Requirements**

Course a	Class Lab Clinic/Exp Credits						
		Class	Lab	Clinic/Exp	Credits		
	Education Required Courses						
	Writing and Inquiry	3	0	0	3		
	Writing/Research in the Disciplines OR		•		-		
	Professional Research and Reporting	3	0	0	3		
	Math Measurement and Literacy	2	2	0	3		
	General Psychology	•	0	0	3		
Total Ge	neral Education Required Hours.	••••••	•••••	••••••	15		
	equired Courses						
	Basic Anatomy and Physiology	1	2	0	5		
	Introduction to Computers or	2	2	0	3		
	Basic PC Literacy	(1	2	0	2)		
	Intro to Interpersonal Communication or		_	_	_		
	Public Speaking	3	0	0	3		
*MED 121		3	0	0	3		
*PSY 241	Developmental Psychology	3	0	0	3 3 3 3 2 3 3 3		
	Behavioral Modification	3	0	0	3		
	Ethics and Standards for SLPA's	3	0	0	3		
	SLPA Anatomy and Physiology	3	0	0	3		
	SLPA Administrative Procedures and Mgt	2	0	0	2		
	Phonetics/Speech Patterns	2	2	0	3		
	Normal Communication	3	0	0	3		
	Communication Dis in Diverse Populations		0	0			
	Developmental Disorders	3	2	0	4		
SLP 212	Acquired Disorders	3	2	3	5		
SLP 215		3	2	0	4		
	Assistive Technology	1	2	0	2		
	SLPA Fieldwork	0	0	12	4		
SLP 231	SLPA Fieldwork Seminar	3	0	0	3		
Total Ma	jor Required Hours		•••••		58-59		
	•						

Total Credit Hours Required for A.A.S. Degree......73-74

# **Suggested Curriculum by Semesters**

549		ted carriedians by bei	
First Y			
Fall Se			Credits
*BIO	163		
*PSY	150		
SLP	111		3
SLP	140		3
SLP	150		3
			17
Spring			
*MED	121		3
*PSY	241		3
SLP	112		3
SLP	120		2
SLP	130		3
			14
Summ	er Se	mester	
*CIS	110 d	or	
CIS	111		3
*COM	120 (	or	
			3
*ENG	111		
*MAT	110		
IVIAI	110		12
Secon	d Yea	r	
Fall Se	mest	er	Credits
*ENG	112 (	or	
*ENG	113 (	or	
*ENG	114		3
PSY	265		
SLP	211		
SLP	215		
SLP	220		
			16
Spring	ı Sam	ester	
SLP	212	estei	_
SLP			
	230		
SLP	231		
Humai	nities/	Fine Arts	
			15

## **Welding Technology**

### A.A.S. Degree [A50420] Diploma [D50420] Certificate [C50420W]

### **Curriculum Description**

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

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses may include math, print reading, metallurgy, welding inspection, and destructive and non-destructive testing providing the student with industry-standard skills developed through classroom training and practical application.

Graduates of the Welding Technology curriculum may be employed as entry-level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment. Students may be awarded a non-degree credential (i.e., certificate, diploma) after completing a specific portion of the Associate degree program.

Class

Lab

Clinic/Exp Credits

### **Course and Hour Requirements**

						•	
General Education Required Courses							
COM	110	Introduction to Communication or					
COM	120	Intro to Interpersonal Communication or					
COM	231	Public Speaking	3	0	0	3	
ENG	111	Writing and Inquiry	3	0	0	3	
HUM	115		3	0	0	3	
MAT	110	Math Measurement & Literacy	2	2	0	3	
PSY	150	General Psychology	3	0	0	3	
Tota	l Ger	neral Education Required Hours				15	
Majo	or Re	equired Courses					
CIS	110	Introduction to Computers	2	2	0	3	
DFT	170	Engineering Graphics	2	2	0	3	
ISC	112	Industrial Safety	2	0	0	2	
MEC	130	Mechanisms	2	2	0	3	
WBL	111*	*Work-Based Learning I	0	10	0	1	
WBL	115*	*Work-Based Learning Seminar I	1	0	0	1	
WLD	110	Cutting Processes	1	3	0	2	
WLD	115	SMAW (Stick) Plate	2	9	0	5	
WLD	116	SMAW (Stick) Plate/Pipe	1	9	0	4	
WLD	121	GMAW (MIG) FCAW/Plate	2	6	0	4	
WLD	122	GMAW (MIG) Plate/Pipe	1	6	0	3	
WLD	131	GTAW (TIG) Plate	2	6	0	4	
WLD	132	GTAW (TIG) Plate/Pipe	1	6	0	3	
WLD	141	Symbols & Specifications	2	2	0	3	
			_		_		

Total Major Required Hours49
Total Credit Hours Required for A.A.S. Degree

### **Suggested Curriculum by Semesters**

Applies to day offerings. Due to time restraints, evening students should expect to have fewer offerings each semester.

· · · · · · · · · · · · · · · · · · ·	Fi	rst	Year
---------------------------------------	----	-----	------

WLD 151 Fabrication I

	···		
Fall Se	emest	er	Credits
CIS	110		3
MAT	110		3
WLD	110		2
WLD	115		5
WLD	141		3

Spring						
WLD	116	4				
WLD	121	4				
WLD	122	3				
WLD	131	4				
		15				
Summ	er Ser	mester				
ENG	111	3				
WLD	132	3				
WLD	151	4				
		10				
Secon	d Year					
Fall Semester						
COM	110 o	r				
COM	120 o	r				
COM	231	3				
DFT	170	3				
HUM	115	3				
MEC	130	3				
PSY	150	3				
		15				
Spring	, Sem	ester				
ISC	112	2				
PHY	110	3				
PHY	110A	1				
WBL	111	1				
WBL	115	1				
		8				

<sup>\*\*</sup>WBL 111 and WBL 115 should be taken during the program of study after the completion of a minimum of 12 core semester hours.

### **Diploma** [D50420]

Class Lab Clinic/Exp Credits								
CIS	110	Introduction to Computers	2	2	0	3		
ENG	111	Writing and Inquiry	3	0	0	3		
MAT	110	Math Measurement & Literacy	2	2	0	3		
WLD	110	Cutting Processes	1	3	0	2		
WLD	115	SMAW (Stick) Plate	2	9	0	5		
WLD	116	SMAW (Stick) Plate/Pipe	1	9	0	4		
WLD	121	GMAW (MIG) FCAW/Plate	2	6	0	4		
WLD	122	GMAW (MIG) Plate/Pipe	1	6	0	3		
WLD	131	GTAW (TIG) Plate	2	6	0	4		
WLD	132	GTAW (TIG) Plate/Pipe	1	6	0	3		
WLD	141	Symbols & Specifications	2	2	0	3		
WLD	151	Fabrication I	2	6	0	4		
Total Credit Hours Required for Diploma Program41								

## Certificate [C50420W]

			Class	Lab	Clinic/Exp	Credits
WLD	110	Cutting Processes	1	3	0	2
WLD	115	SMAW (Stick) Plate	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
Total Credit Hours Required for Certificate Program 18						



## **Curriculum Course Descriptions**

FA—Fall SP—Spring SU—Summer

### **Academic Related**

ACA 085 Improving Study Skills

0 2 0 1

Prerequisites: None Corequisites: None

FA, SP

This course is designed to improve academic study skills and introduce resources that will complement developmental courses and engender success in college-level courses. Topics include basic study skills, memory techniques, note-taking strategies, test-taking techniques, library skills, personal improvement strategies, goal setting, and learning resources. Upon completion, students should be able to apply the techniques learned to improve performance in college-level classes.

ACA 090 Study Skills

3 0 0 3

Prerequisites: None Corequisites: None

This course is intended for those who placed into credit-level course work but who are not maintaining satisfactory academic progress toward meeting program goals. Topics include study skills, note taking, learning styles and strategies, test taking, goal setting, and self-assessment skills. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals.

### ACA 111 College Student Success

1 0 0 1

Prerequisites: None Corequisites: None

FA, SP, SU

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.

### ACA 122 College Transfer Success

0 2 0 1

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college policies and culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

#### Competencies

- 1. Develop a strategic plan for completing community college academic goals, including certificates, diplomas, and/or associate degrees.
- 2. Develop a strategic plan for transferring to a university and preparing for a new career.
- 3. Identify the rights and responsibilities of transfer students under the Comprehensive Articulation Agreement (CAA), including Universal General Education Transfer Component (UGETC) designated courses, the Transfer Assured Admissions Policy (TAAP), the CAA appeals process, and university tuition surcharge.
- 4. Evaluate learning strategies, including note-taking, test-taking, information processing, time management, and memorization techniques, and identify strategies for improvement.

- Identify essential college resources, including financial aid, advising, registration, tutoring, library services, computer labs, and counseling services and recognize the importance of these resources on student success.
- 6. Identify essential college policies and procedures, including academic integrity such as avoiding plagiarism; calculating a GPA, and maintaining satisfactory academic progress for financial aid eligibility and/or good academic standing.

## **Accounting**

ACC 115 College Accounting 3 2 0 4

Prerequisites: None Corequisites: None

FA, SP

This course introduces basic accounting principles for a business. Topics include the complete accounting cycle with end-of-period statements, bank reconciliation, payrolls, and petty cash. Upon completion, students should be able to demonstrate an understanding of accounting principles and apply those skills to a business organization.

### ACC 120 Principles of Financial Accounting 3 2 0 4

Prerequisites Satisfactory placement or DRE 097 and DRE 098

Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

### ACC 121 Principles of Managerial Accounting 3 2 0 4

Prerequisites: ACC 120 Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

### ACC 122 Principles of Financial Accounting II 3 0 0 3

Prerequisites: ACC 120 Corequisites: None

SP. SU

This course provides additional instruction in the financial accounting concepts and procedures introduced in ACC 120. Emphasis is placed on the analysis of specific balance sheet accounts, with in-depth instruction of the accounting principles applied to these accounts. Upon completion, students should be able to analyze data, prepare journal entries, and prepare reports in compliance with generally accepted accounting principles.

### ACC 129 Individual Income Taxes 2 2 0 3

Prerequisites: ACC 120 Corequisites: None

FΑ

This course introduces the relevant laws governing individual income taxation. Topics include tax law, electronic research and methodologies, and the use of technology for preparation of individual tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various individual tax forms.

ACC 130 Business Income Taxes 2 2 0 3

Prerequisites: None Corequisites: None

SP

This course introduces the relevant laws governing business and fiduciary income taxes. Topics include tax law relating to business organizations, electronic research and methodologies, and the use of technology for the preparation of business tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various business tax forms.

ACC 140 Payroll Accounting 1 2 0 2

Prerequisites: ACC 115 or ACC 120

Corequisites: None

FΑ

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.

### ACC 149 Introduction to Accounting Spreadsheets 1 2 0 2

Prerequisites: ACC 115 or ACC 120

Corequisites: None

SP

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

#### ACC 150 Accounting Software Applications 1 2 0 2

Prerequisites: ACC 115 or ACC 120

Corequisites: None

SP

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 152 Advanced Software Applications 1 2 0 2

Prerequisites: ACC 150 Corequisites: None

FΑ

This course provides continued exposure to commercial accounting software and the opportunity to refine skills developed in ACC 150. Emphasis is placed on advanced applications of software packages. Upon completion, students should be able to use commercial software to complete complex accounting tasks.

### ACC 220 Intermediate Accounting I 3 2 0 4

Prerequisites: ACC 122 Corequisites: None

FΑ

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

ACC 221 Intermediate Accounting II 3 2 0 4

Prerequisites: ACC 220 Corequisites: None

SP

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 227 Practices in Accounting 3 0 0 3

Prerequisites: ACC 220 Corequisites: None

SP

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

## **Agriculture**

### AGR 110 Agricultural Economics 3 0 0 3

Prerequisites: None Corequisites: None

SP

This course provides an introduction to basic economic principles in agriculture. Topics include supply and demand, the role of agriculture in the economy, economic systems, and micro- and macroeconomics. Upon completion, students should be able to explain economic systems, interpret supply and demand curves, and complete cost and revenue production schedules.

### AGR 111 Basic Farm Maintenance 1 3 0 2

Prerequisites: None Corequisites: None

FΑ

This course covers fundamentals of maintenance and repair of farm facilities and equipment. Topics include safe use of hand tools and farm machinery, carpentry, concrete, painting, wiring, welding, plumbing, and calculating costs and materials needed. Upon completion, students should be able to answer theoretical questions on topics covered and assist with maintenance and repair of farm facilities and equipment.

### AGR 121 Biological Pest Management 3 0 0 3

Prerequisites: None Corequisites: None

FΑ

This course will emphasize the building and maintaining of healthy soil, plant and insect biological cycles as the key to pest and disease management. Course content includes study of major pests and diseases, including structure, life cycle, and favored hosts; and biological and least toxic methods of chemical control. Upon completion, students will be able to identify and recommend methods of prevention and control of selected insects and diseases.

### AGR 139 Introduction to Sustainable Agriculture 3 0 0 3

Prerequisites: None Corequisites: None

FΑ

This course will provide students with a clear perspective on the principles, history and practices of sustainable agriculture in our local and global communities. Students will be introduced to the economic, environmental and social impacts of agriculture. Upon completion, students will be able to identify the principles of sustainable agriculture as they relate to basic production practices.

### Competencies

### **Student Learning Outcomes**

- 1. Identify sustainable practices in production agriculture.
- 2. Explain the impact of sustainable agriculture on our environment and our economy.
- 3. Demonstrate application of sustainable agriculture in a traditional farm management plan.

AGR 140 Agricultural Chemicals

2 2 0

Prerequisites: None Corequisites: None

FΑ

This course covers all aspects of agricultural chemicals. Topics include safety, environmental effects, federal and state laws, pesticide classification, sprayer calibration, and licensing. Upon completion, students should be able to calibrate a sprayer, give proper pesticide recommendations (using integrated pest management), and demonstrate safe handling of pesticides.

### Competencies

### **Student Learning Outcomes**

- 1. Identify common agricultural pests.
- 2. Develop an integrated pest management plan on target species.
- 3. Prepare for the North Carolina Pesticide Applicator's Exam.

### AGR 150 Ag-O-Metrics

3 0 0 3

Prerequisites: None Corequisites: None

SP

This course introduces basic calculations for agricultural applications. Topics include the metric system, land measurement, feed efficiency, rate of gain, chemical calibration, and payroll. Upon completion, students should be able to perform calculations that pertain to agricultural production.

#### AGR 160 Plant Science

2 0 3

2

Prerequisites: None Corequisites: None

SP

This course introduces the basic principles of botany that pertain to agricultural production. Emphasis is placed on the anatomy and physiology of flowering plants. Upon completion, students should be able to identify and explain plant systems.

#### AGR 170 Soil Science

2 2 0 3

Prerequisites: None Corequisites: None

SP

This course covers the basic principles of soil management and fertilization. Topics include liming, fertilization, soil management, biological properties of soil (including beneficial microorganisms), sustainable land care practices and the impact on soils, and plant nutrients. Upon completion, students should be able to analyze, evaluate, and properly amend soils/media according to sustainable practices.

### Competencies

### **Student Learning Outcomes**

- 1. Identify the biological properties of soil.
- 2. Describe sustainable land care practices and how they impact soil quality.
- 3. Select and apply fertilizers according to sustainable practices.

### AGR 210 Agricultural Accounting

1 4 0 3

Prerequisites: None Corequisites: None

FA

This course covers the basic principles and practices of accounting and bookkeeping as they relate to the agricultural industry. Topics include general accounting terminology, data entry practices, and analysis of records for tax purposes. Upon completion, students should be able to complete a basic record book and analyze records for tax purposes.

AGR 212 Farm Business Management 3 0 0 3

Prerequisites: None Corequisites: None

SP

This course introduces budgeting, farm analysis, production costs, business organizations, and general management principles. Topics include enterprise budgets, partial budgets, whole farm budgets, income analysis, and business organizations. Upon completion, students should be able to prepare and analyze a farm budget.

### AGR 213 Agriculture Law and Finance 3 0 0 3

Prerequisites: None Corequisites: None

FΑ

This course covers the basic laws and financial aspects affecting agriculture. Topics include environmental laws, labor laws, contractual business operations, assets, liabilities, net worth, and funding sources. Upon completion, students should be able to complete loan application procedures and explain basic laws affecting the agricultural industry.

### AGR 214 Agricultural Marketing 3 0 0

Prerequisites: None Corequisites: None

FΑ

This course covers basic marketing principles for agricultural products. Topics include buying, selling, processing, standardizing, grading, storing, and marketing of agricultural commodities. Upon completion, students should be able to construct a marketing plan for an agricultural product.

### AGR 220 Agricultural Mechanization 2 2 0 3

Prerequisites: None Corequisites: None

SP

This course is a study of farm machinery and agricultural equipment. Topics include selection and operation of tractors, materials handling equipment, tillage and harvesting equipment, and irrigation systems. Upon completion, students should be able to identify equipment parts and explain the basic principles of machinery operation and management.

### AGR 226 Maintaining and Servicing of Production Facilities 2 2 0 3

Prerequisites: None Corequisites: None

This course provides a detailed look at maintaining and servicing of production facilities. Emphasis is placed on maintaining electrical equipment, plumbing systems, mechanical equipment, and basic welding and cutting practices. Upon completion, students should be able to troubleshoot and repair ventilation equipment, pumps and plumbing, feed lines, curtain controls, and basic electrical controls.

### AGR 261 Agronomy 2 2 0 3

Prerequisites: None Corequisites: None

SP

This course provides a basic introduction to field and forage crops. Topics include forage crops, field crops, seed selection, fertility management, field preparation, harvesting, and storage. Upon completion, students should be able to demonstrate a knowledge of forage and field crop production practices.

### AGR 262 Weed ID and Control 2 3 0 3

Prerequisites: None Corequisites: None

This course introduces the annual and perennial weeds of economic importance in the southeast. Topics include the life cycles, flowering habits, identification, and control of various weeds in the Southeast. Upon completion, students should be able to identify selected weeds and recommend methods of control.

3

AGR 265 Organic Crop Production: Spring 2 2 0 3

Prerequisites: None Corequisites: None

SP

This course includes a study of spring organic crop production practices, including vegetables, cut flowers, and culinary and medicinal herbs. Topics include variety selection, production methods, and record keeping procedures for certification. Upon completion, students will be able to demonstrate a knowledge of organic crop production appropriate for the spring season.

AGR 266 Organic Crop Production: Fall 2 2 0 3

Prerequisites: None Corequisites: None

FA

This course includes a study of fall organic crop production practices, including vegetables, cut flowers, and culinary and medicinal herbs. Topics include variety selection, production methods, and record keeping procedures for certification. Upon completion, students should be able to demonstrate a knowledge of organic crop production appropriate for the fall season.

## Air Conditioning, Heating, and Refrigeration

AHR 110 Introduction to Refrigeration 2 6 0 5

Prerequisites: None Corequisites: None

FΑ

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

### Competencies

### **Student Learning Outcomes**

1. Demonstrate safe practices and procedures with tools, materials, and industry accepted test equipment covered in the course.

2 2 0

3

- 2. Identify and explain the theory, operating principle, and components of the refrigeration cycle.
- 3. Identify tools, materials, and equipment used in the refrigeration industry.
- Evacuate, charge, recover, and safely operate a basic refrigeration /cooling system in accordance with EPA regulations.
- 5. Demonstrate refrigeration piping and soldering techniques.

### AHR 111 HVACR Electricity

Prerequisites: None Corequisites: None

FΑ

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

### Competencies

### **Student Learning Outcomes**

- 1. Demonstrate safe practices and procedures with tools, materials, and industry accepted test equipment covered in the course.
- 2. Be able to use electrical test instruments.
- 3. Demonstrate knowledge of electricity as applied to heating, ventilation, air conditioning and refrigeration machines.
- Identify the various electrical components used in HVAC equipment and explain their operation.
- 5. Use Ohm's Law to calculate the current, voltage, and resistance in a circuit.
- 6. Draw and interpret wiring schematics for installation and troubleshooting.
- Follow systematic troubleshooting procedure to diagnose electrical problems and control circuit problems.

AHR 112 Heating Technology 2 4 0 4

Prerequisites: None Corequisites: None

FΑ

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

### Competencies

### **Student Learning Outcomes**

- 1. Demonstrate safe practices and procedures with tools, materials, and industry accepted test equipment covered in the course.
- 2. Use industry terminology to describe principles for oil, gas, and electric warm air heating systems.
- 3. Identify the major components of oil, gas, and electric heating systems.
- 4. Install and start-up warm air heating systems.
- 5. Identify various types of energy sources used in heating and describe the individual characteristics of each.
- 6. Describe service procedures for heating systems.
- 7. Use tools and instruments necessary to troubleshoot and test system efficiency.

### AHR 113 Comfort Cooling

2 4 0 4

Prerequisites: AHR 110 Corequisites: None

SP

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

#### Competencies

### Student Learning Outcomes

- 1. Demonstrate safe practices and procedures with tools, materials, and industry accepted test equipment covered in the course.
- 2. Evaluate system operation using psychometrics, manufacturer specifications, and test instruments.
- 3. Demonstrate methods of installing, testing, maintaining, and repairing comfort cooling systems.
- 4. Demonstrate use of test equipment and interpretation of test equipment results.
- 5. Identify refrigerants used in residential and light commercial comfort cooling systems and demonstrate the proper procedures for handling these refrigerants.

### AHR 114 Heat Pump Technology

Prerequisites: AHR 110 or AHR 113

Corequisites: None

SP

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

### Competencies

### **Student Learning Outcomes**

- 1. Demonstrate safe practices and procedures with tools, materials, and industry accepted test equipment covered in the course.
- 2. Diagram refrigerant flow through a heat pump in both the heating and cooling mode identifying refrigerant conditions and pressures.
- 3. Explain the defrost cycle for air-to-air heat pumps.
- 4. Identify and troubleshoot electrical control system components for heat pumps.
- 5. Identify and troubleshoot refrigeration system components for heat pumps.
- 6. Identify and describe the different types of heat pumps in relation to their source of heat.

2

4

AHR 133 HVAC Servicing 2 6 0 4

Prerequisites: None

Corequisites: AHR 112 or AHR 113

SU

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

AHR 151 HVAC Duct Systems I 1 3 0 2

Prerequisites: None Corequisites: None

SU

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

AHR 160 Refrigerant Certification 1 0 0 1

Prerequisites: AHR 110 or permission of instructor

Corequisites: None

SP

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

AHR 180 HVACR Customer Relations 1 0 0 1

Prerequisites: None Corequisites: None

SP

This course introduces common business and customer relation practices that may be encountered in HVACR. Topics include business practices, appearance of self and vehicle, ways of handling customer complaints, invoices, telephone communications, and warranties. Upon completion, students should be able to present themselves to customers in a professional manner, understand how the business operates, complete invoices, and handle complaints.

AHR 211 Residential System Design 2 2 0 3

Prerequisites: None Coreguisites: None

SP

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

### **Competencies**

### **Student Learning Outcomes**

- 1. Design and draw a duct system in accordance with the ACCA Manual D.
- 2. Apply appropriate HVACR codes to the design of residential HVACR systems.
- Calculate heating and cooling loads for residential structures in accordance with ACCA Manual I

### **Animal Science**

ANS 110 Animal Science 3 0 0 3

Prerequisites: None Corequisites: None

FΑ

This course introduces the livestock industry. Topics include nutrition, reproduction, production practices, diseases, meat processing, sustainable livestock production, and marketing. Upon completion, students should be able to demonstrate a basic understanding of livestock production practices and the economic impact of livestock locally, regionally, state-wide, and internationally.

### Competencies

### **Student Learning Outcomes**

- 1. Describe the importance of animal production and explain the major issues related to the production of livestock on an international, national, and state level.
- 2. Explain the relationship of science and animal production through the studies of biotechnology, technology, genetics, physiology, nutrition, and health.
- 3. Describe the basic physiology and terminology of the animal industries.
- 4. Describe the production (including sustainable production) methodologies of the swine, beef, dairy, sheep and horse industries.
- 5. Recognize the requirements of production animals, and the benefits of proper care, nutrition, genetics, and environment to the animal's productivity levels.

## **Anthropology**

ANT 210 General Anthropology 3 0 0 3

Prerequisites: None Corequisites: None

College Transfer Course

This course introduces the physical, archaeological, linguistic, and ethnological fields of anthropology. Topics include human origins, genetic variations, archaeology, linguistics, primatology, and contemporary cultures. Upon completion, students should be able to demonstrate an understanding of the four major fields of anthropology. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

### **Art**

ART 111 Art Appreciation 3 0 0 3

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

FA, SP, SU College Transfer Course

This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms, including but not limited to, sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Humanities/Fine Arts—AA/AS.

### ART 114 Art History Survey I 3 0 0 3

Prerequisites: ENG 111 Corequisites: None

FA, SP College Transfer Course

This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Humanities/Fine Arts—AA/AS.

### ART 115 Art History Survey II 3 0 0 3

Prerequisites: ENG 111 Corequisites: None

FA, SP College Transfer Course

This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Humanities/Fine Arts—AA/AS.

ART 116 Survey of American Art 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

This course covers the development of American art forms from colonial times to the present. Emphasis is placed on architecture, painting, sculpture, graphics, and the decorative arts. Upon completion, students should be able to demonstrate understanding of the history of the American creative experience. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Humanities/Fine Arts-AA/AS.

### ART 117 Non-Western Art History 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

This course introduces non-Western cultural perspectives. Emphasis is placed on, but not limited to, African, Oriental, and Oceanic art forms throughout history. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of non-Western social and cultural development. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Humanities/Fine Arts-AA/AS.

### ART 121 Two-Dimensional Design 0 6 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 and ICAA as a pre-major and/or elective course requirement.

