
McDowell Tech
community college
Learning for Life

McDowell Technical Community College

Catalog and Student Handbook 2017-2018

McDowell Technical Community College
54 College Drive
Marion, NC 28752
(828) 652-6021
Fax (828) 652-1014
www.mcdowelltech.edu

NC Works Career Center
at The Ford Miller Employment and Training Center
Mailing: 54 College Drive
Located at 316 Baldwin Avenue
Marion, NC 28752
(828) 659-6001
Fax (828) 659-8733

MTCC Small Business Center
Mailing: 54 College Drive
Located at 100 Business Center Drive
Marion, NC 28752
(828) 652-0633
Fax (828) 659-8038

Universal Advanced Manufacturing Center
Mailing: 54 College Drive
Located at 634 College Drive
Marion, NC 28752
(828) 652-0619

Table Of Contents

This catalog should not be considered a contract between McDowell Technical Community College and the student. Curriculum offerings may be altered to meet the needs of individuals and a minimum enrollment is required for offering or continuing a class. Tuition and fees are subject to change.

Questions not answered in this publication may be directed to the Student Services Office.

McDowell Technical Community College is an equal opportunity/affirmative action institution. McDowell Technical Community College does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or the provision of services.

Academic Areas

MTCC Board Of Trustees

Darren Waugh, Chairman

Appointees of the Governor's Office	**Expiration of Term**
David Patenaude	June 30, 2018
Boyd Phillips	June 30, 2019
Joe Kaylor	June 30, 2020
Gary Stroud	June 30, 2021

Appointees of the McDowell County Board of Education	
Nancy Hunter	June 30, 2018
Donald Ramsey	June 30, 2019
Gwen Conley	June 30, 2020
Kay P. Medford	June 30, 2021

Appointees of the McDowell County Commissioners	
David Walker	June 30, 2018
Darren Waugh, Chair	June 30, 2019
Greg Barksdale	June 30, 2020
Jim Washburn	June 30, 2021

The President of the Student Government Association serves as an Ex-Officio, Non-Voting Member of the Board of Trustees.

Administrative Officers

President	Dr. John Gossett
Vice-President for Finance and Administration	Ryan Garrison
Vice-President for Learning and Student Services	Dr. Penny Cross
Dean of Curriculum Programs	Dr. Jim Benton
Dean of Health Sciences	Judy Melton

MTCC Foundation

In 1977, the McDowell Technical Community College Foundation, Inc. was created to enrich resource development and enhance the quality of college life by procurement of gifts from the private sector. The Foundation operates under the auspices of a Board of Directors who plan and conduct fundraising projects, pledge campaigns and related programs. Individuals or organizations wishing to assist the College may do so by making tax deductible donations of equipment, cash, bonds, stocks, real estate, trusts, life insurance, or bequests. For additional information, contact Dr. John Gossett, MTCC President, at 828-652-0630 or Chip Cross, Foundation Director, at 828-652-0672.

Members of the Foundation are:

Robert Ayers (Retired)
Marion Baker (Retired)
Bob Boyette (City of Marion)
Steve Bush (McDowell Chamber of Commerce)
Sim Butler (Hospice)
Marsh Dark (Morrow Insurance)
Johnnie Davis (Crane Resistoflex)
Laura Dover Doran (Dover Insulation)
Danny Hampton (Freedom Life Ministries)
William Hollifield (CPA)
Ray McKesson (Retired-MTCC)
Steve McMahan (Rock Tenn)
Rob Noyes (Countryside BBQ)
Ellen Shelley (Attorney)
Helen Shimp (Retired)

Student Government Representative
Board of Trustee Representative
Board of Trustee Representative

MTCC Staff
Dr. John Gossett (President), Secretary
Ryan Garrison (Vice President for Finance & Administration), Treasurer
Dr. Penny Cross (Vice President for Learning and Student Services)
Chip Cross, Foundation Director
Michael Lavender (Director of External Relations)

About This Catalog

This catalog was prepared by Michael Lavender, Director of External Relations, using Adobe InDesign CC software.

McDowell Technical Community College

Telephone List 2017

Dr. John Gossett, President	652-0635	Dr. Penny Cross, VP	652-0645	Ryan Garrison, VPF	652-0627
Dr. Jim Benton, Dean	659-0444	Judy Melton, Dean	652-0647		
Abernathy, Eric	652-0679	Frye, Diane	659-0411	Pell Grant Info Line	659-0450
Adcock, Tab	659-0492	Gaito, Madalyn	652-0630	Perkins, Summer	659-0493
Adjunct Faculty Office	659-0426	Gallion, Rita (UAMC)	652-0619	Perry, Jay	652-0670
ADN (RN)	652-0666	Getty, Richard	652-0694	Price, Pam #131	659-6001
ARC Lab. Bldg. 11	659-0408	Goble-Talley, Anna	652-0639	Print Shop	652-0665
Auto Body	652-0690	Gorecki, Shanna #139	659-6001	Prison	659-7810
Auto Mechanics	652-0671	Gouge, Jane (F - J)	652-0639	Putnam, Deborah	652-0675
Bailey, Aprille	652-0698	Hamlin, Kelly	652-0629	Reeves, Gwen	652-0678
Bartlett, Lora (A - E)	652-0605	Harmon, Ladelle (Bo)	652-0626	Robertson, Steve (UAMC)	659-0402
Benfield, Susan (ADN)	652-0641	Helton, Sherry	652-0653	Robinson, Lisa (MEC Principal)	659-0415
Boardroom Bldg. 17	652-0601	Hensley, Jill	652-0616	Rose, Breanna	652-0618
Book Store	652-0613	Hensley, Jimmy #140 (MTCC 683)	659-6001	Ruiz, Betsy #313 (MTCC #621)	652-7920
Book Store Office	652-0678	Hill, Cassondra	652-0600	Sain, Pamela (K - O)	659-0451
Bowling, Chuck	659-0459	Hollifield, Randy	659-0426	Scoles, Keith (UAMC) High School	652-0693
Broome, Jerry #136	659-6001	Hughes, Joni	652-0662	Security Cell	442-1084
Bruce, Paula	652-0661	Hyatt, Marc	659-0425	Security Office	652-0673
Buchanan, Darian	652-0688	Ingle, Terri (MEC Counselor)	659-0413	Shelton, Lisa	652-0612
Buchanan, Karen	652-0685	Jacobs, Debra #138	659-6001	Shuford, Eddie (UAMC)	652-0652
Buff, Stacy	652-0663	Jamison, Howard	652-0610	Silkwood, Pam	659-0439
Burleson, Michele Dr.	652-0660	Jarvis, Shane (Maint.)	652-0614	Silver, Becky	652-0610
Burnette, Bridget #153	659-6001	Johnson, Elizabeth	652-0610	Silver, Frank	659-7810
Butner, Judy	652-0620	Jordan, Marilyn	652-0648	Silver, Sharon	652-0609
Byrd, Lisa	652-0624	Kanipe, Dean	652-0634	Sloop, Tom (Hort.) Prison	659-0405
Café	652-0615	King, Edwin #160	659-6001	Small Bus Center	652-0634
Cain, Wingate	652-0632	Laughridge, Tina	659-0449	Smith, Melisa	652-0637
Career & College Readiness	652-0657	Lavender, Michael	652-0681	Smith, Nicole	659-0428
Carpentry	652-0695	Ledbetter, Brad	652-0674	Smith, Sharon	652-0697
Cline, Billy	659-0448	Ledbetter, Kim	652-0602	Snart, Clarence	652-0642
Cole, Crystal	659-0421	Ledbetter, Mary Beth #137	659-6001	Sprinkle, Mike	652-0695
Cosmetology Lobby	652-0687	Library	652-0604	Steele, Rhonda	652-0654
Cosmetology Office	652-0610	Long, Susan	659-0418	Stines, Wayne (UAMC)	652-0693
Cross, Chip	652-0672	Lytle, Elizabeth	659-0439	Tallent, Pat	659-0401
Culp, Jennifer	652-0650	Mabry, Ann	652-0612	Telemedicine	652-0639
Davis, Vonda #155	659-6001	Machine Shop	652-0693	Throneburg, Stephanie	652-0646
Day Care Baby Room	652-0600	Macopson, Elmer	652-0603	Tipton, Sharon	652-0625
Day Care Kitchen	652-0612	Madden, Blake	652-0682	Toney, David	652-0690
Day Care Office	652-0637	Mauney, Dick	652-0696	Truett, Lorrie	652-0623
DeAngelus, Ramona	652-0684	McClelland, Terri (Lab 628)	652-0691	Tuttell, Richard (MCI)	659-7810
Dixon, Danny	652-0633	McCraw, Donnie	652-0671	Universal Adv. Manuf. Center	652-0619
Dietrich, Susan	652-0659	McCraw, Sandi	659-0414	Valentino, Jorge	659-0404
Dillard, John	652-0606	McFarland, Kelly Giles	652-0667	Valentino, Teresa	652-0657
Dobson, Valerie	652-0699	MEC Nurse	659-0649	Walsh, Terrance (Ed)	652-0643
Earle, Tim (UAMC)	659-0484	MEC Secretary	659-0411	Ward, Claudia	652-0664
Edwards, Eugene	659-0422	Michaels, Lindsey (P - T)	652-0644	Ward, Jamie (UAMC)	652-0689
Edwards, Wanda	652-0600	Mills, Rachael	652-0612	Watts, Beverly Dr.	652-0669
Electronics	659-0402	Monosso, Deb	652-0617	Waycaster, Brooke	659-0499
Esthetics Lobby	652-0640	Moore, Alan	652-0677	Weather (Staff)	659-0447
FAX Bldg. 17	659-0437	Moore, Debbie	652-0607	Weather (Students)	659-0419
FAX Bldg. 18	659-9710	Moore, Tony	442-1084	Weiler, Joan	652-0651
FAX Business Office	652-1603	Moran, Lori	652-0610	Welding	652-0689
FAX ConEd	652-8008	Morgan, Andy	652-0655	Wilson, Scott	659-0494
FAX Library	652-1014	NC Works/Ford Miller Ctr	659-6001	Wimsatt, Sherry	659-0408
FAX NC Works	659-8733	Nur Asst Info Line (CNA)	652-0639	Wright, Diane	659-0427
FAX Student Service	659-0430	Oliver, Gale #154	659-6001		
Foothills	652-4088	Ollis, James	652-0638		
Foster, Belinda	652-0611	Padgett, Julie	652-0631		
Fowler, Richard	652-0608	Pearson, Rachel	652-0658		

Academic Calendar

Fall 2017

All FT Faculty Return	August 1
Registration Begins	August 1
Late Registration	August 14
Testing Out of Developmental Classes	August 14
New Student Orientation	August 15
Faculty/Staff Development	August 15
Classes Begin	August 16
Blackboard/Gmail Orientation	August 16
End of Drop/Add	August 21
Tuition Refund Deadline	August 25
Non-pay Students Removed from Classes	August 25
Labor Day	September 4 (Closed)
Last Day or Receive Non-Punitive Grade of "W"	September 19
50th Anniversary Celebration and Fall Festival SGA Event	October 24
Veteran's Day	November 10 (Closed)
Registration for Spring Begins	November 20
No Classes	November 22
Thanksgiving	November 23-24 (Closed)
End of Fall Term	December 11
Final Grades Due	December 12 at Midnight
Campus Closed	December 18-29

Developmental Studies Courses Fall 2017

1st 4 weeks	August 21 – September 14
2nd 4 weeks	September 18 – October 12
3rd 4 weeks	October 16 – November 9
4th 4 weeks	November 13 – December 11
1st 8 weeks	August 21 – October 12
2nd 8 weeks	October 16 – December 11

Spring 2018

Campus Closed	January 1 (Closed)
Late Registration	January 3
New Student Orientation	January 4
Faculty/Staff Development	January 4
Classes Begin	January 5
End of Drop/Add	January 9
Dr King Jr Holiday	January 15 (Closed)
Tuition Refund Deadline	January 17
Last Day or Receive Non-Punitive Grade of "W"	February 12
MTCC Fire and Rescue College	March 15- 18
Spring Fling SGA Event	March 20
Spring Break	March 26 - 29
Good Friday	March 30 (Closed)
Easter Monday Observed	April 2 (Closed)
Registration for Summer Begins	April 16
End of Spring Term	May 7
Final Grades Due	May 8 at Midnight
Graduation	May 15

Developmental Studies Courses Spring 2018

1st 4 weeks	January 8 – February 1
2nd 4 weeks	February 5 – March 1
3rd 4 weeks	March 5 – April 5
4th 4 weeks	April 9 – May 3
1st 8 weeks	January 8 – March 1
2nd 8 weeks	March 5 – May 3

Summer 2018

Late Registration	May 14
New Student Orientation	May 15
Classes Begin	May 16
End of Drop/Add	May 21
Tuition Refund Deadline	May 23
Memorial Day	May 28 (Closed)
Last Day or Receive Non Punitive Grade of "W"	June 6
Summer Splash SGA Event	June 14
Summer Break	July 2 - 6
Independence Day	July 4 (Closed)
End of First 8 Weeks	July 19
End of Summer Term (10 weeks)	August 1

Developmental Studies Course Summer 2018

1st 4 weeks	May 21 – June 14
2nd 4 weeks	June 18 – July 19
1st 8 weeks	May 21 – July 19

MTCC History

1964

McDowell Technical Community College was established as the Marion-McDowell Industrial Education Center, located in downtown Marion, N.C. near the corner of State Street and South Garden Street. M-MIEC operated as a satellite unit of Asheville-Buncombe Technical Institute until September, 1967.

1967

M-MIEC became an independent unit of the Department of Community Colleges. The first Board of Trustees was sworn in, giving more local autonomy.

1970

The school moved to permanent facilities on a 31-acre site at the intersection of Interstate 40 and Highway 226 in Marion.

1971

The N.C. General Assembly made it possible for the school to become an independent institution. The College was officially chartered as McDowell Technical Institute.

1975

A new building expansion program was completed, adding 39,322 square feet to the existing campus. Expansion included a new Auto Mechanics shop, 500-seat Amphitheatre, Learning Resource Center, Teaching Auditorium (seating 220), permanent administrative offices, classrooms and an expanded Student Commons area.

1977

McDowell Technical Institute Foundation, Inc. was created to enrich resource development and enhance the quality of college life by procurement of gifts from the private sector.

1979

The N.C. General Assembly enacted a bill to change the school's name to McDowell Technical College.

1984

Robert M. Boggs succeeded John A. Price as President, becoming the College's second Chief Administrator. The College undertook a major bond campaign, which resulted in $2,400,000 for the addition of new facilities.

1987

Construction was completed on the Industrial Skills Center, a 32,000 square foot class/lab facility, housing special industrial skills training facilities and class/lab areas for technical and vocational programs.

The Day Care/Classroom building was completed, housing a day care area for children of MTCC students, Continuing Education classrooms/offices, an auditorium and faculty offices. The new facility added 11,200-square feet to existing campus facilities.

1988

McDowell Technical College changed its name to McDowell Technical Community College to more accurately reflect the comprehensive educational opportunities available to the citizens of McDowell County.

The MTCC Small Business Center was funded and established to provide educational opportunities and financial assistance to small businesses in the county.

1989

The MTCC Career Center was established, providing students with information and help in choosing careers.

The MTCC Downtown Center, located in downtown Marion at the original site of the Marion-McDowell Industrial Education Center, was established to offer Continuing Education classes.

1990

MTCC, in conjunction with Isothermal and Cleveland Community Colleges, established the Foothills Nursing Consortium to begin offering an Associate Degree Nursing Program in 1991.

1996

MTCC's North Carolina Information Highway Room was certified and became operational, offering conferences and classes via live interactive video and sound.

1997

The MTCC Downtown Center moved to its new location at 35 South Main Street in Marion, where the McDowell County Schools Accelerated Learning Center and the McDowell County JobLink Career Center were also located.

Construction was completed on a new 19,950 square foot classroom building, the Library was renovated and a new handicapped lift was installed in the Administrative Building. 1,000 square foot was added to the college bookstore.

1999

Dr. Robert Boggs retired after 15 years of service to the College. Dr. H. Edwin Beam became Interim President and the Board of Trustees began the search for a new President.

Today, McDowell Technical Community College offers Associate Degrees, Diplomas, and/or Certificates in more than 30 curriculum programs. The College also offers classes in many areas of Continuing Education. MTCC currently serves more than 6,800 students per year with some type of education and training.

2000

Dr. Virginia R. Mitchell became third president of the College. Instructor Jan Alms designed the first College Seal, which was incorporated into the College's Presidential Medallion, vested upon Dr. Mitchell during inaugural ceremonies in May.

2004

Dr. Bryan W. Wilson succeeded Dr. Virginia R. Mitchell as president of the College after she retired in December, 2003.

2005

Mr. Ford Miller, local businessman, made the largest private donation the college had ever received when he gave MTCC the former Marion Mills Office Building on Baldwin Avenue. Trustees named the building The Ford Miller Employment and Training Complex. Plans were begun to convert the building to a combination office and classroom building to house MTCC staff and students, the McDowell County JobLink Career Center and associated partners, and the McDowell County Employment Security Commission.

2008

The W. Harold Smith Building was completed and named for Harold Smith, a local businessman who left his estate to further educational opportunities for young adults from McDowell County. A trust established in his name has donated over $825,000 to the college during the last decade, including well in excess of $100,000 for this building. Scholarships from this trust have also benefitted individual students attending curriculum classes at the college.

2009

The Ford Miller Employment and Training Center was completed and began operations in late September of this year.

2010

The Academic Resource Center (ARC) opened on the upper level of the Library adjacent to the Student Enrichment Center to offer students tutoring, computer access, instructional support, test proctoring and a variety of other academic resources. Printers

and study tables are also available.

2014

Dr. Bryan W. Wilson, President, and the Board of Trustees, in conjunction with the McDowell County Board of Commissioners, dedicated the Universal Advanced Manufacturing Center (UAMC), providing new and enlarged classrooms and shop areas for Machining, Electrical/Electronics, Welding, Industry Training and related programs.

2016

Dr. John Gossett, who had been serving as the college's Vice-President for Learning and Student Services, was appointed President in May and assumed his new duties on August 1.

General Information

Accreditation

McDowell Technical Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097: Telephone number 404-679-4500) to award certificates, diplomas, and associate degrees.

Mission and Goals

Preamble

McDowell Technical Community College in Marion, North Carolina, is situated in the foothills of the beautiful Blue Ridge Mountains and is located 32 miles east of Asheville near the intersection of Interstate 40 and NC Highway 226 South.

Established in 1964, MTCC began as the Marion-McDowell Industrial Education Center near downtown Marion, and operated as a satellite unit of Asheville-Buncombe Technical Institute until 1967. The college moved to its current 31 acre site in 1970 and was officially chartered in 1971 as McDowell Technical Institute. In 1979, the college's name was changed to McDowell Technical College and in 1988 to the current McDowell Technical Community College. Although the name has changed, the process of lifelong learning has remained as its primary focus.