### ART 122 Three-Dimensional Design 0 6 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 and ICAA as a pre-major and/or elective course requirement.* 

### ART 131 Drawing I 0 6 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

### ART 132 Drawing II 0 6 0 3

Prerequisites: ART 131
Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

ART 135 Figure Drawing I

Prerequisites: ART 131 Corequisites: None

FA, SP College Transfer Course

This course introduces rendering the human figure with various drawing materials. Emphasis is placed on the use of the visual elements, anatomy, and proportion in the representation of the draped and undraped figure. Upon completion, students should be able to demonstrate competence in drawing the human figure. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

ART 171 Computer Art I

0 6 0 3

0 6 0 3

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

ART 231 Printmaking I

0 6 0 3

0

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

This course introduces printmaking: its history, development techniques, and processes. Emphasis is placed on basic applications with investigation into image source and development. Upon completion, students should be able to produce printed images utilizing a variety of methods. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

ART 232 Printmaking II

Prerequisites: ART 231
Corequisites: None

FA, SP College Transfer Course

This course includes additional methods and printmaking processes. Emphasis is placed on the printed image as related to method, source, and concept. Upon completion, students should be able to produce expressive images utilizing both traditional and innovative methods. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

ART 240 Painting I

0 6 0 3

3

0

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

ART 241 Painting II

0 6 0 3

Prerequisites: ART 240 Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

ART 261 Photography I 0 6 0 3

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

ART 262 Photography II 0 6 0 3

Prerequisites: ART 261 Corequisites: None

FA, SP College Transfer Course

This course introduces the creative manipulation of alternative photographic materials and processes such as toning, hand coloring, infrared, and multiple exposure. Emphasis is placed on personal vision and modes of seeing. Upon completion, students should be able to create properly exposed images using a variety of photographic materials and processes. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

ART 266 Videography I 0 6 0 3

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

ART 267 Videography II 0 6 0 3

Prerequisites: ART 266 Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

ART 271 Computer Art II 0 6 0 3

Prerequisites: ART 171 Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

This course provides an exploration of the creative and technical methods of sculpture with focus

on the traditional processes. Emphasis is placed on developing basic skills as they pertain to three-dimensional expression in various media. Upon completion, students should be able to show competence in variety of sculptural approaches. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

Prerequisites: ART 281 Corequisites: None

FA, SP College Transfer Course

This course builds on the visual and technical skills learned in ART 281. Emphasis is placed on developing original solutions to sculptural problems in a variety of media. Upon completion, students should be able to express individual ideas using the techniques and materials of sculpture. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

Prerequisites: ART 283 Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

## **American Sign Language**

ASL 111 Elementary ASL I 3 0 0 3

Prerequisites: Satisfactory placement or DRE 097 and DRE 098 or DRE 099

Coreauisites: None

FA College Transfer Course

This course introduces the fundamental elements of American Sign Language within a cultural context. Emphasis is placed on the development of basic expressive and receptive skills. Upon completion, students will be able to comprehend and respond with grammatical accuracy to expressive American Sign Language and demonstrate cultural awareness. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.* 

ASL 112 Elementary ASL II 3 0 0 3

Prerequisites: "C" or better earned in ASL 111

Corequisites: None

SP College Transfer Course

This course is a continuation of ASL 111 focusing on the fundamental elements of American Sign Language in a cultural context. Emphasis is placed on the progressive development of expressive and receptive skills. Upon completion, the students should be able to comprehend and respond with increasing accuracy to expressive American Sign Language and demonstrate cultural awareness. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

ASL 211 Intermediate ASL I 3 0 0 3

Prerequisites: "C" or better earned in ASL 112

Corequisites: None

FA College Transfer Course

This course provides a review and expansion of the essential skills of American Sign Language. Emphasis is placed on the progressive development of expressive and receptive skills, study of authentic and representative literacy and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively using American Sign Language about the past, present, and future. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

ASL 212 Intermediate ASL II 3 0 0 3

Prerequisites: "C" or better earned in ASL 211

Corequisites: None

SP College Transfer Course

This course provides a continuation of ASL 211. Emphasis is placed on the continuing development of expressive and receptive skills 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 for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.* 

## **Astronomy**

AST 111 Descriptive Astronomy 3 0 0 3

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

FA College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Natural Sciences—AA.

AST 111A Descriptive Astronomy Lab 0 2 0 1

Prerequisites: None Corequisites: AST 111

FA College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Natural Sciences—AA.

## **Automation and Robotics**

ATR 112 Introduction to Automation 2 3 0 3

Prerequisites: None Corequisites: None

FΑ

This course introduces the basic principles of automated systems and describes the tasks that technicians perform on the job. Topics include the history, development, and current applications of robots and automated systems including their configuration, operation, components, and controls. Upon completion, students should be able to understand the basic concepts of automation and robotic systems.

ATR 214 Advanced PLCs 3 3 0 4

Prerequisites: "C" or better earned in ELN 260

Corequisites: None

SP

This course introduces the study of high-level programming languages and advanced I/O modules. Topics include advanced programming languages; system networking; computer

interfacing; analog and other intelligent I/O modules; and system troubleshooting. Upon completion, students should be able to write and troubleshoot systems using high-level languages and complex I/O modules.

## **Banking and Finance**

BAF 110 Principles of Banking 3 0 0 3

Prerequisites: None Corequisites: None

SP

This course covers the fundamentals of bank functions in a descriptive fashion. Topics include banks and the monetary system, the relationship of banks to depositors, the payment functions, bank loans and accounting, regulations, and examinations. Upon completion, students should be able to demonstrate an understanding of the business of banking from a broad perspective.

### Competencies

### **Student Learning Outcomes**

- 1. Discuss banks and the monetary system.
- 2. Identify banking regulations and examinations.
- 3. Describe bank loans and accounting.
- 4. Define the relationship of banks to depositors.

# **Biology**

BIO 110 Principles of Biology 3 3 0 4

Prerequisites Satisfactory placement or DRE 096

Corequisites: None

FA, SP, SU College Transfer Course

This course provides a survey of fundamental biological principles for non-science majors. Emphasis is placed on basic chemistry, cell biology, metabolism, genetics, evolution, ecology, diversity, and other related topics. Upon completion, students should be able to demonstrate increased knowledge and better understanding of biology as it applies to everyday life. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Natural Sciences—AA/AS.

BIO 111 General Biology I 3 3 0 4

Prerequisites Satisfactory placement or DRE 096

Corequisites: None

FA, SP, SU College Transfer Course

This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, molecular and cellular biology, metabolism and energy transformation, genetics, evolution, 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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Natural Sciences—AA/AS*.

BIO 112 General Biology II 3 3 0 4

Prerequisites: "C" or better earned in BIO 111

Corequisites: None

SP, SU College Transfer Course

This course is a continuation of BIO 111. Emphasis is placed on organisms, evolution, 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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Natural Sciences—AS*.

BIO 120 Introductory Botany 3 3 0 4

Prerequisites: "C" or better earned in BIO 110 or BIO 111

Corequisites: None

SP College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Natural Science.

BIO 130 Introductory Zoology

3 3 0 4

Prerequisites: "C" or better earned in BIO 110 or BIO 111

Corequisites: None

SP College Transfer Course

This course provides an introduction to the classification, relationships, structure, and function of major animal phyla. Emphasis is placed on levels of organization, reproduction and development, comparative systems, and a survey of selected phyla. Upon completion, students should be able to demonstrate comprehension of animal form and function including comparative systems of selected groups. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.

### BIO 140 Environmental Biology

3 0 0 3

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Natural Science.* 

### BIO 140A Environmental Biology Lab

3 0 1

Prerequisites: None Corequisites: BIO 140

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Natural Science.

### BIO 143 Field Biology Minicourse

1 2 0 2

Prerequisites: None Corequisites: None

SP College Transfer Course

This course introduces the biological and physical components of a field environment. Emphasis is placed on a local field environment with extended field trips to other areas. Upon completion, students should be able to demonstrate an understanding of the biological and physical components of the specific biological environment. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

### BIO 155 Nutrition 3 0 0 3

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

SP, SU College Transfer Course

This course covers the biochemistry of foods and nutrients with consideration of the physiological effects of specialized diets for specific biological needs. Topics include cultural, religious, and economic factors that influence a person's acceptance of food, as well as nutrient requirements of the various life stages. Upon completion, students should be able to identify the functions and sources of nutrients, the mechanisms of digestion, and the nutritional requirements of all age groups. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

BIO 163 Basic Anatomy and Physiology 4 2 0 5

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

BIO 168 Anatomy and Physiology I

3 3 0 4

Prerequisites: Satisfactory placement or DRE 096; "C" or better earned in BIO 110, BIO 111 or

high school biology Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

BIO 169 Anatomy and Physiology II 3 3 0 4

Prerequisites: "C" or better earned in BIO 168

Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

BIO 275 Microbiology 3 3 0 4

Prerequisites: "C" or better earned in BIO 110, BIO 111, BIO 163, BIO 165 or BIO 168

Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

### **Business**

BUS 110 Introduction to Business 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

### **Competencies**

### **Student Learning Outcomes**

- 1. Identify various forms of business organizations.
- 2. Define business vocabulary.

0 0 3

- 3. Describe the basics of business ethics.
- 4. Explain basic management principles.

BUS 115 Business Law I 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

This course introduces the student to the legal and ethical framework of business. Contracts, negotiable instruments, the law of sales, torts, crimes, constitutional law, the Uniform Commercial Code, and the court systems are examined. Upon completion the student should be able to identify legal and ethical issues that arise in business decisions and the laws that apply to

Commercial Code, and the court systems are examined. Upon completion the student should be able to identify legal and ethical issues that arise in business decisions and the laws that apply to them. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

### Competencies

### **Student Learning Outcomes**

- 1. Identify the elements of a contract.
- 2. Describe the structure of the U.S. court system.
- 3. Identify laws, conditions and regulations in national and international work environments.

### BUS 121 Business Math 2 2 0 3

Prerequisites: Satisfactory placement or DMA 010, DMA 020 and DMA 030

Corequisites: Satisfactory placement or DRE 096

FA, SP, SU

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 137 Principles of Management 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

### Competencies

#### Student Learning Outcomes

- 1. Explain strategic management in business operations.
- 2. Define management, quality management, and project management.
- 3. Identify relevant issues in human resource management.

### BUS 153 Human Resource Management 3 0 0

Prerequisites: None Corequisites: None

FA, SP

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

BUS 217 Employment Laws and Regulations 3 0 0 3

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

FΑ

This course introduces the principle laws and regulations affecting public and private organizations and their employees or prospective employees. Topics include fair employment practices, EEO, affirmative action, and employee rights and protections. Upon completion,

students should be able to evaluate organization policy for compliance and assure that decisions are not contrary to law.

### Competencies

### **Student Learning Outcomes**

- 1. Define fair employment practices, EEO, affirmative action.
- 2. Identify employee rights and protections.
- 3. Evaluate organization policy for compliance.
- 4. Evaluate decisions to assure they are not contrary to law.

BUS 238 Integrated Management

Prerequisites: Satisfactory placement or DRE 096; ACC 120, BUS 110, BUS 115, BUS 121, BUS

137, BUS 153 and MKT 120

Corequisites: None

SΡ

This course provides a management simulation exercise in which students make critical managerial decisions based upon the situations that arise in operating competitive business enterprises. Topics include operations management, forecasting, budgeting, purchasing, facility layout, aggregate planning, and work improvement techniques. Upon completion, students should be able to perform the variety of analytical and decision-making requirements that will be faced in a business

#### **BUS 239 Business Applications Seminar**

1 2 0 2

Prerequisites: Take One Set:

Set 1: ACC-120, BUS-115, BUS-137, MKT-120, and ECO-151 Set 2: ACC-120, BUS-115, BUS-137, MKT-120, and ECO-251 **Set 3:** ACC-120, BUS-115, BUS-137, MKT-120, and ECO-252

Corequisites None

FA.SP

This course is designed as a capstone course for Business Administration majors. Emphasis is placed on decision making in the areas of management, marketing, production, purchasing, and finance. Upon completion, students should be able to apply the techniques, processes, and vital professional skills needed in the work place.

#### BUS 253 **Leadership and Management Skills**

3 3 0 0

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Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

This course includes a study of the qualities, behaviors, and personal styles exhibited by leaders. Emphasis is placed on coaching, counseling, team building, and employee involvement. Upon completion, students should be able to identify and exhibit the behaviors needed for organizational effectiveness.

#### BUS 258 **Compensation and Benefits**

Prerequisites: None Corequisites: None

This course is designed to study the basic concepts of pay and its role in rewarding performance. Topics include wage and salary surveys, job analysis, job evaluation techniques, benefits, and pay-for-performance programs. Upon completion, students should be able to develop and manage a basic compensation system to attract, motivate, and retain employees.

#### Competencies

### **Student Learning Outcomes**

- 1. Describe job analysis and job evaluation techniques.
- 2. Describe benefits and pay-for-performance programs.
- 3. Develop and manage a basic compensation system to attract, motivate, and retain employees.
- 4. Define wage and salary surveys.

#### **Business Communication BUS 260**

0

Prerequisites: CIS 110 and ENG 111

Corequisites: None

FA, SP, SU

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 3

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

FA, SP

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

## **Chemistry**

CHM 131 Introduction to Chemistry 3 0 0 3

Prerequisites: Satisfactory placement or DMA 010, DMA 020, DMA 030, DMA 040, DMA 050

and DRE 096

Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Natural Science.* 

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### CHM 131A Introduction to Chemistry Lab 0 3 0

Prerequisites: None Corequisites: CHM 131

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Natural Science.

### CHM 132 Organic and Biochemistry 3 3 0 4

Prerequisites: "C" or better earned in CHM 131 and CHM 131A or CHM 151

Corequisites: None

SP College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Natural Science.

### CHM 151 General Chemistry I 3 3 0

Prerequisites: Satisfactory placement or

Take One Set:

Set 1: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060, DMA 070,

DMA 080 and DRE 096

Set 2: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065 and DRE 096

Corequisites: None

FA, SP College Transfer Course

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

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152. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Natural Sciences-AA/AS.

CHM 152 General Chemistry II

Prerequisites: CHM 151 Corequisites: None

SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Natural Sciences-AS*.

# **Information Systems**

CIS 110 Introduction to Computers 2 2 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Mathematics (Quantitative).

CIS 115 Introduction to Programming and Logic 2 3 0 3

Prerequisites: Satisfactory placement or DMA 010, DMA 020, DMA 030, DMA 040, DMA 050

and DRE 096

Corequisites: None

FA College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Mathematics (Quantitative).

## **Criminal Justice**

CJC 100 Basic Law Enforcement Training 9 30 0 20

Prerequisites: None Corequisites: None

FA, SP

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 the topics and areas required for the state comprehensive certification examination. *This is a certificate-level course.* 

CJC 111 Introduction to Criminal Justice 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

CJC 112 Criminology

3 0 0 3

Prerequisites: None Corequisites: None

FA, SP

This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.

CJC 113 Juvenile Justice 3 0 0 3

Prerequisites: None Corequisites: None

SP

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 120 Interviews/Interrogations

1 2 0 2

Prerequisites: None Corequisites: None

FΑ

This course covers basic and special techniques employed in criminal justice interviews and interrogations. Emphasis is placed on the interview/interrogation process, including interpretation of verbal and physical behavior and legal perspectives. Upon completion, students should be able to conduct interviews/interrogations in a legal, efficient, and professional manner and obtain the truth from suspects, witnesses, and victims.

### CJC 121 Law Enforcement Operations

0 0

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Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

### CJC 122 Community Policing

3 0 0 3

Prerequisites: None Corequisites: None

SP, SU

This course covers the historical, philosophical, and practical dimensions of community policing. Emphasis is placed on the empowerment of police and the community to find solutions to problems by forming partnerships. Upon completion, students should be able to define community policing, describe how community policing strategies solve problems, and compare community policing to traditional policing.

#### CJC 131 Criminal Law

3 0 0 3

Prerequisites: None Corequisites: None

FΑ

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 and Evidence

Prerequisites: None Corequisites: None

SP

This course covers judicial structure/process/procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of evidence in court. Topics include consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper judicial procedures, and the admissibility of evidence.

### CJC 141 Corrections 3 0 0 3

Prerequisites: None Corequisites: None

SP College Transfer Course

This course covers the history, major philosophies, components, and current practices and problems of the field of corrections. Topics include historical evolution, functions of the various components, alternatives to incarceration, treatment programs, inmate control, and other related topics. Upon completion, students should be able to explain the various components, processes, and functions of the correctional system. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

### CJC 151 Introduction to Loss Prevention

3 0 0 3

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Prerequisites: None Corequisites: None

FΑ

This course introduces the concepts and methods related to commercial and private security systems. Topics include the historical, philosophical, and legal basis of security, with emphasis on security surveys, risk analysis, and associated functions. Upon completion, students should be able to demonstrate and understand security systems, risk management, and the laws relative to loss prevention.

### CJC 160 Terrorism: Underlying Issues 3 0

Prerequisites: None Corequisites: None

SP

This course identifies the fundamental reasons why America is a target for terrorists, covering various domestic/international terrorist groups and ideologies from a historical aspect. Emphasis is placed upon recognition of terrorist crime scene; weapons of mass destruction; chemical, biological, and nuclear terrorism; and planning consideration involving threat assessments. Upon completion, the student should be able to identify and discuss the methods used in terrorists' activities and complete a threat assessment for terrorists' incidents.

### CJC 170 Critical Incident Management for Public Safety 3 0 0 3

Prerequisites: None Corequisites: None

This course prepares the student to specialize in the direct response, operations, and management of critical incidents. Emphasis is placed upon the theoretical and applied models to understand and manage disasters, terrorism, and school/work place violence. Upon completion, the student should be able to identify and discuss managerial techniques, legal issues, and response procedures to critical incidents.

### CJC 212 Ethics and Community Relations 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU

This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems; social change, values, and

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norms; cultural diversity; citizen involvement in criminal justice issues; and other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations.

CJC 215 Organization and Administration 3

Prerequisites: None Corequisites: None

FA. SP

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

CJC 221 Investigative Principles 3 2 0 4

Prerequisites: None Corequisites: None

FΑ

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

CJC 222 Criminalistics 3 0 0 3

Prerequisites: None Corequisites: None

FΑ

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 223 Organized Crime 3 0 0

Prerequisites: None Corequisites: None

SP

This course introduces the evolution of traditional and non-traditional organized crime and its effect on society and the criminal justice system. Topics include identifying individuals and groups involved in organized crime, areas of criminal activity, legal and political responses to organized crime, and other related topics. Upon completion, students should be able to identify the groups and activities involved in organized crime and the responses of the criminal justice system.

CJC 225 Crisis Intervention 3 0 0 3

Prerequisites: None Corequisites: None

FΑ

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

CJC 231 Constitutional Law 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP

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

CJC 255 Issues in Criminal Justice Application 3 0 0 3

Prerequisites: CJC 111, CJC 221 and CJC 231

Corequisites: None

FA, SP

This course provides an opportunity to exhibit interpersonal and technical skills required for application of criminal justice concepts in contemporary practical situations. Emphasis is placed on critical thinking and integration of theory and practical skills components. Upon completion, students should be able to demonstrate the knowledge required of any entry-level law enforcement officer.

### **Communication**

COM 110 Introduction to Communication 3 0 0 3

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts (Substitute).

COM 120 Introduction to Interpersonal Communication 3 0 0 3

Prerequisites: Satisfactory placement or DRE 097 and DRE 098 or DRE 099

Corequisites: None

FA, SP, SU College Transfer Course

This course introduces the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is placed on the communication process, perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication relationships. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations. This course has been approved for transfer under the CAA ICAA as a general education course in English Composition.

COM 140 Introduction to Intercultural Communication 3 0 0 3

Prerequisites: Satisfactory placement or DRE 097 and DRE 098

Corequisites: None

College Transfer Course

This course introduces techniques of cultural research, definitions, functions, characteristics, and impacts of cultural differences in public address. Emphasis is placed on how diverse backgrounds influence the communication act and how cultural perceptions and experiences determine how one sends and receives messages. Upon completion, students should be able to demonstrate an understanding of the principles and skills needed to become effective in communicating outside one's primary culture. This course has been approved for transfer under the CAA ICAA as a general education course in English Composition.

COM 231 Public Speaking 3 0 0 3

Prerequisites: ENG 111 Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Communications—AA/AS.

## Cosmetology

### COS 111 Cosmetology Concepts I

4 0 0 4

Prerequisites: None Corequisites: COS 112

FA, SP

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

COS 112 Salon I 0 24 0 8

Prerequisites: None Corequisites: COS 111

FA, SP

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

COS 113 Cosmetology Concepts II

0 0 4

Prerequisites: COS 111 and COS 112

Corequisites: COS 114

FA, SP

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

COS 114 Salon II 0 24 0 8

Prerequisites: COS 111 and COS 112

Corequisites: COS 113

FA, SP

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

COS 115 Cosmetology Concepts III 4 0

Prerequisites: COS 111 and COS 112

Corequisites: COS 116

FA. SP

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

COS 116 Salon III 0 12 0 4

Prerequisites: COS 111 and COS 112

Corequisites: COS 115

FA, SP

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

COS 117 Cosmetology Concepts IV 2 0 0 2

Prerequisites: COS 111 and COS 112

Corequisites: COS 118

FA, SP

This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements.

COS 118 Salon IV 0 21 0 7

Prerequisites: COS 111 and COS 112

Corequisites: COS 117

FA. SP

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

COS 119 Esthetics Concepts I 2 0 0 2

Prerequisites: None Corequisites: None

This course covers the concepts of esthetics. Topics include orientation, anatomy, physiology, hygiene, sterilization, first aid, chemistry, basic dermatology, and professional ethics. Upon completion, students should be able to demonstrate an understanding of the concepts of esthetics and meet course requirements.

COS 120 Esthetics Salon I 0 18 0 6

Prerequisites: None Corequisites: None

This course covers the techniques of esthetics in a comprehensive experience in a simulated salon setting. Topics include client consultation, facials, body treatments, hair removal, makeup applications, and color analysis. Upon completion, students should be able to safely and competently demonstrate esthetic services on clients in a salon setting.

COS 121 Manicure/Nail Technology I 4 6 0 6

Prerequisites: None Corequisites: None

This course covers techniques of nail technology, hand and arm massage, and recognition of nail diseases and disorders. Topics include OSHA/safety, sanitation, bacteriology, product knowledge, salesmanship, manicures, artificial applications, pedicures, massage, and other related topics. Upon completion, students should be able to safely and competently perform nail care, including manicures, pedicures, massage, decorating, and artificial applications in a salon setting.

COS 125 Esthetics Concepts II 2 0 0 2

Prerequisites: COS 119 Corequisites: None

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

Prerequisites: COS 120 Corequisites: None

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.

6

COS 222 Manicure/Nail Technology II 4 6 0

Prerequisites: COS 121 Corequisites: None

This course covers advanced techniques of nail technology and hand arm massage. Topics include OSHA/safety, product knowledge, customer service, salesmanship, artificial applications, nail art, and other related topics. Upon completion, students should be able to demonstrate competence necessary for the licensing examination, including advanced nail care, artificial enhancements, and decorations.

COS 271 Instructor Concepts I 5 0 0 5

Prerequisites: Must possess a valid license in Cosmetology

Corequisites: COS 272

FΑ

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

Prerequisites: Must possess a valid license in Cosmetology

Corequisites: COS 271

FΑ

This course covers supervisory and instructional skills for teaching entry-level cosmetology students in a laboratory setting. Topics include demonstrations of services, supervision, and entry-level student assessment. Upon completion, students should be able to demonstrate salon services and instruct and objectively assess the entry-level student.

COS 273 Instructor Concepts II 5 0 0 5

Prerequisites: COS 271 and COS 272

Corequisites: COS 274

SP

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: COS 271 and COS 272

Corequisites: COS 273

SP

This course is designed to develop supervisory and instructional skills for teaching advanced cosmetology students in a laboratory setting. Topics include practical demonstrations, supervision, and advanced student assessment. Upon completion, students should be able to demonstrate competence in the areas covered by the Instructor Licensing Examination and meet program completion requirements. This is a certificate-level course.

# **Computer Science**

Prerequisites: Satisfactory placement or

Take One Set:

Set 1: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060, DMA 070,

DMA 080 and DRE 096

Set 2: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065 and DRE 096

Corequisites: None

FA College Transfer Course

This course introduces computer programming using the C++ programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

## CSC 151 JAVA Programming

2 3 0 3

Prerequisites: None Corequisites: None

College Transfer Course

This course introduces computer programming using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion students should be able to design, code, test, debug JAVA language programs. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

## CSC 234 Advanced C++ Programming

3 0 3

Prerequisites: Take CSC 134

Corequisites: None

FA,SP

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 251 Advanced JAVA Programming

2 3 0 3

Prerequisites: Take CSC 151

Corequisites: None

FA,SP

This course is a continuation of CSC 151 using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment.

## CSC 289 Programing Capstone Project

1 4 0 3

Prerequisite: Take All: CTI-110, CTI-120, and CTS-115

Corequisites: None

SP

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.

# **Computer Technology Integration**

CTI 110 Web, Programming, and Database Foundation 2 2 0 3

Prerequisites: None Corequisites: None

FΑ

This course covers the introduction of the tools and resources available to students in programming, mark-up language and services on the Internet. Topics include standard mark-up language Internet services, creating web pages, using search engines, file transfer programs; and database design and creation with DBMS products. Upon completion students should be able to demonstrate knowledge of programming tools, deploy a web-site with mark-up tools, and create a simple database table.

CTI 120 Network and Security Foundation 2 2 0 3

Prerequisites: None Corequisites: None

FΑ

This course introduces students to the Network concepts, including networking terminology and protocols, local and wide area networks, and network standards. Emphasis is placed on securing information systems and the various implementation policies. Upon completion, students should be able to perform basic tasks related to networking mathematics, terminology, media and protocols.

# **Computer Information Technology**

CTS 115 Information Systems Business Concepts 3 0 0 3

Prerequisites: None Corequisites: None

SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

3

CTS 120 Hardware/Software Support 2 3

Prerequisites: None Corequisites: None

SP

This course covers the basic hardware of a personal computer, including installation, operations and interactions with software. Topics include component identification, memory-system, peripheral installation and configuration, preventive maintenance, hardware diagnostics/repair, installation and optimization of system software, commercial programs, system configuration, and device-drivers. Upon completion, students should be able to select appropriate computer equipment and software, upgrade/maintain existing equipment and software, and troubleshoot/repair non-functioning personal computers.

Prerequisites: None Corequisites: None

FA, SP, SU

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 155 Tech Support Functions 2 2 0 3

Prerequisites: None Corequisites: None

SP

This course introduces a variety of diagnostic and instructional tools that are used to evaluate the performance of technical support technologies. Emphasis is placed on technical support management techniques and support technologies. Upon completion, students should be able to determine the best technologies to support and solve actual technical support problems.

CTS 220 Adv Hard/Software Support 2 3 0 3

Prerequisites: CTS 120 Corequisites: None

FA, SP, SU

This course provides advanced knowledge and competencies in hardware and operating system technologies for computer technicians to support personal computers. Emphasis is placed on: configuring and upgrading; diagnosis and troubleshooting; as well as preventive maintenance of hardware and system software. Upon completion, students should be able to install, configure, diagnose, perform preventive maintenance, and maintain basic networking on personal computers.

CTS 289 System Support Project 1 4 0

Prerequisites: CTI 110, CTI 120 and CTS 115

Corequisites: None

FA, SP, SU

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.

# **Culinary**

CUL 110 Sanitation & Safety 2 0 0 2

Prerequisites: None Corequisites: None

FΑ

This course introduces the basic principles of sanitation and safety relative 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 the content necessary for successful completion of a nationally recognized food/safety/sanitation exam.

CUL 112 Nutrition for Foodservice 3 0 0 3

Prerequisites: None Corequisites: None

SP

This course covers the principles of nutrition and its relationship to the foodservice industry. Topics include 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 130 Menu Design 2 0 0 2

Prerequisites: None Corequisites: None

SP

This course introduces menu design and its relationship to foodservice operations. Topics include layout, marketing, concept development, dietary concerns, product utilization, target consumers and trends. Upon completion, students should be able to design, create and produce menus for a variety of foodservice settings.

3

CUL 135 Food & Beverage Service 2 0 0 2

Prerequisites: None Corequisites: None

FΑ

This course is designed to cover the practical skills and knowledge necessary for effective food and beverage service in a variety of settings. Topics include greeting/service of guests, dining room set-up, profitability, menu sales and merchandising, service styles and reservations. Upon completion, students should be able to demonstrate competence in human relations and the skills required in the service of foods and beverages.

Prerequisites: None Corequisites: Take CUL 110

FΑ

This course introduces the fundamental concepts, skills and techniques in basic cookery, and moist, dry and combination heat. Emphasis is placed on recipe conversion, measurements, terminology, classical knife cuts, safe food/equipment handling, flavorings/seasonings, stocks/sauces/soups, and related topics. Upon completion, students should be able to exhibit the basic cooking skills used in the foodservice industry.

CUL 160 Baking I 1 4 0 3

Prerequisites: None

Corequisites: Take CUL 110

SP

This course covers basic ingredients, techniques, weights and measures, baking terminology and formula calculations. Topics include yeast/chemically leavened products, laminated doughs, pastry dough batter, pies/tarts, meringue, custard, cakes and cookies, icings, glazes and basic sauces. Upon completion, students should be able to demonstrate proper scaling and measurement techniques, and prepare and evaluate a variety of bakery products.

CUL 170 Garde Manger I 1 4 0 3

Prerequisites: None

Corequisites: Take CUL-110

FΑ

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 present a cold food display and exhibit an understanding of the cold kitchen and its related terminology

CUL 230 Global Cuisines 1 8 0 5

Prerequisites: Take CUL 110 and CUL 140

Corequisites: None

FΑ

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 240 Culinary Skills II 1 8 0 5

Prerequisites: Take CUL 110 and CUL 140

Corequisites: None

SΡ

This course is designed to further students' knowledge of the fundamental concepts, skills, and techniques involved in basic cookery. Emphasis is placed on meat identification/fabrication, butchery and cooking techniques/methods; appropriate vegetable/starch accompaniments; 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: Take CUL 110 and CUL 160

Corequisites: None

FΑ

This course is designed to further students' knowledge in ingredients, weights and measures, baking terminology and formula calculation. Topics include classical desserts, frozen desserts, cake and torte production, decorating and icings/glazes, dessert plating and presentation. Upon completion, students should be able to demonstrate pastry preparation, plating, and dessert buffet production skills.

CUL 270 Garde Manager II 1 4 0 3

Prerequisites: Take CUL 110 and CUL 140 and CUL 170

Corequisites: None

SP

This course is designed to further students' knowledge in basic cold food preparation techniques and pantry production. Topics include pates, terrines, galantines, decorative garnishing skills, carving, charcuterie, smoking, canapés, horsdoeuvres, and related food items. Upon completion, students should be able to design, set up, and evaluate a catering/event display to include a cold buffet with appropriate showpieces.

CUL 283 Farm to Table 2 6 0 5

Prerequisites: Take CUL-110 and CUL 140

Corequisites: None

SP

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

Prerequisites: Satisfactory placement or DMA 010, DMA 020 and DRE 096

Corequisites: None

SP

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.

DBA 120 Database Programming 2 2 0 3

Prerequisites: None Corequisites: None

FΑ

This course is designed to develop SQL programming proficiency. Emphasis is placed on data definition, data manipulation, and data control statements as well as on report generation. Upon completion, students should be able to write programs which create, update, and produce reports.

# **Design Drafting**

DDF 252 Advanced Solid Modeling 2 2 0 3

Prerequisites: DFT 153 or DFT 154

Corequisites: None

SP

This course introduces advanced solid modeling and design software. Topics include design principles, design constraints, work planes, view generation, and model shading and rendering. Upon completion, students should be able to create advanced solid models.

## **Dietetic Technician**

Please refer to Gaston College's catalog for DET course descriptions.

# **Developmental Disabilities**

DDT 110 Developmental Disabilities 3 0 0 3

Prerequisites: None Corequisites: None

FΑ

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

# **Drafting**

DFT 151 CAD I 2 3 0 3

Prerequisites: None Corequisites: None

FΑ

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

DFT 152 CAD II 2 3 0 3

Prerequisites: DFT 151 Corequisites: None

SP

This course introduces extended CAD applications. Emphasis is placed upon intermediate applications of CAD skills. Upon completion, students should be able to use extended CAD applications to generate and manage drawings.

DFT 153 CAD III 2 3 0 3

Prerequisites: None Corequisites: None

FΑ

This course introduces advanced CAD applications. Emphasis is placed upon advanced applications of CAD skills. Upon completion, students should be able to use advanced CAD applications to generate and manage data.

DFT 170 Engineering Graphics 2 2 0 3

Prerequisites: None Corequisites: None

College Transfer Course

This course introduces basic engineering graphics skills and applications. Topics include sketching, selection and use of current methods and tools, and the use of engineering graphics applications. Upon completion, students should be able to demonstrate an understanding of basic engineering graphics principles and practices. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

## **Developmental Mathematics**

DMA 010 Operations with Integers .75 .50 0 1

Prerequisites: None

Corequisites: Satisfactory placement or DRE 096

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.

## **Competencies**

- Visually represent an integer and its opposite on the number line.
- Explain the concept of the absolute value of an integer.
- Demonstrate the conceptual understanding of operations with integers to solve application problems.
- Correctly apply commutative and associative properties to integer operations.
- Apply the proper use of exponents and calculate the principal square root of perfect squares.
- Simplify multi-step expressions using the rules for order of operations.
- Solve geometric application problems involving area and perimeter of rectangles and triangles, angles, and correctly apply the Pythagorean theorem.

## **Student Learning Outcomes**

- Demonstrate an understanding of the concept of integers within contextual application problems.
- 2. Correctly represent integers on a number line.
- 3. Demonstrate the correct use of additive inverses.
- 4. Evaluate the absolute value of a number.
- 5. Apply integer operations in solving contextual application problems.
- 6. Correctly apply the associative and commutative properties.
- 7. Demonstrate understanding of exponents by converting between exponential and expanded form.
- 8. Evaluate exponents.
- 9. Calculate the square root of numbers containing perfect squares.
- 10. Evaluate integer expressions by using the correct order of operations.
- 11. Distinguish between appropriate use of area and perimeter formulas to solve geometric application problems.
- 12. Use the Pythagorean Theorem to solve geometric problems.
- 13. Represent the events of a geometric application problem included in this module pictorially. and evaluate the correct solution using the appropriate formula.
- 14. Demonstrate an understanding of what a variable represents.
- 15. Evaluate variable expressions and formulas.

## DMA 020 Fractions and Decimals

.75 .50 0 1

Prerequisites: Satisfactory placement or DMA 010 Corequisites: Satisfactory placement or DRE 096

FA, SP, SU

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.

## Competencies

- Solve contextual application problems involving operations with fractions and decimals.
- Visually represent fractions and their decimal equivalents.
- Simplify fractions.
- Find the lowest common denominator of two fractions.
- Correctly perform arithmetic operations on fractions.
- Explain the relationship between a number and its reciprocal.
- · Correctly order fractions and decimals on a number line.
- Convert decimals between standard notation and word form.

- · Round decimals to a specific place value.
- Estimate sums, differences, products, and quotients with decimals.
- Demonstrate an understanding of the connection between fractions and decimals.
- · Convert between standard notation and scientific notation.
- Solve geometric applications involving the circumference and area of circles.

## **Student Learning Outcomes**

- 1. Student Learning Outcomes.
- 2. Solve conceptual problems involving fractions and decimals.
- 3. Visually represent fractions and decimals.
- 4. Simplify fractions.
- 5. Visually represent equivalent fractions and correctly place the values on the number line.
- 6. Add and subtract fractions with like denominators.
- 7. Write an equivalent fraction with a given denominator.
- 8. Add and subtract fractions with unlike denominators using the correct LCD.
- 9. Visually represent the sum and difference of two fractions with unlike denominators.
- 10. Multiply fractions.
- 11. Visually represent multiplication of fractions.
- 12. Divide fractions using reciprocals.
- 13. Correctly round decimals to a specific place value.
- 14. Estimate sums, differences, products, and quotients with decimals.
- 15. Demonstrate an understanding of the connection between fractions and decimals.
- 16. Distinguish between the appropriate use of circumference and area of a circle in solving geometric applications.
- 17. Represent events in geometric problems pictorially and evaluate the solution using correct formulas.
- 18. Correlate negative exponents to fractions and decimals in base 10.
- 19. Convert between standard notation and scientific notation.

## DMA 030 Proportion/Ratios/Rates/Percents

.75 .50 0 1

Prerequisites: Satisfactory placement or DMA 010 and DMA 020

Corequisites: Satisfactory placement or DRE 096

FA, SP, SU

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.

#### **Competencies**

- Apply the concepts of ratio, rates, proportions, and percents to application problems.
- Recognize and choose the correct units in application problems using ratios, rates, and proportions.
- · Calculate a unit rate.
- Convert measurements within and between the U.S. customary and metric system using unit analysis.
- · Compare percents, decimals, and fractions.
- Apply the concepts of part, whole, and percent to solve contextual applications.

- 1. Demonstrate an understanding of the concepts of ratios, rates, proportions, and percents in the context of application problems.
- 2. Write a ratio using a variety of notations.
- 3. Distinguish between events in a problem that should be represented by a ratio or a rate.
- 4. Calculate a unit rate.
- 5. Convert measurements within the U.S. customary and metric system using unit analysis.
- 6. Convert measurements between the U.S customary and metric systems using unit analysis.
- 7. Represent percent as "parts of 100".
- 8. Correctly convert between fractions, decimals, and percents.
- 9. Solve application problems using ratios, rates, proportions, and percents.
- 10. Recognize that two triangles are similar and solve for unknown sides using proportions in contextual applications.

DMA 040 Expressions/Linear Equations/Inequalities .75 .50 0 1

Prerequisites: Satisfactory placement or DMA 010, DMA 020 and DMA 030

Corequisites: Satisfactory placement or DRE 096

FA, SP, SU

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.

## Competencies

- · Differentiate between expressions, equations, and inequalities.
- Simplify and evaluate, when appropriate, expressions, equations, and inequalities.
- Effectively apply algebraic properties of equality.
- Correctly represent the solution to an inequality on the number line.
- Represent the structure of application problems pictorially and algebraically.
- Apply effective problem solving strategies to contextual application problems.
- Demonstrate conceptual knowledge by modeling and solving applications using linear equations and inequalities.

## **Student Learning Outcomes**

- Demonstrate the use of a problem solving strategy to include multiple representations
  of the situation, organization of the information, and algebraic representation of linear
  equations or inequalities.
- 2. Represent verbal statements as algebraic expressions, equations, and inequalities.
- 3. Distinguish between problem events that use expressions, equations, or inequalities.
- 4. Solve linear equations and inequalities in one variable using algebraic properties of equality.
- 5. Demonstrate an understanding of the meaning of solutions to problems, i.e. identity, contradiction, conditional.
- 6. Represent solutions of inequalities on a number line.

## DMA 050 Graphs/Equations of Lines

.75 .50 0 1

Prerequisites: Satisfactory placement or DMA 010, DMA 020, DMA 030 and DMA 040

Corequisites: Satisfactory placement or DRE 096

FA, SP, SU

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.

#### Competencies

- · Read and interpret basic graphs to solve problems.
- Apply the concept of slope as a rate of change in real-world situations.
- Write and graph linear equations in two variables to model real-world situations.
- Represent real-world situations as linear equations in two variables in tabular form, graphically, and algebraically.

- 1. Analyze and interpret basic graphs to solve problems.
- Represent real world situations in tabular, graphical, and algebraic equation form using two variables.
- 3. Generate a table of values given an equation in two variables and plot in Cartesian plane to graph a line.
- 4. Demonstrate an understanding of the concept of slope as a rate of change in real world situations using the slope formula.
- 5. Find and interpret the x- and y-intercepts of linear models in real world situations.
- 6. Graph linear equations using a variety of strategies.
- Given a contextual application, write a linear equation and use the equation to make predictions.
- 8. Demonstrate a conceptual understanding of horizontal and vertical lines in terms of slope and graphically.
- 9. Demonstrate a conceptual understanding of the concept of an algebraic function.

DMA 060 Polynomial/Quadratic Applications .75 .50 0 1

Prerequisites: Satisfactory placement or DMA 010, DMA 020, DMA 030, DMA 040 and DMA 050

Corequisites: Satisfactory placement or DRE 096

FΑ

This course provides a study of problems involving algebraic representations of quadratic equations. Topics include basic polynomial operations, factoring polynomials, and solving polynomial equations by means of factoring. Upon completion, students should be able to find algebraic solutions to contextual problems with quadratic applications.

#### Competencies

- Represent real-world applications as quadratic equations.
- · Apply exponent rules.
- Solve application problems involving polynomial operations.
- · Apply the principles of factoring when solving problems.
- Analyze the graph of a quadratic function.

## **Student Learning Outcomes**

- Demonstrate the use of a problem solving strategy to include multiple representations of the situation, organization of the information, and algebraic representation of quadratic equations
- 2. Add and subtract polynomials.
- 3. Apply exponent rules.
- 4. Multiply polynomials.
- 5. Divide a polynomial by a monomial.
- 6. Factor trinomials using multiple methods.
- 7. Factor the difference of two squares.
- 8. Solve quadratic applications using the zero product property and critique the reasonableness of solutions found.
- 9. Given the graph of a parabola, identify the vertex and x-intercepts.

## DMA 065 Algebra for Precalculus

1.5 1.0 0 2

Prerequisites: DMA 010, DMA 020, DMA 030, DMA 040 and DMA 050

Corequisites: None

FA, SP, SU

This course provides a study of problems involving algebraic representations of quadratic, rational, and radical equations. Topics include simplifying polynomial, rational, and radical expressions and solving quadratic, rational, and radical equations. Upon completion, students should be able to find algebraic solutions to contextual problems with quadratic and rational applications.

## Competencies

- 1. Represent real-world applications as quadratic equations
- 2. Apply exponent rules
- 3. Solve application problems involving polynomial
- 4. Apply the principles of factoring when solving problems
- Represent and solve contextual application problems involving operations on expressions and/or equations
- 6. Explain the reasonableness of solutions found
- 7. Solve radical equations
- 8. Perform operations with radical expressions

- 1. Demonstrate the use of a problem solving strategy to include multiple representations of the situation, organization of the information, and algebraic representation of quadratic and rational equations
- 2. Add and subtract polynomials
- 3. Apply exponent rules
- 4. Multiply polynomials
- 5. Divide a polynomial by a monomial
- 6. Factor trinomials using multiple methods
- 7. Factor the difference of two squares
- 8. Given the graph of a parabola, identify the vertex and x-intercepts
- Solve quadratic applications using the zero product property and critique the reasonableness of solutions found

- 10. Identify the domain of a rational expression
- 11. Multiply and divide rational expressions
- 12. Add and subtract rational expressions
- 13. Solve basic rational equations
- 14. Use rational exponents to rewrite radical expressions
- 15. Simplify radical expressions
- 16. Add and subtract radical expressions
- 17. Multiply radical expressions
- 18. Divide radical expressions
- 19. Solve radical equations with one radical term
- 20. Solve quadratic equations and applications using the quadratic formula

# Digital Media Technology

Digital Media TechnologyDME 110 Introduction to Digital Media 2 2 0 3

Prerequisites: None Corequisites: None

FΑ

This course introduces students to key concepts, technologies, and issues related to digital media. Topics include emerging standards, key technologies and related design issues, terminology, media formats, career paths, and ethical issues. Upon completion, students should be able to demonstrate the various media formats that are used in digital media technology.

## DME 115 Graphic Design Tools 2

Prerequisites: None Corequisites: None

FΑ

This course provides students with an introduction to creative expression and art/design techniques in a digital environment. Emphasis is placed on designing, creating, editing and integrating visual components consisting of bit-mapped and vector-based images, drawings, banners, text, simple animations, and multiple layers. Upon completion, students should be able to design and produce a range of visual products using digital processing techniques.

## DME 120 Introduction to Multimedia Application 2 2 0 3

Prerequisites: DME 110 and DME 115

Corequisites: None

SP

This course introduces storyboarding and multimedia application design. Topics include vector and bit-mapped graphics, interactive multimedia interfaces, layering techniques, image and animation libraries, and scripting. Upon completion, students should be able to produce basic high-quality interactive multimedia applications.

DME 130 Digital Animation I 2 2 0 3

Prerequisites: DME 110 and DME 120

Corequisites: None

FΑ

This course introduces concepts for planning and developing animation sequences. Emphasis will be placed on review of digital animation concepts and exploration of various animation software packages. Upon completion, students should be able to produce simple animations.

## DME 210 User Interface Design 2 2 0 3

Prerequisites: DME 110 Corequisites: None

SP

This course covers current design approaches and emerging standards related to the design and development of user interfaces. Emphasis is placed on conducting research, and analyzing and reviewing current practices in effective interface design. Upon completion, students should be able to intelligently discuss and evaluate new and existing digital media products in terms of the user interface.

2 0 3

DME 215 Advanced Graphic Design Tools 2 2 0 3

Prerequisites: DME 115 Corequisites: None

SP

This course provides students with advanced design techniques in a digital environment. Emphasis is placed on understanding principles of design and typography, and applying them effectively in projects. Upon completion, students should be able to design and produce a range of visual products using advanced digital design techniques and principles.

DME 260 Emerging Tech Digital Media 2 2 0 3

Prerequisites: DME 120 and DME 130

Corequisites: None

SP

This course provides students with the latest technologies and strategies in the field of digital media. Emphasis is placed on the evaluation of emerging digital media technologies and presenting those findings to the class. Upon completion, students should be able to critically analyze emerging digital media technologies and establish informed opinions.

DME 270 Professional Practice Digital Media 2 2 0 3

Prerequisites: DME 120, DME 130, DME 215, and GRD 141

Corequisites: None

SP

This course introduces students to business skills needed to succeed in the digital media workplace. Topics include portfolio development, resume design, and preparation of media contacts. Upon completion, students should be able to prepare themselves and their work for a career in the digital media workplace.

DME 285 Systems Project 2 2 0 3

Prerequisites: DME 120, DME 130, DME 210, DME 215, WEB 140 and WEB 210

Corequisites: None

This course provides an opportunity to complete a significant digital media 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, maintain and implement a digital media project.

## Drama/Theatre

DRA 111 Theatre Appreciation 3 0 0 3

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

College Transfer Course

This course provides a study of the art, craft, and business of the theatre. Emphasis is placed on the audience's appreciation of the work of the playwright, director, actor, designer, producer, and critic. Upon completion, students should be able to demonstrate a vocabulary of theatre terms and to recognize the contributions of various theatre artists. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

DRA 124 Readers Theatre 3 0 0 3

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

College Transfer Course

This course provides a theoretical and applied introduction to the medium of readers theatre. Emphasis is placed on the group performance considerations posed by various genres of literature. Upon completion, students should be able to adapt and present a literary script following the conventions of readers theatre. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

DRA 130 Acting I 0 6 0 3

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

College Transfer Course

This course provides an applied study of the actor's craft. Topics include role analysis, training the voice, and body concentration, discipline, and self-evaluation. Upon completion, students should be able to explore their creativity in an acting ensemble. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

DRA 131 Acting II 0 6 0 3

Prerequisites: DRA 130 Corequisites: None

College Transfer Course

This course provides additional hands-on practice in the actor's craft. Emphasis is placed on further analysis, characterization, growth, and training for acting competence. Upon completion, students should be able to explore their creativity in an acting ensemble. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

## **Developmental Reading/English**

DRE 096 Integrated Reading and Writing 2.50 1 0 3

Prerequisites: None Corequisites: None

FA, SP, SU

This course is designed to develop proficiency in specific integrated and contextualized reading and writing skills and strategies. Topics include reading and writing processes, critical thinking strategies, and recognition and composition of well-developed, coherent, and unified texts; these topics are primarily taught at the introductory level using texts primarily in a Lexile (TM) range of 960 to 1115. Upon completion, students should be able to apply those skills toward understanding a variety of academic and career-related texts and composing effective paragraphs. *Please note: (TM) stands for registered trademark.* 

## Competencies

- Students will demonstrate the use of pre-reading, reading, and post-reading strategies, including using previewing strategies to comprehend texts; activating prior knowledge; identifying text attributes; using context clues; identifying stated main ideas in paragraphlength texts; and making text-to-self connections.
- 2. Students will demonstrate the use of the writing process (prewriting, drafting, revising, editing, and proofreading), including narrowing the focus of the text, establishing a clear main idea, generating supporting details, and determining appropriate organization.
- Students will apply critical thinking strategies in reading and writing and demonstrate an understanding of technical and academic language, including the difference between formal and informal language.
- 4. Students will demonstrate an understanding of purpose, point of view, and tense.
- 5. Students will demonstrate an understanding of fact and opinion in reading and by writing paragraphs using facts and opinions for support of main ideas.
- 6. Students will recognize inferences in texts and analyze and evaluate graphic materials in a text.
- 7. Students will recognize and compose well-developed, coherent, and unified texts, including writing clear topic sentences and relevant body sentences; demonstrating an understanding of specific and adequate supporting information; and analyzing and evaluating body sentences in texts and student writings for specific and adequate support.
- 8. Students will demonstrate an understanding of coherence through organizational patterns, including employing a variety of organizational patterns to draft texts; and using transitions, key words, and synonyms to connect ideas and achieve coherence in writing.
- 9. Students will apply the conventions of Standard Written English.

DRE 097 Integrated Reading and Writing II 2.50 1 0 3

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

FA, SP, SU

This course is designed to develop proficiency in integrated and contextualized reading and writing skills and strategies. Topics include reading and writing processes, critical thinking strategies, and recognition and composition of well-developed, coherent, and unified texts; except where noted, these topics are taught at a reinforcement level using texts primarily in a Lexile (TM) range of 1070 to 1220. Upon completion, students should be able to demonstrate and apply those skills toward understanding a variety of complex academic and career texts and composing essays incorporating relevant, valid evidence. *Please note: (TM) represents registered trademark.* 

## Competencies

## **Student Learning Outcomes**

- 1. Students will demonstrate the use of pre-reading, reading, and post-reading strategies, including applying a variety of previewing strategies to complex texts; activating prior knowledge; identifying important text attributes; using context clues; distinguishing between connotative and denotative meanings and between informal language and Standard Written English; employing introductory metacognitive strategies; identifying stated and implied main ideas at the introductory level; recognizing organizational patterns; responding in writing to complex texts using text-to-text connections; and paraphrasing and summarizing texts at an introductory level.
- 2. Students will demonstrate the use of the writing process (prewriting, drafting, revising, editing, and proofreading), including narrowing the focus of the text; establishing a clear main idea (thesis statement); generating supporting details for a specific purpose and audience; determining appropriate organization; composing and revising drafts; and using MLA or APA guidelines.
- 3. Students will apply critical thinking strategies to analyze complex texts and to inform and strengthen their writing, including making logical conclusions based on prior knowledge and inference; understanding the difference between formal and informal language; using types of technical and academic language in complex texts; recognizing figurative language-simile, metaphor, and personification; determining the author's purpose, point of view, and tone in complex texts; identifying fact and opinion statements in complex texts; demonstrating an understanding of verbal and situational irony; and understanding bias, logical fallacies, and propaganda techniques.
- Students will identify and write clear thesis statements, including identifying thesis statements in multi-paragraph complex texts, and writing clear, focused thesis statements for essays.
- 5. Students will demonstrate an understanding of specific and adequate supporting information, including analyzing and evaluating body paragraphs in complex texts and student writings for specific and adequate support; assessing, synthesizing, and integrating relevant and valid evidence from assigned readings to support a main idea; avoiding plagiarism by paraphrasing; and documenting source material using MLA or APA guidelines.
- Students will achieve unity and coherence in essays, including identifying points that are off-topic in complex texts, and composing body paragraphs that support the thesis statement of an essay.
- 7. Students will apply the conventions of Standard Written English.
- 8. Students will employ appropriate technology when composing texts.