Mission Statement

McDowell Technical Community College is a member of the North Carolina Community College System, dedicated to providing student-centered accessible, high-quality educational opportunities and services which fulfill the personal development, training and employment needs of the residents, businesses, and industries of McDowell County and the surrounding areas through an open-door admissions policy.

The college recognizes each person's right to an education and seeks to contribute to the maximum development of a globally and culturally diverse workforce and improve the quality of life of the individuals in our community.

The college provides life-long learning opportunities by:

- Offering comprehensive academic transfer, professional/technical, developmental, basic skills and continuing education programs through traditional and non-traditional delivery methods;
- Providing comprehensive student support services;
- Interacting and assisting with others to encourage, promote and facilitate economic growth and community development;
- Recruiting, retaining and developing a highly qualified and diverse faculty and staff who are dedicated to quality education and service to the college and the community;
- Enhancing student life by sponsoring a variety of educational, cultural, and community services and activities.

Graduate Competencies

McDowell Technical Community College strives to prepare graduates to:

1. Listen and communicate effectively, orally and in writing.
2. Demonstrate competence in reading.
3. Perform effectively in their chosen occupations.
4. Demonstrate positive interpersonal life skills.
5. Demonstrate quantitative competencies.
6. Demonstrate skills in using a personal computer.
7. Use information to analyze problems and make logical decisions.

General Responsibilities

Students are expected to acquaint themselves with and observe College regulations and policies contained in the *Catalog and Student Handbook* and all announcements made by administrative officials.

Academic Year

McDowell Technical Community College operates on the semester system (Fall, Spring and Summer).

Classes are regularly scheduled Monday through Friday for the day and evening curriculum classes. Weekend curriculum classes may also be offered on an occasional basis. Holidays, days for registration, and the first and last days for classes in each semester are indicated on the academic calendar.

Hours of Operation

In general, the College will offer day and night curriculum classes in technical, vocational, general education and college transfer programs from approximately 8:00 am to 10:30 pm Monday through Friday. Occasionally, classes will begin or end an hour earlier or later than these parameters. Weekend and summer semester classes may vary from this schedule.

The administrative offices of the College are open 8:00 am to 5:00 pm Monday through Thursday, and 8:00 am to 4:30 pm Friday.

The Switchboard is open from 8:00 am to 5:00 pm Monday through Thursday and 8:00 am to 4:30 pm on Friday.

The Academic Resource Center is open from 8:00 am to 8:00 pm Monday through Thursday and 8:00 am to 4:00 pm on Friday.

The Library is open from 8:00 am to 7:00 pm Monday through Thursday and 8:00 am to 4:00 pm on Friday.

Continuing Education classes will be offered across campus and throughout the community at varying times throughout the week. Consult the Schedule of Classes for Continuing Education class times.

Hours of operation for the annual Fire and Rescue College will be mailed to applicants several weeks prior to the event.

Closing of School For Bad Weather

At times, McDowell Technical Community College curriculum and/or continuing education classes may be delayed or canceled due to inclement weather, natural disaster, or other emergency. The President is responsible for making the decision of whether to delay or cancel classes and for communicating this decision to the Director of External Relations for communication to the news media and to the college switchboard.

When it becomes necessary to discontinue or delay classes, an announcement will be made to local and regional radio and television stations. Morning announcements will be made about 6:15 am for day classes. All day classes will operate according to the announcement and will either be canceled for the day or begin at 10:00 am.

Should it become necessary to change from the delayed class schedule to class cancellation, the stations will be notified by 8:00 am.

Announcements concerning evening classes will be made over the same stations during the afternoon, hopefully by 3:00 pm. There is no abbreviated schedule for evening classes.

Students may call the college if they cannot receive one of the radio or television stations listed . If the college is closed, students may access a recorded closing/delay message by calling the College at 659-0419. Announcements will also be listed on Facebook and at www.mcdowelltech.edu .

Students, faculty and staff may also sign up for text alerts from the College to receive inclement weather announcements. Log onto the MTCC website at www.mcdowelltech.edu and visit the section labeled "McDowell Tech Text Alerts" to sign up.

During inclement weather, students and staff members may listen to these stations for news about school delays or class cancellation:

Radio	**Television**
WWNC (570 AM) Asheville	WLOS (Ch. 13, Asheville)
WBRM (1250 AM) Marion	WBTV (Channel 3, Charlotte)
WTOE (1470 AM) Spruce Pine	WSOC (Ch. 9, Charlotte) WYFF (Ch. 4, Greenville)
WMNC (92.1 FM) Morganton	WSPA (Ch. 7, Spartanburg)
WKSF (99.9 FM) Asheville	
WQNQ (104.3 FM), Asheville/Old Fort	

Class makeup: The college recognizes its obligation to deliver the instructional services for which students pay tuition and fees. For this reason, all missed classes should be re-scheduled or made up in a manner determined by the Vice-President for Learning and Student Services. The final attendance report must document how cancelled classes were made up.

Housing

McDowell Technical Community College is a commuter institution and does not provide living accommodations for students. However, if a student desires to live in the community while attending classes, the Student Services Office will refer him/her to appropriate resources for assistance in locating suitable housing.

Parking

Parking facilities are available for students, visitors, staff and faculty. Handicapped parking facilities are available and are appropriately designated across campus. Students are required to purchase a parking permit at a cost of $5 each semester they attend. These passes should be displayed in a prominent area on the windshield of the vehicle. Faculty and staff are also required to have a parking permit in order for their vehicles to park in the designated staff parking areas. Unauthorized vehicles will be towed away at the owner's expense.

Food Services

A short order café is located in the Student Commons. The café serves breakfast, lunch, and dinner Monday through Thursday, and breakfast and lunch on Fridays. The cafe may be closed on certain occasions when the college is holding special events in the Student Commons or when class is not in session. Snacks and soft drinks may also be purchased from vending machines in the Student Commons.

Library Services

Library Services encompasses the Library and audiovisual materials and equipment. Library staff members are available to help students and faculty as well as members of the community with library needs. The MTCC library hours are posted on the library entrance. The MTCC library can be accessed through the MTCC website by clicking on the "Library" tab on the left.

A wide range of library resources is available to support the curriculum programs of the College. The book collection includes more than 28,780 volumes of current reference materials, college transfer, technical and vocational materials and an extensive paperback collection. Approximately 100 periodical and newspapers are received throughout the year. Patrons are welcome to recommend materials for purchase.

Audiovisual materials are available for classroom instruction. Audiovisual equipment is maintained in most of the classrooms on campus. The online card catalog (SirsiDynix iLink) provides easy access to Library materials and makes the check-out process smooth, quick and accurate.

Additional library resources include Interlibrary Loan through online Computer Library Center (OCLC) and Community College Libraries in North Carolina (CCLINC). Online databases include SIRS Researcher, Renaissance and Government Reporter; and Facts on File: Issues & Controversies and Bloom's Online Literary Reference. Computers are available for Internet research, including NC LIVE. Through its databases, NC LIVE provides access to full-text articles from over 29,700 magazines and newspapers from its 17 vendors. It also provides access to over 31,000 electronic books, as well as over 3,400 videos and audio books. Remote access to the NC LIVE, SIRS, & FOF databases is available to online students through Blackboard. Other students need a library card to get the passwords/urls for the databases. A library card is needed by all library patrons to use the computers in the library and to check out library materials.

Use of Telephones

Students will not be called out of class to receive personal calls except in the case of an emergency.

Cell Phones and Beepers

Cellular telephones, beepers, two-way radios and similar devices may cause distraction and/or disruption of the learning environment. Students are to keep all such devices turned off during class and while in the MTCC Library. Students with extenuating circumstances must seek permission of the individual instructor or library staff member to have such devices turned on in these locations.

Technology

McDowell Technical Community College maintains multiple computer labs for instructional purposes in curriculum areas such as Accounting, Advertising & Graphic Design, Business Administration, Computer Information Technology, Health Information Technology, Nursing, Office Systems, Photography and Web Technology. The Graphic Design and Photography labs utilize Macintosh computers with associated software while other labs contain PC workstations running Microsoft Windows with associated software. Printing is also available in labs for instructional purposes.

The Academic Resource Center (ARC) is an open lab available for student use. It is located just above the library in Cedar Building.

Wi-Fi is available across campus for guest use. No login is necessary, but users must read and accept the campus policy to access the internet. Violation of this policy could result in revocation of computer use privileges on campus.

Children On Campus

It is College policy that children may not accompany students to class. Children who are brought to campus for other reasons must be closely supervised by a responsible adult and may be asked to leave if they become disruptive. Children enrolled in the MTCC Child Development Center are allowed on campus when supervised by College staff.

Child Development Center

The McDowell Technical Community College Child Development Center is a 5-star center providing quality care for children 6 weeks to 5 years of age. We provide care during the day with full-time or part-time slots to students, MTCC/MEC faculty & staff and the community. The Center is open as follows from 7:30 am to 5:30 pm Monday through Thursday, and from 7:30 am to 4:30 pm on Friday. Financial assistance is available to qualifying applicants. For additional information, fee schedules and application materials, please contact MTCC Child Development Center at 828-652-0637.

Dress

Students are to exercise judgment in dressing appropriately for classes or laboratory work. Students in certain curriculum programs may be required to wear particular items of clothing for safety and/or designation of their course of study. Refer to the Student-Oriented Policies and Procedures section of the Catalog for more details.

Noise

Students are to be considerate of classes which are in session. Excessive noise will not be tolerated within administrative or classroom buildings.

Smoking Facilities

McDowell Technical Community College is a tobacco-free campus. We no longer have designated smoking areas and smoking is not permitted on campus. Students who violate this policy will receive a verbal warning by College staff for their first offense. Continued use of tobacco products after this warning is considered a violation of this policy and appropriate disciplinary action will be taken.

Bulletin Boards

Students may post notices on bulletin boards subject to the approval of the Student Government Advisor in the Student Services Office.

Lost and Found

All lost or found items should be reported to the switchboard operator at the information desk in Building 11 (Cedar) 828-652-6021. The Switchboard Operator will post information on items which have been turned in.

Social Media Guidelines

The purpose of McDowell Technical Community College (MTCC) social networking sites such as Facebook, Twitter, and YouTube is to support the College's mission, programs, services, and events by offering news and information to the students, faculty, staff, and friends of MTCC. Social media sites are valuable as they provide a method for disseminating information. These procedures are also subject to the addition of other forms of social media. MTCC encourages feedback and comments from prospective students, current students, alumni, faculty, staff, and members of the community. MTCC remains committed to maintaining these sites as safe and family-friendly forums for sharing information.

Guidelines are provided in order to protect the College's reputation and image. The establishment of guidelines ensures information follows the same high standards as printed and web publications.

In an effort to maintain a positive environment for MTCC website visitors, MTCC reserves the right to remove or block posts, users, or any content from official college-sponsored pages.

MTCC expects users to comply with the social website's terms of service.

- Facebook Statement of Rights and Responsibilities
- Instagram Terms of Service

- Twitter Terms of Service
- YouTube Terms of Service
- WordPress Terms of Service

Social Media Guidelines for Students

Online behavior that violates the college's Student Code of Conduct (pg. 71) or the Appropriate Use of Computing Resources Policy which is brought to the attention of the Vice President of Learning and Student Services, will be treated as any other violation of the Student Code of Conduct.

The following types of content are prohibited from the MTCC social networking sites:

1. Derogatory language or demeaning statements about or threats to any third party;
2. Lewd, indecent, or incriminating images or information depicting hazing, sexual harassment, vandalism, stalking, underage drinking, illegal drug use, or any other inappropriate behavior or inappropriate language;
3. Content that violates local, state or federal law;
4. Online gambling;
5. Content that harasses any third party or personal attacks of any kind;
6. Selling goods or services for personal financial profit;
7. Comments or posts that are unrelated to MTCC;
8. Spam;
9. Infringement on copyrights or trademarks; and/or
10. Offensive comments that target or disparage any ethnic, racial, religious, or other group of people.

If you have questions or concerns about a post or comment, the Director of External Relations. If a sanctioned student club or organization wishes to create a social media web page, the faculty advisor must follow the procedures outlined under Social Media Guidelines for Employees in the MTCC policy and procedure manual.

Note: Refer to Individual Program handbook for potentially more stringent policy and consequences.

Sexual Misconduct, Dating Violence, Domestic Violence and Stalking Policy

McDowell Technical Community College provides and is committed to maintaining programs, activities, and an educational and work environment founded on civility and respect, where no one is unlawfully excluded from participation in, denied the benefits of, or subjected to discrimination in any College program or activity on the basis of sex.

Sexual Misconduct, dating violence, domestic violence, and stalking are forms of sex discrimination that may deny or limit an individual's ability to participate in or benefit from College programs or activities and thus are inconsistent with the values and standards of the College community; incompatible with the safe, healthy environment that the College community expects and deserves; and will not be tolerated.

It is the policy of the College to provide educational, preventive, and training programs regarding sexual misconduct, dating violence, domestic violence, and stalking; encourage reporting of these behaviors; take appropriate action to prevent incidents from denying or limiting an individual's ability to participate in or benefit from the College's programs; make available timely services for those who have been affected; and provide prompt and equitable methods of investigation and resolution to stop discrimination, remedy any harm, and prevent its recurrence.

The College is committed to fostering a community that promotes timely and fair resolution of sexual misconduct, dating violence, domestic violence, and stalking allegations. To that end, the College has appointed a Title IX Coordinator to oversee the investigation and resolution of such allegations and has adopted investigation and resolution procedures. Any allegation of sexual misconduct, dating violence, domestic violence, or stalking involving any member of the College community, occurring on College property, and/or occurring off of College property (if the conduct giving rise to the allegation is related to the College's programs or activities) will be investigated by the College's Title IX Coordinator pursuant to the appropriate procedures.

The Title IX Coordinator is Ryan Garrison, Vice-President of Finance, who can be reached at 828-652-0627.

McDowell Technical Community College
Performance Measures and Standards for Performance Funding

Last revised August 2017 from the *2017 Performance Measures for Student Success* report by NCCCS.

Measures A, B, C, D, E, F, and G, are required for performance funding.

An asterisk "*" indicates that number is too small to report without violating students' privacy. A minimum of 5 students is required for a reportable sample size

Measure	Description	Standard(s)	System Average Performance	MTCC Performance
A. Basic Skills Student Progress	Percentage of Basic Skills students who achieve an Educational Functioning Level gain during the program year (July 1 – June 30).	Goal: 68.3% Baseline: 34.5%	58.3%	69.6%
B. Credit English Success	Percentage of first-time Associate Degree seeking and transfer pathway students passing a credit-bearing English course with a "C" or better within their first term of enrollment.	Goal: 55.9% Baseline: 23.8%	52.0%	66.2%
C. Credit Math Success	Percentage of first-time Associate Degree seeking and transfer pathway students passing a credit-bearing Math course with a "C" or better within their first term of enrollment.	Goal: 32.5% Baseline: 10.1%	29.8%	51.0%
D. First Year Progression	Percentage of first-time fall curriculum students attempting at least 12 hours who successfully complete at least 12 hours within their first academic year (fall, spring, summer).	Goal: 75.0% Baseline: 54.1%	69.7%	74.2%
E. Curriculum Completion	Percentage of first-time fall curriculum students who, within six years of first term of enrollment, have either graduated, transferred, or are still enrolled with at least 36 non-developmental credit hours.	Goal: 51.9% Baseline: 35.9%	44.0%	12% CC Graduate and Univ. Transfer 19% CC Graduate, Not Univ. Transfer 8% Univ. Transfer Not CC Graduate 2% Retained (36 HRS), Did Not CC Graduate or Univ. Transfer 40.9% Graduate, Transfer, or Retained (36 HRS)
F. Licensure and Certification Passing Rate	Aggregate institutional passing rate of first-time test-takers on licensure and certification exams. Exams included in this measure are state mandated exams which candidates must pass before becoming active practitioners.	Goal: 90.9% Baseline: 69.9%	84.1% Aggregate BLET 80% Cosmetology: Apprentice 97% Cosmet 91% Esthetics 89% Instructor 83% Manicurist 82% Pract. Nursing 92% Reg. Nursing 92%	92.2% Aggregate BLET 86% Cosmetology: Apprentice (*) Cosmet 90% Esthetics 100% Instructor (*) Manicurist (*) Pract. Nursing 97% Reg. Nursing 100%

Measure	Description	Standard(s)	System Average Performance	MTCC Performance
			EMT 77% EMT-I 72% EMT-P 80%	EMT 88% EMT-I (*) EMT-P 80%
G. College Transfer Performance	The percentage of students who exited NCCCS after having completed an Associate Degree and/or at least 30 cumulative hours of articulated transfer credits and subsequently transferred to a four-year college or university and earned a GPA of 2.25 or better after two consecutive semesters within the academic year at the institution.	Goal: 87.6% Baseline: 65.1%	82.8%	84.8%

College Summary:

Four performance measures were met, Measure A – Basic Skills Progress, Measure B – Credit English Success, Measure C – Credit Math Success, and Measure F – Licensure Passing Rate. Two performance measures were Above the College Average, but Below the Excellence Level and one performance measure was Above the Baseline, Below the Average.

Degrees, Diplomas & Certificates

Program Name	Program Code	CIP Code
Accounting		
Accounting		
Accounting-Associate Degree	A25100	52.0301
Accounting-Certificate/Pathway	C25100P	52.0301
Accounting - Bookkeeping-Certificate/Pathway	C25100BP	52.0301
Accounting-Income Tax Preparation		
Accounting-Income Tax Preparer-Certificate	C25100B	52.0301
Accounting-Income Tax Preparation-Certificate/Pathway	C25100TP	52.0301
Accounting-Other		
Accounts Payable, Accounts Receivable, Bookkeeping-Certificate	C25100A	52.0301
Payroll Accounting Clerk-Certificate	C25100C	52.0301
Advertising and Graphic Design		
Advertising and Graphic Design-Associate Degree	A30100	50.0402
Advertising and Graphic Design-Diploma	D30100	50.0402
Advertising and Graphic Design-Certificate	C30100	50.0402
Advertising and Graphic Design-Certificate/Pathway	C30100P	50.0402
Air Conditioning, Heating & Refrigeration Technology		
Air Conditioning, Heating & Refrigeration Technology-Diploma	D35100	47.0201
Air Conditioning, Heating & Refrigeration Technology-Certificate/Pathway	C35100P	47.0201
Associate in Arts and Science		
Associate in Arts	A10100	24.0101
Associate in Science	A10400	24.0101
Basic Law Enforcement Training		
Basic Law Enforcement Training-Certificate	C55120	43.0107
Business Administration		
Business Administration		
Business Administration-Associate Degree	A25120	52.0201
Business Administration-Associate Degree	A25120B	52.0201
Business Administration-Certificate/Pathway	C25120P	52.0201
Business Administration-Marketing & Retail		
Business Administration - Marketing & Retailing-Associate Degree	A25120M	52.0201
Business Administration - Marketing & Retailing-Certificate/Pathway	C25120FP	52.0201
Business Administration-Operations Management		
Business Administration - Operations Management-Associate Degree	A25120O	52.0201
Business Administration - Operations Management Certificate	C25120O	52.0201
Business Administration - Operations Management Certificate/Pathway	C25120OP	52.0201
Carpentry		
Carpentry-Diploma	D35180	46.0201
Carpentry Certificate	C35180	46.0201
Carpentry-Certificate/Pathway	C35180P	46.0201
Computer Integrated Machining		
Computer-Integrated Machining-Associate Degree	A50210	48.0503
Computer-Integrated Machining-Diploma	D50210	48.0503
Computer-Integrated Machining-Certificate/Pathway	C50210P	48.0503
Cosmetology		
Cosmetology-Associate Degree	A55140	12.0401
Cosmetology-Diploma	D55140	12.0401
Cosmetology-Certificate/Pathway	C55140P	12.0401
Cosmetology Instructor-Certificate	C55160	12.0413

Early Childhood Education

Early Childhood Education		
Early Childhood Education-Associate Degree	A55220	13.121
Early Childhood-Diploma	D55220	13.121
Early Childhood-Certificate	C55220	13.121
Early Childhood Education-Certificate/Pathway	C55220P	13.121
Early Childhood-Special Educaton		
Early Childhood Special Education-Certificate	C55220S	13.121
Infant/Toddler Care		
Infant/Toddler Care-Certificate	C55220I	13.121
School-Age Education		
School-Age Education-Associate Degree	A55440	13.1202
School-Age Child-Diploma	D55440	13.1202
School-Age Child-Certificate	C55440	13.1202

Electrical System Technology

Electrical System Technology-Associate Degree	A35130	46.0302
Electrical System Technology-Diploma	D35130	46.0302
Electrical System Technology-Certificate/Pathway	C35130P	46.0302

Emergency Management

Emergency Management		
Emergency Management-Associate Degree	A55460	43.0302
Emergency Management-Certificate	C55460E	43.0302
Emergency Management-Certificate/Pathway	C55460EP	43.0302
Emergency Management-Criminal Justice		
Emergency Management-Criminal Justice-Certificate	C55460C	43.0302
Emergency Management-Criminal Justice-Certificate/Pathway	C55460CP	43.0302
Emergency Management-Fire Protection		
Emergency Management-Fire Protection-Certificate/Pathway	C55460FP	43.0302
Emergency Management-Fire Technology-Certificate	C55460F	43.0302

Engineering

Associate in Engineering	A10500	14.0102

Esthetics Technology

Esthetics Technology-Certificate	C55230	12.0409
Esthetics Technology-Certificate/Pathway	C55230P	12.0409
Esthetics Technology Instructor-Certificate	C55270	12.0413

General Education

General Education-Associate Degree	A10300	24.0199
General Education (Pre-Nursing)-Associate Degree	A10300PN	24.0199

General Occupational Technology

General Occupational Technology-Associate Degree	A55280	24.0102

Health Information Technology

Health Information Technology		
Health Information Technology-Associate Degree	A45360	51.0707
Health Information Technology-Diploma	D45360	51.0707
Health Information Technology-Certificate/Pathway	C45360P	51.0707
Health Information Technology-Certificate/Pathway	C45360BP	51.0707
Health Information Technology-Health Care Informatics		
Health Information Technology-Health Care Informatics-Certificate	C45360IF	51.0707
Health Information Technology-Health Care Informatics-Certificate/Pathway	C45360IP	51.0707
Health Information Technology-Other		
HIT-Medical Billing and Coding-Certificate	C45360B	51.0707
HIT-Release of Information-Certificate	C45360A	51.0707

Industrial Systems Technology

Industrial Systems Technology

Industrial Systems Technology-Associate Degree	A50240	15.0499
Industrial Systems Technology-Diploma	D50240	15.0499
Industrial Systems Technology-Certificate/Pathway	C50240P	15.0499

Industrial Systems Techology-Refrigeration

Industrial Systems Technology-Refrigeration-Certificate A	C50240A	15.0499
Industrial Systems Technology-Refrigeration-Certificate B	C50240B	15.0499

Information Systems

Information Technology

Information Systems Advanced	C25590B	11.0103
Information Technology	C25590A	11.0103
Information Technology	A25590	11.0103
Information Technology	C25590AP	11.0103
Information Technology - Advanced	C25590BP	11.0103

Information Technology-Network Management

Information Technology - Advanced Network Management	C25590DP	11.0103
Information Technology - Network Management	C25590CP	11.0103
Network Management	C25590C	11.0103
Network Management Advanced	C25590D	11.0103
Networking Management Diploma	D25590B	11.0103

Information Technology-Software and Web Development

Information Technology - Software & Web Design Advanced	C25590FP	11.0103
Information Technology - Software and Web Design	C25590EP	11.0103

Information Technology-Web Administration

Information Technology - Web Admin & Design	C25590GP	11.0103
Information Technology - Web Admin & Design Advanced	C25590HP	11.0103
Information Technology (Information Systems)	A25590A	11.0103
Information Technology (Network Management)	A25590B	11.0103
Information Technology (Software and Web Development)	A25590C	11.0103
Information Technology (Web Administration and Design)	A25590D	11.0103
Software & Web Development	C25590E	11.0103
Software & Web Development Advanced	C25590F	11.0103
Web Admininstration & Design Advanced	C25590H	11.0103
Web Administration & Design	C25590G	11.0103

Horticultural Science Technology: Landscape Gardening

Landscape Gardening

Landscape Gardening-Associate Degree	A15260	1.0605
Landscape Gardening-General-Certificate	C15260G	1.0605
Landscape Gardening-General-Certificate/Pathway	C15260GP	1.0605

Landscape Gardening-Installation and Maintenance

Landscape Gardening-Installation and Maintenance-Certificate	C15260I	1.0605
Landscape Gardening-Installation and Maintenance-Certificate/Pathway	C15260IP	1.0605

Landscape Gardening-Production

Landscape Gardening-Production-Certificate	C15260P	1.0605
Landscape Gardening-Production-Certificate/Pathway	C15260PP	1.0605

Manicuring/Nail Technology

Manicuring/Nail Technology-Certificate	C55400	12.041
Manicuring/Nail Technology-Certificate/Pathway	C55400MP	12.041

Nursing

Associate Degree Nursing

Associate Degree Nursing	A45110	51.3801

Practical Nursing

Practical Nursing-Diploma	D45660	51.3901

Nurse Aide

Nurse Aide	D45970	51.3902
Nurse Aide-Certificate	C45840	51.3902
Nurse Aide-Certificate/Pathway	C45840P	51.3902

Office Administration

General Office Administration

General Office Administration-Associate Degree	A25370A	52.0204
General Office Administration-Diploma	D25370A	52.0204
General Office Administration-Certificate	C25370A	52.0204

Office Administration

Office Administration-Associate Degree	A25370	52.0204
Office Administration-Certificate/Pathway	C25370P	52.0204

Office Administration-Other

Office Finance-Associate Degree	A25370B	52.0204
Office Software-Associate Degree	A25370C	52.0204

Photographic Technology

Photographic Technology-Associate Degree	A30280	10.0201
Photography Technology-Certificate	C30280	10.0201
Photographic Technology-Certificate/Pathway	C30280P	10.0201

Surgical Technology

Surgical Technology-Diploma	D45740	51.0909

Transportation

Transportation: Automotive Systems Technology

Automotive Systems Technology-Associate Degree	A60160	47.0604
Automotive Systems Technology-Diploma	D60160	47.0604
Automotive Systems Technology-Certificate	C60160	47.0604
Automotive Systems Technology-Certificate/Pathway	C60160P	47.0604

Transportation: Collision Repair & Refinishing Technology

Collision Repair and Refinishing Technology-Diploma	D60130	47.0603
Collision Repair Structural Damage-Diploma	C60130SD	47.0603
Collision Repair and Refinishing Technology-Certificate	C60130	47.0603
Collision Repair and Refinishing Technology-Certificate/Pathway	C60130P	47.0603

Welding Technology

Welding Technology-Diploma	D50420	48.0508
Welding Technology-Certificate	C50420	48.0508
Welding Technology-Certificate/Pathway	C50420P	48.0508

Adult High School	Adult High School Diploma
Adult High School Equivalency (GED)	Adult High School Equivalency Certificate
Continuing Education Course Completion	Certificate of course completion

Admissions

As a member of the North Carolina Community College System, McDowell Technical Community College operates under an "open door" admissions policy. Open door admissions means, "Any person who is a high school graduate or at least 18 years old has the opportunity to pursue the various educational opportunities that are offered by institutions in the system." Special admission requirements, such as educational qualifications, physical abilities, assessment scores and State Board policy restrictions, are attached to certain curriculums. Applicants scoring below specified minimums on entrance exams will be counseled and required to enroll in classes designed to eliminate their admission deficiencies.

The following are the general admission requirements. However, some curricula have special requirements for admission. Consult the section of this catalog which describes the particular curriculum in which you wish to enroll for a list of the exceptions or requirements.

The College has seven departments:

Business Technologies Department
College Transfer / General Education Department
Continuing Education Department
Correctional Education Department
Health Science Department
Human & Public Services Department
Vocational Department

Curriculum Admissions

Curriculum classes are offered in all departments except the Continuing Education Department. Therefore, admission to all departments except the Continuing Education Department are coordinated through and conducted in the Student Services Office. For curriculum admissions, an applicant must be a graduate of an accredited high school or must have been awarded a high school equivalency certificate. Exceptions may be made for Career and College Promise students, as well as individuals whose age and maturity make success likely.

Continuing Education Admissions

In general, Continuing Education courses are open for enrollment to persons 18 years of age or older, or those whose high school graduating class has graduated. However, because some specialty and advanced courses may be more difficult and require a greater degree of preparation, potential enrollees should be aware of the nature of the course requirements to determine their possible success in those courses.

To meet admissions requirements for certain specialized courses such as Fire Service, Law Enforcement or Management Development Training, potential students must be employed by or recommended by one of the requesting training agencies.

Special Admissions

Provisional Admissions

Students who have applied too late to secure all supporting documents for admission to a particular semester may be admitted as provisional students. In such cases, all requirements for regular admission should be completed within the first semester of attendance.

Students who fail to secure all supporting documents or satisfy requirements for official admission to the College may not be eligible for financial assistance and will not be allowed to enroll the next semester.

Admission of Special Students

A special student is defined as one who is enrolled in curriculum credit courses, but who is not working toward a degree or diploma. Special students may register to take courses for which they have met prerequisites, provided that such registration does not pre-empt students enrolled in a degree, diploma, or certificate program.

A student may take a maximum of 15 hours in any one semester while classified as a special student. When a student reaches 20 cumulative hours, he/she will be counseled to declare a major or curriculum preference.

For admission to McDowell Technical Community College, special students need only to complete the application for admission which is available in the Student Services Office. Special students may be asked to submit proof of high school graduation and meet certain placement criteria, depending on the courses they wish to enroll in. If they desire to be reclassified as a regular student with intent to pursue and earn a degree, diploma, or certificate at McDowell Technical Community College, they must meet the admission criteria of their chosen program of study.

How to Enroll in a Curriculum Program

Persons wishing to enroll in a **curriculum program** at the College must complete the entire application process and meet requirements as follows:

- Submit an application form, health form (depending upon program area) and residency statement. **There is no application fee!**

- Obtain official transcripts of credits from all secondary and post-secondary schools attended. Records should show that the student is a high school graduate or has a state-approved equivalent education.

- Complete admission and placement tests administered by the College through the Student Enrichment Center. Student suitability for admission to individual programs will be determined by scores on the placement exam and specific program requirements. Applicants scoring below the necessary minimum will be required to enroll in various developmental (remediation) courses to ensure success in their curricula.

- The Vice President for Learning and Student Services will review all requests for placement test exemption. Students classified as transfer or special students may be considered for such exemptions, as may those with satisfactory scores on the ACT or SAT, and those who have satisfactorily completed college level English or Algebra with appropriate grades.

***For information on admission to Continuing Education courses, refer to the Continuing Education section of this catalog.*

Visiting Student Status

A visiting student is defined as one who is a student in good standing at another institution of higher education. A visiting student may enroll at MTCC by completing an application and furnishing MTCC with a letter of permission and transcripts from the parent college (college at which the individual is a regular student).

Visiting students may register to take courses for which they have met prerequisites, provided that such registration does not pre-empt students enrolled in a degree, diploma, or certificate program.

Foreign Student Admission

A student wishing to apply for admission as a foreign student (F1-VISA) should first make arrangements through the American Consulate in his/her own country to take the Test of English as a Foreign Language (TOEFL Test). To demonstrate proficiency in the English language, international applicants from non-English speaking countries must score at least 133 on the computer-based test or a 450 on the paper-based test. If the applicant is already in the Marion area, the MTCC placement test may be substituted for the TOEFL requirement. Applicants will not be considered until a satisfactory score is received on this exam.

Educational records, including transcripts, must be translated into the English language by officials from the school(s) from which the applicant graduated. These records must contain course titles, grades and an explanation of the marking system.

Foreign applicants must submit an official certification that adequate funds are at the applicant's disposal to meet education and living expenses, including transportation, housing, insurance, out-of-state tuition, etc.

The MTCC Application for Admission, high school transcript, college transcripts, TOEFL or MTCC placement test scores and official documentation of financial resources must be received before an admission decision can be made and a U.S. Immigration and Naturalization Service I-20 can be issued.

Undocumented immigrants are required to pay out-of-state tuition and are subject to the rules and regulations for undocumented students.

Foreign applicants must meet all other regular admission requirements as stated in this catalog.

Admission of Minors

"An applicant who is a minor between the age of 16 and 18 may be considered as a person with special needs and admitted to appropriate courses or programs, provided:

1) That the minor applicant has left the public schools no less than six calendar months prior to the last day of regular registration of the semester in the institution for which admission is sought: and

2) That the application of such minor is supported by a notarized petition of the minor's parent, legal guardian, or other person or agency having legal custody and control of such minor applicant, which petition certifies the place of residence and date of birth of the minor, the parental or other appropriate legal relationship of the petitioner to the minor

applicant, and the date on which the minor applicant left the public schools. However, all or any part of the six-month waiting period may be waived by the superintendent of the public schools of the administrative unit in which the applicant resides; and

3) That such admission will not pre-empt College facilities and staff to such an extent as to render the College unable to admit all applicants who have graduated from high school or who are 18 years of age or older.

It shall be the policy of the State Board of Education and the Community College System to encourage young people to complete high school before seeking admission to community colleges or technical institutes."

McDowell Early College

McDowell Early College (MEC) is a small, personalized high school located on the McDowell Technical Community College Campus. MEC is an exciting partnership between McDowell County Schools and McDowell Technical Community College that offers unique educational opportunities designed for a diverse group of students. The mission of MEC is to provide a smaller academic environment that fosters growth and success to prepare students for their future by developing relationships, responsibility, and respect through relevant and rigorous coursework.

McDowell Early College students earn an Associate's degree or two years of transferable credit in addition to their high school diploma. All MEC students are offered a schedule that meets individual needs, abilities and interests. The school, provides ongoing academic support in a small school setting to help students meet the high expectations of the Early College Model. Our focus is college readiness. McDowell Early College strives to redefine teaching and learning by using innovative best practices.

For more information, contact the MEC prinicipal at 659-0411.

Enrollment Limitations

Some curriculum programs have maximum student enrollment limitations and/or reserve space for currently enrolled students. Acceptance to most programs except Nursing, Surgical Technology and BLET will be on a first come, first served basis as evidenced by the receipt of qualified applications and payment of all appropriate fees.

Applicants who do not register and pay at established times may lose their position.

Readmissions

Students who have withdrawn in good standing, withdrawn while on probation, or who have been suspended for academic deficiencies should submit requests for readmission to the VP for Learning and Student Services. Consideration of requests for readmission of students who have withdrawn for these reasons will be made in light of the applicant's ability, evidence of growth and maturity, time elapsed since withdrawing and other extenuating circumstances. Additional consideration will be given to those who have completed course pre-requisites. Enrollment limits and class sequencing will also be considered in evaluating a request for readmission.

Transfer

Transfer From Other Schools

Students who complete course work in another accredited college or university may apply for admission to MTCC. An application must be submitted and must include official transcripts for all institutions previously attended. Transfer applicants must have maintained a "satisfactory conduct" standing in the institution from which they are transferring to be accepted as a student in good standing at MTCC.

Academic work completed at accredited colleges and universities will be accepted at full value for required courses passed with the grade of "C." Courses taken at other institutions must have essentially the same content, contact hours and difficulty level as MTCC courses.

In order to receive a degree or diploma from MTCC, a student must earn 25% of his/her program in residence at MTCC with at least a "C" average (see graduation requirements).

Applicants who seek admission with advanced standing at MTCC should make an appointment with an admissions counselor to conduct a transcript evaluation. The admissions officer will conduct an official transcript evaluation when the applicant's admission file is complete. Requests for transfer credit should be made prior to the student's first term of enrollment. All transfer credit will be computed by the end of the first semester of the student's initial enrollment. The applicant can inquire in Student Services about all credits which transfer, preferably prior to enrollment.

A transfer student applying too late to complete pre-entrance requirements may be admitted as a provisional student. In such a case, all requirements for regular admission must be completed within the first semester of attendance.

A student on academic probation or suspended status from his/her last college or post-secondary institution may be admitted on a probationary basis and may be subject to academic progress regulations as defined in this catalog.

Transfer of Credits from College Level Examination Program

Credit may be allowed for up to 14 semester hours of college work based on appropriate scores on the CLEP General Examination where appropriate to the student's program of study. CLEP subject examinations are evaluated individually if applicable to the program of study.

Transfer of Credits For Military Experience

McDowell Technical Community College recognizes the unique nature of the military lifestyle and has committed itself to easing the transfer of relevant course credits, providing flexible academic residency requirements and crediting learning from appropriate military training and experience. Veterans of the Armed Forces automatically receive credit for two semester hours of physical education credit. They are eligible to apply for curriculum credit in other areas based on prior education, training and experience. See the Veterans Certifying Official in the Student Enrichment Center for more information on credit for prior military experience.

Transfer Within Curriculums

McDowell Technical Community College will make all reasonable efforts to assist students who transfer from one curriculum to another within the College. Credits earned in one curriculum will transfer to another when appropriate.

A student's cumulative grade point average will be computed only from the credits transferred to the new curriculum. The Dean of Academic Programs is the primary authority in determining transfer of credits from other schools and within curriculums. When there is doubt about the transfer of a credit, the Dean of Academic Programs will consult the appropriate faculty members. If a student wishes to appeal the decision, the transcript will be referred to the VP for Learning and Student Services, whose decision will be final.

Transfer To Other Schools

The school to which a student wishes to transfer is responsible for deciding which credits from McDowell Technical Community College will be accepted. Most colleges and universities will accept MTCC credit for a course if a grade of "C" or higher is earned. Students planning to transfer to senior institutions should strongly consider enrolling in the MTCC College Transfer or General Education program. Transfer of credits from other areas may be limited. Students should seek the advice of a counselor in these instances.