DRE 098 Integrated Reading and Writing III 2.50 1 0

Prerequisites: Satisfactory placement or DRE 097

Corequisites: None

FA. SP. SU

This course is designed to develop proficiency in integrated and contextualized reading and writing skills and strategies. Topics include reading and writing processes, critical thinking strategies, and recognition and composition of well-developed, coherent, and unified texts; these topics are taught using texts primarily in the Lexile (TM) range of 1185 to 1385. Upon completion, students should be able to apply those skills toward understanding a variety of texts at the career and college ready level and toward composing a documented essay. Note: (TM) represents registered trademark.

## Competencies

## **Student Learning Outcomes**

- 1. Students will demonstrate the use of pre-reading, reading, and post-reading strategies to comprehend texts at the career and college ready level, including activating prior knowledge; identifying important text attributes; using context clues; distinguishing between connotative and denotative meanings and between informal language and Standard Written English; employing metacognitive strategies; identifying stated and implied main ideas and details in career-and-college-ready texts and student writing; text-to-world-connections.
- 2. Students will demonstrate the use of the writing process (prewriting, drafting, revising, editing, and proofreading), including narrowing the focus of the text; establishing a clear main idea; generating supporting details for a specific purpose and audience; determining appropriate organization; composing and revising drafts; using editing and proofreading strategies to reflect Standard Written English; using MLA or APA guidelines.
- 3. Students will apply critical thinking strategies to analyze texts at the career and college ready level and to inform and strengthen writing, including comprehending figurative language--simile, metaphor, personification; interpreting imagery, symbols, and analogies; determining the author's purpose and point of view; identifying fact and opinion statements; using inference skills; demonstrating an understanding of verbal and situational irony; understanding bias, logical fallacies, and propaganda techniques; and demonstrating consistent point of view, clear purpose, appropriate tone, and appropriate use of facts and expert opinions.
- 4. Students will recognize and compose well-developed, coherent, and unified texts, including clear thesis statements and specific and adequate supporting information; analyzing and evaluating body paragraphs in texts at the career-and-college-ready level and in student writing; assessing, synthesizing, and integrating relevant and valid evidence; employing a variety of organizational patterns to draft texts and using transitional strategies to connect ideas and achieve coherence; avoiding plagiarism by paraphrasing; and documenting source material using MLA or APA quidelines.
- 5. Students will apply the conventions of Standard Written English.
- 6. Students will employ appropriate technology when composing texts.

## DRE 099 Integrated Reading and Writing III

2 0 0 2

Prerequisites: Satisfactory placement or DRE 097

Corequisites: ENG 111

This course is designed to develop proficiency in integrated and contextualized reading and writing skills and strategies by complementing, supporting and reinforcing material covered in ENG 111. Topics include reading and writing processes, critical thinking strategies, and recognition and composition of well-developed, coherent, and unified texts; except where noted, these topics are taught using texts primarily in the Lexile (TM) range of 1185 to 1385. Upon completion, students should be able to apply those skills toward understanding a variety of texts at the career and college ready level and toward composing a documented essay. Note: (TM) represents registered trademark.

## Competencies

- 1. Students will demonstrate the use of pre-reading, reading, and post-reading strategies to comprehend texts at the career and college ready level, including activating prior knowledge; identifying important text attributes; using context clues; distinguishing between connotative and denotative meanings and between informal language and Standard Written English; employing metacognitive strategies; identifying stated and implied main ideas and details in texts at the career and college ready level and student writing; recognizing organizational patterns; summarizing; and responding to texts using text-to-world connections.
- 2. Students will demonstrate the use of the writing process (prewriting, drafting, revising, editing, and proofreading), including narrowing the focus of the text; establishing a clear main idea; generating supporting details for a specific purpose and audience; determine appropriate organization; composing and revising drafts; using editing and proofreading strategies to reflect Standard Written English; using MLA or APA guidelines.
- Students will apply critical thinking strategies to analyze texts at the career and college ready level and to inform and strengthen writing, including comprehending figurative

language - -simile, metaphor, personification; interpreting imagery, symbols, and analogies; determining the author?s purpose and point of view; identifying fact and opinion statements; using inference skills; demonstrating an understanding of verbal and situational irony; understanding bias, logical fallacies, and propaganda techniques; and demonstrating consistent point of view, clear purpose, appropriate tone, and appropriate use of facts and expert opinions.

- 4. Students will recognize and compose well-developed, coherent, and unified texts, including clear thesis statements and specific and adequate supporting information; analyzing and evaluating body paragraphs in texts at the career and college ready level and student writing; assessing, synthesizing, and integrating relevant and valid evidence; employing a variety of organizational patterns to draft texts and using transitional strategies to connect ideas and achieve coherence; avoiding plagiarism by paraphrasing; and documenting source material using MLA or APA guidelines.
- 5. Students will apply the conventions of Standard Written English.
- 6. Students will employ appropriate technology when composing texts.

## **Economics**

ECO 251 Principles of Microeconomics 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Social/Behavioral Sciences—AA/AS.

ECO 252 Principles of Macroeconomics 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Social/Behavioral Sciences—AA/AS.

## **Education**

EDU 119 Introduction to Early Childhood Education 4 0 0 4

Prerequisites: None Corequisites: None

Corequisites: N FA, SP, SU

This course introduces the foundations of early childhood education, the diverse educational settings for young children, professionalism and planning intentional developmentally appropriate experiences for each child. Topics include theoretical foundations, national early learning standards, NC Foundations for Early Learning and Development, state regulations, program types, career options, professionalism, ethical conduct, quality inclusive environments, and curriculum responsive to the needs of each child/family. Upon completion, students should be able to design a career/professional development plan, and appropriate environments, schedules, and activity plans.

EDU 126 Early Childhood Seminar I 2 0 0 2

Prerequisites: EDU 119 and EDU 221

Corequisites: Satisfactory placement or DRE 097

FA, SU

This course introduces the students to the early childhood classroom setting and the roles that professionals play in that setting. Emphasis is placed on observations of children/teachers in the classroom, and the use of assessment tools to enhance planning and implementation of curricular experiences. Upon completion, students should be able to use various child assessment tools, determine developmental characteristics of children, and plan developmentally appropriate curricula.

EDU 131 Child, Family, and Community 3 0 0 3

Prerequisites: None

Corequisites: Satisfactory placement or DRE 097

FA, SP

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.

EDU 144 Child Development I 3 0 0 3

Prerequisites: None

Corequisites: Satisfactory placement or DRE 097; EDU 162

FA, SP

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.

EDU 145 Child Development II 3 0 0 3

Prerequisites: None

Corequisites: Satisfactory placement or DRE 097; EDU 162

FA, SP

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.

EDU 146 Child Guidance 3 0 0 3

Prerequisites: None

Corequisites: Satisfactory placement or DRE 097

FA, SP

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.

EDU 151 Creative Activities 3 0 0 3

Prerequisites: None

Corequisites: Satisfactory placement or DRE 097

FA, SP

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.

EDU 153 Health, Safety, & Nutrition 3 0 0 3

Prerequisites: None

Corequisites: Satisfactory placement or DRE 097

FA, SP

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.

EDU 154 Social/Emotional/Behavioral Development 3 0 0 3

Prerequisites: EDU 144 and EDU 145

Corequisites: Satisfactory placement or DRE 097

SP

This course covers the emotional/social development of children and the causes, expressions, prevention and management of challenging behaviors in all children. Emphasis is placed on caregiver/family/child relationships, positive emotional/social environments, developmental concerns, risk factors, and intervention strategies. Upon completion, students should be able to identify factors influencing emotional/social development, utilizing screening measures, and designing positive behavioral supports.

EDU 162 Observation and Assessment in ECE 3 0 0 3

Prerequisites: None

Corequisites: Satisfactory placement or DRE 097

FA. SP

This course introduces the research, benefits, goals, and ethical considerations associated with observation and assessment in Early Childhood environments. Emphasis is placed on the implementation of multiple observation/assessment strategies including anecdotal records, event samples, rating scales, and portfolios to create appropriate learning experiences. Upon completion, students should be able to practice responsible assessment and use assessments to enhance programming and collaboration for children and families.

EDU 184 Early Childhood Introduction Practicum 1 3 0 2

Prerequisites: EDU 119

Corequisites: Satisfactory placement or DRE 097

SP

This course introduces students to early childhood settings and applying skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on observing children and assisting in the implementation of developmentally appropriate activities/environments for all children; and modeling reflective/professional practices. Upon completion, students should be able to demonstrate developmentally appropriate interactions with children and ethical/professional behaviors as indicated by assignments and onsite faculty visits.

EDU 216 Foundations of Education 4 0 0 4

Prerequisites: None

Corequisites: Satisfactory placement or DRE 098

SP

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.

## **EDU 221** Children with Exceptionalities

3 0

0 3

Prerequisites: EDU 144 and EDU 145

Corequisites: Satisfactory placement or DRE 098

FA, SP, SU

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.

## **EDU 223** Specific Learning Disabilities

3 0 0 3

Prerequisites: EDU 144 and EDU 145

Corequisites: Satisfactory placement or DRE 098

SP

This course provides a comprehensive study of characteristics, alternative assessments, teaching strategies, placement options, inclusion, and family intervention for children with specific learning disabilities. Topics include causes, assessment instruments, learning strategies, and collaborative/inclusion methods for children with specific learning disabilities. Upon completion, students should be able to assist in identifying, assessing, and providing educational interventions for children with specific learning disabilities and their families.

## EDU 234 Infants, Toddlers, and Twos

3 0 0 3

Prerequisites: EDU 119

Corequisites: Satisfactory placement or DRE 098

SP

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 234A Infants, Toddlers, and Twos Lab

0 2 0 1

Prerequisites: None

Corequisites: Satisfactory placement or DRE 098; EDU 234

SP

This course focuses on practical applications that support the healthy development of very young children by applying principles of quality inclusive early care and education. Emphasis is placed on recognizing the interrelated factors that impact children's development through planning, evaluating and adapting quality environments, including activities and adult/child interactions. Upon completion, students should be able to demonstrate the ability to engage in respectful, responsive care that meets the unique needs of individual children/families.

## **EDU 235** School-Age Development and Programs

0 0 3

Prerequisites: None

Corequisites: Satisfactory placement or DRE 098

SU

This course includes developmentally appropriate practices in group settings for school-age children. Emphasis is placed on principles of development, environmental planning, and positive guidance techniques. Upon completion, students should be able to discuss developmental principles for all children ages five to twelve and plan and implement developmentally-appropriate activities.

EDU 247 Sensory and Physical Disabilities 3 0 0 3

Prerequisites: EDU 144 and EDU 145

Corequisites: Satisfactory placement or DRE 098

SP

This course covers characteristics, intervention strategies, assistive technologies, and inclusive practices for children with sensory and physical disabilities. Topics include inclusive placement options, utilization of support services, other health impairments and family involvement for children with sensory and physical disabilities. Upon completion, students should be able to identify and utilize intervention strategies and service delivery options for those specific disabilities.

EDU 248 Developmental Delays 3 0 0 3

Prerequisites: EDU 144 and EDU 145

Corequisites: Satisfactory placement or DRE 098

SP

This course covers the causes and assessment of developmental delays and individualized instruction and curriculum for children with developmental delays. Emphasis is placed on definition, characteristics, assessment, educational strategies, inclusion, family involvement, and services for children with developmental delays. Upon completion, students should be able to identify, assess, and plan educational intervention strategies for children with developmental delays and their families.

EDU 252 Math and Science Activities 3 0 0 3

Prerequisites: None

Corequisites: Satisfactory placement or DRE 098, EDU 119

SP

This course introduces discovery experiences in math and science. Topics include concepts, facts, phenomena, and skills in each area. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate developmentally appropriate curriculum materials.

EDU 259 Curriculum Planning 3 0 0 3

Prerequisites: CIS 110 and EDU 119

Corequisites: Satisfactory placement or DRE 098

SP

This course is designed to focus on curriculum planning for three to five year olds. Topics include philosophy, curriculum models, indoor and outdoor environments, scheduling, authentic assessment, and planning developmentally appropriate experiences. Upon completion, students should be able to evaluate children's development, critique curriculum, plan for individual and group needs, and assess and create quality environments.

EDU 261 Early Childhood Administration I 3 0 0 3

Prerequisites: None

Corequisites: Satisfactory placement or DRE 098; EDU 119

SU

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.

EDU 262 Early Childhood Administration II 3 0 0 3

Prerequisites: EDU 261

Corequisites: Satisfactory placement or DRE 098; EDU 119

SU

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.

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EDU 271 Educational Technology 2 2 0 3

Prerequisites: CIS 110

Corequisites: Satisfactory placement or DRE 098

FΑ

This course introduces the use of technology to enhance teaching and learning in all educational settings. Topics include technology concepts, instructional strategies, materials and adaptive technology for children with exceptionalities, facilitation of assessment/evaluation, and ethical issues surrounding the use of technology. Upon completion, students should be able to apply technology enhanced instructional strategies, use a variety of technology resources and demonstrate appropriate technology skills in educational environments.

EDU 280 Language and Literacy Experiences 3 0 0 3

Prerequisites: None

Corequisites: Satisfactory placement or DRE 098

FΑ

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.

EDU 281 Instructional Strategies/Reading and Writing 2 2 0 3

Prerequisites: None

Corequisites: Satisfactory placement or DRE 098

SU

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.

EDU 284 Early Childhood Capstone Practices 1 9 0 4

Prerequisites: EDU 119, EDU 144, EDU 145, EDU 146, EDU 151, and instructor consent

Corequisites: Satisfactory placement or DRE 098

FA. SP

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 onsite faculty visits.

EDU 288 Advanced Issues/Early Childhood Education 2 0 0 2

Prerequisites: None

Corequisites: Satisfactory placement or DRE 098

SU

This course covers advanced topics and issues in early childhood. Emphasis is placed on current advocacy issues, emerging technology, professional growth experiences, and other related topics. Upon completion, students should be able to list, discuss, and explain advanced current topics and issues in early childhood education.

## **Engineering**

EGR 150 Introduction to Engineering 1 2 0 2

Prerequisites: None Corequisites: None

This course is an overview of the engineering profession. Topics include goal setting and career assessment, ethics, public safety, the engineering method and design process, written and

oral communication, interpersonal skills and team building, and computer applications. Upon completion, students should be able to understand the engineering process, the engineering profession, and utilize college resources to meet their educational goals. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

## EGR 210 Introduction to Electrical/Computer Engineering Lab 1 3 0 2

Prerequisites: MAT 271 and PHY 251

Corequisites: None

This course provides an overview of electrical and computer engineering, through a lecture and laboratory setting. Topics include fundamental concepts, electronic circuits, digital circuits, communication systems, and signal processing. Upon completion, students should be able to discuss the wide range of fields available to the electrical or computer engineer. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

## EGR 212 Logic System Design I 3 0 0 3

Prerequisites: MAT 271 and PHY 251

Corequisites: None

This course provides an introduction to digital circuits and analysis. Topics include Boolean Algebra; mixed logic; design of combinational circuits; introduction to sequential systems; and MSI building blocks. Upon completion, students should be able to analyze and design digital circuits and systems. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

## EGR 215 Network Theory I 3 0 0 3

Prerequisites: MAT 272 and PHY 251
Corequisites: MAT 273 and PHY 252
College Transfer Course

This course provides an introduction to Kirchoff's laws and terminal equations, circuit analysis techniques and network theorems, transient and natural response, and state variable analysis. Topics include Kirchoff's laws, Ohm's law, circuit analysis techniques, Network theorems, singularity functions, transient and natural responses, power, and state variable analysis. Upon completion, students should be able to analyze electric circuits involving capacitors, inductors, and resistors to determine required parameters. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

## EGR 216 Logic and Network Lab 0 3 0 1

Prerequisites: MAT 272 and PHY 251
Corequisites: EGR 212 and EGR 215

College Transfer Course

This course provides laboratory experiments in network measurements and logic design and laboratory equipment and techniques. Topics include network measurement and applications, experimental logic design and introduction to laboratory equipment and techniques. Upon completion, students should be able to complete network measurement logic design and be able to use laboratory equipment with proper techniques. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

#### EGR 220 Engineering Statics 3 0 0 3

Prerequisites: PHY 251 Corequisites: MAT 272

College Transfer Course

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 for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

EGR 225 Engineering Dynamics 3 0 0 3

Prerequisites: EGR 220 Corequisites: MAT 273

College Transfer Course

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 for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

EGR 228 Introduction to Solid Mechanics 3 0 0 3

Prerequisites: EGR 220 Corequisites: None

College Transfer Course

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 for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

EGR 250 Statics/Strength of Materials 4 3 0 5

Prerequisites: MAT 121 or MAT 171

Corequisites: None

FΑ

This course includes vector analysis, equilibrium of force systems, friction, sectional properties, stress/strain, and deformation. Topics include resultants and components of forces, moments and couples, free-body diagrams, shear and moment diagrams, trusses, frames, beams, columns, connections, and combined stresses. Upon completion, students should be able to analyze simple structures.

EGR 285 Design Project 0 4 0 2

Prerequisites: Take One Set:

Set 1: ELN 131, ELN 152, ELN 232 and "C" or better earned in PHY 131 or PHY 151

Set 2: ELN 110, MAC 124 and "C" or better earned in PHY 131 or PHY 151

Corequisites: None

SP

This course provides the opportunity to design an instructor-approved project using previously acquired skills. Emphasis is placed on selection, proposal, design, testing, and documentation of the approved project. Upon completion, students should be able to present and demonstrate projects.

## **Electricity**

ELC 113 Residential Wiring 2 6 0 4

Prerequisites: None Corequisites: None

FΑ

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

## Competencies

#### **Student Learning Outcomes**

1. Identify and demonstrate safe practices and procedures with tools, materials and industry accepted test equipment covered in the course.

- 2. Demonstrate appropriate use of test equipment, evaluate circuit performance and apply appropriate troubleshooting techniques to residential electrical circuits.
- 3. Draw, plan and interpret electrical plans and symbols used in residential applications
- 4. Identify, size, and install wiring and electrical distribution equipment and devices associated with residential electrical installations in accordance with the National Electrical Code.
- 5. Recognize and demonstrate appropriate use of tools and materials that are used in residential wiring.

**ELC 114** Commercial Wiring

2 6 0 4

Prerequisites: ELC 113 Corequisites: None

SP

This course provides instruction in the application of electrical tools, materials, and test equipment associated with commercial electrical installations. Topics include the NEC; safety; electrical blueprints; planning, layout, and installation of equipment and conduits; and wiring devices such as panels and overcurrent devices. Upon completion, students should be able to properly install equipment and conduit associated with commercial electrical installations.

## Competencies

## **Student Learning Outcomes**

- 1. Identify and demonstrate safe practices and procedures with tools, materials and industry accepted test equipment covered in the course.
- 2. Demonstrate appropriate use of test equipment, evaluate circuit performance and apply appropriate troubleshooting techniques to commercial electrical circuits.
- 3. Draw, plan, and interpret electrical plans and symbols used in commercial applications.
- 4. Identify, size, and install wiring and electrical distribution equipment and devices associated with commercial electrical installations in accordance with the National Electrical Code.
- 5. Recognize and demonstrate appropriate use of tools and materials that are used in commercial wiring.

## **ELC 115** Industrial Wiring

2 6 0 4

Prerequisites: ELC 113 Corequisites: None

SP

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

#### **Competencies**

#### **Student Learning Outcomes**

- Identify and demonstrate safe practices and procedures with tools, materials and industry accepted test equipment covered in the course.
- 2. Demonstrate appropriate use of test equipment, evaluate circuit performance and apply appropriate troubleshooting techniques to industrial electrical circuits.
- 3. Draw, plan, and interpret electrical plans and symbols used in industrial applications.
- 4. Identify, size, and install wiring and electrical distribution equipment and devices associated with industrial electrical installations in accordance with the National Electrical Code.
- 5. Recognize and demonstrate appropriate use of tools and materials that are used in industrial wiring.

## ELC 117 Motors and Controls 2 6 0 4

Prerequisites: None Corequisites: None

SU

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

## Competencies

## **Student Learning Outcomes**

1. Demonstrate safe practices and procedures with tools, materials and industry accepted test equipment covered in the course.

- 2. Demonstrate appropriate use of test equipment, evaluate circuit performance and apply appropriate troubleshooting techniques to control circuits.
- 3. Interpret and use ladder and wiring diagrams, symbols, and schematics.
- 4. Demonstrate and describe the use of relays, contactors, motor starters and pilot devices in electrical control circuits.
- 5. Describe principles and operations related to electrical control circuits.
- 6. Describe the concepts of rotating electrical machinery.

ELC 119 NEC Calculations 1 2 0

Prerequisites: None Corequisites: None

FΑ

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

ELC 131 Circuit Analysis 3 3 0

Prerequisites: None Corequisites: None

FΑ

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

## Competencies

## **Student Learning Outcomes**

- 1. Identify and describe the operation of components used in DC/AC circuits.
- 2. Apply math formulas and circuit theorems in the analyses of DC/AC Circuits.
- 3. Locate and select DC/AC devices using component specifications based on circuit requirements.
- 4. Construct series, parallel and combination circuits.
- 5. Select and demonstrate the use of appropriate test equipment to analyze circuit operation.
- Using appropriate troubleshooting techniques evaluate circuit performance applying suitable repair methods.
- 7. Identify and demonstrate safe workplace practices.

## ELC 131A Circuit Analysis I Lab

0 3 0 1

2

4

Prerequisites: None Corequisites: ELC 131

SP

This course provides laboratory assignments as applied to fundamental principles of DC/AC electricity. Emphasis is placed on measurements and evaluation of electrical components, devices and circuits. Upon completion, the students will gain hands-on experience by measuring voltage, current, and opposition to current flow utilizing various meters and test equipment.

ELC 133 Circuit Analysis II 3 3 0 4

Prerequisites: ELC 131 and MAT 171

Corequisites: None

SP

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

ELC 135 Electrical Machines 2 2 0 3

Prerequisites: None Corequisites: None

SP

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

ELC 213 Instrumentation 3 2 0 4

Prerequisites: None Corequisites: None

SP

This course covers the fundamentals of instrumentation used in industry. Emphasis is placed on electric, electronic, and other instruments. Upon completion, students should be able to install, maintain, and calibrate instrumentation.

ELC 215 Electrical Maintenance 2 3 0 3

Prerequisites: ELC 117 Corequisites: None

SP

This course introduces the theory of maintenance and the skills necessary to maintain electrical equipment found in industrial and commercial facilities. Topics include maintenance theory, predictive and preventive maintenance, electrical equipment operation and maintenance, and maintenance documentation. Upon completion, students should be able to perform maintenance on electrical equipment in industrial and commercial facilities.

## **Electronics**

ELN 110 Survey of Electronics 2 2 0 3

Prerequisites: None Corequisites: None

FΑ

This course introduces fundamental electrical and electronic concepts for non-electronic majors. Emphasis is placed on terminology and devices used in basic electronic and digital applications. Upon completion, students should be able to demonstrate a grasp of the fundamentals of modern electronic circuits.

ELN 131 Analog Electronics I 3 3 0 4

Prerequisites: ELC 131 and MAT 171

Corequisites: None

FΑ

This course introduces the characteristics and applications of semiconductor devices and circuits. Emphasis is placed on analysis, selection, biasing, and applications. Upon completion, students should be able to construct, analyze, verify, and troubleshoot analog circuits using appropriate techniques and test equipment.

## Competencies

- 1. Identify and describe operation of semiconductor devices.
- 2. Analyze where and how analog components are used.
- Locate and select analog devices using component specifications based on circuit requirements.
- 4. Construct operational circuits using analog devices.
- 5. Select and demonstrate the use of appropriate test equipment to analyze circuit operation.
- Using appropriate troubleshooting techniques evaluate circuit performance applying suitable repair methods.
- 7. Identify and demonstrate safe workplace practices.

ELN 133 Digital Electronics 3 3 0

Prerequisites: None Corequisites: None

FΑ

This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, medium scale integration (MSI) and large scale integration (LSI) circuits, analog to digital (AD) and digital to analog (DA) conversion, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.

## Competencies

## **Student Learning Outcomes**

- 1. Identify and describe the operation of digital electronic devices and circuits.
- 2. Analyze where and how digital electronics circuits are used.
- 3. Locate and select digital electronic devices using component specifications based on circuit requirements.
- 4. Construct operational circuits using digital devices.
- 5. Select and demonstrate the use of appropriate test equipment to analyze circuit operation.
- Using appropriate troubleshooting techniques evaluate circuit performance applying suitable repair methods.
- 7. Identify and demonstrate safe workplace practices.

#### **ELN 150** CAD for Electronics

1 3 0 2

Prerequisites: None Corequisites: None

FΑ

This course introduces computer-aided drafting (CAD) with an emphasis on applications in the electronics field. Topics include electronics industry standards (symbols, schematic diagrams, layouts); drawing electronic circuit diagrams; and specialized electronic drafting practices and components such as resistors, capacitors, and ICs. Upon completion, students should be able to prepare electronic drawings with CAD software.

## ELN 152 Fabrication Techniques

1 3 0 2

4

Prerequisites: None Corequisites: None

FΑ

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

## ELN 232 Introduction to Microprocessors 3 3 0 4

Prerequisites: "C" or better earned in ELN 133

Corequisites: None

SP

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

## ELN 234 Communication Systems

Prerequisites: "C" or better earned in ELN 131 and ELN 133

Corequisites: None

SP

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

ELN 260 Programmable Logic Controllers 3 3 0 4

Prerequisites: None Corequisites: None

FΑ

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

# **Emergency Medical Science**

EMS 110 EMT 6 6 0 8

Prerequisites: None Corequisites: None

FA,SP

This course introduces basic emergency medical care. Topics include preparatory, airway, patient assessment, medical emergencies, trauma, infants and children, and operations. Upon completion, students should be able to demonstrate the knowledge and skills necessary to achieve North Carolina State or National Registry EMT certification.

3 1

EMS 122 EMS Clinical Practicum I 0 0

Prerequisites: EMS 110 Corequisites: EMS 130

FA.SP

This course provides the introductory hospital clinical experience for the paramedic student. Emphasis is placed on mastering fundamental paramedic skills. Upon completion, students should be able to demonstrate competence with fundamental paramedic level skills.

EMS 130 Pharmacology 3 3 0 4

Prerequisites: EMS 110 Corequisites: EMS 122

FA,SP

This course introduces the fundamental principles of pharmacology and medication administration and is required for paramedic certification. Topics include medical terminology, pharmacological concepts, weights, measures, drug calculations, vascular access for fluids and medication administration and legislation. Upon completion, students should be able to accurately calculate drug dosages, properly administer medications, and demonstrate general knowledge of pharmacology.

EMS 131 Advanced Airway Management 1 2 0 2

Prerequisites: EMS 110 Corequisites: None

FA,SP

This course is designed to provide advanced airway management techniques and is required for paramedic certification. Topics include respiratory anatomy and physiology, airway/ventilation, adjuncts, surgical intervention, and rapid sequence intubation. Upon completion, students should be able to properly utilize all airway adjuncts and pharmacology associated with airway control and maintenance.

EMS 160 Cardiology I 1 3 0 2

Prerequisites: EMS 110 Corequisites: None

FA.SP

This course introduces the study of cardiovascular emergencies and is required for paramedic certification. Topics include anatomy and physiology, pathophysiology, electrophysiology, and basic rhythm interpretation in the monitoring leads. Upon completion, students should be able to recognize and interpret basic rhythms.

EMS 220 Cardiology II 2 3 0 3

Prerequisites: EMS 122, EMS 130, and EMS 160

Corequisites: None

FA,SP

This course provides an in-depth study of cardiovascular emergencies and is required for paramedic certification. Topics include assessment and treatment of cardiac emergencies, application and interpretation of advanced electrocardiography utilizing the twelve-lead ECG, cardiac pharmacology, and patient care. Upon completion, students should be able to assess and treat patients utilizing American Heart Association guidelines.

EMS 221 EMS Clinical Practicum II 0 0 6 2

Prerequisites: EMS 122 and EMS 130

Corequisites: None

FA,SP

This course provides clinical experiences in the hospital and/or field. Emphasis is placed on increasing the proficiency of students' skills and abilities in patient assessments and the delivery of care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

EMS 231 EMS Clinical Practicum III 0 0 9 3

Prerequisites: EMS 130 and EMS 221

Corequisites: None

FA.SP

This course provides clinical experiences in the hospital and/or field. Emphasis is placed on enhancing the students' skills and abilities in providing advanced-level care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

EMS 240 Patients with Special Challenges 1 2 0 2

Prerequisites: EMS 122 and EMS 130

Corequisites: None

FA,SP

This course includes concepts of crisis intervention and techniques of interacting with patients with special challenges and is required for paramedic certification. Topics include appropriate intervention and interaction for neglected, abused, terminally ill, chronically ill, technology assisted, bariatric, physically challenged, mentally challenged, or assaulted patients as well as behavioral emergencies. Upon completion, students should be able to recognize and manage the care of patients with special challenges.

EMS 241 EMS Clinical Practicum IV 0 0 12 4

Prerequisites: EMS 130 and EMS 231

Corequisites: None

FA,SP

This course provides clinical experiences in the hospital and/or field. Emphasis is placed on mastering the skills/competencies required of the paramedic providing advanced-level care. Upon completion, students should be able to provide advanced-level patient care as an entry-level paramedic.

EMS 250 Medical Emergencies 3 3 0 4

Prerequisites: EMS 122 and EMS 130

Corequisites: None

FA,SP

This course provides an in-depth study of medical conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include appropriate interventions/treatments for disorders/diseases/injuries affecting the following systems: respiratory, neurological, abdominal/gastrointestinal, endocrine, genitourinary, musculoskeletal, and immunological as well as toxicology, infectious diseases and diseases of the eyes, ears, nose and throat. Upon completion, students should be able to recognize, assess and manage the care of frequently encountered medical conditions based upon initial patient assessment.

EMS 260 Trauma Emergencies 1 3 0 2

Prerequisites: EMS 122 and EMS 130

Corequisites: None

FA,SP

This course provides in-depth study of trauma including pharmacological interventions for conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include an overview of thoracic, abdominal, genitourinary, orthopedic, neurological, and multi-system trauma, soft tissue trauma of the head, neck, and face as well as environmental emergencies. Upon completion, students should be able to recognize and manage trauma situations based upon patient assessment and should adhere to standards of care.

EMS 270 Life Span Emergencies 2 3 0 3

Prerequisites: EMS 122 and EMS 130

Corequisites: None

FA,SP

This course covers medical/ethical/legal issues and the spectrum of age-specific emergencies from conception through death required for paramedic certification. Topics include gynecological, obstetrical, neonatal, pediatric, and geriatric emergencies and pharmacological therapeutics. Upon completion, students should be able to recognize and treat age-specific emergencies.

EMS 285 EMS Capstone 1 3 0 2

Prerequisites: EMS 220, EMS 250 and EMS 260

Corequisites: None

FA.SP

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 111 Writing and Inquiry 3 0 0 3

Prerequisites: Satisfactory placement or DRE 098

Corequisites: None

FA, SP, SU College Transfer Course

This course is designed to develop the ability to produce clear writing in a variety of genres and formats using a recursive process. Emphasis includes inquiry, analysis, effective use of rhetorical strategies, thesis development, audience awareness, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in English Composition—AA/AS.

#### Competencies

#### **Student Learning Outcomes**

- 1. Demonstrate writing as a recursive process.
- Demonstrate writing and inquiry in context using different rhetorical strategies to reflect, analyze, explain, and persuade in a variety of genres and formats.
- 3. Reflect upon and explain the writing strategies.
- 4. Demonstrate the critical use and examination of printed, digital, and visual materials.
- 5. Locate, evaluate, and incorporate relevant sources with proper documentation.
- 6. Compose texts incorporating rhetorically effective and conventional use of language.
- 7. Collaborate actively in a writing community.

## ENG 112 Writing/Research in the Disciplines 3 0 0 3

Prerequisites: "C" or better earned in ENG 111

Corequisites: None

FA, SP, SU College Transfer Course

This course, the second in a series of two, introduces research techniques, documentation styles, and writing strategies. Emphasis is placed on analyzing information and ideas and incorporating

research findings into documented writing and research projects. Upon completion, students should be able to evaluate and synthesize information from primary and secondary sources using documentation appropriate to various disciplines. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in English Composition—AA/AS.

## ENG 114 Professional Research and Reporting

3 0

0 3

Prerequisites: ENG 111 Corequisites: None

FA, SP, SU College Transfer Course

This course, the second in a series of two, is designed to teach professional communication skills. Emphasis is placed on research, listening, critical reading and thinking, analysis, interpretation, and design used in oral and written presentations. Upon completion, students should be able to work individually and collaboratively to produce well-designed business and professional written and oral presentations. This course has been approved for transfer under the CAA and ICAA as a general education course in English Composition.

## ENG 125 Creative Writing I

3 0 0 3

Prerequisites: ENG 111 Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

## ENG 126 Creative Writing II

3 0 0 3

Prerequisites: ENG 125 Corequisites: None

FA, SP College Transfer Course

This course is designed as a workshop approach for advancing imaginative and literary skills. Emphasis is placed on the discussion of style, techniques, and challenges for first publications. Upon completion, students should be able to submit a piece of their writing for publication. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

#### ENG 231 American Literature I

3 0 0 3

Prerequisites: "C" or better earned in ENG 112, ENG 113 or ENG 114

Corequisites: None

FA College Transfer Course

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 analyze and interpret literary works in their historical and cultural contexts. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Humanities/Fine Arts—AA/AS.

## Competencies

## **Student Learning Outcomes**

- 1. Describe, analyze, interpret and evaluate features of literary texts in several genres, applying appropriate literary and cultural terms.
- 2. Critically analyze and interpret American literature from its beginnings to 1865 within historical and cultural contexts.
- 3. Write critical essays about American literature that integrate primary and secondary sources using MLA documentation and standard academic written conventions.

## ENG 232 American Literature II

3 0 0 3

Prerequisites: "C" or better earned in ENG 112, ENG 113 or ENG 114

Corequisites: None

SP College Transfer Course

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 analyze and interpret literary works in their historical and cultural contexts. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Humanities/Fine Arts—AA/AS.

## Competencies

## **Student Learning Outcomes**

- 1. Describe, analyze, interpret, and evaluate features of literary texts in several genres, applying appropriate literary and cultural terms.
- Critically analyze and interpret American literature from 1865 to the present within historical and cultural contexts.
- 3. Write critical essays about American literature that integrate primary and secondary sources using MLA documentation and standard academic written conventions.

3

ENG 233 Major American Writers 3 0 0

Prerequisites: "C" or better earned in ENG 112, ENG 113 or ENG 114

Corequisites: None

SP College Transfer Course

This course provides an intensive study of the works of several major American authors. Emphasis is placed on American history, culture, and the literary merits. Upon completion, students should be able to interpret, analyze, and evaluate the works studied. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/ Fine Arts.

ENG 241 British Literature I 3 0 0 3

Prerequisites: "C" or better earned in ENG 112, ENG 113 or ENG 114

Corequisites: None

FA College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.* 

ENG 242 British Literature II 3 0 0 3

Prerequisites: "C" or better earned in ENG 112, ENG 113 or ENG 114

Corequisites: None

SP. SU College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.* 

ENG 243 Major British Writers 3 0 0 3

Prerequisites: "C" or better earned in ENG 112, ENG 113 or ENG 114

Corequisites: None

FA College Transfer Course

This course provides an intensive study of the works of several major British authors. Emphasis is placed on British history, culture, and the literary merits. Upon completion, students should be able to interpret, analyze, and evaluate the works studied. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.* 

ENG 261 World Literature I 3 0 0 3

Prerequisites: "C" or better earned in ENG 112, ENG 113 or ENG 114

Corequisites: None

FA College Transfer Course

This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from their literary beginnings through the seventeenth century. Emphasis is placed on historical

background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.* 

ENG 262 World Literature II 3 0 0 3

Prerequisites: "C" or better earned in ENG 112, ENG 113 or ENG 114

Corequisites: None

SP, SU College Transfer Course

This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from the eighteenth century to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/ Fine Arts

# **Emergency Preparedness**

EPT 140 Emergency Management 3 0 0 3

Prerequisites: None Corequisites: None

This course covers the four phases of emergency management: mitigation, preparedness, response, and recovery. Topics include organizing for emergency management, coordinating for community resources, public sector liability, and the roles of government agencies at all levels. Upon completion, students should be able to demonstrate an understanding of comprehensive emergency management and the integrated emergency management system.

## **Fire Protection**

FIP 120 Introduction to Fire Protection 3 0 0 3

Prerequisites: None Corequisites: None

FΑ

This course provides an overview of the development, methods, systems and regulations that apply to the fire protection field. Topics include history, evolution, statistics, suppression, organizations, careers, curriculum, and related subjects. Upon completion, students should be able to demonstrate a broad understanding of the fire protection field.

## Competencies

## **Student Learning Outcomes**

- 1. Illustrate and explain the history and culture of the fire service.
- 2. Discuss and describe the scope, purpose, and organizational structure of fire and emergency services.
- 3. Identify protection and emergency-service careers in both the public and private sector.
- 4. Describe the importance of wellness and fitness as it relates to emergency services.
- Identify the primary responsibilities of fire prevention personnel including: code enforcement, public information, and public and private fire protection systems.

#### FIP 124 Fire Prevention and Public Education 3 0 0 3

Prerequisites: None Corequisites: None

FΑ

This course introduces fire prevention concepts as they relate to community and industrial operations referenced in NFPA standard 101. Topics include the development and maintenance of fire prevention programs, educational programs, and inspection programs. Upon completion, students should be able to research, develop, and present a fire safety program to a citizens or industrial group.

## Competencies

- 1. Describe the relationship of fire prevention as it relates to the community.
- 2. Demonstrate an educational program for delivery to a defined audience.

- 3. Demonstrate the ability to gather research about fire deaths in the United States and knowledge of how fire prevention impacts this data.
- 4. Describe inspection practices and procedures.
- 5. Define the laws, rules, regulations, and codes and identify those relevant to fire prevention of the authority having jurisdictions.

FIP 128 Detection and Investigation 3

Prerequisites: None Corequisites: None

FΑ

This course covers procedures for determining the origin and cause of accidental and incendiary fires referenced in NFPA standard 921. Topics include collection and preservation of evidence, detection and determination of accelerants, courtroom procedure and testimony, and documentation of the fire scene. Upon completion, students should be able to conduct a competent fire investigation and present those findings to appropriate officials or equivalent.

## Competencies

## **Student Learning Outcomes**

- 1. Identify key case law decisions that have affected fire investigations.
- 2. Describe proper evidence collection.
- 3. Describe proper courtroom procedures.
- 4. Explain the basic elements of fire dynamics and how they affect cause determination.
- 5. Present evidence and findings from an arson scene to a defined audience.

## FIP 132 Building Construction

300

0 3

Prerequisites: None Corequisites: None

FΑ

This course covers the principles and practices reference in NFPA standard 220 related to various types of building construction, including residential and commercial, as impacted by fire conditions. Topics include types of construction and related elements, fire resistive aspects of construction materials, building codes, collapse, and other related topics. Upon completion, students should be able to understand and recognize various types of construction and their positive or negative aspects as related to fire conditions.

## Competencies

#### **Student Learning Outcomes**

- 1. Describe building construction as it relates to fire fighter safety, building codes, fire prevention, code enforcement, firefighting strategy and tactics.
- Analyze the hazards and tactical considerations associated with given types of building construction.
- 3. Explain the correlation of loads and stresses that are placed on buildings during fires and fire suppression activities.
- 4. Identify the indicators of potential structural failure as they relate to firefighter safety.
- 5. Classify major types of building construction according to materials and methods used.

#### FIP 136 Inspections and Codes

3 0 0 3

Prerequisites: None Corequisites: None

SP

This course covers the fundamentals of fire and building codes and procedures to conduct an inspection referenced in NFPA standard 1730. Topics include review of fire and building codes, writing inspection reports, identifying hazards, plan reviews, site sketches, and other related topics. Upon completion, students should be able to conduct a fire code compliance inspection and produce a written report.

#### **Competencies**

- 1. Describe the relationship of fire and building codes as they relate to a community.
- 2. Define the elements of a fire inspection program including application and the interpretation of codes, standards, and recommended practices.
- 3. Demonstrate an understanding of the code adoption process and the basis for each jurisdiction to enact such codes and regulations.

- 4. Demonstrate the ability to conduct a fire code compliance inspection and produce a written report.
- 5. Review a building drawing and identify fire systems.

FIP 146 Fire Protection Systems

3 2 0 4

Prerequisites: None Corequisites: None

SP

This course introduces various types of automatic sprinklers, standpipes, fire alarm systems, and fixed and portable extinguishing systems referenced in NFPA standard 25, including their operation, installation, and maintenance. Topics include wet and dry systems, testing and maintenance, water supply requirements, fire detection and alarm systems, including application, testing, and maintenance of Halon, carbon dioxide, dry chemical, and special extinguishing agents utilized in fixed and portable systems. Upon completion, students should be able to demonstrate a working knowledge of sprinkler and alarm systems, both fixed and portable, including appropriate application, operation, inspection, and maintenance requirements.

### Competencies

### **Student Learning Outcomes**

- 1. Identify the various types of automatic extinguishing systems.
- 2. Describe the proper procedure to maintain an extinguishing system.
- 3. Determine the design requirements for sprinklers and standpipes in a designated building.
- 4. Demonstrate a working knowledge of various sprinklers and alarm systems.
- 5. Define the proper application and maintenance of various sprinklers and alarm systems.

### FIP 152 Fire Protection Law

0 0 3

3

Prerequisites: None Corequisites: None

FΑ

This course covers fire protection law as referenced in NFPA standard 1. Topics include legal terms, contracts, liability, review of case histories, and other related topics. Upon completion, students should be able to discuss laws, codes, and ordinances as they relate to fire protection.

### Competencies

### **Student Learning Outcomes**

- 1. Define and describe the different types of laws within various levels of government.
- 2. Explain the purpose of national codes and standards.
- 3. Define and describe liability and negligence as it applies to fire and emergency services.
- 4. Discuss applicable court decisions influencing emergency services.
- 5. Explain current and emerging legal issues affecting emergency service delivery.

### FIP 220 Fire Fighting Strategies

3 0 0 3

Prerequisites: None Corequisites: None

SΡ

This course provides preparation for command of initial incident operations involving emergencies within both the public and private sector referenced in NFPA standards 1561, 1710, and 1720. Topics include incident management, fire-ground tactics and strategies, incident safety, and command/control of emergency operations. Upon completion, students should be able to describe the initial incident system as it relates to operations involving various emergencies in fire and non-fire situations.

### Competencies

- 1. Identify and define the main functions within the National Incident Management System (NIMS) and how they interrelate during an incident.
- 2. Explain how pre-incident plan information is gathered using pre-formatted forms and methods for storing and retrieving pre-plan information.
- 3. Compare construction methods in terms of structural stability, fire extension, and fuel contribution.
- 4. Describe the 16 Firefighter Life Safety Initiatives and apply them to fire department operations.

5. Describe and compare offensive, defensive, and transitional fire attack methods for appropriate conditions and scenarios.

### FIP 221 Advanced Fire Fighting Strategies

Prerequisites: FIP 220 Corequisites: None

This course covers command-level operations for multi-company/agency operations involving fire and non-fire emergencies. Topics include advanced use of the Incident Command System (ICS), advanced incident analysis, command-level fire operations, and control of both man made and natural major disasters. Upon completion, students should be able to describe proper and accepted systems for the mitigation of emergencies at the level of overall scene command.

### Competencies

### **Student Learning Outcomes**

- Describe the relationship between the fire department, local/state government, and the federal government in large scale and extended duration incidents requiring state and federal assistance or involvement.
- 2. Explain strategic goals and tactical objectives for multi-family, commercial, and industrial/manufacturing fire incidents involving multiple agencies.
- 3. Discuss operational considerations for special situations and occupancies including hotels, high rise structures, health care facilities, and public assembly/school buildings.
- 4. Identify operational considerations for hazardous materials and terrorism incidents, and identify roles and responsibilities of responders from various agencies.

#### FIP 224 Fire Instructor I and II

4 0 0 4

3

Prerequisites: None Corequisites: None

This course covers the knowledge, skills, and abilities needed to train others in fire service operations. Topics include planning, presenting, and evaluating lesson plans, learning styles, use of media, communication, and other related topics. Upon completion, students should be able to meet the requirements of the Fire Instructor I and II objectives from National Fire Protection Association (NFPA) 1041.

### Competencies

### **Student Learning Outcomes**

- 1. Describe the skills and abilities needed to train others in the fire service.
- 2. Develop a lesson plan for a selected topic.
- 3. Demonstrate an educational program for delivery to a defined audience.
- 4. Identify safety considerations in various fire safety training scenarios and make appropriate provisions for a safe learning environment.
- 5. Demonstrate utilization of different types of media in an educational environment.

#### FIP 226 Fire Officer I and II

4 0 0 4

Prerequisites: None Corequisites: None

This course covers the knowledge, skills, and requirements referenced in the National Fire Protection Association (NFPA) Standard 1021 for Fire Officer I and II training. Topics include officer roles and responsibilities, budgets, fire cause determination, inspections, education, leadership, management, public relations, and other requirements included in the NFPA standard. Upon completion, students should be able to demonstrate an understanding of relevant NFPA standards as required for state Fire Officer I and II certification.

### Competencies

- 1. Describe the roles and responsibilities of an officer in the fire service.
- 2. Develop a budget.
- 3. Demonstrate knowledge of supervisory and management skills within the fire service.
- 4. Demonstrate the ability to apply organizational guidelines and policies for given incident and non-incident situations.
- 5. Explain the importance of leading and motivating individuals and others as a company or unit.

FIP 228 Local Government Finance 3 0 0 3

Prerequisites: None Corequisites: None

SP

This course introduces local governmental financial principles and practices. Topics include budget preparation and justification, revenue policies, statutory requirements, audits, and the economic climate. Upon completion, students should be able to comprehend the importance of finance as it applies to the operations of a department.

### Competencies

### **Student Learning Outcomes**

- 1. Define the types of budgets and typical usage for each type.
- 2. Define and describe the different types of revenue fire departments receive including the advantages and disadvantages of each.
- 3. Develop and present a budget for a capital outlay.
- 4. Prepare a budget and written justification for the budget for presentation.
- 5. Define basic finance and budgeting principles in relation to governmental agencies.

### FIP 229 Fire Dynamics and Combustion

3 0 0 3

Prerequisites: None Corequisites: None

SP

This course covers the theories and fundamentals of how and why fires start and spread, and how they are safely controlled referenced in NFPA standard 1001. Topics include components of fire, fire sources, fire behavior, properties of combustible solids, classification of hazards, and the use of fire extinguishing agents. Upon completion, students should be able to describe the properties of matter and dynamics of fire, identify fuel sources, and compare suppressants and extinguishment techniques.

### Competencies

### **Student Learning Outcomes**

- 1. Describe the theories and fundamentals of fire behavior.
- 2. Determine classifications of fire.
- 3. Describe the properties of matter and dynamics of fire.
- 4. Describe different fire sources and compare different suppressants and extinguishment techniques.

#### FIP 230 Chemistry of Hazardous Materials I

0 0 5

Prerequisites: None Corequisites: None

SP

This course covers the evaluation of hazardous materials referenced in NFPA standard 1072. Topics include use of the periodic table, hydrocarbon derivatives, placards and labels, parameters of combustion, and spill and leak mitigation. Upon completion, students should be able to demonstrate knowledge of the chemical behavior of hazardous materials.

#### **Competencies**

### **Student Learning Outcomes**

- 1. Describe the relationship between the elements listed in the periodical table and fire.
- 2. Develop a response plan for a hazardous materials incident.
- 3. Demonstrate knowledge of the chemical behavior of hazardous materials.
- 4. Describe how NFPA standard 1072 affects operations at an incident.

### FIP 232 Hydraulics and Water Distribution

2 0 3

Prerequisites: None Corequisites: None

This course covers the flow of fluids through fire hoses, nozzles, appliances, pumps, standpipes, water mains, and other devices reference in NFPA standard 25. Emphasis is placed on supply and delivery systems, fire flow testing, hydraulic calculations, and other related topics. Upon completion, students should be able to perform hydraulic calculations, conduct water availability tests, and demonstrate knowledge of water distribution systems.

### Competencies

### **Student Learning Outcomes**

- 1. Describe flow of water through various appliances.
- 2. Describe pumping system.
- 3. Demonstrate the ability to perform hydraulic calculations.
- 4. Demonstrate knowledge of a water distribution system.

#### FIP 240 Fire Service Supervision

Prerequisites: None Corequisites: None

This course covers supervisory skills and practices in the fire protection field. Topics include the supervisor's job, supervision skills, the changing work environment, managing change, organizing for results, discipline and grievances, and safety. Upon completion, students should be able to demonstrate an understanding of the roles and responsibilities of effective fire service supervision, meeting elements of NFPA 1021.

### Competencies

### **Student Learning Outcomes**

- 1. Describe the importance and necessity of supervisory skills and practices within the fire protection and emergency services.
- 2. Develop disciplinary action plan.
- 3. Demonstrate the process for dealing with a grievance.
- Demonstrate an understanding of the roles and responsibilities of effective fire service supervision.
- 5. Administer an employee performance evaluation.

### FIP 244 Fire Protection Project

Prerequisites: None Corequisites: None

This course provides an opportunity to apply knowledge covered in previous courses to employment situations that the fire protection professional will encounter referenced in NFPA standard 1001. Emphasis is placed on the development of comprehensive and professional practices. Upon completion, students should be able to demonstrate knowledge of the fire protection service through written and performance evaluations.

### Competencies

### **Student Learning Outcomes**

- 1. Demonstrate the ability to develop a comprehensive program for a defined project.
- 2. Develop an educational program for delivery to a defined audience.
- 3. Demonstrate the ability to gather research about the fire service to defend decisions made within the fire service.

### FIP 276 Managing Fire Services

3 0 0 3

0

3

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Prerequisites: None Corequisites: None

FΑ

This course provides an overview of fire department operative services referenced in NFPA standard 1021. Topics include finance, staffing, equipment, code enforcement, management information, specialized services, legal issues, planning, and other related topics. Upon completion, students should be able to understand concepts and apply fire department management and operations principles.

### Competencies

- 1. Define the standards of efficiency and optimization.
- 2. Define the framework of management and planning in the fire service.
- 3. Develop management policies and plans for fire prevention and investigation practices.
- 4. Explain the concepts of human resource management of public organizations.
- 5. Explain how modern fire services function as all-hazards organizations.

### French

FRE 111 Elementary French I 3 0 0 3

Prerequisites: Satisfactory placement or DRE 097 and DRE 098 or DRE 099

Corequisites: None

College Transfer Course

This course introduces the fundamental elements of the French language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written French and demonstrate cultural awareness. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.* 

FRE 112 Elementary French II 3 0 0 3

Prerequisites: "C" or better earned in FRE 111

Corequisites: None

College Transfer Course

This course is a continuation of FRE 111 focusing on the fundamental elements of the French language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written French and demonstrate further cultural awareness. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts*.