There are many four-year schools which accept transfer technical courses from McDowell Technical Community College. Students should contact four-year schools of their choice to determine which courses will transfer.

Procedures for Students Desiring a Second Degree

1. The student desiring a second degree informs his/her advisor of his/her intent to receive two associate degrees prior to applying for graduation in Student Services.
2. The advisor evaluates the student's transcript to determine if additional semester hours/coursework is required.
3. The advisor documents his/her decision on the Dual Degree Approval Form provided by the student by completing the bottom section of the form.
4. The student applies for graduation in Student Services, submitting a separate application for each degree sought.
5. The Director of Admissions confirms that the Dual Degree Form and Student Data Change Form are completed. If not, he/she informs the student that they need to speak with their advisor and/or Veterans' Certifying Official before proceeding if he/she plans to receive VA educational benefits.

False Information

Furnishing false data for admission or failure to fully disclose requested information will be grounds for rejection of an application or dismissal of a student who has already be admitted to the college.

Notification of Acceptance (*Does not apply to students in Nursing, and Surgical Technology.)

Applicants will be notified by mail of their admission status within one to four weeks after their application is received. Placement into a requested program may be determined at a later date. Official notification of acceptance or placement in a program is issued only by the Vice-President for Learning and Student Services or his/her designee. Applicants not placed in the program of their choice will be notified of this decision. An admissions interview may be requested prior to placement into any program. An applicant who changes his/her mailing address prior to registration for classes, who desires to apply for a different program, or wishes to enroll in a different semester than the one for which he/she originally applied should notify the Student Services Office immediately.

Placement Information

Placement into a specific course of study is based upon standards which will help to assure the applicant's success in that course of study. New students seeking a degree, certificate or diploma need to take an Accuplacer test unless they meet the pre-requisite developmental course requirements for their course of study through another source. The test is administered by the Student Enrichment Center under the auspices of the Student Services Office. Those who do not yet possess the background required by their course of study may be enrolled in developmental (refresher) courses designed to provide this background.

An individual's educational background, interest, motivation, experience and aptitude will be considered when an application is submitted to the College.

Students may be required to take developmental classes based on their placement test scores. Students are expected to enroll in developmental courses during their first semester. Students must pass the developmental course(s) with a grade of "PD" or better to advance into higher level coursework.

For placement into MAT 271 Calculus I, contact the Student Enrichment Center (659-0148 or 652-0683) for placement options.

Career and College Promise

Session Law 2011-145, the Appropriations Act of 2011, authorized the State Board of Education and the State Board of Community Colleges to establish the Career and College Promise program, effective January 1, 2012.

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

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

College Transfer Pathway

1. The Career and College Promise Pathway requires the completion of at least thirty semester hours of transfer courses, including English and mathematics and ACA 122 College Transfer Success
2. To be eligible for enrollment, a high school student must meet the following criteria:
    a. Be a high school junior or senior;
    b. Have a weighted GPA of 3.0 on high school courses; and
    c. Demonstrate college readiness on an assessment or placement test (See attachment A).
    A student must demonstrate college readiness in English, reading and mathematics to be eligible for enrollment in a College Transfer Pathway.
3. A high school junior or senior who does not demonstrate college-readiness on an approved assessment or placement test may be provisionally enrolled in a College Transfer Pathway. To qualify for Provisional Status, a student must meet the following criteria:
    a. Have a cumulative weighted GPA of 3.5;
    b. Have completed two years of high school English with a grade of 'C' or higher;
    c. Have completed high school Algebra II or Math III (or a higher level math class) with a grade of 'C' of higher;
    d. Obtain the written approval of the high school principal or his/her designee; and,
    e. Obtain the written approval of the community college president or his/her designee.

    Students who meet all the requirements listed above may:
    a. enroll in English and/or mathematics courses in a college transfer pathway as provisional students without placement or other testing.
    b. provisional students who successfully complete ENG 111 with a 'C' or higher can enroll in ENG 112.

c. provisional students in the Associate in Science pathway who successfully complete MAT 171 with a "C" or higher can enroll in MAT 172.
d. register only for college mathematics (MAT) and college English (ENG) courses within the chosen Pathway.
e. Provisional students cannot enroll in any additional courses in the pathway until they are no longer considered provisional.
f. In order to no longer be considered provisional, the student must successfully complete the first mathematics and English course in the pathway with a grade of 'C' or higher.

4. To maintain eligibility for continued enrollment, a student must
    a. Continue to make progress toward high school graduation, and
    b. Maintain a 2.0 GPA in college coursework after completing two courses.
    c. A student who falls below a 2.0 GPA after completing two college courses will be subject to the college's policy for satisfactory academic progress.
5. A student must enroll in one College Transfer Pathway program of study and may not substitute courses in one program for courses in another
6. A student may change his or her program of study major with approval of the high school principal or his/her designee and the college's chief student development administrator.
7. With approval of the high school principal or his/her designee and the college's chief student development administrator, a student who completes a College Transfer Pathway, while still enrolled in high school, may continue to earn college transfer credits leading to the completion of the Associate in Arts, Science or Engineering. The AA/AS/AE may not be awarded prior to high school graduation verification.
8. With approval of the high school principal or his/her designee and the college's chief student development administrator, a student may enroll in both a College Transfer Pathway program of study and a Career Technical Education program of study.

Career Technical Education Pathway (Juniors and Seniors)

1. The Career and College Promise Career Technical Education Pathway for juniors and seniors leads to a certificate or diploma aligned with a high school Career Cluster.
2. To be eligible for enrollment, a high school student must meet the following criteria:
    a. Be a high school junior or senior;
    b. Have a weighted GPA of 3.0 on high school courses or have the recommendation of the high school principal or his/her designee; and
    c. Have received career pathway information outlining program requirements for completion of the certificate or diploma.
3. High school counselors should consider students' PLAN scores in making pathway recommendations.
4. College Career Technical Education courses may be used to provide partial or full fulfillment of a four-unit career cluster. Where possible, students should be granted articulated credit based on the local or state North Carolina High School to Community College articulation agreement.

5. To maintain eligibility for continued enrollment, a student must
    a. Continue to make progress toward high school graduation, and Maintain a 2.0 in college coursework after completing two courses. A student who falls below a 2.0 GPA after completing two college courses will be subject to the college's policy for satisfactory academic progress.
6. A student may be awarded a certificate or diploma prior to high school graduation. The AAS may not be awarded prior to high school graduation verification.
7. A student must enroll in one program of study and may not substitute courses in one program for courses in another. The student may change his or her program of study major with approval of the high school principal or his/her designee and the college's chief student development administrator.
8. A student may concurrently enroll in two CTE programs of study provided the exception has been approved by the college's Chief Academic Officer or his/her designee. With approval of the high school principal or his/her designee and the college's chief student development administrator, a student may enroll in both a College Transfer Pathway program of study and a Career Technical Education program of study.
9. A CTE student is not required to demonstrate college readiness on an assessment or placement test to be eligible for the program. However, some required courses within the program may have developmental course pre-requites requirements which must be met when this is the case through the demonstration of college readiness on an approved assessment or placement test (See Attachment A). Students are encouraged to complete college readiness assessments prior to entry to the program. CCP students may not enroll in developmental courses.
10. A student who completes the CTE certificate or diploma may continue in the same AAS as long as they are still eligible for CCP. In order to continue, the program code should be changed to reflect the AAS. The student type will remain CCPP and their student code will remain CTE.
11. Colleges are responsible for adhering to external agency guidelines that may restrict CCP students from enrolling in specific programs.

NC CAREER & COLLEGE PROMISE

Career and College Promise (CCP) allows eligible high school students (junior and seniors) to enroll in community college courses!

Tuition is FREE!

Students declare pathways that lead to certificates, diplomas, or degrees, as well as providing entry-level job skills in specific areas.

All information may be obtained from the following website: www.mcdowelltech.edu/high_school_program.html

For enrollment information contact

Betsy Ruiz at 652-0621 or 652-7920 ext.313

College Transfer Pathways

Associate in Arts P1012C		Credit Hours
ENG 111	Writing and Inquiry	3
ENG 112	Writing/Research in the Disciplines	3
	(Pick 3 courses from 2 different disciplines)	
COM 231	Public Speaking	3
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	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
	(Pick 3 courses from 2 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
	(Pick 1 course)	
MAT 143	Quantitative Literacy	3
MAT 152	Statistical Methods I	4
MAT 171	Precalculus Algebra	4
	(Pick 1 course)	
BIO 111	General Biology I	4
CHM 151	General Chemistry I	4
	(Other required)	
ACA 122	College Transfer Success	1
	Total credit hours: 32-33	

Associate in Engineering P1052C		
ENG 111	Writing and Inquiry	3
ENG 112	Writing/Research in the Disciplines	3
	(Pick 1 course)	
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
	(Pick 1 course)	
ECO 251	Princ of Microeconomics	3
	(Pick 2 courses)	
MAT 271	Calculus I	4
MAT 272	Calculus II	4
	(Pick 2 courses)	
CHM 151	General Chemistry I	4
PHY 251	General Physics I	4
PHY 252	General Physics II	4
	(Pick 2 courses)	
EGR 150	Intro to Engineering	2
DFT 170	Engineering Graphics	3
	(Other required)	
ACA 122	College Transfer Success	1
	Total credit hours: 34	

Associate Nursing P1032C

ENG 111	Writing and Inquiry	3
ENG 112	Writing/Research in the Disciplines	3
	(Pick 1 course)	
ART 111	Art Appreciation	3
ART 114	Art History Survey I	3
ART 115	Art History Survey II	3
HUM 115	Critical Thinking	3
MUS 110	Music Appreciation	3
MUS 112	Introduction to Jazz	3
PHI 215	Philosophical Issues	3
PHI 240	Introduction to Ethics	3
	(Take 2 courses)	
PSY 150	General Psychology	3
PSY 241	Developmental Psychology	3
	(Take 2 courses)	
BIO 168	Anatomy and Physiology I	4
BIO 169	Anatomy and Physiology II	4
	(Other required)	
ACA 122	College Transfer Success	1
	Total credit hours: 24	

Associate in Science P1042C

ENG 111	Writing and Inquiry	3
ENG 112	Writing/Research in the Disciplines	3
	(Pick 2 courses from 2 different disciplines)	
COM 231	Public Speaking	3
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	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
	(Pick 2 courses from 2 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
	(Pick 2 courses)	
MAT 171	Precalculus Algebra	4
MAT 172	Precalculus Trigonometry	4
MAT 271	Calculus I	4
MAT 272	Calculus II	4
	(Pick 1 sequence of courses)	
BIO 111	General Bio I &	
BIO 112	General Bio II	8
CHM 151	Gen. Chem. I &	
CHM 152	Gen. Chem. II	8
	(Other required)	
ACA 122	College Transfer Success	1
	Total credit hours: 35	

Career & Technical Education Pathways

Accounting C25100P **Credit Hours**

ACC 120	Principles of Financial Account	4
ACC 121	Principles of Managerial Accounting	4
BUS 115	Business Law I	3
CIS 110	Introduction to Computers	3
BUS 110	Introduction to Business	3
	Total credit hours: 17	

Accounting, Bookkeeping C25100BP

ACC 120	Principles of Financial Accounting	4
ACC 121	Principles of Managerial Accounting	4
ACC 129	Individual Income Taxes	3
CIS 110	Introduction to Computers	3
ACC 180	Practices of Bookkeeping	3
	Total credit hours: 17	

Accounting, Income Tax Preparation C25100TP

ACC 120	Principles of Financial Accounting	4
ACC 121	Principles of Managerial Accounting	4
ACC 129	Individual Income Taxes	3
ACC 130	Business Income Taxes	3
BUS 110	Introduction to Business	3
	Total credit hours: 17	

Advertising and Graphic Design C30100P

ART 121	Two- Dimensional Design	3
ART 171	Computer Art I	3
ART 275	Introduction to Graphic Design	3
GRD 141	Graphic Design I	4
GRD 151	Computer Design Basics	3
	Total credit hours: 16	

Air Conditioning, Heating, & Ref. C35100P

AHR 110	Introduction to Refrigeration	5
AHR 112	Heating Technology	4
AHR 113	Comfort Cooling	4
AHR 114	Heat Pump Technology	4
	Total credit hours: 17	

Automotive Systems Technology C60160P

AUT 141	Suspension and Steering Systems	3
AUT 141A	Suspension and Steering Systems Lab	1
AUT 151	Brake Systems	3
AUT 151A	Brake Systems Lab	1
AUT 181	Engine Performance 1	3
AUT 181A	Engine Performance 1 Lab	1
TRN 170	PC Skills for Transportation	2
TRN 180	Basic Welding for Transportation	3
	Total credit hours: 17	

Business Administration C25120P

BUS 110	Introduction to Business	3
BUS 115	Business Law I	3
BUS 125	Personal Finance	3
BUS 137	Principles of Management	3
CIS 110	Introduction to Computers	3
ECO 251	Principles of Microeconomics	3
	Total credit hours: 18	

Business Admin.– Marketing & Retailing C25120FP

BUS 110	Introduction to Business	3
BUS 115	Business Law I	3
CIS 110	Introduction to Computers	3
ECO 252	Principles of Macroeconomics	3
MKT 120	Principles of Marketing	3
MKT 227	Marketing Applications	3
	Total credit hours: 18	

Business Admin.–Operations Management C25120OP

BUS 137	Principles of Management	3
CIS 110	Introduction to Computers	3
ECO 251	Principles of Microeconomics	3
ISC 121	Environmental Health & Safety	3
ISC 130	Intro to Quality Control	3
ISC 210	Oper. & Prod Planning	3

Total credit hours: 18

Carpentry C35180P

CAR 110	Introduction to Carpentry	2
CAR 111	Carpentry I	8
CAR 112	Carpentry II	8

Total credit hours: 18

Collision Repair & Refinishing Technology C60130P

AUB 111	Painting and Refinishing I	4
AUB 121	Non-Structural Damage I	3
AUB 131	Structural Damage I	4
AUB 136	Plastics and Adhesives	3
TRN 180	Basic Welding for Transp	3

Total credit hours: 17

Computer –Integrated Machining C50210P

BPR 111	Print Reading	2
MAC 141	Machining Applications I	4
MAC 142	Machining Applications II	4
MAC 121	Intro to CNC	2

Total credit hours: 12

Cosmetology C55140P

COS 111	Cosmetology Concepts I	4
COS 112	Salon I	8
COS 113	Cosmetology Concepts II	4
COS 114	Salon II	8
COS 115	Cosmetology Concepts III	4
COS 116	Salon III	4
COS 240	Contemporary Design	2

Total credit hours: 34

Criminal Justice C55460CP

CJC 111	Intro to Criminal Justice	3
CJC 131	Criminal Law	3
CJC 132	Court Procedure & Evidence	3
CJC 231	Constitutional Law	3
ACA 115	Success & Study Skills	1

Total credit hours: 13

Early Childhood Education C55220P

EDU 119	Intro to Early Childhood Ed.	4
EDU 131	Child, Family and Community	3
EDU 145	Child Development II	3
EDU 146	Child Guidance	3
EDU 153	Health, Safety and Nutrition	3
EDU 153A	Health, Safety and Nutrition Lab	1

Total credit hours: 17

Early Childhood Infant Toddler C55290P

EDU 119	Intro to Early Childhood Ed	4
EDU 131	Child Family and Community	3
EDU 144	Child Development I	3
EDU 153	Health, Safety, & Nutrition	3
EDU 234	Infants, Toddlers, and Two's	3
EDU 153A	Health, Safety, & Nutrition Lab	1

Total credit hours: 17

Electrical Systems Technology C35130P

ELC 112	DC/AC Electricity	5
ELC 113	Residential Wiring	4
ELC 118	National Electrical Code	2
ELC 128	Introduction to PLC	3
ISC 110	Workplace Safety	1

Total credit hours: 15

Emergency Management C55460EP

EPT 130	Mitigation & Preparedness	3
EPT 140	Emergency Management	3
EMS 110	EMT	8
ACA 115	Success & Study Skills	1

Total credit hours: 15

Esthetics Technology C55230P

COS 119	Esthetics Concepts I	2
COS 120	Esthetics Salon I	6
COS 125	Esthetics Concepts II	2
COS 126	Esthetics Salon II	6

Total credit hours: 16

Fire Technology C55460FP

FIP 120	Intro to Fire Protection	3
FIP 124	Fire Prevention & Public Ed	3
FIP 132	Building Construction	3
FIP 162	Firefighter Safety & Wellness	3
FIP 228	Local Govt Finance	3
ACA 115	Success & Study Skills	1

Total credit hours: 16

Health Information Technology C45360P

CIS 110	Introduction to Computers	3
HIT 110	Fundamentals of HIM	3
HIT 112	Health Law Ethics	3
HIT 114	Health Data Systems/Standards	3
MED 121	Medical Terminology I	3
MED 122	Medical Terminology II	3

Total credit hours: 18

Healthcare Informatics C45360IP

CIS 113	Computer Basics	1
HIT 112	Health Law and Ethics	3
HIT 114	Health Data Sys/Standards	3
HIT 221	Lifecycle of EHR	3
HIT 225	Healthcare Informatics	4
HIT 227	Informatics Project Mgt	3

Total credit hours: 17

Industrial Systems Technology C50240P

ATR 212	Industrial Robots	3
BPR 111	Print Reading	2
ELC 112	DC/AC Electricity	5
HYD 110	Hydraulics/Pneumatics I	3
ISC 110	Workplace Safety	1
MNT 110	Intro to Maintenance Procedures	2
WLD 112	Basic Welding Processes	2

Total credit hours: 18

Information Technology C25590AP

CIS 110	Introduction to Computers	3
CTS 120	Hardware/Software Support	3
NOS 130	Windows Single User	3
WEB 115	Web Markup and Scripting	3

Total credit hours: 12

Advanced Information Technology C25590BP

CSC 151	JAVA Programming	3
CTI 120	Network & Sec Foundation	3
NOS 120	Linux/UNIX Single User	3
NOS 230	Windows Administration I	3

Total credit hours: 12

Landscape Gardening C15260GP

HOR 114	Landscape Construction	3
HOR 160	Plant Materials I	3
HOR 164	Hort Pest Management	3
LSG 111	Basic Landscape Technique	2
LSG 121	Fall Gardening Lab	2
TRF 110	Intro Turfgrass Cult & ID	4

Total credit hours: 17

Landscape Gardening - Installation Maintenance C15260IP

HOR 112	Landscape Design I	3
HOR 114	Landscape Construction	3
HOR 160	Plant Materials I	3
HOR 164	Hort Pest Management	3
HOR 257	Arboriculture Practices	2
LSG 111	Basic Landscape Technique	2

Total credit hours: 16

Landscape Gardening - Production C15260PP

HOR 114	Landscape Construction	3
HOR 134	Greenhouse Operations	3
HOR 160	Plant Materials I	3
HOR 164	Hort Pest Management	3
HOR 168	Plant Propagation	3
LSG 122	Spring Gardening Lab	2