FRE 211 Intermediate French I 3 0 0 3

Prerequisites: "C" or better earned in FRE 112

Corequisites: None

College Transfer Course

This course provides a review and expansion of the essential skills of the French language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

FRE 212 Intermediate French II 3 0 0 3

Prerequisites: "C" or better earned in FRE 211

Corequisites: None

College Transfer Course

This course is a continuation of FRE 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

# Geography

GEO 111 World Regional Geography 3 0 0 3

Prerequisites: None Corequisites: None

College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.* 

GEO 112 Cultural Geography 3 0 0 3

Prerequisites: None Corequisites: None

College Transfer Course

This course is designed to explore the diversity of human cultures and to describe their shared characteristics. Emphasis is placed on the characteristics, distribution, and complexity of earth's cultural patterns. Upon completion, students should be able to demonstrate an understanding of the differences and similarities in human cultural groups. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

GEO 113 Economic Geography 3 0 0 3

Prerequisites: None Corequisites: None

This course covers the patterns and networks of economic interdependence and how they affect human populations. Emphasis is placed on the economic aspects of the production and distribution of goods and services and their impact on the quality of human life. Upon completion, students should be able to describe different economic systems and demonstrate an understanding of the variables that influence economic development.

GEO 130 General Physical Geography 3 0 0 3

Prerequisites: None Corequisites: None

SU College Transfer Course

This course introduces both the basic physical components that help shape the earth and the study of minerals, rocks, and evolution of landforms. Emphasis is placed on the geographic grid, cartography, weather, climate, mineral composition, fluvial processes, and erosion and deposition. Upon completion, students should be able to identify these components and processes and explain how they interact. *This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences*.

GEO 131 Physical Geography I 3 2 0 4

Prerequisites: None Corequisites: None

College Transfer Course

This course introduces the basic physical components that help shape the earth. Emphasis is placed on the geographic grid, cartography, weather, climate, biogeography, and soils. Upon completion, students should be able to identify these components and explain how they interact. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

### German

GER 111 Elementary German I 3 0 0 3

Prerequisites: Satisfactory placement or DRE 097 and DRE 098 or DRE 099

Corequisites: None

FA College Transfer Course

This course introduces the fundamental elements of the German language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written German and demonstrate cultural awareness. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.* 

GER 112 Elementary German II 3 0 0 3

Prerequisites: "C" or better earned in GER 111

Corequisites: None

SP College Transfer Course

This course is a continuation of GER 111 focusing on the fundamental elements of the German language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written German and demonstrate further cultural awareness. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

GER 211 Intermediate German I 3 0 0 3

Prerequisites: "C" or better earned in GER 112

Corequisites: None

FA College Transfer Course

This course provides a review and expansion of the essential skills of the German 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 for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

GER 212 Intermediate German II 3 0 0 3

Prerequisites: "C" or better earned in GER 211

Corequisites: None

SP College Transfer Course

This course provides a continuation of GER 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 for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

## **Graphic Design**

GRD 141 Graphic Design I 2 4 0 4

Prerequisites: None Corequisites: None

FΑ

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.

# Gerontology

GRO 120 Gerontology 3 0 0 3

Prerequisites: None Corequisites: None

ŀΑ

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

### Health

HEA 110 Personal Health/Wellness 3 0 0 3

Prerequisites: None Corequisites: None

SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

HEA 112 First Aid and CPR 1 2 0 2

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

HEA 120 Community Health 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

### **Health Information Technology**

Please refer to Pitt Community College's catalog for HIT course descriptions.

# **History**

HIS 111 World Civilizations I 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Social/Behavioral Sciences—AA/AS.* 

### HIS 112 World Civilizations II 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Social/Behavioral Sciences—AA/AS.

#### HIS 121 Western Civilization I 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

### HIS 122 Western Civilization II 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

HIS 131 American History I 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Social/Behavioral Sciences AA/AS.

HIS 132 American History II 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Social/Behavioral Sciences—AA/AS*.

HIS 151 Hispanic Civilization 3 0 0 3

Prerequisites: None Corequisites: None

FA College Transfer Course

This course surveys the cultural history of Spain and its impact on the New World. Topics include Spanish and Latin American culture, literature, religion, and the arts. Upon completion, students should be able to analyze the cultural history of Spain and Latin America. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

### HIS 221 African-American History 3 0 0 3

Prerequisites: None Corequisites: None

SP College Transfer Course

This course covers African-American history from the Colonial period to the present. Topics include African origins, the slave trade, the Civil War, Reconstruction, the Jim Crow era, the civil rights movement, and contributions of African Americans. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the history of African Americans. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

HIS 226 The Civil War 3 0 0 3

Prerequisites: None Corequisites: None

College Transfer Course

This course examines the social, political, economic, and ideological forces that led to the Civil War and Reconstruction. Topics include regional conflicts and sectionalism, dissolution of the Union, military campaigns, and the War's socioeconomic impact, aftermath, and consequences. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the United States during the era of the Civil War. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

HIS 231 Recent American History 3 0 0 3

Prerequisites: None Corequisites: None

FA College Transfer Course

This course is a study of American society from the post-Depression era to the present. Topics include World War II, the Cold War, social unrest, the Vietnam War, the Great Society, and current political trends. Upon completion, students should be able to analyze significant political,

socioeconomic, and cultural developments in recent America. The background to these events is reviewed from 1900 and the diplomatic impact of events is stressed as the United States moves into world leadership. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

HIS 236 North Carolina History 3 0 0 3

Prerequisites: None Corequisites: None

SP College Transfer Course

This course is a study of geographical, political, economic, and social conditions existing in North Carolina from America's discovery to the present. Topics include native and immigrant backgrounds; colonial, antebellum, and Reconstruction periods; party politics; race relations; and the transition from an agrarian to an industrial economy. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in North Carolina. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

# **Healthcare Management**

### HMT 110 Introduction to Healthcare Management 3 0 0 3

Prerequisites: None Corequisites: None

FΑ

This course introduces the functions, practices, organizational structures, and professional issues in healthcare management. Emphasis is placed on planning, controlling, directing, and communicating within health and human services organizations. Upon completion, students should be able to apply the concepts of management within a healthcare service environment.

### HMT 210 Medical Insurance 3 0 0 3

Prerequisites: None Corequisites: None

SP

This course introduces the concepts of medical insurance. Topics include types and characteristics of third-party payers, coding concepts, payment systems, and manual/electronic claims form preparation. Upon completion, students should be able to process third-party claims forms.

### HMT 211 Long-Term Care Administration 3 0 0 3

Prerequisites: None Corequisites: None

FΑ

This course introduces the administration of long-term care facilities and services. Emphasis is placed on nursing home care, home health care, hospice, skilled nursing facilities, and other long-term care services. Upon completion, students should be able to distinguish between the different long-term care offerings, criteria for use, and benefits of the patient, resident, and participant.

### HMT 220 Healthcare Financial Management 4 0 0 4

Prerequisites: ACC 121 and HMT 110

Corequisites: None

SP

This course covers the methods and techniques utilized in the financial management of healthcare programs. Topics include cost determination, pricing of services, financial statement analysis, forecasting/projections, third-party billing, reimbursement, Medicare, Medicaid, and budgeting. Upon completion, students should be able to interpret and apply the principles of financial management in a healthcare environment.

# **Hotel & Restaurant Management**

HRM 220 Cost Control—Food & Beverage 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU

This course introduces controls and accounting procedures as applied to costs in the hospitality industry. Topics include reports, cost control, planning and forecasting, control systems, financial statements, operational efficiencies, labor controls and scheduling. Upon completion, students should be able to demonstrate an understanding of food, beverage, and labor cost control systems for operational troubleshooting and problem solving.

HRM 245 Human Resource Management—Hospitality 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU

This course introduces a systematic approach to human resource management in the hospitality industry. Topics include training/development, staffing, selection, hiring, recruitment, evaluation, benefit administration, employee relations, labor regulations/laws, discipline, motivation, productivity, shift management, contract employees and organizational culture. Upon completion, students should be able to apply human resource management skills for the hospitality industry.

### **Human Services**

HSE 110 Introduction to Human Services 2 2 0 3

Prerequisites: None Corequisites: None

FΑ

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

HSE 112 Group Process I 1 2 0 2

Prerequisites: Enrollment in the HSE program

Corequisites: None

FΑ

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

Prerequisites: None Corequisites: None

SP

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

HSE 125 Counseling 2 2 0 3

Prerequisites: None Corequisites: None

FΑ

This course covers the major approaches to psychotherapy and counseling, including theory, characteristics, and techniques. Emphasis is placed on facilitation of self-exploration, problem

solving, decision making, and personal growth. Upon completion, students should be able to understand various theories of counseling and demonstrate counseling techniques.

### **HSE 160** HSE Clinical Supervision I

1 0 0 1

Prerequisites: None

Coreguisites: HSE 161, HSE 162, HSE 163 or HSE 164

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

### HSE 163 HSE Clinical Experience I

0 0 9 3

Prerequisites: None Corequisites: HSE 160

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

### **HSE 210** Human Services Issues

2 0 0 2

Prerequisites: Successful completion of 12 SHC in the HSE program

Corequisites: None

FA, SP

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

### HSE 220 Case Management

2 2 0 3

Prerequisites: HSE 110 Corequisites: None SP

This course covers the variety of tasks associated with professional case management. 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 initial contact through termination of services.

#### HSE 225 Crisis Intervention

0 0 3

Prerequisites: None Corequisites: None

SP

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 227 Children and Adolescents in Crisis

3 0 0 3

Prerequisites: Satisfactory placement or DRE 097 and DRE 098

Corequisites: None

SP

This course covers the crises affecting children and adolescents in contemporary society. Emphasis is placed on abuse and neglect, suicide and murder, dysfunctional family living, poverty, and violence. Upon completion, students should be able to identify and discuss intervention strategies and available services for the major contemporary crises affecting children and adolescents.

HSE 240 Issues in Client Services 3 0 0 3

Prerequisites: None Corequisites: None

SP

This course introduces systems of professional standards, values, and issues in the helping professions. Topics include confidentiality, assessment of personal values, professional responsibilities, competencies, and ethics relative to multicultural counseling and research. Upon completion, students should be able to understand and discuss multiple ethical issues applicable to counseling and apply various decision-making models to current issues.

### HSE 260 HSE Clinical Supervision II 1 0 0 1

Prerequisites: None

Corequisites: HSE 261, HSE 262, HSE 263 or HSE 264

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

### HSE 263 HSE Clinical Experience II 0 0 9 3

Prerequisites: None Corequisites: HSE 260

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

### **Humanities**

### HUM 110 Technology and Society 3 0 0 3

Prerequisites: None Corequisites: None

College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

### HUM 115 Critical Thinking 3 0 0 3

Prerequisites: Satisfactory placement or DRE 097 and DRE 098

Corequisites: None

College Transfer Course

This course introduces the use of critical thinking skills in the context of human conflict. Emphasis is placed on evaluating information, problem solving, approaching cross-cultural perspectives, and resolving controversies and dilemmas. Upon completion, students should be able to demonstrate orally and in writing the use of critical thinking skills in the analysis of appropriate texts. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

### HUM 120 Cultural Studies 3 0 0 3

Prerequisites: Satisfactory placement or DRE 097 and DRE 098

Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

3

3

HUM 130 Myth in Human Culture

Prerequisites: Satisfactory placement or DRE 097 and DRE 098

Corequisites: None

SP College Transfer Course

This course provides an in-depth study of myths and legends. Topics include the varied sources of myths and their influence on the individual and society within diverse cultural contexts. Upon completion, students should be able to demonstrate a general familiarity with myths and a broad-based understanding of the influence of myths and legends on modern culture. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

HUM 150 American Women's Studies 3 0 0 3

Prerequisites: Satisfactory placement or DRE 097 and DRE 098

Corequisites: None

SP, SU College Transfer Course

This course provides an inter-disciplinary study of the history, literature, and social roles of American women from Colonial times to the present. Emphasis is placed on women's roles as reflected in American language usage, education, law, the workplace, and mainstream culture. Upon completion, students should be able to identify and analyze the roles of women as reflected in various cultural forms. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

HUM 160 Introduction to Film 2 2 0 3

Prerequisites: None

Corequisites: Satisfactory placement or DRE 098

FA. SP. SU College Transfer Course

This course introduces the fundamental elements of film artistry and production. Topics include film styles, history, and production techniques, as well as the social values reflected in film art. Upon completion, students should be able to critically analyze the elements covered in relation to selected films. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

HUM 180 International Cultural Exploration 2 3 0 3

Prerequisites: None Corequisites: None

SU College Transfer Course

This course provides a framework for students to visit, examine, and analyze a country/region outside the United States to learn about the place and people. Emphasis is placed on the distinctive cultural characteristics of a country or region. Upon completion, students should be able to identify similarities/differences, analyze causes/effects, and clearly articulate the impact of one or more cultural elements. This course has been approved for transfer under the CAA as a pre-major and/or elective course requirement.

### **Hydraulics**

HYD 110 Hydraulics/Pneumatics I 2 3 0 3

Prerequisites: None Corequisites: None

SP

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

### Competencies

- Identify and demonstrate safe practices and procedures with tools, materials and industry accepted test equipment covered in the course.
- 2. Demonstrate appropriate use of test equipment, evaluate circuit performance and apply appropriate troubleshooting techniques to fluid power systems.

- 3. Identify components of fluid power systems using symbols and schematics.
- 4. Assemble a fluid power system.
- 5. Calculate and demonstrate the basic physics of fluid mechanics.

### **Industrial Science**

ISC 112 2 0 0 2

Prerequisites: None Corequisites: None

SP

This course introduces the principles of industrial safety. Emphasis is placed on industrial safety and OSHA regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment and OSHA compliance.

ISC 115 Construction Safety 2 0 0 2

Prerequisites: None Corequisites: None

SP

This course introduces the basic concepts of construction site safety. Topics include ladders, lifting, lock-out/tag-out, personal protective devices, scaffolds, and above/below ground work based on OSHA regulations. Upon completion, students should be able to demonstrate knowledge of applicable safety regulations and safely participate in construction projects.

### **Information Systems Security**

Please refer to Catawba Valley Community College's catalog for Information Systems Security programs details.

### Latin

LAT 111 Elementary Latin I 3 0 0 3

Prerequisites: Satisfactory placement or DRE 097 and DRE 098 or DRE 099

Corequisites: None

FA College Transfer Course

This course introduces the fundamental elements of Latin within a cultural context. Emphasis is placed on the development of basic reading and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to written Latin and demonstrate cultural awareness. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

LAT 112 Elementary Latin II 3 0 0 3

Prerequisites: "C" or better earned in LAT 111

Corequisites: None

SP College Transfer Course

This course is a continuation of LAT 111 focusing on the fundamental elements of Latin within a cultural context. Emphasis is placed on the progressive development of reading, vocabulary, and grammar skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to written Latin and demonstrate further cultural awareness. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

LAT 211 Intermediate Latin I 3 0 0 3

Prerequisites: "C" or better earned in LAT 112

Corequisites: None

FA College Transfer Course

This course provides a review and expansion of the essential skills of Latin. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to accurately read and comprehend Latin. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

LAT 212 Intermediate Latin II 3 0 0 3

Prerequisites: "C" or better earned in LAT 211

Corequisites: None

SP College Transfer Course

This course provides a continuation of LAT 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to demonstrate increased accuracy in reading and comprehension of Latin. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/ Fine Arts.* 

# Machining

MAC 122 CNC Turning

1 3 0 2

Prerequisites: None Corequisites: None

SP

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

1 3 0 2

Prerequisites: None Corequisites: None

FΑ

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 232 CAM: CNC Milling 1 4 0 3

Prerequisites: MAC 124 and MEC 110

Corequisites: None

SP

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.

### **Mathematics**

MAT 001 Math Skills Support (Pending) 0 2 0 1

Prerequisites: None

Corequisites: Take One Course:

MAT-110 MAT-121 MAT-143 MAT-152 or MAT-171

FA, SP

This course provides opportunities for students to build a stronger foundation for success in their corequisite math course by obtaining skills through a variety of instructional strategies. Emphasis is placed on foundational skills as well as concepts, skills, vocabulary and definitions necessary to master student learning outcomes of the co-requisite math course. Upon completion, students should be able to apply mathematical concepts and critical thinking skills to solve problems relevant to the student's co-requisite math course. MAT 001 is required for students who have a high school GPA between 2.6 and 2.99.

MAT 110 Math Measurement and Literacy 2 2 0 3

Prerequisites: Satisfactory placement or DMA 010, DMA 020 and DMA 030

Corequisites: None

FA. SP

This course provides an activity-based approach that develops measurement skills and mathematical literacy using technology to solve problems for non-math intensive programs.

Topics include unit conversions and estimation within a variety of measurement systems; ratio and proportion; basic geometric concepts; financial literacy; and statistics including measures of central tendency, dispersion, and charting of data. Upon completion, students should be able to demonstrate the use of mathematics and technology to solve practical problems, and to analyze and communicate results.

### Competencies

### **Student Learning Outcomes**

- 1. Demonstrate estimation skills and justify results.
- 2. Use dimensional analysis to convert units of measurement.
- 3. Employ fractions, percentages and proportions to solve contextual problems.
- 4. Compute geometric measurements of perimeter, area, volume and angles.
- 5. Use technology to analyze and interpret elements of personal finance.
- 6. Compare and contrast measures of center and measures of dispersion.
- 7. Interpret tables, charts, and graphs and communicate results.

### MAT 121 Algebra/Trigonometry I

2 2 0 3

Prerequisites: Satisfactory placement or DMA 010, DMA 020, DMA 030, DMA 040, DMA 050

and DMA 060

Corequisites: None

FΑ

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 the properties of plane and solid geometry, area and volume, and basic proportion applications; simplification, evaluation, and solving of algebraic equations and inequalities and radical functions; complex numbers; right triangle trigonometry; and systems of equations. Upon completion, students will be able to demonstrate the ability to use mathematics and technology for problem-solving, analyzing and communicating results.

### Competencies

### **Student Learning Outcomes**

- Use geometric principles to solve industrial application problems involving perimeter, area, and volume.
- 2. Employ basic algebraic operations to simplify, evaluate, and solve proportions, radical and other algebraic functions, equations, and inequalities.
- 3. Perform basic algebraic operations involving complex numbers.
- 4. Solve applied problems using trigonometric principles involving right triangles.
- 5. Solve applied problems using systems of equations involving two and three variables.
- 6. Use technology to solve practical problems and communicate results.

### MAT 143 Quantitative Literacy

2 2 0

Prerequisites: Satisfactory placement or DMA 010, DMA 020, DMA 030, DMA 040, DMA 050

and DRE 098

Corequisites: None

FA, SP, SU College Transfer Course

This course is designed to engage students in complex and realistic situations involving the mathematical phenomena of quantity, change and relationship, and uncertainty through project-and activity-based assessment. Emphasis is placed on authentic contexts which will introduce the concepts of numeracy, proportional reasoning, dimensional analysis, rates of growth, personal finance, consumer statistics, practical probabilities, and mathematics for citizenship. Upon completion, students should be able to utilize quantitative information as consumers and to make personal, professional, and civic decisions by decoding, interpreting, using, and communicating quantitative information found in modern media and encountered in everyday life. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics (Quantitative). This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Mathematics-AA.

### Competencies

- Judge the reasonableness of results using estimation, logical processes, and a proper understanding of quantity
- 2. Utilize proportional reasoning to solve contextual problems and make conversions involving various units of measurement

- 3. Identify, interpret, and compare linear and exponential rates of growth to make predictions and informed decisions based on data and graphs
- 4. Differentiate between simple and compound interest and analyze the long-term effects of saving, investing, and borrowing
- 5. Describe, analyze, and interpret statistical information such as graphs, tables, and summarized data to draw appropriate conclusions when presented with actual statistical studies
- 6. Determine probabilities and expected values and use them to assess risk and make informed decisions
- 7. Analyze civic and/or societal issues and critique decisions using relevant mathematics

### MAT 152 Statistical Methods I 3 2 0 4

Prerequisites: Satisfactory placement or DMA 010, DMA 020, DMA 030, DMA 040, DMA 050

and DRE 098

Corequisites: None

FA, SP, SU College Transfer Course

This course provides a project-based approach to introductory statistics with an emphasis on using real-world data and statistical literacy. Topics include descriptive statistics, correlation and regression, basic probability, discrete and continuous probability distributions, confidence intervals and hypothesis testing. Upon completion, students should be able to use appropriate technology to describe important characteristics of a data set, draw inferences about a population from sample data, and interpret and communicate results. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Mathematics—AA.

### Competencies

### **Student Learning Outcomes**

- 1. Organize, display, calculate, and interpret descriptive statistics
- 2. Apply basic rules of probability
- 3. Identify and apply appropriate probability distributions
- 4. Perform regression analysis
- 5. Analyze sample data to draw inferences about a population parameter
- 6. Communicate results through a variety of media

### MAT 171 Precalculus Algebra 3 2 0 4

Prerequisites: Satisfactory placement or

Take One Set:

Set 1: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060, DMA 070

and DMA 080

Set 2: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 and DMA 065

Set 3: "C" or better earned in MAT 121

Corequisites: None

FA, SP, SU College Transfer Course

This course is designed to develop topics which are fundamental to the study of Calculus. Emphasis is placed on solving equations and inequalities, solving systems of equations and inequalities, and analysis of functions (absolute value, radical, polynomial, rational, exponential, and logarithmic) in multiple representations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to algebra-related problems with and without technology. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Mathematics—AA/AS.

### Competencies

- Use analytical, graphical, and numerical representations to solve absolute value, radical, polynomial, rational, exponential, and logarithmic equations with both real and complex solutions.
- 2. Use analytical, graphical, and numerical representations to solve absolute value, polynomial and rational inequalities with real solutions.
- 3. Use analytical, graphical, and numerical representations to analyze absolute value, radical, polynomial, rational, exponential and logarithmic functions with both real and complex zeros.

- 4. Use multiple methods to solve problems involving systems of equations and apply to decomposing partial fractions.
- 5. Construct the composition and inverse of functions.
- 6. Use polynomial, exponential and logarithmic functions to model various real world situations in order to analyze, draw conclusions, and make predictions.

MAT 172 Precalculus Trigonometry 3 2 0 4

Prerequisites: Satisfactory placement or "C" or better earned in MAT 171

Corequisites: None

FA, SP College Transfer Course

This course is designed to develop an understanding of topics which are fundamental to the study of Calculus. Emphasis is placed on the analysis of trigonometric functions in multiple representations, right and oblique triangles, vectors, polar coordinates, conic sections, and parametric equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to trigonometry-related problems with and without technology. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Mathematics—AS.

### Competencies

### **Student Learning Outcome**

- 1. Use the unit circle and right triangle definitions to evaluate and graph trigonometric functions and their inverses, to derive trigonometric identities, and to simplify trigonometric expressions.
- Use multiple methods to solve problems involving trigonometric equations, right triangles, and oblique triangles.
- 3. Demonstrate knowledge of vector definitions and perform vector operations.
- 4. Convert equations and graphs between rectangular and polar coordinate systems, and apply to complex numbers.
- 5. Use multiple representations to define, construct and analyze conic sections.
- 6. Create, graph, and analyze parametric equations.

MAT 263 Brief Calculus 3 2 0 4

Prerequisites: Satisfactory placement or "C" or better earned in MAT 171

Corequisites: None

FA, SP College Transfer Course

This course is designed to introduce concepts of differentiation and integration and their applications to solving problems. Topics include 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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Mathematics—AS.

### **Student Learning Outcomes**

- 1. Calculate limits and verify using graphical, numerical and analytical methods.
- 2. Interpret the derivative as a rate of change.
- 3. Analyze and interpret the derivative of algebraic, exponential, and logarithmic functions.
- Evaluate antiderivatives and definite integrals of algebraic, exponential, and logarithmic functions.
- 5. Apply derivatives and integrals to business, economics, and biological and behavioral sciences contexts.
- 6. Use appropriate technology and communicate results through a variety of media.

MAT 271 Calculus I 3 2 0 4

Prerequisites: Satisfactory placement or "C" or better earned in MAT 172

Corequisites: None

FA, SP, SU College Transfer Course

This course is designed to develop the topics of differential and integral calculus. Emphasis is placed on limits, continuity, derivatives and integrals of algebraic and transcendental functions of one variable. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to derivative-related problems with and without technology.

This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Mathematics-AS.

### Competencies

### **Student Learning Outcomes**

- 1. Apply the definition of limit to evaluate limits by multiple methods and use it to derive the definition and rules for differentiation and integration.
- 2. Use derivatives to analyze and graph algebraic and transcendental functions.
- 3. Select and apply appropriate models and differentiation techniques to solve problems involving algebraic and transcendental functions; these problems will include but are not limited to applications involving optimization and related rates.
- 4. Apply the definition of indefinite integral to solve basic differential equations.
- 5. Apply the definition of definite integral to evaluate basic integrals.
- 6. Use the fundamental theorem of calculus to evaluate integrals involving algebraic and transcendental functions.

MAT 272 Calculus II 3 2 0 4

Prerequisites: "C" or better earned in MAT 271

Corequisites: None

FA, SP College Transfer Course

This course is designed to develop advanced topics of differential and integral calculus. Emphasis is placed on the 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 select and use appropriate models and techniques for finding solutions to integral-related problems with and without technology. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics.

### **Competencies**

### **Student Learning Outcomes**

- Select and apply appropriate models and integration techniques to solve problems involving algebraic and transcendental functions; these problems will include but are not limited to applications involving volume, arc length, surface area, centroids, force and work.
- 2. Evaluate proper and improper integrals using various integration techniques.
- 3. Analyze the convergence and divergence of infinite sequences and series and find the Taylor and McLaurin representations for transcendental functions.
- 4. Use differentiation and integration to analyze the graphs of polar form equations and parametric form equations.
- 5. Solve separable and first-order linear differential equations.
- 6. Analyze and graph conic sections using calculus techniques.

MAT 273 Calculus III 3 2 0 4

Prerequisites: "C" or better earned in MAT 272

Corequisites: None

FA, SP College Transfer Course

This course is designed to develop the topics of multivariate calculus. Emphasis is placed on multivariate functions, partial derivatives, multiple integration, solid analytical geometry, vector valued functions, and line and surface integrals. Upon completion, students should be able to select and use appropriate models and techniques for finding the solution to multivariate-related problems with and without technology. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics.

### Competencies

- 1. Perform operations with vectors in two and three dimensional space and apply to analytic geometry.
- 2. Differentiate and integrate vector-valued functions and apply calculus to motion problems in two and three dimensional space.
- 3. Determine the limits, derivatives, gradients, and integrals of multivariate functions.
- 4. Solve problems in multiple integration using rectangular, cylindrical, and spherical coordinate systems.
- Select and apply appropriate models and techniques to define and evaluate line and surface integrals; these techniques will include but are not limited to Green's, Divergence, and Stoke's theorems.

6. Demonstrate proficiency in using CAS technology to analyze, solve and interpret the various applications.

MAT 280 Linear Algebra 2 2 0 3

Prerequisites: "C" or better earned in MAT 271

Corequisites: None

FA College Transfer Course

This course provides an introduction to linear algebra topics. Emphasis is placed on the development of abstract concepts and applications for vectors, systems of equations, matrices, determinants, vector spaces, multi-dimensional linear transformations, eigenvectors, eigenvalues, diagonalization and orthogonality. Upon completion, students should be able to demonstrate understanding of the theoretical concepts and select and use appropriate models and techniques for finding solutions to linear algebra-related problems with and without technology. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

### Competencies

### **Student Learning Outcomes**

- Use analytical and graphical representations to apply vector operations in multipledimensions.
- 2. Solve systems of linear equations using multiple manual and technology-based methods; these methods will include but are not limited to Gaussian and Gauss-Jordan.
- Use eigenvalues, eigenvectors and diagonalization to solve problems in appropriate situations.
- 4. Use matrix operations and linear transformations to solve problems in appropriate situations.
- 5. Demonstrate knowledge of orthogonal projections and orthogonal complements of subspaces, and apply to appropriate situations.
- 6. Use the fundamental concept of a basis for a subspace to give a precise definition of dimensions and rank, and to solve problems in appropriate situations.
- Demonstrate proficiency in using CAS technology to analyze, solve and interpret the various applications.

### MAT 285 Differential Equations

2 2 0 3

Prerequisites: "C" or better earned in MAT 272

Corequisites: None

SP College Transfer Course

This course provides an introduction to topics involving ordinary differential equations. Emphasis is placed on the development of abstract concepts and applications for first-order and linear higher-order differential equations, systems of differential equations, numerical methods, series solutions, eigenvalues and eigenvectors, and LaPlace transforms. Upon completion, students should be able to demonstrate understanding of the theoretical concepts and select and use appropriate models and techniques for finding solutions to differential equations-related problems with and without technology. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

#### Competencies

- Find general solutions to first-order, second-order, and higher-order homogeneous and non-homogeneous differential equations by manual and technology-based methods.
- 2. Identify and apply initial and boundary values to find particular solutions to first-order, second-order, and higher order homogeneous and non-homogeneous differential equations by manual and technology-based methods, and analyze and interpret the results.
- Select and apply appropriate methods to solve differential equations; these methods will include, but are not limited to, undetermined coefficients, variation of parameters, eigenvalues and eigenvectors, LaPlace and inverse LaPlace transforms.
- 4. Select and apply series techniques to solve differential equations; these techniques will include but are not limited to Taylor series.
- 5. Select and apply numerical analysis techniques to solve differential equations; these techniques will include but are not limited to Euler, Improved Euler, and Runge-Kutta.
- 6. Demonstrate proficiency in using CAS technology to analyze, solve and interpret the various applications.

0 2

### Mechanical

MEC 110 Introduction to CAD/CAM 1 2

Prerequisites: None Corequisites: None

FΑ

This course introduces CAD/CAM. Emphasis is placed on transferring part geometry from CAD to CAM for the development of a CNC-ready program. Upon completion, students should be able to use CAD/CAM software to produce a CNC program.

MEC 111 Machine Processes I 1 4 0 3

Prerequisites: None Corequisites: None

FΑ

This course introduces shop safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include use and care of tools, safety, measuring tools, and the basic setup and operation of common machine tools. Upon completion, students should be able to safely machine simple parts to specified tolerances.

MEC 130 Mechanisms 2 2 0 3

Prerequisites: None Corequisites: None

FΔ

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 Manufacturing Materials I 2 3 0 3

Prerequisites: None Corequisites: None

FΑ

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.

### **Competencies**

#### Student Learning Outcomes

- 1. Identify the physical and mechanical properties of ferrous and non-ferrous materials.
- 2. Identify the physical and mechanical properties of plastics, ceramics, and composites
- 3. Compare and contrast various primary metal work
- 4. Compare and contrast material finishing operations.
- 5. Discuss various testing procedures and results of each on various materials.
- 6. Apply and demonstrate OSHA safety procedures with the various manufacturing processes and testing procedures.

## **Medical Assisting**

MED 110 Orientation to Medical Assisting 1 0 0 1

Prerequisites: Enrollment in the Medical Assisting diploma program

Corequisites: None

FΑ

This course covers the history of medicine and the role of the medical assistant in the health care setting. Emphasis is placed on professionalism, communication, attitude, behaviors, and duties in the medical environment. Upon completion, students should be able to project a positive attitude and promote the profession of medical assisting.

**MED 118** Medical Law and Ethics 2 0

Prerequisites: Enrollment in the Medical Assisting diploma program or Healthcare Management

Technology program

Corequisites: None

FΑ

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

Prerequisites: Satisfactory placement or DRE 097 and DRE 098

Coreauisites:

FA. SP. SU

This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

MED 122 **Medical Terminology II** 0 3

Prerequisites: "C" or better earned in MED 121

Corequisites: None

FA. SP

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 Administrative Office Procedures I 2 2

Prerequisites: Enrollment in the Medical Assisting diploma program

Corequisites: MED 121

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** Administrative Office Procedures II

Prerequisites: Enrollment in the Medical Assisting diploma program, "C" or better earned in

MED 122 and MED 130

None Coreauisites:

SΡ

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 134** Medical Transcription

Enrollment in the Medical Assisting Scribe certificate, earned "C" or better in MED Prerequisites:

122

Corequisites: None

FΑ

This course provides the basic knowledge, understanding, and skills required to complete medical reports and transcribe medical dictation. Emphasis is placed on correct punctuation, capitalization, and spelling. Upon completion, students should be able to demonstrate competence in medical transcription.

**MED 140 Exam Room Procedures I** 

Enrollment in the Medical Assisting diploma program, "C" or better earned in BIO Prerequisites:

163 or BIO 168 and BIO 169, MED 122

MED 150 Corequisites:

SP

This course provides instruction in clinical examining room procedures. Topics include asepsis, infection control, assisting with exams and treatment, patient education, preparation and administration of medications, EKG, vital signs, and medical emergencies. Upon completion, students should be able to demonstrate competence in exam room procedures.

MED 150 **Laboratory Procedures I** 

Prerequisites: Enrollment in the Medical Assisting diploma program, "C" or better earned in BIO

163 or BIO 168 and BIO 169, MED 122

Corequisites: MED 140

This course provides instruction in basic lab techniques used by the medical assistant. Topics include lab safety, quality control, collecting and processing specimens, performing selective tests, phlebotomy, screening and follow-up of test results, and OSHA/CLIA regulations. Upon completion, students should be able to perform basic lab tests/skills based on course topics.

MED 232 **Medical Insurance Coding** 3 0

Prerequisites: Enrollment in the Medical Assisting diploma program, "C" or better earned in BIO

163 or BIO 168 and BIO 169, MED 122

Corequisites: MED 140 SP

This course is designed to develop coding skills. Emphasis is placed on advanced diagnostic and procedural coding in the outpatient facility. Upon completion, students should be able to demonstrate proficiency in coding for reimbursement.

MED 260 MED Clinical Practicum 15 0 0 5

2

0

3

2

Prerequisites: Enrollment in the Medical Assisting program, ENG 111, MED 118, MED 131, MED

140, MED 150, MED 232, OST 135 and PSY 150

Corequisites: None

SU

This course provides the opportunity to apply clinical, laboratory, and administrative skills in a medical facility. Emphasis is placed on enhancing competence in clinical and administrative skills necessary for comprehensive patient care and strengthening professional communications and interactions. Upon completion, students should be able to function as an entry-level health care professional.

MED 270 Symptomatology

Prerequisites: MED 260 Corequisites: None

FΑ

This course covers the study of disease symptoms and the appropriate actions taken by medical assistants in a medical facility in relation to these symptoms. Emphasis is placed on interviewing skills and appropriate triage, preparing patients for procedures, and screening test results. Upon completion, students should be able to recognize how certain symptoms relate to specific diseases, recognize emergency situations, and take appropriate actions.

**MED 272 Drug Therapy** 3

Prerequisites: MED 260 Corequisites: None

This course focuses on major drug groups, including their side effects, interactions, methods of administration, and proper documentation. Emphasis is placed on the theory of drug administration. Upon completion, students should be able to identify, spell, recognize side effects of, and document the most commonly used medications in a physician's office.

**Marketing and Retailing** 

MKT 120 Principles of Marketing 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP

This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making.

### Competencies

### **Student Learning Outcomes**

- 1. Define the role of marketing in business.
- 2. Explain the role of selling, customer relations and product management in marketing.
- 3. Describe marketing.
- 4. Define pricing and channel management strategies.

### MKT 122 Visual Merchandising

3 0 0

3

Prerequisites: None

Corequisites: Satisfactory placement or DRE 096

SP

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

0 0 3

3

Prerequisites: None

Corequisites: Satisfactory placement or DRE 096

FΑ

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.

### Competencies

### **Student Learning Outcomes**

- 1. Identify appropriate sales techniques for various selling situations.
- 2. Describe sales techniques.
- 3. Explain the necessity of selling skills in modern business environment.

### MKT 223 Customer Service

3 0 0 3

Prerequisites: None Corequisites: None

ŀΑ

This course stresses the importance of customer relations in the business world. Emphasis is placed on learning how to respond to complex customer requirements and to efficiently handle stressful situations. Upon completion, students should be able to demonstrate the ability to handle customer relations.

# **Medical Laboratory Technology**

Please refer to Southwestern Community College's catalog for MLT course descriptions.

### Music

MUS 110 Music Appreciation 3 0 0 3

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Humanities/Fine Arts—AA/AS.

MUS 111 Fundamentals of Music

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 112 Introduction to Jazz 3 0 0 3

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

FA College Transfer Course

This course introduces the origins and musical components of jazz and the contributions of its major artists. Emphasis is placed on the development of discriminating listening habits, as well as the investigation of the styles and structural forms of the jazz idiom. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Humanities/Fine Arts-AA/AS.

MUS 121 Music Theory I 3 2 0 4

Prerequisites: Satisfactory music placement or "C" or better earned in MUS 111. Students wishing to take the music college placement test will need to schedule an

appointment with the music department coordinator.

Corequisites: None

FA College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 122 Music Theory II 3 2 0 4

Prerequisites: "C" or better earned in MUS 121

Corequisites: None

SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

MUS 131 Chorus I 0 2 0 1

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

This course provides an opportunity to gain experience singing in a chorus. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 132 Chorus II 0 2 0 1

Prerequisites: MUS 131 Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 133 Band I 0 2 0 1

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

This course provides an opportunity for those who play a band instrument to gain experience playing in an ensemble. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 134 Band II 0 2 0 1

Prerequisites: MUS 133 Corequisites: None

FA, SP College Transfer Course

This course is a continuation of MUS 133. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

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Prerequisites: None Corequisites: None

FA, SP College Transfer Course

This course provides an opportunity for those who play an appropriate instrument to gain experience playing in a jazz ensemble. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

#### 

Prerequisites: MUS 135 Corequisites: None

FA, SP College Transfer Course

This course is a continuation of MUS 135. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

#### MUS 137 Orchestra I 0 2 0 1

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

This course provides an opportunity for those who play an orchestral instrument to gain experience playing in an ensemble. Emphasis is placed on orchestral techniques and the study and performance of a variety of styles and periods of orchestral and string ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

MUS 141 Ensemble I 0 2 0 1

Prerequisites: None Corequisites: None

College Transfer Course

This course provides an opportunity to perform in any combination of instrumental, vocal, or keyboard groups of two or more. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

MUS 142 Ensemble II 0 2 0 1

Prerequisites: MUS 141 Corequisites: None

College Transfer Course

This course is a continuation of MUS 141. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 151 Class Music I 0 2 0 1

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/ or elective course requirement.

MUS 152 Class Music II 0 2 0 1

Prerequisites: MUS 151 Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 161 Applied Music I 1 2 0 2

Prerequisites: Enrollment in the A.F.A.—Music (A10700)

Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 162 Applied Music II 1 2 0 2

Prerequisites: Enrollment in the A.F.A.—Music (A10700) and MUS 161

Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 210 **History of Rock Music** 

3

Prerequisites: Satisfactory placement or DRE 096

None

Corequisites: FA. SP College Transfer Course

This course is a survey of Rock music from the early 1950's to the present. Emphasis is placed on musical groups, soloists, and styles related to the evolution of this idiom and on related historical and social events. Upon completion, students should be able to identify specific styles and to explain the influence of selected performers within their respective eras. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine

Arts.

MUS 211 **History of Country Music**  3 3

Prerequisites: Satisfactory placement or DRE 096

Coreauisites:

College Transfer Course

This course introduces the varied origins of country music and the commercialization of this art form. Emphasis is placed on historical, sociocultural, and stylistic factors related to country music and musicians. Upon completion, students should be able to identify specific styles and explain the influence of pop culture on the development of country music. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

MUS 221 Music Theory III 3 2 0 4

Prerequisites: "C" or better earned in MUS 122

Corequisites: None

College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 222 Music Theory IV 2 0

Prerequisites: "C" or better earned in MUS 221

Corequisites: None

College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 231 Chorus III 2 0 1

Prerequisites: MUS 132 Corequisites: None

FA. SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 232 Chorus IV 0 2 0 1

Prerequisites: MUS 231 Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 233 Band III 0 2 0 1

Prerequisites: MUS 134 Corequisites: None

FA, SP College Transfer Course

This course is a continuation of MUS 134. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 234 Band IV 0 2 0 1

Prerequisites: MUS 233 Corequisites: None

FA, SP College Transfer Course

This course is a continuation of MUS 233. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 235 Jazz Ensemble III 0 2 0 1

Prerequisites: MUS 136 Corequisites: None

FA, SP College Transfer Course

This course is a continuation of MUS 136. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

MUS 236 Jazz Ensemble IV 0 2 0 1

Prerequisites: MUS 235 Corequisites: None

FA, SP College Transfer Course

This course is a continuation of MUS 235. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

MUS 241 Ensemble III 0 2 0 1

Prerequisites: MUS 142 Corequisites: None

College Transfer Course

This course is a continuation of MUS 142. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 242 Ensemble IV 0 2 0 1

Prerequisites: MUS 241 Corequisites: None

College Transfer Course

This course is a continuation of MUS 241. Emphasis is placed on the development of performance skills and the study of styles of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 260 Introduction to Music Education 2 0 0 2

Prerequisites: MUS 121 Corequisites: None

FA, SP College Transfer Course

This course provides an introduction to the music education profession. Emphasis is placed on creating successful music learning environments and the role of the music educator. Upon completion, students should be able to demonstrate knowledge and skills related to the philosophy and methods of teaching music.

MUS 261 Applied Music III 1 2 0 2

Prerequisites: Enrollment in the A.F.A.—Music (A10700) and MUS 162

Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 262 Applied Music IV 1 2 0 2

Prerequisites: Enrollment in the A.F.A.—Music (A10700) and MUS 261

Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 271 Music History I 3 0 0 3

Prerequisites: MUS 122 Corequisites: None

College Transfer Course

This course is the first of a two-semester, in-depth study of music history. Emphasis is placed on the history and literature of music from Antiquity through the Baroque Period. Upon completion, students should be able to trace important musical developments and demonstrate an understanding of the composers' styles. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

MUS 272 Music History II 3 0 0 3

Prerequisites: MUS 271 Corequisites: None

College Transfer Course

This course is the second of a two-semester, in-depth study of music history. Emphasis is placed on the history and literature of music from the Classical Period to the present. Upon completion, students should be able to trace important musical developments and demonstrate an understanding of the composers' styles. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

### **Nurse Aide**

NAS 101 Nurse Aide I 3 4 3 6

Prerequisites: None Corequisites: None

This course includes basic nursing skills required to provide safe, competent personal care for individuals. Emphasis is placed on person-centered care, the aging process, communication, safety/emergencies, infection prevention, legal and ethical issues, vital signs, height and weight measurements, elimination, nutrition, basic restorative care/rehabilitation, dementia, mental health and end-of-life care. Upon completion, students should be able to demonstrate knowledge and skills and be eligible to test for listing on the North Carolina Nurse Aide I Registry.

NAS 102 Nurse Aide II 3 2 6 6

Prerequisites: NAS 101 Corequisites: None

This course provides training in Nurse Aide II tasks. Emphasis is placed on the role of the Nurse Aide II, sterile technique and specific tasks such as urinary catheterization, wound care, respiratory procedures, ostomy care, peripheral IV assistive activities, and alternative feeding methods. Upon completion, students should be able to demonstrate knowledge and skills and safe performance of skills necessary to be eligible for listing on the North Carolina Nurse Aide II Registry.

NAS 103 Home Health Care Nurse Aide 4 4 0 6

Prerequisites: NAS 101 Corequisites: None

This course provides advanced training for the currently listed Nurse Aide I enhancing specific skills needed when working in the home care setting. Topics include person-centered care, nutrition, hydration, patient and personal safety, mental health, dementia, behavioral challenges, pain management, palliative care, and stress management. Upon completion, students are eligible for listing as a home care nurse aide with the North Carolina Nurse Aide Registry.

# **Networking Technology**

NET 110 Networking Concepts 2 2 0 3

Prerequisites: Satisfactory placement or DMA 010, DMA 020 and DRE 096

Corequisites: None

SP

This course introduces students to the networking field. Topics include 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 125 Introduction to Networks 1 4 0 3

Prerequisites: None Corequisites: None

FΑ

This course introduces the architecture, structure, functions, components, and models of the Internet and computer networks. Topics include introduction to the principles of IP addressing and fundamentals of Ethernet concepts, media, and operations. Upon completion, students should be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

**NET 126 Routing Basics** 1 3

Prerequisites: None Corequisites: None

This course focuses on initial router configuration, router software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). Emphasis will be placed on the fundamentals of router configuration, managing router software, routing protocol, and access lists. Upon completion, students should have an understanding of routers and their role in WANs, router configuration, routing protocols, TCP/IP, troubleshooting, and ACLs.

**NET 225** Routing and Switching I O 3

Prerequisites: None Coreauisites: None

FΑ

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.

3 **NET 226** Routing and Switching II 1

Prerequisites: None Coreauisites: None

SP

This course introduces WAN theory and design, WAN technology, PPP, Frame Relay, ISDN, and additional case studies. Topics include network congestion problems, TCP/IP transport and network layer protocols, advanced routing and switching configuration, ISDN protocols, PPP encapsulation operations on a router. Upon completion, students should be able to provide solutions for network routing problems, identify ISDN protocols, and describe the Spanning Tree protocol.

**NET 289 Networking Project** 1 3

Prerequisites: Take All: CTI-110, CTI-120, and CTS-115

Corequisites: None

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 System**

NOS 110 **Operating System Concepts** 3 3

Prerequisites: Satisfactory placement or DMA 010, DMA 020 and DRE 096

Corequisites: None

FΑ

This course introduces students to a broad range of operating system concepts, including installation and maintenance. Emphasis is place on operating system concepts, management, maintenance, and resources required. Upon completion of this course, students will have an understanding of OS concepts, installation, management, maintenance, using a variety of operating systems.

**NOS 120** Linux/UNIX Single User 2 0 3

Prerequisites: None Corequisites: None

This course develops the necessary skills for students to develop both GUI and command line skills for using and customizing a Linux workstation. Topics include Linux file system and access permissions, GNOME Interface, VI editor, X Window System expression pattern matching,

I/O redirection, network and printing utilities. Upon completion, students should be able to customize and use Linux systems for command line requirements and desktop productivity roles.

NOS 130 Windows Single User

Prerequisites: CET 211, CTI 130 or NOS 110

Corequisites: None

SP

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 230 Windows Administration I

2 2 0 3

3

2 2

Prerequisites: NOS 130 Corequisites: None

FΑ

This course covers the installation and configuration of a Windows Server operating system. Emphasis is placed on the basic configuration of core network services, Active Directory and group policies. Upon completion, students should be able to install and configure a Windows Server operating system.

NOS 231 Windows Administration II

2 2 0 3

Prerequisites: NOS 230 Corequisites: None

SP

This course covers the management of a Windows Server operating system. Emphasis is placed on the deployment of print services, network services, Active Directory, group policies and access controls. Upon completion, students should be able to deploy and manage services on a Windows Server operating system.

# Nursing

### NUR 111 Introduction to Health Concepts

4 6 6 8

Prerequisites Enrollment in the Associate Degree Nursing program

Coreguisites BIO 168, NUR 117, and PSY 150

FΑ

This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including medication administration, assessment, nutrition, ethics, interdisciplinary teams, informatics, evidence-based practice, individual-centered care, and quality improvement. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

### NUR 112 Health-Illness Concepts

3 0 6 5

Prerequisites "C" or better earned in BIO 168, NUR 111, NUR 117, and PSY 150

Corequisites BIO 169

SP

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

0 6 5

Prerequisites "C" or better earned in BIO 168, BIO 169, BIO 275, ENG 111, NUR 111, NUR 112,

NUR 114, NUR 117, PSY 150, and PSY 241

Corequisites ENG 112

FA

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**  5

"C" or better earned in BIO 168, NUR 111, NUR 112, NUR 117, and PSY 150 Prerequisites Corequisites **BIO 169** 

SP

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

3 2 **NUR 117** Pharmacology

Prerequisites: Enrollment in the Associate Degree Nursing program

Coreauisites: **NUR 111** 

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** 

Prerequisites "C" or better earned in BIO 168, BIO 169, BIO 275, ENG 111, NUR 111, NUR 112,

NUR 114, NUR 117, PSY 150, and PSY 241

Corequisites **ENG 112** 

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of 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** 

"C" or better earned in BIO 168, BIO 169, BIO 275, ENG 111, ENG 112, NUR 111, Prerequisites

NUR 112, NUR 113, NUR 114, NUR 117, NUR 211, PSY 150, and PSY 241

Corequisites **NUR 213** 

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of grief/loss, violence, health-wellness-illness, collaboration, managing care, safety, advocacy, legal issues, policy, healthcare systems, ethics, accountability, and evidence-based practice. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 213 **Complex Health Concepts** 15 10

Prerequisites "C" or better earned in NUR 111, NUR 117, BIO 168, BIO 169, BIO 275, ENG 111,

ENG 112, PSY 150, and PSY 241

Corequisites "C" or better earned in NUR 112, NUR 113, NUR 114, NUR 211, and NUR 212

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.

# Office Systems Technology

OST 134 Text Entry and Formatting 2 2 0 3

Prerequisites: None Corequisites: None

FA, SP

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. More advanced business documents such as itineraries, agendas, newsletters, international formatting features, medical documents, legal documents, office forms, and publications are introduced.

OST 135 Advanced Text Entry and Format 2 2 0 3

Prerequisites: OST 134 Corequisites: None

FA, SP

This course is designed to incorporate computer application skills in the generation of office documents. Emphasis is placed on advanced document production with increased speed and accuracy. Upon completion, students should be able to make independent decisions regarding planning, style, and method of presentation.

OST 164 Office Editing 3 0 0 3

Prerequisites: None

Corequisites: Satisfactory placement or DRE 097 and DRE 098 or DRE 099; OST 134

FΑ

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 181 Office Procedures 2 2 0 3

Prerequisites: OST 134 Corequisites: None

FA, SP

This course introduces the skills and procedures needed in today's office. Topics include effectively interacting with co-workers and the public, processing simple financial and informational documents, and performing functions typical of today's offices. Upon completion, students should be able to display skills and decision-making abilities essential for functioning in the total office context. In addition, telephone techniques, mail services, travel arrangements, meeting/conference planning, and employment document preparation are introduced.

OST 184 Records Management 2 2 0 3

Prerequisites: None Corequisites: None

FA. SP

This course includes the creation, maintenance, protection, security, and disposition of records stored in a variety of media forms. Topics include alphabetic, geographic, subject, and numeric filing methods. Upon completion, students should be able to set up and maintain a records management system.

OST 247 Procedure Coding 2 2 0 3

Prerequisites: MED 121 Corequisites: None

SP

This course provides in-depth coverage of procedural coding. Emphasis is placed on CPT and HCPCS coding systems. Upon completion, students should be able to properly code procedures and services performed in a medical facility.

OST 248 Diagnostic Coding 2 2 0 3

Prerequisites: MED 121 Corequisites: None

FΑ

This course provides an in-depth study of diagnostic coding. Emphasis is placed on ICD coding system. Upon completion, students should be able to properly code diagnoses in a medical facility.

OST 249 Med Coding Certification Prep 2 3 0 3

Prerequisites: OST 247 and OST 248

Corequisites: None

SP

This course provides instruction that will prepare students to sit for a national coding certification exam. Topics include diagnostic and procedural coding. Upon completion, students should be able to sit for the AAPC CPC Exam.

OST 289 Office Administration Capstone 2 2 0 3

Prerequisites: OST 164 and either OST 134 or OST 136

Corequisites: None

SP

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 written and oral communication skills, office software applications, office procedures, ethics, and professional development. Upon completion, students should be able to adapt in an office environment.