Total credit hours: 17

Medical Billing and Coding C45360BP

HIT 124	Prof Practice Exp II	1
HIT 215	Reimbursement Methodology	2
MED 121	Medical Terminology I	3
MED 122	Medical Terminology II	3
OST 247	Procedure Coding	3
OST 248	Diagnostic Coding	3
OST 249	Med Coding Certification Prep	2

Total credit hours: 18

Networking Management C25590CP

CTS 120	Hardware/Software Support	3
NET 125	Introduction to Networks	3
NET 126	Routing Basics	3
NOS 120	Linux/UNIX Single User	3

Total credit hours: 12

Advanced Networking Management C25590DP

CTI 120	Network & Sec Foundation	3
CTI 140	Virtualization Concepts	3
NET 225	Routing and Switching I	3
NOS 230	Windows Administration I	3

Total credit hours: 12

Nursing Assistant C45840P

NAS 101	Nursing Assistant I	6
NAS 102	Nursing Assistant II	6
MED 121	Medical Terminology I	3
MED 122	Medical Terminology II	3

Total credit hours: 18

Office Administration C25370P

CIS 110	Introduction to Computers	3
OST 136	Word Processing	3
OST 164	Office Editing	3
OST 184	Records Management	3
OST 289	Office Admin. Capstone	3

Total credit hours: 15

Photographic Technology C30280P

PHO 110	Fundamentals of Photography	5
PHO 115	Basic Studio Lighting	4
PHO 139	Intro to Digital Imaging	2
PHO 120	Intermediate Photography	4
ACA 115	Success & Study Skills	1

Total credit hours: 16

Software and Web Development C25590EP

CSC 151	JAVA Programming	3
DBA 110	Database Concepts	3
WEB 111	Intro to Web Graphics	3
WEB 115	Web Markup and Scripting	3

Total credit hours: 12

Advanced Software and Web Dev. C25590FP

CTI 120	Network & Sec Foundation	3
WEB 182	PHP Programming	3
WEB 210	Web Design	3
WEB 250	Database Driven Websites	3

Total credit hours: 12

Web Admin and Design C25590GP

WEB 111	Intro to Web Graphics	3
WEB 115	Web Markup and Scripting	3
WEB 120	Intro to Internet Multimedia	3
WEB 214	Social Media	3

Total credit hours: 12

Advanced Web Admin. & Design C25590HP

CTI 120	Network and Sec Foundation	3
GRD 151	Computer Design Basics	3
GRD 152	Computer Design Tech I	3
WEB 210	Web Design	3

Total credit hours: 12

Welding Technology C50420P

WLD 110	Cutting Processes	2
WLD 115	SMAW (stick) Plate	5
WLD 121	GMAW (MIG) FCAW/Plate	4
WLD 131	GTAW (TIG) Plate	4
WLD 141	Symbols and Specifications	3

Total credit hours: 18

Academic Regulations

Grading System

MTCC grading system is based on a semester schedule. Grade point averages are determined by dividing the total number of quality points by the number of hours attempted. If a course is repeated, the latest grade will be used in determining a student's hour quality points. Grades will be issued at the conclusion of each semester based on the following system:

Numerical Grade	Letter Grade	Quality Point Equivalent
93-100	A-Excellent	4 points per credit hour
85-92	B-Above Average	3 points per credit hour
77-84	C-Average	2 points per credit hour
70-76	D-Below Average	1 point per credit hour
Below 70	F-Failure	0 grade point (punitive)
AU-Audit		No effect on grade point average
CR-Credit by Exam		No effect on grade point average
I-Incomplete		After 6 weeks from the beginning of the next semester, an incomplete grade becomes an "F." (punitive)
NS-No Show (never attended class)		No effect on grade point average
PD-Pass Developmental		No effect on grade point average
RD-Repeat Developmental		No effect on grade point average
W-Withdrawal prior to 30% point		No effect on grade point average
WP-Withdrawal Passing after 30% point		No effect on grade point average
WF-Withdrawal Failing after 30% point		0 grade point (punitive)

** The above Numerical Grade does not apply to Nursing, Nurse Aide, HIT, Dialysis and Surgical Technology students, for whom the lowest passing grade is a C.
**An 80 or above is required for the Nurse Aide, Practical Nurse, ADN programs and all developmental courses.
**Under unusual or extenuating circumstances, faculty may use a different grading system other than the one listed above. Should this be necessary, the instructor must approve this change with administrators in Educational Programs and list the new grading system on the course syllabi for that particular course.

Incompletes

The grade "I," incomplete, may be assigned when a student is unable to complete a course by the end of the semester. The student must present valid reasons why the course cannot be completed and obtain the instructor's approval to receive an incomplete grade. This grade will be replaced with the grade earned when the work to be completed is satisfactorily accomplished prior to the first day of class in the following semester. If the incomplete course is a pre-requisite to a course the student is registered for in the following semester, and if the student is unable to complete the requirements to satisfy the incomplete grade, the student will be withdrawn from the subsequent course. An incomplete grade is treated as a failing grade in GPA computation after the first day of the subsequent semester when the work has not been completed. The faculty member of the course will complete a Change of Grade Form to document that the incomplete has, in fact, been satisfied.

Only under extenuating circumstances may the Vice President of Learning extend the deadline for the completion of an incomplete grade. In such a rare case, the student, faculty and Vice President will sign a memo of understanding outlining the parameters of the extension.

Standards of Progress

All MTCC students are expected to make academic progress toward graduation. The grade point average required for graduation is 2.00, indicating that the student has a C average in all course work. The calculations listed below are the acceptable grade point averages which students are expected to maintain for the number of semester hours they have accumulated.

ASSOCIATE DEGREE PROGRAMS

Cumulative Semester Hours	Minimum Grade Point Average
0 - 10	1.00
11 - 20	1.25
21 - 30	1.50
31 - 40	1.75
41 - 50	1.90
51 - Completion	2.00

VOCATIONAL DIPLOMA PROGRAMS

Cumulative Semester Hours	Minimum Grade Point Average
0 - 10	1.00
11 - 20	1.35
21 - 30	1.75
31 - Completion	2.00

***There are additional regulations for Nursing, HIT, Surgical Technology, BLET and other specific curriculums. Check with the Student Services Office, the Nursing Department, or your advisor for these regulations. Also, see Graduation Requirements in this Catalog.*

Academic Advisement/Probation

The above cumulative grade point averages are the minimums which must be attained in order for a student to make reasonable progress toward graduation. A 2.00 grade point average is required for graduation. Students who fall below the specified minimum will be placed on Academic Probation for the following semester and will be required to reduce their course loads.

Academic Suspension and Readmission

Students who fail to earn a 2.00 GPA during any semester of academic probation may be suspended from their program of study. The period of suspension will not be less than one semester, nor more than one year. Students who have been suspended for academic deficiencies should submit requests for readmission to the VP for Learning and Student Services. Requests for readmission will be considered in light of the applicant's ability, evidence of growth and maturity, time elapsed since suspension and other extenuating circumstances. Additional consideration will be given to those who have completed course pre-requisites. Enrollment limits and class sequencing will also be considered in evaluating a request for readmission.

Recognition of Academic Honor Students

Students enrolled full-time (12 credit hours or more) who receive no incompletes are eligible for the following academic honor's lists:

President's List - Grade point average of 4.00
Dean's List - Grade point average of 3.75 - 3.99
Honor List - Grade point average of 3.50 - 3.74

Academic honor lists are posted on-campus and provided to newspapers each semester.

Faculty Advisor

Each student enrolled at MTCC will be assigned an advisor. The basic purpose of this is to provide each student personal assistance in orientation and progress throughout the time enrolled.

The student's faculty advisor may be consulted regarding various problems, but must, in all cases, be consulted by the student in the following instances:

1. When planning each semester's schedule.
2. When changing courses within the current program.
3. When changing programs of study.
4. When preparing to enter a final semester of studies to determine graduation eligibility.

If a student is unsure who his or her current advisor is, the student should go to Student Services for the advisor name, location and phone number. Advisors maintain office hours as posted on their office doors.

Registration

MTCC operates on the semester system (Fall, Spring, and Summer). All students are expected to register during the time set aside for that purpose. MTCC offers Pre-Registration dates to give students more time and flexibility to register and meet with their advisors as well as offering a one-time Registration Day. These dates are listed in the MTCC Catalog, the Schedule of Classes, and the MTCC website.

Students may not register for a semester until they have paid any deferred or past due charges owed to the College. These fees are paid through the Business Office. Students are responsible for obtaining registration clearance each semester before they are permitted to register for classes. All current students who register late will be charged an additional fee of $5.00.

Schedule Changes and Withdrawal

Students may change their academic schedules during the prescribed period without scholastic penalty. Courses dropped after the 10% point in the semester are not subject to a refund. Courses dropped after the 30% point in the semester will be marked "WP" (Withdrawal Passing) or "WF" (Withdrawal Failing). A "WF" carries the same stigma as an "F" (Failure).

The steps below must be followed before schedule changes are official:

1. The student secures a Add-Drop-Withdrawal Form from the Student Services Office as well as a Tuition Refund Request Form if applicable.
2. Individual schedule changes must be approved by the appropriate instructor.
3. Notification of schedule changes must be acknowledged and recorded by the Student Services Office.
4. Students who do not withdraw from school officially and have to be administratively withdrawn from school because of absences will be dropped from classes with grades of "WP" or "WF."

Procedures for Student Withdrawal

To officially withdraw from the College or from a course, the student must follow these procedures:

1. The student reports to the Student Services Office to obtain a withdrawal form and, if applicable, a Tuition Refund Request form.
2. The student is responsible for obtaining each instructor's signature, last date of attendance and withdrawal grade on the withdrawal form, and is responsible for returning this form back to the Student Services Office. If the circumstances surrounding the withdrawal process do not allow the student to do the above, the Student Services Office will perform the withdrawal procedure for the student upon request.
3. A student may withdraw prior to the 30% point of the semester without scholastic penalty. This procedure, if followed, will entitle the student to have his permanent record show the notation "W" withdrawn. This notation indicates good standing and the privelege or readmission but may affect financial aid.
4. Any student who withdraws, or is withdrawn due to violation of the College's attendance policy, after the 30% point of the semester will receive a grade of "WP" or "WF."
5. Any student who fails to officially withdraw from the College may receive a grade of "WF." STUDENTS ARE ENCOURAGED TO INITIATE AND FOLLOW THROUGH WITH OFFICIAL WITHDRAWAL PROCEDURES.

Course Substitutions

Students may be allowed to substitute one course for another to meet graduation requirements. The substituted course must contribute to the goals of the degree program equally as well as the original course. Students must obtain approval from the instructor, advisor, Dean of Curriculum Programs or Dean of Health Science and the VP for Learning and Student Services to gain approval. A course substitution form may be obtained in the Student Services Office.

Repeating Courses

A course may be repeated for credit for the purposes of obtaining certification hours, gaining additional knowledge, improving a grade or for the purposes of auditing a class. A student may receive credit hours toward graduation only once for a course. In the case of a course which has been repeated, only the quality points and hours earned in the most recent enrollment will be calculated in the GPA. However, all grades will be shown on the transcript during the semester in which the course was taken.

Students may receive financial aid one additional time for a repeated course that was previously passed if the student is attempting to better that grade. Students may also receive financial aid for a repeated course in which they previously received a grade of "F," regardless of the number of prior attempts, as long as they are maintaining satisfactory academic progresss per financial aid guidelines.

Veteran's benefits may not be received by students repeating a course unless it is to achieve the minimum grade required for graduation.

Auditing Courses

Students who wish to audit courses must register and pay the same fees as students taking courses for credit. Unless the instructor makes an exception, auditing students are subject to the attendance policy (as stated in the *College Catalog and Student Handbook*). Students auditing courses which involve laboratory work may work in labs only during the course's scheduled laboratory hours and under the direct supervision of the instructor. Otherwise, labs are closed to auditing students.

No financial aid is received for audited classes. Audited courses are not eligible for Veteran's educational benefit payments.

Credit by Examination

A student may pass a specially prepared examination and receive credit for a course without having to do the normal course work. The student must enroll in the course and present evidence of his knowledge of the subject matter to the instructor prior to requesting credit-by-examination. The student must then present a Credit-by-Examination Request form to the instructor to begin the process . This form may be obtained in the Student Services Office.

If the student sufficiently passes the exam, he/she will receive a grade of "CR" which will be recorded on the transcript. The hours will be counted toward graduation, but will not be used in calculation of GPA.

A student may earn up to 20% of the course requirements for any curriculum through credit-by-examination.

Change of Program

All MTCC students wishing to change their program of study must pick up a Student Data Change Form located in the Student Services Office. A change of major will be applied at the beginning of each semester. Once your program change has been processed, a new advisor will be assigned for the purpose of re-evaluating your new program and transferring applicable credits.

Students who request a major change from a certificate or diploma program to an associate degree program will have to update placement tests through the Student Enrichment Center.

Credit or Contact Hours

Credit for course work is recorded in semester hours. One semester hour credit is given for one hour of class work, two hours of laboratory or three hours shop work per week during a 16 week term. Manipulative laboratory credit is one semester hour for each three hours of work. Manipulative laboratory involves development of skills and job proficiency. Co-op Education credit is one semester hour of credit for 10 hours of work per week.

Maximum Course Load

Students are encouraged not to enroll in more courses than they can successfully complete. Students enrolling for 19 credit hours up to 22 maximum credit hours must have special permission from the faculty advisor and VP of Learning and Student Services and have a GPA of 3.00 or higher.

Class Attendance

Students are expected to attend and be on time for all classes, labs and clinical periods and shop sessions.

A student who never attends class will be assigned a grade of "NS" (no show).

A student who is absent for five consecutive class sessions or two consecutive weeks of class or whose total absences exceed 20% of the total scheduled hours for a class, laboratory period or shop session will be automatically withdrawn from class by their instructor and assigned a grade of "W" (Withdrawn) if the withdrawal date is prior to the 30% point of the course (30% of the total scheduled hours of the class). If the withdrawal date is after the 30% point, the student will be assigned a grade of either "WP" (Withdrawn Pass) or "WF" (Withdrawn Fail), depending upon whether the student was passing or failing the class at the time of withdrawal. (For Individualized Instruction, a student must complete 100% of required hours.) Health Science programs may have more stringent attendance requirements.

If the student does not follow through with official withdrawal procedures, the instructor will complete a drop/add form and give it to the Registrar in Student Services when a student has been withdrawn for attendance reasons. The instructor will have the option to assign a non-punitive grade, regardless of the student's academic status in that course.

Exceptions to the above policies will be made only on rare occasions when the nature of a student's absences warrant such exception. Appeals should be made in writing to the VP for Learning and Student Services. Permission to be readmitted to class (and thereby remove the withdrawal grade) will be granted by joint approval of the instructor responsible for the course and the VP for Learning and Student Services.

Procedure for Attendance in All (including online) Classes

Per Department of Education regulations in 34 C.F.R. 668.22 (1) (7), the following activities are considered academic attendance or an academically-related activity:

- Physically attending a class where there is an opportunity for direct interaction between the instructor and students
- Submitting an academic assignment
- Taking an exam, an interactive tutorial, or computer-assisted instruction
- Attending a study group that is assigned by the institution
- Participating in an online discussion about academic matters
- Initiating contact with a faculty member to ask a question about the academic subject studied in the course

The following activities would not be considered an academically-related activity:

- Logging into an online class without active participation
- Participating in academic counseling or advising

With the understanding that federal standards regarding attendance in distance education courses are more rigorous than those of the state, the procedure for documenting attendance in online courses should include:

- An activity scheduled for each week that indicates some form of active attendance; such as:

1. Interactive tutorial in which the student must participate to receive an attendance mark
2. Video with required completion of at least one question after viewing
3. Discussion board/interaction with other students in class
4. Practice exam
5. Test review
6. Quiz (less than 5 questions would be acceptable)
7. Required reading with completion of at least one question after reading
8. Journal entry based on material covered or read

- An activity would not include simply downloading material for reading, watching a video without interaction or questions, logging in with no indication of work
- There should be at least one activity each week that documents attendance; this documentation should be easily accessible for auditing purposes
- If a student fails to participate in an activity for two consecutive weeks, the student should be withdrawn from the class with a last date of attendance equal to the last documented activity

Final Exams

Final exams in all subjects will be held at the end of each semester. These evaluations (tests or other) combined with the student's record in class will constitute the final grade.

Grade Reports

Final grade reports will be posted in WebAdvisor. If the student has any outstanding debt to the college, the grade report will be held until the debt is resolved.

Change of Name or Address

Students should immediately report any change of name or address on the appropriate form to the Student Services Office.

Student Classification

Full-Time Student:* A student enrolled for 12 or more credit hours.

Part-Time Student:* A student enrolled for less than 12 credit hours.

Freshman: A student with fewer than 32 semester hours of credit.

Sophomore: A student with 32 or more semester hours of credit.

*Since the summer semester is an abbreviated term, 9 or more credit hours is considered full-time during the summer; less than 9 hours is considered part-time.

For financial aid purposes, a student must be enrolled for 12 semester hours of credit during any semester for which he/she wishes to be considered full-time, including the summer semester.

Graduation Requirements

It is the responsibility of each student to know and to meet the graduation requirements of the College in her/his particular program of study and to maintain the minimum required grade average. Counselors and faculty advisors are available to work with individual students, but the final responsibility for meeting graduation requirements lies with the student. The following list constitutes the minimum requirements for graduation:

1. Satisfy proficiency standards in English, math, and reading. Complete all course requirements as outlined by curriculums, achieve an overall grade point average of 2.00 or above with all passing grades.
2. Students who fail individual subjects or have incomplete grades must make up such deficiencies before being allowed to graduate.
3. Students graduating from a diploma or associate degree program are required to take either the **ETS Proficiency Profile** and/or the **ACT Career Readiness Certification** examinations prior to graduation. The results of this testing do not have any impact upon graduation and are utilized for the purposes of assessing the extent to which graduates have attained college-level general education competencies. The results of the assessment are utilized to determine the need for improvement strategies in curriculum coursework directly related to core general education competencies. The ACT Career Readiness Certification is an industry-recognized credential that is beneficial to students with job placement.
4. Applications for graduation must be submitted to the Student Services Office at least one semester prior to the completion of course requirements. One semester prior to the semester that the student expects to complete diploma or degree requirements, **the student is expected to have a preliminary record check by an academic advisor.** It is the student's responsibility to arrange for a final record check with the Director of Admissions.
5. Students are expected to be present for graduation practice and ceremony, if participating.
6. Students must fulfill all financial obligations to the College.

Graduation

Graduation exercises are held each year at the end of the spring semester.

Graduation With Honors and High Honors

A graduate who completes two-thirds of his/her curriculum program at MTCC with an accumulated grade point average of 3.50 to 3.79 on a 4.0 scale will be graduated with "honors." Graduates with an accumulated grade point average of 3.80 to 4.0 will graduate with "high honors." These distinctions will be noted on the diploma and on the student's permanent record.