### **Physical Education**

PED 110 Fit and Well for Life 1 2 0 2

Prerequisites: None Corequisites: None

FA College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

PED 111 Physical Fitness I 0 3 0 1

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PED 113 Aerobics I 0 3 0 1

Prerequisites: None Corequisites: None

SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PED 117 Weight Training I 0 3 0 1

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PED 121 Walk, Jog, Run 0 3 0 1

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PED 122 Yoga I 0 2 0 1

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

This course introduces the basic discipline of yoga. Topics include proper breathing, relaxation techniques, and correct body positions. Upon completion, students should be able to demonstrate the procedures of yoga. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PED 123 Yoga II 0 2 0 1

Prerequisites: PED 122 Corequisites: None

College Transfer Course

This course introduces more detailed aspects of the discipline of yoga. Topics include breathing and physical postures, relaxation, and mental concentration. Upon completion, students should be able to demonstrate advanced procedures of yoga. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

PED 125 Self-Defense—Beginning 0 2 0 1

Prerequisites: None Corequisites: None

FA. SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PED 128 Golf—Beginning 0 2 0 1

Prerequisites: None Corequisites: None

FA College Transfer Course

This course emphasizes the fundamentals of golf. Topics include the proper grips, stance, alignment, swings for the short and long game, putting, and the rules and etiquette of golf. Upon completion, students should be able to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PED 130 Tennis—Beginning 0 2 0 1

Prerequisites: None Corequisites: None

FA College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

PED 137 Badminton 0 2 0 1

Prerequisites: None Corequisites: None

SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

#### PED 139 Bowling—Beginning 0 2 0 1

Prerequisites: None Corequisites: None

SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

#### PED 142 Lifetime Sports 0 2 0 1

Prerequisites: None Corequisites: None

FA College Transfer Course

This course is designed to give an overview of a variety of sports activities. Emphasis is placed on the skills and rules necessary to participate in a variety of lifetime sports. Upon completion, students should be able to demonstrate an awareness of the importance of participating in lifetime sports activities. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

#### PED 143 Volleyball—Beginning 0 2 0 1

Prerequisites: None Corequisites: None

FA College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

#### PED 145 Basketball—Beginning 0 2 0 1

Prerequisites: None Corequisites: None

SP College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

#### PED 152 Swimming—Beginning 0 2 0 1

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

This course is designed for non-swimmers and beginners. Emphasis is placed on developing confidence in the water, learning water safety, acquiring skills in floating, and learning elementary

strokes. Upon completion, students should be able to demonstrate safety skills and be able to tread water, back float, and use the crawl stroke for 20 yards. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

PED 153 Swimming—Intermediate 0 2 0 1

Prerequisites: PED 152 Corequisites: None

College Transfer Course

This course is designed for those who have mastered basic swimming skills. Emphasis is placed on refining basic skills and learning new swim strokes. Upon completion, students should be able to demonstrate the four basic strokes, the scissors kick, the underwater swim, and other related skills. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PED 154 Swimming for Fitness 0 3 0 1

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

This course introduces lap swimming, aquacises, water activities, and games. Emphasis is placed on increasing cardiovascular efficiency through aquatic exercise. Upon completion, students should be able to develop an individualized aquatic fitness program. This course has been approved for transfer under the CAA as a pre-major and/or elective course requirement.

PED 155 Water Aerobics 0 3 0 1

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

This course introduces rhythmic aerobic activities performed in water. Emphasis is placed on increasing cardiovascular fitness levels, muscular strength, muscular endurance, and flexibility. Upon completion, students should be able to participate in an individually-paced exercise program. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PED 160 Canoeing—Basic 0 2 0 1

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

This course provides basic instruction for the beginning canoeist. Emphasis is placed on safe and correct handling of the canoe and rescue skills. Upon completion, students should be able to demonstrate basic canoeing, safe-handling, and self-rescue skills. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PED 171 Nature Hiking 0 2 0 1

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

This course provides instruction on how to equip and care for oneself on the trail. Topics include clothing, hygiene, trail ethics, and necessary equipment. Upon completion, students should be able to successfully participate in nature trail hikes. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PED 175 Horseback Riding I 0 2 0 1

Prerequisites: None Corequisites: None

College Transfer Course

This course introduces beginning and non-riders to recreational horseback riding. Topics include riding skills, equipment, handling of horses, mounting, care of the horse, and coordinated horse-rider balance. Upon completion, students should be able to demonstrate riding, safety, and horse management skills. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

PED 176 Horseback Riding II 0 2 0 1

Prerequisites: PED 175 Corequisites: None

College Transfer Course

This course is designed to give advanced riding experiences in a variety of specialized situations. Emphasis is placed on the development of skills such as jumping, rodeo games, and trail riding. Upon completion, students should be able to demonstrate control and management of the horse and perform various riding techniques. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PED 186 Dancing for Fitness 0 2 0 1

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

This course is designed to develop movement and recreational dance skills, safety, fitness, coordination, and techniques used to teach various groups. Emphasis is placed on participation and practice with adapting dances for ages and ability levels. Upon completion, students should be able to demonstrate knowledge of fitness through social, folk, and square dance participation and instruction. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

PED 216 Indoor Cycling 0 3 0 1

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

This course is designed to promote physical fitness through indoor stationary cycling. Emphasis is placed on pedaling techniques, safety procedures, and conditioning exercises necessary for cycling. Upon completion, students should have improved cardiovascular and muscular endurance and be able to design and participate in a cycling for fitness program. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PED 217 Pilates I 0 2 0 1

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

This course provides an introduction to the pilates method of body conditioning exercise. Topics include instruction in beginning and intermediate pilates exercises using a mat or equipment, history of pilates method, and relevant anatomy and physiology. Upon completion, students should be able to perform beginning and intermediate exercises, and possess an understanding of the benefits of conditioning the body's core muscles. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

PED 219 Disc Golf 0 2 0 1

Prerequisites: None Corequisites: None

College Transfer Course

This course introduces the fundamentals of disc golf. Emphasis is placed on basic throwing techniques, putting, distance driving, scoring, and single and doubles play. Upon completion, students should be able to perform the skills required in playing situations. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

PED 233 Ju-Jitsu 0 3 0 1

Prerequisites: None Corequisites: None

College Transfer Course

This course introduces martial arts using the ju-jitsu form. Topics include proper conditioning exercises, proper terminology, historical foundations, etiquette, and drills. Upon completion, students should be able to perform skills and techniques related to this form of martial arts. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

PED 239 Kickboxing 0 3 0 1

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

This course introduces martial arts using the kickboxing form. Topics include proper conditioning exercises, proper terminology, historical foundations, etiquette, and drills. Upon completion, students should be able to perform skills and techniques related to this form of martial arts. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PED 252 Officiating/Baseball/Softball 1 2 0 2

Prerequisites: None Corequisites: None

FA College Transfer Course

This course introduces the rules and techniques for sports officiating in baseball and softball. Emphasis is placed on officiating fundamentals and responsibilities. Upon completion, students should be able to demonstrate proper mechanics and knowledge of officiating procedures in baseball and softball. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PED 254 Coaching Basketball 1 2 0 2

Prerequisites: None Corequisites: None

College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

PED 256 Coaching Baseball 1 2 0 2

Prerequisites: None Corequisites: None

College Transfer Course

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 for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PED 260 Lifequard Training 1 2 0 2

Prerequisites: PED 153 Corequisites: None

College Transfer Course

This course covers the skills, knowledge, and techniques of lifesaving and lifeguarding. Topics include identifying and minimizing aquatic hazards, recognizing and effectively rescuing people in distress, and developing safety skills. Upon completion, students should be able to demonstrate skills, knowledge, and techniques of lifesaving and lifeguarding to pass American Red Cross lifeguarding certification. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

### Philosophy

PHI 215 Philosophical Issues 3 0 0 3

Prerequisites: ENG 111 Corequisites: None

College Transfer Course

This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critically evaluate the philosophical components

of an issue. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Humanities/Fine Arts—AA/AS.

#### Competencies

- 1. Engage in critical thinking.
- 2. Identify, reconstruct, and evaluate philosophical arguments.
- 3. Analyze key philosophical concepts within epistemology, metaphysics, and ethics.
- Demonstrate an understanding of major philosophical views, and how they relate to contemporary issues.

PHI 240 Introduction to Ethics 3 0 0 3

Prerequisites: ENG 111 Corequisites: None

FA, SP College Transfer Course

This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on moral theories such as consequentialism, deontology, and virtue ethics. Upon completion, students should be able to apply various ethical theories to moral issues such as abortion, capital punishment, poverty, war, terrorism, the treatment of animals, and issues arising from new technologies. *This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Humanities/Fine Arts—AA/AS.* 

#### Competencies

- 1. Engage in critical thinking about moral issues.
- 2. Identify, reconstruct and evaluate ethical arguments.
- 3. Analyze key ethical concepts.
- 4. Demonstrate understanding of major views in moral philosophy and how they relate to contemporary ethical and social issues.

## **Physics**

PHY 110 Conceptual Physics 3 0 0 3

Prerequisites: Satisfactory placement or DMA 010, DMA 020, DMA 030, DMA 040, DMA 050,

DMA 060, and DRE 096

Corequisites: PHY 110A

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Natural Sciences—AA/AS*.

PHY 110A Conceptual Physics Lab 0 2 0 1

Prerequisites: Satisfactory placement or DMA 010, DMA 020, DMA 030, DMA 040, DMA 050,

DMA 060, and DRE 096

Corequisites: PHY 110

FA, SP College Transfer Course

This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Natural Sciences—AA/AS.

PHY 131 Physics—Mechanics 3 2 0 4

Prerequisites: Satisfactory placement or DRE 096; MAT 121 or MAT 171

Corequisites: None

FA, SP

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 3 2 0 4

Prerequisites: Satisfactory placements or DRE 096; MAT 171

Corequisites: MAT 172

FA College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Natural Sciences—AS*.

PHY 152 College Physics II

3 2 0

Prerequisites: "C" or better earned in PHY 151

Corequisites: None

SP College Transfer Course

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Natural Sciences—AS.

#### PHY 251 General Physics I

3 3 0 4

Prerequisites: Satisfactory scores on the college placements tests or DRE 096; MAT 271

Corequisites: MAT 272

FA College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Natural Sciences—AS.

#### PHY 252 General Physics II

3 3 0 4

Prerequisites: MAT 272 and "C" or better earned in PHY 251

Corequisites: None

SP College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Natural Sciences—AS.

### **Political Science**

POL 120 American Government 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

This course is a study of the origins, development, structure, and functions of American 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 process. 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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Social/Behavioral Sciences-AA/AS.

#### Competencies

- Demonstrate an understanding of the essential concepts and theories in the course materials. Illustrate an understanding of the roles, duties, and structural characteristics of the executive, legislative, and judicial branches in the US government.
- 2. Analyze how American political institutions and individual behaviors interact to create political outcomes, with an awareness of the global context.
- 3. Define the function of political parties, interest groups, public opinion, and the media.
- Interpret how American's political history, constitutional structure, and political culture contribute to the state of contemporary American democracy.

#### POL 130 State and Local Government

3 0 0

3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

This course includes state and local political institutions and practices in the context of American federalism. Emphasis is placed on procedural and policy differences as well as political issues in state, regional, and local governments of North Carolina. Upon completion, students should be able to identify and discuss various problems associated with intergovernmental politics and their effect on the community and the individual. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* 

#### POL 210 Comparative Government

0 0 3

Prerequisites: None Corequisites: None

College Transfer Course

This course provides a cross-national perspective on the government and politics of contemporary nations such as Great Britain, France, Germany, and Russia. Topics include each country's historical uniqueness, key institutions, attitudes and ideologies, patterns of interaction, and current political problems. Upon completion, students should be able to identify and compare various nations' governmental structures, processes, ideologies, and capacity to resolve major problems. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

#### POL 220 International Relations

0 0

3

Prerequisites: None Corequisites: None

FA College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

### **Psychology**

#### PSY 150 General Psychology

3 0 0 3

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Social/Behavioral Sciences-AA/AS.

PSY 241 Developmental Psychology 3 0 0 3

Prerequisites: PSY 150 Corequisites: None

SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

PSY 246 Adolescent Psychology 3 0 0 3

Prerequisites: PSY 150 Corequisites: None

College Transfer Course

This course provides an overview of the behavior patterns, life changes, and social issues that accompany the developmental stage of adolescence. Topics include developmental theories; physical, cognitive and psychosocial growth; transitions to young adulthood; and sociocultural factors that influence adolescent roles in home, school and community. Upon completion, students should be able to identify typical and atypical adolescent behavior patterns as well as appropriate strategies for interacting with adolescents. This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.

PSY 281 Abnormal Psychology 3 0 0 3

Prerequisites: PSY 150 Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

### Religion

REL 110 World Religions 3 0 0 3

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts*.

REL 211 Introduction to Old Testament 3 0 0 3

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

REL 212 Introduction to New Testament 3 0 0 3

Prerequisites: Satisfactory placement or DRE 096

Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

### **Substance Abuse**

SAB 110 Substance Abuse Overview 3 0 0 3

Prerequisites: None Corequisites: None

FΑ

This course provides an overview of the core concepts in substance abuse and dependence. Topics include the history of drug use/abuse, effects on societal members, treatment of addiction, and preventive measures. Upon completion, students should be able to demonstrate knowledge of the etiology of drug abuse, addiction, prevention, and treatment.

SAB 135 Addictive Process 3 0 0 3

Prerequisites: None Corequisites: None

FΑ

This course explores the physical, emotional, psychological, and cultural aspects of the addictive process. Emphasis is placed on addictions to food, sex, alcohol, drugs, work, gambling, and relationships. Upon completion, students should be able to identify the effects, prevention strategies, and treatment methods associated with addictive disorders.

SAB 210 Substance Abuse Counseling 2 2 0 3

Prerequisites: None Corequisites: None

SP

This course provides theory and skills acquisition by utilizing intervention strategies designed to obtain therapeutic information, support recovery, and prevent relapse. Topics include counseling individuals and dysfunctional families, screening instruments, counseling techniques and approaches, recovery and relapse, and special populations. Upon completion, students should be able to discuss issues critical to recovery, identify intervention models, and initiate a procedure culminating in cognitive/behavioral change.

### **Information Systems Security**

SEC 110 Security Concepts 2 2 0 3

Prerequisites: NET 110 OR CTI 120

Corequisites: None

FΑ

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.

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# Sociology

SOC 210 Introduction to Sociology 3 0 0

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a universal general education transfer component course (UGETC) in Social/Behavioral Sciences—AA/AS.

SOC 213 Sociology of the Family 3 0 0

Prerequisites: None Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

SOC 220 Social Problems 3 0 0 3

Prerequisites: None Corequisites: None

FA, SP College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

SOC 225 Social Diversity 3 0 0 3

Prerequisites: None Corequisites: None

College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

### **Speech-Language Pathology**

Please refer to Caldwell Community College and Technical Institute's catalog for SLP course descriptions.

### **Spanish**

SPA 111 Elementary Spanish I 3 0 0 3

Prerequisites: Satisfactory placement or DRE 097 and DRE 098 or DRE 099

Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

SPA 112 Elementary Spanish II

3 0 0

3

Prerequisites: "C" or better earned in SPA 111

Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

#### SPA 211 Intermediate Spanish I

3 0 0 3

Prerequisites: "C" or better earned in SPA 112

Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

#### SPA 212 Intermediate Spanish II

0 3

Prerequisites: "C" or better earned in SPA 211

Corequisites: None

FA, SP, SU College Transfer Course

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 for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

### **Social Work**

#### SWK 110 Introduction to Social Work

3 0 0 3

Prerequisites: None Corequisites: None

FΑ

This course examines the historical development, values, orientation, and professional standards of social work and focuses on the terminology and broader systems of social welfare. Emphasis is placed on the various fields of practice including those 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

3 0 0 3

Prerequisites: None Corequisites: None

SP

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.

# **Work-Based Learning**

WBL 111 Work-Based Learning I 0 10 0 1

Prerequisites: None Corequisites: None

FA, SP, SU

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

WBL 112 Work-Based Learning I 0 20 0 2

Prerequisites: None Corequisites: None

FA, SP

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

WBL 115 Work-Based Learning Seminar I 1 0 0 1

Prerequisites: None

Corequisites: WBL 111 or WBL 112

FA, SP, SU

This course provides procedures necessary for the Co-op student to receive maximum benefit from his/her work experience. Emphasis is placed on the student/employer/advisor relationship and the evaluation process of the experience used to show accountability. Upon completion the student will be totally aware of the Co-op benefit and process.

WBL 121 Work-Based Learning II 0 0 10 1

Prerequisites: WBL 111 Corequisites: None

FA, SP, SU

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

### Web Technologies

WEB 110 Internet/Web Fundamentals 2 2 0 3

Prerequisites: None Corequisites: None

FA, SP

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 language, and effectively use and understand the function of search engines.

WEB 140 Web Development Tools 2 2 0 3

Prerequisites: None Corequisites: None

FA, SP

This course provides an introduction to web development software suites. Topics include the creation of web sites and applets using web development software. Upon completion, students should be able to create entire web sites and supporting applets.

WEB 151 Mobile Application Dev I 2 2 0 3

Prerequisites: None Corequisites: None

FA, SP

This course introduces students to programming technologies, design and development related to mobile applications. Topics include accessing device capabilities, industry standards, operating systems, and programming for mobile applications using an OS Software Development Kit (SDK). Upon completion, students should be able to create basic applications for mobile devices.

WEB 179 JAVA Web Programming 2 3 0 3

Prerequisites: CSC 151 Corequisites: None

FA, SP

This course introduces the development of dynamic, database-driven web applications using the JAVA programming languages. Topics include Object Oriented Programming JAVA Server Pages, servlets, database interactions, and form handling. Upon completion, students should be able to create and modify JAVA-based internet applications.

WEB 187 Programming for Mobile Devices 2 2 0 3

Prerequisites: WEB 140 Corequisites: None

FΔ

This course introduces content development for mobile electronic devices with a focus on business-related, social media, and entertainment applications. Emphasis is placed on developing web content and creating applications for mobile devices, including internet/business practices and techniques for delivery on mobile platforms. Upon completion, students should be able to develop web content and business or entertainment applications for use on mobile electronic devices

WEB 210 Web Design 2 2 0 3

Prerequisites: DME 110, DME 115 and WEB 140

Corequisites: None

FΑ

This course introduces intermediate to advanced web design techniques. Topics include customer expectations, advanced markup language, multimedia technologies, usability and accessibility practices, and techniques for the evaluation of web design. Upon completion, students should be able to employ advanced design techniques to create high impact and highly functional web sites.

WEB 251 Mobile Application Dev II 2 2 0 3

Prerequisites: WEB 151 Corequisites: None

FA. SP

This course covers advanced applications and custom programming to develop applications for mobile devices. Topics include device capabilities, OS specific Software Development Kits (SDK), scripting for functionality and designing interactivity. Upon completion, students should be able to demonstrate effective programming techniques to develop advanced mobile applications.

Welding

WLD 110 Cutting Processes 1 3 0 2

Prerequisites: None Corequisites: None

FΑ

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.

Competencies

**Student Learning Outcomes** 

- 1. Identify the parts and functions of an oxy-acetylene cutting torch.
- 2. Identify the parts and functions of various cutting equipment.
- 3. List the safety practices of using oxy-fuel, plasma-arc, and other cutting equipment.
- 4. Set-up and adjust cutting equipment.
- 5. Use an oxy-acetylene outfit, plasma cutting equipment, and other equipment to: a.Cut a straight marked line on various thickness steel plate. b.Cut various shapes out of carbon steel plate. c.Cut carbon steel plate to a bevel and pipe.

#### WLD 115 SMAW (Stick) Plate

2 9 0 5

Prerequisites: None Corequisites: None

FΑ

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.

#### Competencies

#### **Student Learning Outcomes**

- 1. Demonstrate SMAW electrode classification in compliance with AWS codes.
- 2. Perform a groove weld according to AWS D1.1.
- 3. Demonstrate safe and proper SMAW equipment setup, operation, and shut-down practices in accordance to manufacturer's recommendations.

#### WLD 116 SMAW (Stick) Plate/Pipe

1 9 0 4

Prerequisites: WLD 115 Corequisites: None

SP

This course is designed to enhance skills with the shielded metal arc (stick) welding process. Emphasis is placed on advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be able to perform groove welds on carbon steel with prescribed electrodes in the flat, horizontal, vertical, and overhead positions.

#### WLD 121 GMAW (MIG) FCAW/Plate

2 6 0 4

Prerequisites: None Corequisites: None

SP

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.

#### Competencies

#### Student Learning Outcomes

- Demonstrate the use of GMAW electrode classification in compliance with AWS code for the selection of electrodes.
- 2. Demonstrate the use of FCAW electrode classification in compliance with AWS code for the selection of electrodes.
- 3. Perform a Fillet weld in accordance with AWS code.
- 4. Perform a groove weld in accordance with AWS code.
- 5. Demonstrate safe and proper GMAW equipment setup, operation, and shut-down practices in accordance to manufacturer's recommendations.

#### WLD 122 GMAW (MIG) Plate/Pipe

1 6 0 3

Prerequisites: WLD 121 Corequisites: None

SP

This course is designed to enhance skills with the gas metal arc (MIG) welding process. Emphasis is placed on advancing skills with the GMAW process making groove welds on carbon steel plate and pipe in various positions. Upon completion, students should be able to perform groove welds with prescribed electrodes on various joint geometry.

WLD 131 GTAW (TIG) Plate 2 6 0 4

Prerequisites: None Corequisites: None

SP

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.

#### Competencies

#### **Student Learning Outcomes**

- Demonstrate the use of GTAW electrode classification in compliance with AWS for the selection of electrodes.
- 2. Perform a groove weld in accordance with AWS code.
- 3. Perform a Fillet weld in accordance with AWS code.
- Demonstrate safe equipment setup, operation, and shut-down practices according to manufacturer's recommendations.

#### WLD 132 GTAW (TIG) Plate/Pipe

1 6 0 3

Prerequisites: WLD 131 Corequisites: None

SU

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 and Specifications

2 0 3

Prerequisites: None Corequisites: None

FΑ

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.

#### Competencies

#### **Student Learning Outcomes**

- 1. Identify and read welding symbols.
- 2. Identify and explain various lines, notes, and specifications on a blueprint.
- 3. Identify the different types of lines on a blueprint.
- 4. Interpret destructive testing symbols and their methods.
- 5. Interpret non-destructive testing symbols and their methods.
- 6. Develop a working sketch.
- 7. Create a bill of materials from a blueprint.

#### WLD 151 Fabrication I

2 6 0 4

Prerequisites: None Corequisites: None

SU

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.

### Administration, Faculty and Staff

A complete directory of administration, faculty and staff is available at mitchellcc.edu/facultyand-staff All employee e-mail addresses are in the following format: first initial of first name last name@mitchellcc.edu (ex. jsmith@mitchellcc.edu).

#### **Board of Trustees**

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The Mitchell Community College Board of Trustees meets on the fourth Wednesday evening of each month except in November and December when the Board meets on the first Wednesday after Thanksgiving to avoid conflict with the Thanksgiving and Christmas holidays. Also, generally, the Board does not meet in July. Meetings are routinely held at 7 p.m. in the Board Room of Kirkman House on the Statesville Campus.

### Office of the President

Brewer, Dr. James T	President
B.S. Mars Hill College; M.R.R. North Carolina	State University; Ed.D. North Carolina State
University	•
Fulton, Jodee	Director, Human Resources
A.A., A.S. Sinclair Community College; B.S. G	ardner-Webb University; Professional Human
Resources Certification	•

Student Services
Brannon, Dr. T. PorterVice President for Student Services
B.S. St. John's University; M.S. St. John's University; Ed.D. Fordham University
Cooper, Candace Director, Financial Aid
B.S. Georgia College State University
Davis, Dr. Nikkole
B.A. Winthrop University; M.Ed. University of Georgia; Ed.D. Northeastern University
<b>Dubea, Erin</b> Assistant Director, Admissions and Records/Registrar
B.A. Southeastern Louisiana University; M.S. Kansas State University
Kirby, Donavon Director, Counseling
B.A. Lenoir-Rhyne University; M.A. Lenoir-Rhyne College; Ed.S. Appalachian State
University; Nationally Certified Counselor; North Carolina Licensed Professional
Counselor
Knox, RachelFinancial Aid Specialist
B.S. Gardner-Webb University
Lewis, MyraSenior Academic Advisor
B.S. Gardner-Webb University; M. Ed. Appalachian State University
Myers, Barbara Academic Advisor

B.S. Case Western Reserve University; M.A. University of North Carolina at Charlotte

Patrick, Elizabeth Student Activities Coordinator
B.S. Southern Connecticut State University; M.Ed. Springfield College
Patterson, Elizabeth "Betsy" Director, Admissions/Registrar
B.S. East Carolina University
Sappenfield, TammyCounselor/Admissions Specialist
B.S. and M.S. East Carolina University
Saunders, Ann
B.S. Ball State University; M.A. Appalachian State University
Watkins, Jeremi Financial Aid Specialist
B.A. Western Carolina University
West, MarkFinancial Aid Specialist
D.A. Langein Dieses a Linius maites
Willis, SamanthaCounselor/Admissions Specialist
B.S. East Carolina University; M.S. Kansas State University; Graduate Certificate,
Appalachian State University
Apparacinan state striversity
Instruction
Reese, Dr. Camille
M.S.N., RN, CNE University of North Carolina at Greensboro; Ed.D. University of North
Carolina at Greensboro
<b>Eisnaugle, Eva</b> Director, Institutional Research & Planning
B.A. Ohio State University; MBA Pfeiffer University
Fansler, Brett Dean, Mooresville Campus
B.S. and B.A. Western Carolina University; MBA Gardner-Webb University
Moore, Meredith
B.S. and M.A. University of North Carolina at Greensboro; M.S. and Graduate Certificate
East Carolina University
Nobles, CoyInstructional Technologist
A.A. Mitchell Community College; B.S. Appalachian State University; M.S. University of
A.A. Mitchell Community College; B.S. Appalachian State University; M.S. University of North Carolina at Greensboro
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A.A. Mitchell Community College; B.S. Appalachian State University; M.S. University of North Carolina at Greensboro  Rufty, Beverly
A.A. Mitchell Community College; B.S. Appalachian State University; M.S. University of North Carolina at Greensboro  Rufty, Beverly
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B.S. Western Carolina University

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