Graduation Caps and Gowns

All orders for caps, gowns, and graduation invitations will be made through the Student Services Office. Notices will be posted relevant to dates for measurements. Students are urged to be prompt when making these orders.

Completion of Two A.A.S. Degrees

Students who fulfill degree requirements for two curriculum programs within a prescribed term of study shall be awarded only one degree at commencement. However, completion of both degree requirements will be noted on the student's permanent record and credentials.

Any MTCC graduate who desires a second degree must fulfill all degree requirements for the second degree plus a minimum of 20 semester hour credits earned in residency beyond the first degree. Students with an Associate Degree from another accredited institution may receive a second Associate Degree from MTCC by fulfilling the conditions outlined above.

Distance Learning & Non-Traditional Classes

Distance Learning

Distance Learning is teaching and learning across geographical distances through the use of a Learning Management System (LMS), a software program for online course delivery. MTCC utilizes Blackboard as our LMS, and students use computers and the Internet to access course materials, lectures, notes, assignments, and tests.

Distance learning courses offer a high degree of flexibility and may eliminate barriers to educational goals. Students taking courses by distance learning methods must be self-motivated, self-disciplined learners, and should have average or above average computer skills. Since students work more independently than in traditional courses, distance learning may not be the best method of instruction for all students.

All facilities and resources available to traditional MTCC students, such as student services, library resources, and support services, are also available to the distance learner, and the same tuition and fees apply, as does curriculum credit.

MTCC charges no student fees solely associated with Distance Learning courses.

Methods of Instruction in Distance Education Classes

• ***Online*** class instruction is offered off campus and delivered via the Internet. Students receive their assignments and information from an instructor, participate in online discussion forums, submit work, and take tests through Blackboard. However, a student may be required to come to campus or select a college approved proctor to complete an exam. Instructors are available by email, telephone, and on campus during office hours. These sections are designated by 50-53 on the academic schedule or roster.

> *An **Orientation** for online classes is provided and it is highly recommended that new online students attend this meeting; the orientation will provide useful information, resources, and tutorials that can help a student succeed in distance education courses. By completing the orientation prior to taking an online course, a student will be better prepared and ready to concentrate on the course content, rather than logistics and software issues.*
> *Location: main campus. Date: first day of classes for each semester.*

• ***Hybrid*** courses are offered on campus, but they have an internet component. Students will meet with their professor in a classroom at predetermined days/times. The online portion of the course is supplemented with class notes, assignments, tests, and discussion forums, which are available online through Blackboard. These sections are designated by 20-29 in the academic schedule or roster.

• ***North Carolina Information Highway (NCIH),*** also known as the Information Highway courses, are teleconferences that are delivered in a special classroom on campus at a specific time and day. This method enables an instructor at one location to teach to one or more other locations. It also allows MTCC to provide courses that might otherwise not be available locally. It is full, two-way, audio/video communication; classes are both sent and received using microphones, video cameras, television monitors, and telephones in the Interactive Television (ITV) classroom. Blackboard and/or Moodle are utilized as a supplementary component for testing and assignments. Sections that are designated by 40-42 are NCIH classes in the academic schedule or roster.

• **Web-Assisted** classes meet face to face for all class meetings, but students are required to have internet access as a supplemental part of the course. My Math Lab, My Art Lab, Web Tutor, and My Education Lab are a few of the online web-assisted programs that we utilize. Sections 30-39 on the academic roster are web-assisted classes in the academic schedule or roster.

• **Telecourse** is an innovative instructional method involving the use of television programs, textbooks, CD's, and other materials to provide distant access to a limited number of curriculum courses. These courses are designated as sections 43-45 on the academic roster.

Non-Traditional Classes

Saturday Classes

Traditionally, curriculum classes have been offered at MTCC only during the regular workweek. However, beginning in 1998, occasional courses will be offered to MTCC students who would prefer to attend classes on Saturdays due to work, family or social commitments during the workweek. Student demand and availability of instructors will determine which classes will be offered each semester.

The requirements for these classes are the same as for other curriculum classes of the same title and course number. However, since these classes are condensed into one meeting per week, rather than two, three or more, students will be expected to attend class for an extended period of time each Saturday. The total number of contact hours will be the same as for classes offered during the workweek.

Individualized Instruction (Independent Study)

Students may under certain circumstances register for courses by Individualized Instruction. Students who wish to register for a course through Individualized Instruction should contact the Student Services Office to procure the appropriate form to be completed. The student is required to have a 2.50 grade point average or recommendation of faculty advisor, present reasons why the course cannot be taken in a regular class, obtain written approval from the instructor of the course and the VP for Learning and Student Services, and submit a completed Request for Individualized Instruction Form to the Student Services Office.

No more than one course per semester may be taken as Individualized Instruction, for a maximum of 12 semester hours that can be counted toward graduation.

Work-Based Learning(WBL)

Cooperative Education (Co-op) is designed to give students an opportunity to receive non-major elective credit, and in some limited cases, required credit for on-the-job work experience. Students participating in the cooperative education program will work under the direction of the MTCC Work-Based Learning Director, their job supervisor, and their Curriculum Advisor. The work experience used for co-op must be significantly related to the student's program of study. Furthermore, the work-based learning student may receive up to eight hours of academic credit for an approved Associate of Applied Science program, up to four hours of academic credit for an approved Diploma program, up to two hours of academic credit for an approved Certificate program, and one credit hour of academic credit in the Associate of Arts program.

Eligibility

Any student who is enrolled in a curriculum program which offers WBL for academic credit may be eligible if they meet the following requirements:

1. Be approved by his/her advisor.
2. Be approved by the WBL Director.
3. Students with previous work experience must be registered for classes in their program of study, or must have completed such courses before taking WBL classes.
4. Students with no previous work history must complete at least one semester at the college before taking WBL Education classes.

Academic Credit

A minimum work load of 10 hours per week is required to qualify for the program. In most cases, the student may earn credit toward the Associate in Applied Science and Associate in Arts degree programs.

WBL Options

Eligible students in the College Transfer program must use WBL credit for non-major elective credit. Students in Technical Degree programs must use WBL credit for non-major elective credit, except in programs where WBL courses are listed as a requirement. Approval for substituting WBL for required curriculum courses must be approved by the Dean of Curriculum Programs, the VP for Learning and Student Services, the Curriculum Advisor, and the WBL Director.

Application Procedure

Students interested in participating in the WBL program must contact the WBL Director and curriculum advisor. Students are selected for WBL based on an evaluation of their interview and other pertinent criteria. After a student has been approved for WBL, the curriculum advisor will assist him/her in locating an appropriate assignment. Students already working must have the approval of the College and employer.

Registration

Students must have the approval of the WBL Director and curriculum advisor before registering for a WBL work experience. Those students who are approved must follow normal registration procedures. Students are invited to inquire at the WBL Office for more detailed information.

High School Completion

Adults may complete high school education through the Adult High School Diploma Program, or the High School Equivalency Program. These programs are available to all non-high school graduates who are at least eighteen years of age or those sixteen years of age who have been out of public school six months or longer. Students between the ages of sixteen and eighteen must have a minor permission form signed by a parent or legal guardian, as well as the signature of the principal at the last high school attended. Please note that students 16-17 years of age must contact the College and Career Readiness Department to

request drop-release paperwork to be eligible to take adult high school courses or high school equivalency assessments in North Carolina.

The Adult High School Program offers instruction to assist learners in preparing to successfully complete the credits required for a High School Diploma. Accumulation of a pre-determined number of credits as approved by McDowell County Schools (MCS) is required. Required courses are based on a transcript evaluation from the high school last attended and may include: English, mathematics, science, social studies, health, and electives. Students must meet enrollment requirements and provide an official sealed transcript from the high school last attended.

The High School Equivalency (HSE) Diploma Program offers instruction to assist learners in preparing to successfully pass a designated high school equivalency assessment. The three nationally-recognized assessments used to obtain a state-issued High School Equivalency credential in North Carolina are GED®, HiSET® and TASC®. All three High School Equivalency assessments are recognized by US Department of Education USDOE GEN-14-16 (link is external) and cover the same content areas. Passing any one of the assessments will lead to the same High School Equivalency Diploma issued by the North Carolina State Board of Community Colleges. Currently, MTCC offers two of the testing options, the GED® and the HiSET® examination.

The GED® Testing fee is $80.00 and is a computer-based test of four subjects (Language Arts, Science, Social Studies, and Mathematics). Students may retake the test up to two times for free.

The HiSET® Testing fee is $50.00 and is a computer-based test of five subjects (Reading, Writing, Science, Social Studies, and Mathematics). Students may retake the test up to two times for free.

Student Expenses

McDowell Technical Community College receives financial support from local, state and federal sources, allowing educational opportunities at a minimum cost. **Tuition fees are set by the State Board of Community Colleges and are subject to change without notice.** Cost of textbooks and supplies are additional expenses which vary according to the program of study. The payment of tuition and all required fees must be made at the time of registration unless deferred payment arrangements have been made with the Business Office.

Students are not officially registered until tuition payment and fees have been received in the Business Office or deferred by Financial Aid or a signed Promissory Note.

****The following information applies to students enrolled in curriculum programs (technical, vocational, college transfer and general education). For information on Continuing Education fees, see the appropriate section of this catalog.***

TUITION (In-State)

$76.00 per credit hour, up to a maximum tuition charge of $1,216.00 per semester.
[16 or more credit hours=$1,216.00)

TUITION (Out-of-State)

Any student whose legal residence is outside the State of North Carolina, or, in the case of students who are boarding or living with relatives in the community, whose parents or guardians are living outside the State, shall pay tuition fees as follows: $268.00 per semester credit hour, up to 16 credit hours; maximum tuition charge of $4,288.00 per semester.

Past Due Accounts

Students may not register for a semester, receive transcripts or participate in graduation until deferred or past due charges are paid in the Business Office.

Residency Status For Tuition Purposes

Under North Carolina law, persons must qualify as state residents for a tuition rate lower than that for non-residents.

Residency Determination Service

In 2013 the North Carolina General Assembly (SB 402) instructed the educational entities in North Carolina to work collaboratively to create a centralized process for determining residency for the purpose of tuition and administration of state financial aid. These entities included the University of North Carolina General Administration (UNCGA), the North Carolina Community College System (NCCCS), the North Carolina Independent Colleges and Universities (NCICU), and the North Carolina State Education Assistance Authority (NCSEAA).

As a result of the legislative directive, College Foundation, Inc. (CFI) was selected to develop and administer the statewide Residency Determination Service.

MTCC implemented the Residency Determination Service (RDS) on February 20, 2017. All individuals applying to MTCC after March 20, 2017, will be required to complete the online residency determination prior to applying to the college. It is recommended that applicants complete the residency determination well in advance of the semester they wish to start. Upon completion of the residency determination, students will be issued a Residency Certification Number (RCN) which will be utilized at all colleges in NC.

MTCC will continue to work with students who have business sponsorships, are using military benefits or other exceptions allowed by the state. All other residency determinations will be made by CFI and not MTCC.

The Residency Determination Service will provide separate processes to reach a residency classification. Most students will only be required to complete the Initial Consideration process. The Reconsideration and Appeal processes are for those students who experience a change in circumstances (Reconsideration) or who have not had a change in status and believe their residency classification is incorrect (appeal).

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

Tuition Exemptions

College tuition exemptions are as follows:

- Current high school students taking courses at community colleges.
- Some students enrolled in the BLET training program .
- Any person who is the survivor of a law enforcement officer, firefighter, volunteer firefighter, or rescue squad worker killed as a direct result of traumatic injury sustained in the line of duty may be eligible for a tuition waiver.
- Any spouse or children (ages 17 to 22) of law enforcement officers, firefighters, volunteer firefighters, or rescue squad workers who are permanently and totally disabled as a result of a traumatic injury sustained in the line of duty may be eligible for waiver of tuition.

Late Registration Fee

Currently enrolled students who do not pay tuition and fees on or before the day of registration will be assessed a $5.00 late charge. New students or former students (students who were not enrolled during the past academic year) who register during the prescribed registration period will not be assessed a late registration fee.

Activity Fee

All curriculum students are required to pay the Student Government Activity Fee as follows:

$1.00 per credit hour (maximum of $16.00 per semester)

These fees are not refundable except when approved by the Vice President for Finance and Administration according to Business Office policy.

Student Insurance Fee

In order that every student may be covered by insurance in case of an accident, institutional policy requires that each student enroll in the accident insurance program at registration. The established fee is $1.30 per semester. This fee is not refundable.

Liability Insurance

Students enrolled in Practical Nursing Education, Associate Degree Nursing, Nurse Aide, Teacher Associate, Cosmetology, Nail Technology, Health Information Technology, Surgical Technology, Phlebotomy and Early Childhood Associate are required to purchase professional liability insurance coverage. The cost of liability insurance is $14.50 per year.

Technology Fee

In order to offset the cost of copies, toner, state-of-the-art computer labs, and other technology made available to students, a fee of $1.50 per credit hour, up to a maximum of $24.00 per semester, is charged to each student at the time of registration. This fee is not refundable.

Identification Badge

All curriculum students are required to purchase a picture identification badge to be on his/her person at all times while on the campus grounds for a fee of $3.00 for the academic year.

Parking Fees

All curriculum students are required to purchase a parking pass to be placed in his/her vehicle at all times while on the campus grounds for a fee of $5 per semester. All occupational extension students taking a semester-long course are required to purchase a pass to be placed in his/her vehicle at all times while on the campus grounds for a fee of $5 per semester. Other short-term students taking classes will be identified with parking passes given at the time of registration.

Fees For Special Purposes

Graduation expenses for diploma, caps and gowns are payable at the beginning of the semester in which the student expects to graduate. These costs can be obtained from the Student Services Office.

Educational Testing Fee

Students enrolled in the Practical Nursing Education and Associate Degree Nursing Programs are charged an educational testing fee each semester. There are testing fees for PNE and for ADN students which will be provided at student orientation.

Transcript Copy Fee

Students should go to Student Services to request a transcript. A fee of $3.00 is charged for copies of official transcripts.

Additional Expenses

Some curriculums require students to purchase additional supplies, equipment and/or uniforms. Students should contact the instructor/advisor in the curriculum they plan to enter.

Book Costs

Students are required to purchase the necessary textbooks for courses. Copying of textbooks is not allowed and is a violation of copyright laws in most cases. The average cost ranges from approximately $500 to $800 per semester, depending on the student's chosen curriculum. Workbooks and certain text materials which are expendable items may be required by some instructors.

Continuing Education Fire and Rescue College Fee

Students attending the McDowell Fire and Rescue College will be charged a fee of $10.00.

Returned Check Fee

A $25.^{00}$ service charge is assessed for each returned check.

Refund Policy

Tuition refunds are not automatic; it is the student's responsibility to file a request. Tuition refunds for students shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. A 100% tuition refund can be made to a student who withdraws by registration day. A 75% tuition refund can be made to a student who withdraws before the 10% point in the semester. An official withdrawal must be made by completing the "Add/Drop/Withdrawal" form. An official request for a refund must be made by completing the "Request for Refund" form. Both of these forms should be submitted together to the Student Services Office for processing. Tuition refunds will not be considered after the 10% point in the semester. There is no refund made on activity fees or insurance unless the class is cancelled. The "Request for Tuition Refund" and "Add/Drop Withdrawal" forms may be obtained in the Student Services Office.

Students will receive a copy of the textbook refund policy when textbooks are published in the College Bookstore. Books must be returned within ten days of registration for consideration of refund. All refunds are subject to the terms and conditions stated on the textbook refund policy.

Student Financial Aid

Students who have satisfactory academic records and are in need of aid may qualify for financial assistance. Although the primary responsibility for financing an education remains with students and families, McDowell Technical Community College participates in several programs designed to supplement individual and family contributions. Financial aid may consist of grants, scholarships, campus employment, or any combination of these as determined by the policies of the Financial Aid Office.

Eligibility for Financial Aid

Eligibility requirements for receiving financial aid may change from year to year. Specific requirements are established by the U.S. Department of Education for federally funded aid programs. The North Carolina State Education Assistance Authority and the North Carolina Community College System determine eligibility for state funded programs. Any local and/or private scholarship sources determine the eligibility for awarding funds from their respective programs.

Students must be in a program leading to a degree, diploma, or eligible certificate (at least 16 semester hours and/or 38 contact hours in length) to be eligible for Federal financial aid. Therefore, students enrolled as Special Credit/Undecided are not eligible to receive Federal financial aid. In addition, any student in default of a student loan or owing a repayment of Pell Grant funds will not be awarded financial aid. Students must have a high school diploma or GED certificate in order to receive federal and/or state financial aid. An official copy of that transcript must be on file in the MTCC Admissions Office.

All students receiving financial aid must maintain satisfactory academic progress. At MTCC, students must maintain a grade point average of 2.0 and complete 67% of all credit hours attempted. Students that receive financial aid and subsequently withdraw from classes before the end of the semester may be required to repay a portion of Pell Grant and SEOG funds.

Students falling below the minimum standard for academic progress and/or in ineligible status due to overpayment of Pell Grant funds or student loan default should contact the MTCC Financial Aid Office to determine how their eligibility may be regained. (See upcoming section regarding satisfactory academic progress for further explanation.)

Important Information for Pell Grant Recipients Regarding Lifetime Eligibility

In December 2011, President Obama signed into law the Consolidated Appropriations Act of 2012 (Public Law 112-74). This law significantly impacts Federal Student Aid Programs.

One of the most significant changes is Federal Pell Grant Duration of Eligibility. The law reduces the duration of a student's eligibility to receive a Federal Pell Grant to 12 full-time semesters (or it's equivalent). This provision applies to all Pell Grant eligible students effective the 2012/2013 academic year. The calculation of the duration of the student's eligibility will include all years, no matter how far in the past, that the student has received Federal Pell Grant funding. Therefore, every semester that a student has received Pell Grant funding will count toward the semester limit. Students that have attended at less than full-time status in the past, or at present, will be assessed accordingly.

The MTCC Financial Aid Office will attempt to notify students of their remaining eligibility as they apply or reapply for financial aid.

Application For Financial Aid

Students applying for financial aid at MTCC should complete a Free Application for Federal Student Aid (FAFSA). The FAFSA is completed and submitted via an online process at www.fafsa.ed.gov . There is no technical deadline to apply for financial aid at MTCC, but students should apply at least eight weeks prior to the beginning of their first semester at MTCC. Funds are limited in some financial aid categories, i.e. Federal Work Study and Supplemental Educational Opportunity Grant (SEOG). Therefore, early applicants are most likely to receive assistance if eligible and funds are available. Students may also be required to submit additional internal and external scholarship applications if interested in applying for aid other than or in addition to Federal and State funds. FAFSA worksheets and scholarship applications are available in the MTCC Financial Aid Office and at local high school guidance offices.

Student financial aid information is kept confidential within the MTCC Financial Aid Office. Student financial aid awards are disbursed once a semester and can be adjusted according to changes in eligibility and enrollment.

In order to guarantee timely usage of financial aid funds at registration, students should apply via the FAFSA prior to the dates listed below:

Fall Semester	July 1
Spring Semester	November 1
Summer Semester	April 1

Applications received after the dates listed will be processed as quickly as possible, but there will be no guarantee that the student will have a definite financial aid decision prior to the beginning of the semester.

Awarding of Financial Aid

Most awards on the student's award offer letter are based on full-time enrollment. The award will be reduced proportionately if the student attends less than full-time. The requirement for full-time eligibility for Federal and/or State financial aid is 12 or more credit hours; 3/4 time is 9, 10, or 11 credit hours; 1/2 time is 6, 7, or 8 credit hours. In some cases, funds may be disbursed to students attending less than 1/2 time (5 credit hours or less). Students must always be enrolled in at least six credit hours to be eligible for the NC Community College Grant and NC Education Lottery Scholarship.

Because of the number of credit and/or contact hours, the following certificates are not eligible for financial aid:

- Collision Repair and Refinishing Certificate
- Cosmetology- Manicurist/Nail Technology Certificate
- Cosmetology- Manicurist Instructor Certificate

Nondiscrimination in Aid Awards

As with all programs of the College, financial aid awards are made equitably without regard to age, race, color, sex, handicap, disability, religion, political affiliation, or national/ethnic origin. For further information, see the College's policies on discrimination in the General Information Section of this catalog.

Satisfactory Academic Progress Standards

Federal regulations require that institutions of higher education establish minimum standards of Satisfactory Academic Progress (SAP) that students must meet in order to receive federal/state financial aid. This progress is measured qualitatively and quantitatively. The academic records of students are evaluated at the end of each semester, including Summer. In order to accurately measure a student's progress, the total academic record must be considered. This includes classes transferred in from other institutions, developmental and curriculum classes.

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

- Qualitative: Maintain a minimum grade point average (GPA) of 2.0.
- Quantitative: Complete a minimum of 67% of cumulative credit hours attempted.
- Time Frame: Must complete program of study in a timeframe not to exceed 150% of the length of the program for full-time students. Transfer credits used toward the student's program of study will be considered for maximum time frame.

If a student fails to maintain satisfactory academic progress standards by either the quantitative and/or qualitative measures, he/she will lose eligibility for Federal and/or State financial aid. If the student feels that he/she has a legitimate mitigating circumstance which prevented successful completion of course work, he/she may complete a Statement of Financial Aid Warning requesting reconsideration for financial aid. This statement is presented to the Director of Financial Aid for consideration. If the warning status is granted, the student will receive aid for the upcoming semester and must agree to complete all classes with a grade of "C" or better. Failure to do so will result in suspension of Federal and/or State financial aid. If the student is unable to meet the minimum overall academic standards despite successful completion of all classes in the semester of warning, he/she may complete the Financial Aid Satisfactory Academic Progress Appeal Request to apply for continued eligibility. Additionally, if a student does not meet the requirements set forth in their Statement of Financial Aid Warning, he/she must appeal via the Financial Aid Satisfactory Academic Progress Appeal Request to apply for future financial aid eligibility. Appeal decisions are made by the MTCC Financial Aid/Scholarship Committee and are final. Only one appeal per academic year will be considered.

Title IV Repayment Policy

Per Federal Financial Aid Regulations, students receiving financial aid from Title IV funds (Federal Pell Grant, Federal Supplemental Educational Opportunity Grant and/or Federal Direct Loans) will be required to repay a portion of their awarded financial aid if the student withdraws from all classes prior to the 60% point of the semester. These requirements do not apply to any student who does not actually withdraw from all classes. For example, if a student enrolled in 12 credit hours withdraws from a 3-hour course only, because the student has 9 remaining hours, this is not a complete withdrawal.

Students eligible for federal financial aid begin earning Title IV financial aid funds on the first day of class attendance. Students are awarded funds on the assumption that he/she is eligible for the full amount received. Students that stop attending classes should obtain a drop/add/withdrawal form from Student Services. Each instructor should be contacted so that the last day of attendance can be documented and the appropriate grade given. If the student ceases to attend without informing his/her instructors and/or Registrar's Office, the student will be withdrawn from classes by the instructor as the maximum absence number in the class is reached.

Once the student is withdrawn from all classes, the MTCC Financial Aid Office is responsible for calculating any amount of overpayment based on the last date of attendance if the student completely withdraws from all classes. The student could be responsible for repayment in part to The US Department of Education, in addition to McDowell Technical Community College. The student is given written notification via US Postal Service of the amount that is owed due to overpayment.

The amount of the repayment is due in full when notification is received. As long as there is any unpaid balance at MTCC or

with the Department of Education, the student will not be awarded financial aid funds. Additionally, any unpaid balance at MTCC will prevent the student from future registration of classes or receiving MTCC transcripts.

See page 45-47 for more information about withdrawal procedures and class attendance. Additionally, see page 58 for full explanation of MTCC's refund policy should a student withdraw from any and/or all classes prior to the 10% point of the semester.

Types of Aid

I. Government Aid Programs

Pell Grant

The Federal Pell Grant Program provides the foundation on which the financial aid package is developed. Students begin the financial aid process by completing the Free Application for Federal Student Aid (FAFSA). From this application, an expected family contribution (EFC) is calculated to determine the family's contribution to the student's education. This figure is used by the Financial Aid Office to determine the amount of the Pell Grant award. Federal Pell Grant awards can range from $606 to $5920 per academic year depending on enrollment status.

Supplemental Educational Opportunity Grant (SEOG)

This grant is awarded to students with exceptional financial need. Limited funds are available with priority given to students receiving Pell Grant funds with a low expected family contribution. Priority is given to students completing their FAFSA prior to March 15.

Federal Work-Study (FWS)

A limited number of part-time employment positions are available to eligible students on campus. The work-study program provides students with an additional means of contributing to their educational costs. When possible, students are placed in an area of work which matches their career interests and skills.

Vocational Rehabilitation

Students who have a substantial handicap to employment from a physical or emotional problem may be eligible for funds through the N.C. Division of Vocational Rehabilitation. Application should be made through the V.R. Office in the county of residence.

II. State Aid Programs

North Carolina Community College Grant (NCCCG)

North Carolina residents that have completed the Free Application for Federal Student Aid to determine eligibility for Pell Grant may also be eligible to receive the NCCC Grant. Students must be enrolled in at least six credit hours in an eligible program to be considered for this grant. If eligible, students are awarded this grant for Fall and Spring Semesters (no award is available for Summer Semester). The guidelines for this grant are different than those for Pell Grant; therefore not all Pell Grant recipients will be eligible. No additional application is necessary; eligibility is determined from the FAFSA.

North Carolina Education Lottery Scholarship (NCELS)

North Carolina residents that have completed the Free Application for Federal Student Aid to determine eligibility for Pell Grant may also be eligible to receive this scholarship. Students must be enrolled in at least six credit hours in an eligible program to be considered for this scholarship. If eligible, students are awarded this scholarship for Fall and Spring Semesters (no award is available in Summer Semester). The guidelines for this grant are different than those for Pell Grant and NC Community College Grant; therefore not all Pell Grant recipients will be eligible. No additional application is necessary; eligibility is determined from the FAFSA.

Forgiveable Education Loans for Service (FELS)

This program is made possible through the North Carolina State Education Assistance Authority and allows students to obtain the degree they want and repay the loan funds by staying in North Carolina in areas with a critical need for more employees, such as nursing, teaching, allied health fields or medicine. Recipients of this loan sign a promissory note agreeing to work in North Carolina after graduation in an approved position for each academic year of funding received. Students should visit www.cfnc.org/FELS for details on requirements and the application process.

Golden LEAF Scholars Program--Two-Year Colleges

This scholarship is funded through a grant from the Golden LEAF Foundationi, a non-profit organization hoping to help North Carolina's economy. Selection factors include the effects of the declining economy on students and their families. The scholars program provides up to $750 per semester for curriculum students and $250 per semester for occupational education students. Students may apply by completing a Golden LEAF scholarship application. These are available in the MTCC Financial Aid Office.

Less Than Half Time Grant

Funds for this grant are provided by the NC Department of Community Colleges. Students must be enrolled for less than six credit hours and fall within specific EFC (expected family contribution) limits to be eligible for these funds in Fall and/or Spring semesters. No additional application is necessary; eligibility is determined from the FAFSA.

Targeted Assistance Grant

Funds for this grant are provided by the NC Department of Community Colleges. Students must be enrolled in one of the following programs to be considered for this grant: Machining Technology, Industrial Systems or Electrical/Electronics. No additional application is necessary; eligibility is determined by the FAFSA.

WIOA

A possible source of educational assistance for unemployed and/or underemployed individuals is WIOA benefits. Interested individuals should contact the NC Works Career Center for more information and eligibility criteria.

III. Institutional Aid

McDowell Technical Community College – Board of Trustees Scholarship

The MTCC Board of Trustees Scholarship is awarded by the MTCC Scholarship Committee to four (4) students per year for $200 per semester. This scholarship is based on financial need. Applications are available in the Financial Aid Office at MTCC.

Crane Fund for Widows and Children

Crane Resistoflex Corporation provides scholarship funds for needy and deserving widows and/or children or deserving wives and/or children of men who provide limited support due to age and disability. Applications are in the MTCC Financial Aid Office.

IV. Other Scholarships

In addition to the above programs, various companies, organizations and individuals provide scholarships as funds allow.

American Society for Quality Control Fund of the Community Foundation of WNC

This scholarship opportunity is available to students who aspire to continue their education in advanced studies in a field which relates to quality control. To be eligible to apply, the student must be a high school graduate or possess an equivalency certificate and be a resident of a county within Western North Carolina. Applications are available in the MTCC Financial Aid Office.

Route 70 Cruisers Scholarship

This scholarship opportunity was established in 2012 by the Route 70 Cruisers, a local car club from Old Fort, NC. These scholarship funds are designated for students pursuing an education in the automotive industry. One scholarship is awarded anually to a student in the Automotive Systems Technology program and another to a student in the Collision Repair and Refinishing Technology program. Recipients must have a strong desire to pursue a career in the automotive industry and have financial need.

American Legion Post 56 Veteran's Memorial Scholarship

This scholarship opportunity was established in 2012 by the McDowell American Legion Post # 56. These scholarships are to be awarded to a McDowell County Veteran, spouse or child of a Veteran. Two scholarships are awarded annually. Students can be enrolled in any program of study, but must exhibit financial need.

Gerald P. Cox and Meillia S. Cox Family Foundation, Inc. Scholarship

This scholarship is given by the Cox Family Foundation to assist students attending Community College in pursuing their goal of college education to prepare as nurses to meet the workforce needs of the healthcare industry, particularly in geriatrics. Students must be in good academic standing with a minimum grade point average of 2.5, exhibit exemplary character, and demonstrate potential in the field of nursing. The amount of the scholarship(s) is determined by financial need and is awarded to the student in equal disbursements for Fall and Spring semesters.

Jeld-Wen Scholarship

Jeld-Wen Fiber provides scholarship funds for two incoming freshmen in any curriculum. Applications are available in the MTCC Financial Aid Office.

State Employee's Credit Union Foundation Scholarship

The SECU Foundation established this two-year scholarship program to assist NC Community College System students achieve academic success. Students must be a resident of North Carolina, demonstrate financial need per results of current FAFSA, be enrolled full-time and maintain a grade point average of at least 2.5 in order to be eligible to apply. Four scholarships are awarded annually. Applications are available in the MTCC Financial Aid Office.

Wells Fargo Technical Scholarship

The Department of Community Colleges makes the Wells Fargo Technical Scholarship available to second-year students in a two-year technical program who demonstrate financial need and show academic promise. One scholarship is awarded yearly. Applications are available in the MTCC Financial Aid Office.

William Harold Smith Scholarship

The William Harold Smith Charitable Trust provides scholarship assistance to graduates of McDowell High School attending a postsecondary institution. Awards are based on need and may be renewed as long as the recipient maintains satisfactory academic progress. Applications are available in the Financial Aid Office or at McDowell High School. Applications must be submitted each semester for which aid is requested.

V. Veterans Benefits

U.S. Department of Veterans Affairs Benefits

McDowell Technical Community College is approved by the North Carolina State Approving Agency for the enrollment of persons eligible for education assistance benefits from the U.S. Department of Veterans Affairs (DVA). Entitled veterans, participants in the Montgomery G.I. Bill contributory program, active duty military personnel in voluntary education programs, active members of the National Guard who are drilling, and eligible spouses and offspring who may be certified to the U.S. DVA Regional Office as enrolled and in pursuit of an approved program of education. This institution has been approved for one semester only of provisional admission. Due to late registration, some students may fail to have all admissions documentation (transcripts or test scores) and may be admitted as provisional students for one semester pending receipt of the required documentation. However, students who fail to submit all transcripts during the second semester will not be re-certified.

Dual Programs

McDowell Technical Community College is approved for Veterans' Affairs students to pursue dual programs simultaneously. Students desiring a second program must meet with the Veterans' Certifying Official and their advisor to complete a Dual Program Approval Form and follow the guidelines listed in the college catalog. Students must meet certain criteria to be certified for Veterans' Affairs benefits while seeking completion of dual programs. Dual programs must be related to a single career field.

DVA Standards of Progress, Attendance and Conduct

Public Law 93-508 requires that each educational institution approved for veterans to receive educational benefits (GI Bill) must establish written policies that clearly state what is expected of the veteran in the areas of academic progress, class attendance and conduct. Many of these expectations are required of all students, veterans and non-veterans, and are covered in this Catalog ad Student Handbook.

Further requirements include that any recipient of veteran's benefits: (1) who withdraws from all subjects undertaken will have his or her educational benefits terminated from the last date of attendance; (2) who drops any of his or her courses may have benefits reduced; and (3) must maintain a level of satisfactory academic progress. Students are considered to be making unsatisfactory progress if they have not achieved a level of progress consistent with their time in the program. Veterans who are making unsatisfactory progress will be terminated by the Veterans Certifying Official. When performance meets the level of satisfactory progress, the recipient may be recertified. Recipients of DVA benefits need to consult the Veteran's Certifying Official before enrolling in telecourses, Cooperative Education classes, Internet classes, or making course substitutions.

Veterans Pay Schedule

For accuracy, a veteran should contact the U.S. Department of Veterans Affairs Regional Office in Atlanta, GA, at 1-888-442-4551 for an assessment of benefits which they may receive. Benefits will vary according to many criteria. *A period of six to ten weeks should be allowed for receipt of the Veterans Administration subsistence check*.

For more information about programs available at this institution, contact the campus Veterans Certifying Official in the MTCC Financial Aid Office.

Services To Students

The Student Services Office at McDowell Technical Community College is responsible for various types of student assistance: admissions, counseling, orientation, testing, supervision of and assistance in planning student activities, financial aid, placement of graduates, school publications and community-school relations.

Objectives

McDowell Technical Community College, operating under the "Open-Door" admissions policy of the North Carolina Department of Community Colleges, is committed to taking prospective students and placing them in a program of study commensurate with their interests and abilities through counseling, guidance and testing. As a result of this commitment, the Student Services Office must respond to the needs of a diverse student population. The ultimate objective is total service to the student and to the community. Specifically, the objectives can be broken down as follow:

1. To provide information to prospective students and the community on opportunities available at McDowell Technical Community College.
2. To provide a counseling and testing program to assist prospective students in selecting a suitable program of study.
3. To orient new students to the college environment.
4. To provide and assist in the development of a program of student activities.
5. To provide for the maintenance and utilization of student records.
6. To identify and utilize all community resources which can be used to the advantage of the student, school and community.

These objectives support the educational programs and the philosophy of McDowell Technical Community College so that each student can reach his/her fullest potential. The student is encouraged to seek the assistance available in the Office of Student Services.

Programs of Assistance

Orientation

At the beginning of each semester, an orientation program is held for new students to acquaint them with basic ideas, procedures, student support and learning resources, academic areas, administrative personnel and services of the College.

Health Services

The College does not have a health clinic to provide hospitalization or emergency services. The physical location of the College campus is easily accessible to hospital facilities in both Marion and Morganton. In the event of an emergency, EMS ambulances are available on a 24-hour schedule; phone 911.

First-aid supplies are available in all shop areas and in each campus building.

If a student becomes ill during class and is unable to go by him/herself to the first aid station, it is the responsibility of the individual's instructor to accompany the student there. If the student is unable to contact a parent, spouse or relative, then the instructor should contact the Student Services Office (or the Receptionist after 8:00 pm), who will contact the parent, spouse or relative.

In the event of serious accident or sickness, the following procedures should be followed:

1. Summon EMS ambulance service.
2. Make the person as comfortable as possible WITHOUT MOVING HER/HIM UNTIL HELP ARRIVES.
3. As soon as possible, notify the Safety Director at 652-0627 or the receptionist at extension 0.

Note: The College's *Comprehensive Safety Plan* is posted on the College website (www.mcdowelltech.cc.nc.us) under the heading *General Information*.

Any student enrolling in the College may complete a student medical (health) data form. This information may be used for the purpose of referral in the event of an emergency and to notify appropriate personnel of conditions which may affect the student's enrollment in a particular program.

Health-e-Schools

MTCC is a part of Health-e-Schools. This is a program that provides medical care to clients in the place where they spend most of their time-school or work! Our staff can provide access to medical care to students/employees, without students/employees missing school or work. This program helps the student/employee stay healthy, decreases school/work absences, and reduces out-of-work, travel, and wait time. Telemedicine is available at MTCC every public school day and appointments can be arranged during non-core classes (call 828-659-0499). For more information about how we do this, please visit our website at www.myhealtheschools.org

Student Enrichment Center

The Student Enrichment Center provides a variety of testing and student support services. These include: placement testing, career assessments and personality inventories to explore student interests and aptitudes, career counseling services, and tutorial assistance services.

The Student Enrichment Center operates the MTCC Student Tutorial Program. Students interested in participating in the program as a tutor or those desiring tutorial assistance should contact the Center for further details.

The campus contact for job placement are also located in the center.

All Student Enrichment Center services are free to the MTCC student. Walk-ins are accepted; however, appointments are encouraged to guarantee the student these services in a timely manner.

Placement Tests

In order to guarantee high program standards and student success, it is important that the academic abilities of students be equal to program entrance requirements. The "open door" policy allows all students the opportunity to obtain higher education; however, program entrance requirements must be met. Each new student, except as designated below, is required to take a placement test prior to enrolling in a curriculum at McDowell Technical Community College. These tests are administered in the Student Enrichment Center. Testing assures that students will be enrolled in classes appropriate to academic abilities. It is recommended that students take the test one to two semesters prior to enrollment to provide time to address any academic deficiencies. Student Enrichment Center staff will advise each student according to the results of his/her placement test.

The test or parts of the test may be waived under these circumstances:

- Submit official ASSET, Accuplacer or COMPASS scores taken within the last five years from another college.
- Submit an official transcript showing completion of college level English or math at an accredited college with a grade of C or better.
- Submit proof of SAT writing and reading scores of 500 or above or ACT English score of 18 or Reading score of 22 or above taken within the last five years.
- Submit proof of SAT math score of 500 or above or ACT Math score of 22 taken within the last five years.
- Students who take the SAT after March 2016 should submit scores above 480 for Evidenced-Based Reading and Writing and above 530 for Mathematics.
- Submit NC High School transcript (beginning with the Class of 2013) meeting requirements in the NCCCS Multiple Measures Policy.
- Exemptions for testing are not made for applicants seeking admission to the Associate Degree Nursing or the Practical Nursing Programs.

About the Test

The college uses Accuplaceer (NCDAP) North Carolina Diagnostic and Placement Test for placement purposes.

Accuplacer (NCDAP), the North Carolina Diagnostic and Placement Test, is made up of two major sections: Mathematics and English and Reading. It is an untimed test, except for the essay portion.There is currently no fee for the tests.

Entrance requirements vary for individual courses and programs. The sections required are based on the chosen curriculum. Students will receive the test results immediately. Results from tests do not affect eligibility for admission, but developmental courses may be required as part of the student's curriculum if the test indicates the need. Prior to taking the test, applicants are encouraged to obtain the Sample Test Questions from the Student Enrichment Center or the NC Works Career Center. They can also be accessed on the MTCC website under Placement Testing. After completing the practice test samples an applicant may find it helpful to review some of the test subject matter before attempting the test. A placement test review class is offered at the NC Works Career Center.

For placement into MAT 271 and Calculus I, see Student Enrichment staff.

Placement Testing Rules

- Must have an application on file with Student Services.
- Must make an appointment with the Student Enrichment Center. Discuss special needs or concerns related to testing at that time. Persons with disabilities may request special accommodations and need to do so when scheduling the testing appointment to allow adequate time for needed arrangements to be made. Official documentation verifying the disability and the need for special accommodations must be submitted prior to testing. Special accommodations include, but are not limited to, braille, large print materials and tests on audiotape.
- Must bring MTCC Student Identification Number and have a picture ID. Pencils and scrap paper will be provided.
- Placement test scores are considered current for five years. If you have not attended MTCC in five years or more, new placement test scores are required. Returning students who have successfully completed all developmental courses within the last 10 years will not be required to retest unless there has been a change of major which requires higher levels of math or English.

Students who do not pass sections of the initial math placement test will have two opportunities to retest by taking the Math Challenge Exam on scheduled Registration Days. Proof of remediation is required to take the Math Challenge Exam.
*Please note that, if transferring math classes to another school, the Challenge Exam results may not be honored at other schools.

Students with an English composite score of 146 or above on the initial placement test are allowed to immediately retest (typically the multiple choice sections). All students, including those who immediately retested but did not pass, may remediate for one additional test opportunity.

Students are strongly encouraged to begin their developmental classes by their second semester of enrollment.

CCP students may test in English once each semester, including the automatic re-test with the composite score of 146 and once each semester in math, including the Challenge Exam with remediation. After the first English test, the student must also provide proof of remediation to test in the following semester.

Developmental Studies

McDowell Technical Community College has a Developmental Studies program designed to identify and assist students with academic weaknesses. Students scoring below proficiency levels determined by the College are required to enroll in the Developmental courses appropriate for the identified weakness.

Required Developmental courses are prerequisites for certain other courses and must be taken.

These courses may also be taken by others, at the student's initiative, or on recommendation of a faculty member.

Academic Resource Center (ARC)

The Academic Resource Center (ARC) serves as a common computer lab for all students. It provides students free access to computers and the internet in order to fulfill technological requirements in their courses at MTCC. Students may bring their own laptops to the ARC where they will be able to find power outlets and access wireless internet.

The ARC also provides free tutoring in basic math and English topics during specified times each semester. Students do not need to set up an appointment to receive this free tutoring, but they do need to check on the times of availability each semester. Other resources available to students in the ARC include math DVDs, textbook software, and remedial software that can enhance student learning.

Career Planning and Development

Educational objectives generally are pursued by students for the purpose of preparing themselves for the world of work or for job mobility. The function of all personnel involved in the educational process is to provide ways and means to assist the student in career planning and individual development. Please contact the Student Enrichment Center for career assessments and exploration.

Job Placement

The College offers job placement assistance through the Student Enrichment Center and the NC Works Career Center. A job placement counselor is available for the purposes of referral to the NC Works Career Center/Ford Miller Employ-

ment and Training Center. Although employment cannot be guaranteed by McDowell Technical Community College, every effort is made to notify students of job opportunities and assist them in securing positions of employment. The NC Works Career Center/Ford Miller Employment and Training Center provides resume preparation, counseling, and assists students in securing employment. Up-to-date job openings are posted and available on-line through resources provided at the NC Works Career Center/Ford Miller Employment and Training Center. Short-term employability skills classes are available to those seeking employment.

Students interested in full or part-time jobs are asked to complete a NC Works Customer Profile and have a conference with NC Works staff.

Students are also encouraged to utilize the services of the North Carolina Employment Security Commission located on Baldwin Avenue at NC Works Career Center/Ford Miller Employment and Training Center in Marion, NC for job placement assistance.

Campus Security

The Security office is located just inside the front entrance of the Administration Building. Members of the Security Staff are available to serve you with any crisis, emergency or security situation that may arise. They can be reached immediately by telephone at cell number 442-1084, or at the office line, 652-0673. Otherwise, dial "0" on our local land line. Please feel free to call Security staff for any security needs you may have. They are there to serve you.

Student-Oriented Policies & Procedures

Diversity and Non-Discrimination

Diversity

McDowell Technical Community College values diversity and desires to create a situation where all persons, regardless of race, sex, age, national origin, religion, disability or other factors, may realize their fullest potential. To this end, the college prohibits discrimination of all kinds in programs, services and employment. Our policies are also located in the Employee Handbook with copies placed in the MTCC Library.

Non-Discrimination Policy

It is the policy of McDowell Technical Community College that no individual shall, on the basis of sex, age, religion, race, color, national/ethnic origin, disability or political affiliation, be excluded from participation in, be denied admission to or the benefits of, or be subjected to discrimination in his/her education program, as required by Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1975, Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990 (ADA). Any student who feels he/she has been discriminated against should contact the Director of the Student Enrichment Center, MTCC, 54 College Drive, Marion, NC 28752 Phone (828)652-0631. In addition, he or she may consult with or write to the Office for Civil Rights, District of Columbia Office, U.S. Department of Education, 1100 Pennsylvania Avenue., NW, Room 316, P.O. Box 14620, Washington DC 20044-4620. (202)786-0500

Provisions for Persons With Disability

McDowell Technical Community College provides equal access to education for persons with disabilities in compliance with Section 504 of the Rehabilitation Act and Americans with Disabilities Act. It is the responsibility of the student to make his or her disability known and to request academic adjustments of modifications each semester. The Disabilities Coordinator advises and assists in securing academic adjustments, support services and other provisions for qualified students with disabilities. Request for modifications, adjustments or accommodations should be made 30 working days before events or activities and submitted to the Disabilities Coordinator. Every reasonable effort will be made to make reasonable adjustments.

In order to establish the student's eligibility for services, documentation of disability is required of all students who request academic accommodations or modifications. Documentation should be submitted to the Disabilities Coordinator and may include results of medical or psychological tests or other professional evaluations that verify the existence of an ADA-recognized disability. Students with learning disabilities should provide a current psychological evaluation that states the specific learning disability and the functional limitation within the learning environment. All documentation and records will be maintained in a confidential manner as outlined in the Family Rights and Privacy Act of 1974.

College procedures for application and admission apply to students with disabilities. For additional information, contact the Disabilities Coordinator.

Student Grievance Procedure

It is the policy of McDowell Technical Community College to provide all students with the means to seek resolution to any problem affecting their enrollment. The primary objective of a grievance procedure is to ensure that student rights are protected. Further, it is essential that the student be given adequate opportunity to bring valid complaints and problems to the attention of the College with the assurance that student's grievances will be handled fairly, rapidly, and in a non-threatening atmosphere.

A grievance is defined as the dissatisfaction that occurs when a student has reason to believe a condition or a situation, or an action affecting the individual is unjust, inequitable, and/or a hindrance to effective performance A grievable action is an action that is in violation of written campus policies or procedures or constitutes arbitrary, capricious, or unequal application of written campus policies or procedures.

In implementing a grievance policy, the College emphasizes the importance of rectifying any issues before utilizing the grievance policy. All students and faculty members, administrators, or staff members have an obligation to make every effort to resolve problems fairly and informally so that they do not become sources of grievances to be pursued formally through the grievance procedure. However, the College realizes that all problems cannot be corrected with an informal resolution. The

procedure is not intended to initiate disciplinary action against a student or a member of the faculty, staff, or administration; or to alter college policy. It is important to note that all matters will be handled in a professional manner and parties will be treated professionally and fairly with no retaliation before, during and after the grievance procedure.

Procedures

A formal complaint may be filed any time by students who believe that a personal right has been violated. The following procedure is established to provide prompt and equitable resolution as they relate to claims of discrimination based on age, sex, (including sexual harassment) religion, race, color, national/ethnic origin, disability or political affiliation, or have been excluded from participation in, be denied admission to or the benefits of, or be subjected to discrimination in his/her education program. (Because of the private and sensitive nature of certain incidents, an aggrieved student may choose a third party mediator to help resolve complaints on an informal basis.)

The following outlines the grievance procedure:

1. Students with concerns should first discuss their problem with the faculty or staff member(s) who are involved. (A third party may be present.) All parties should attempt to resolve the issue in discussion.
2. If the issue is not resolved, the student must talk with the faculty/staff member's immediate supervisor within ten working days, who will attempt to resolve the complaint.
3. In the event that the grievance cannot be resolved within the department, students should submit a written grievance to the Vice President for Learning and Student Services within thirty working days after completion of step # two (2). The complaint should specify the time, place, and nature of the incident that resulted in the complaint. (Forms are available in the Student Services Office and on the MTCC website www.mcdowelltech.edu)
4. Copies of the complaint will be forwarded to the appropriate administrator of the area involved.
5. Within ten working days, the Vice President for Learning and Student Services will contact all parties involved (including third parties) and request a meeting.
6. If the situation cannot be resolved during the meeting in Step # 5, the Vice President for Learning and Student Services will establish the Grievance Committee within twenty working days. The student or employee may have persons appear on his/her behalf provided that a list of names is given to the Chairperson of the Grievance Committee five school days prior to the meeting. (The Committee with guidance from the Chair [who will receive appropriate training for the procedure] will investigate and evaluate all information provided. A period of ten days is allowed for this process.) The student or employee portion of the Grievance Committee meeting shall be taped to ensure that a full and accurate record of the information presented is available to the student or employee and committee members and to facilitate the writing of the minutes of the meeting. Copies of the tape may be made for the student at cost. The discussion following the student part of the meeting is considered a closed session.

The Grievance Committee shall consist of:

1. Chairperson (non-voting member).
2. Student Services administrator. This person will serve as student advocate. (Non-voting member).
3. Two faculty members, at least one being from the same department as the aggrieved student.
4. Two students: the President of the SGA and one other student elected by the SGA.
5. One administrator: appointed by the College President.

7. Five (5) voting members are required before a vote can be taken. The decision of the Grievance Committee shall be by majority vote. Within ten (10) school days, the Grievance Committee shall submit its findings of facts and recommendations to the Vice President for Learning and Student Services. This will serve as the final decision. The Vice President for Learning and Students Services will make the student aware (in writing) within ten (10)days the decision of the Grievance Committee.
8. If the Grievant is not satisfied with the decision of the Grievance Committee, he/she may appeal the decision to the President. The appeal must be made to the President in writing within ten working days. The President will review all procedures and meet with the student.
9. The President will render a decision within ten working days. In all cases, the President's decision shall serve as the final governing authority of the College.

Equal Opportunity/Affirmative Action Institution

McDowell Technical Community College is an Equal Opportunity/Affirmative Action Institution in complicance with all policies on non-discrimination. The College has an Affirmative Action Plan. The Affirmative Action Officer for McDowell Technical Community College is the VP for Finance and Administration. The contact number is (828) 652-0627.

Code of Student Conduct

Proper Conduct

The College has a responsibility to ensure students an optimum opportunity for learning. That responsibility includes providing a healthful and safe environment, protecting property and records, and supporting the laws of the community, state and nation. In order to maintain an appropriate environment for study and learning, the College expects students to conduct themselves as mature, responsible adults.

Dismissal for Improper Conduct

Personal conduct that detracts from the educational process will not be tolerated. The College reserves the right to dismiss any student who disrupts the learning environment.

Social Media Guidelines

The purpose of McDowell Technical Community College (MTCC) social networking sites such as Facebook, Twitter, and YouTube is to support the College's mission, programs, services, and events by offering news and information to the students, faculty, staff, and friends of MTCC. Social media sites are valuable as they provide a method for disseminating information. These procedures are also subject to the addition of other forms of social media. MTCC encourages feedback and comments from prospective students, current students, alumni, faculty, staff, and members of the community. MTCC remains committed to maintaining these sites as safe and family-friendly forums for sharing information.

Guidelines are provided in order to protect the College's reputation and image. The establishment of guidelines ensures information follows the same high standards as printed and web publications.

In an effort to maintain a positive environment for MTCC website visitors, MTCC reserves the right to remove or block posts, users, or any content from official college-sponsored pages.

MTCC expects users to comply with the social website's terms of service.

- Facebook Statement of Rights and Responsibilities
- Instagram Terms of Service
- Twitter Terms of Service
- YouTube Terms of Service
- WordPress Terms of Service

Social Media Guidelines for Students

Online behavior that violates the college's Student Code of Conduct (pg. 71) or the Appropriate Use of Computing Resources Policy which is brought to the attention of the Vice President of Learning and Student Services, will be treated as any other violation of the Student Code of Conduct.

The following types of content are prohibited from the MTCC social networking sites:

1. Derogatory language or demeaning statements about or threats to any third party;
2. Lewd, indecent, or incriminating images or information depicting hazing, sexual harassment, vandalism, stalking, underage drinking, illegal drug use, or any other inappropriate behavior or inappropriate language;
3. Content that violates local, state or federal law;
4. Online gambling;
5. Content that harasses any third party or personal attacks of any kind;
6. Selling goods or services for personal financial profit;
7. Comments or posts that are unrelated to MTCC;
8. Spam;
9. Infringement on copyrights or trademarks; and/or
10. Offensive comments that target or disparage any ethnic, racial, religious, or other group of people.

If you have questions or concerns about a post or comment, the Director of External Relations. If a sanctioned student club or organization wishes to create a social media web page, the faculty advisor must follow the procedures outlined under Social Media Guidelines for Employees in the MTCC policy and procedure manual.

Note: Refer to Individual Program handbook for potentially more stringent policy and consequences.

Sexual Misconduct, Dating Violence, Domestic Violence and Stalking Policy

McDowell Technical Community College provides and is committed to maintaining programs, activities, and an educational and work environment founded on civility and respect, where no one is unlawfully excluded from participation in, denied the benefits of, or subjected to discrimination in any College program or activity on the basis of sex.

Sexual Misconduct, dating violence, domestic violence, and stalking are forms of sex discrimination that may deny or limit an individual's ability to participate in or benefit from College programs or activities and thus are inconsistent with the values and standards of the College community; incompatible with the safe, healthy environment that the College community expects and deserves; and will not be tolerated.

It is the policy of the College to provide educational, preventive, and training programs regarding sexual misconduct, dating violence, domestic violence, and stalking; encourage reporting of these behaviors; take appropriate action to prevent incidents from denying or limiting an individual's ability to participate in or benefit from the College's programs; make available timely services for those who have been affected; and provide prompt and equitable methods of investigation and resolution to stop discrimination, remedy any harm, and prevent its recurrence.

The College is committed to fostering a community that promotes timely and fair resolution of sexual misconduct, dating violence, domestic violence, and stalking allegations. To that end, the College has appointed a Title IX Coordinator to oversee the investigation and resolution of such allegations and has adopted investigation and resolution procedures. Any allegation of sexual misconduct, dating violence, domestic violence, or stalking involving any member of the College community, occurring on College property, and/or occurring off of College property (if the conduct giving rise to the allegation is related to the College's programs or activities) will be investigated by the College's Title IX Coordinator pursuant to the appropriate procedures.

The Title IX Coordinator is Ryan Garrison, Vice-President of Finance, who can be reached at 828-652-0627.

Policy on Publications- Classroom use of equipment/materials/supplies

McDowell Technical Community College strives to maintain up-to-date computers, printers, supplies and materials to be utilized by instructors and students.

MTCC's equipment, including computers, printers, laboratory equipment, shop equipment, and supplies and materials are to be used for curriculum-coursework projects only.

Any equipment/materials/supplies utilized by students or staff for personal use or for monetary gain are prohibited.

Any work produced must have the approval of the instructor and/or administration to be displayed within any area on campus.

Any student observed not following the above regulations may be subject to suspension or dismissal from the College for the semester or longer.

Dress Code Policy for Students

The following expectations for student dress have been established and approved by the McDowell Technical Community College Administration and the McDowell Technical Community College Board of Trustees.

The following dress code shall be observed by all McDowell Technical Community College students:

1. Any clothing or accessory that is deemed offensive causing a distraction and hampering the learning environment is prohibited.
2. Clothing and accessories must be appropriate to the classroom/lab setting to provide a safe learning environment.
3. Footwear is required and must be safe and appropriate for classroom/lab activities.
4. Jewelry and accessories that are safety hazards or could be used as weapons are prohibited.

The President, Vice President of Learning and Student Services, Dean of Health Sciences or Dean of Curriculum may allow exceptions to the dress code only on special occasions, such as Student Government activities. Further dress requirements may be prescribed by the above persons for certain classes, such as physical education, vocational, and health science classes.

Violations of the dress code procedures and regulations shall result in disciplinary action as follows:

1st violation: Verbal warning by instructor. Instructor will document the offense and forward a referral to the appropriate Dean and Vice President for Learning and Student Services for the record.

2nd violation: After speaking with the student and the situation cannot be resolved, the instructor will present an official letter stating concerns and suggested actions to the Dean of Curriculum or Dean of Health Science, the Vice President for Learning and Student Services and the President

3rd violation: Administration will investigate the situation. Depending on the results of the investigation, the student will be subject to suspension and/or dismissal from the college for the duration of the semester or longer.

Basis for Suspension or Expulsion; Types of Inappropriate Conduct

Expulsion, suspension from the College or a lesser sanction may result from the commission of any of the following offenses:

1. Academic Dishonesty (Plagiarism) - Students will not give or receive help during tests; will not submit papers or reports (that are supposed to be original work) which are not entirely their own; and will not cite source materials improperly. Sanctions will include receipt of a failing grade in applicable coursework and disciplinary probation for a first offense. The instructor of the course in which the infraction occurred, or the Dean of Curriculum Programs or the Dean of Health Sciences will deal with this offense.
2. Willfully representing the College or a student organization without that group's permission or representing improperly the identity of any other individual member of the campus community.
3. Violation of the terms of disciplinary probation or of any College regulation during the period of probation.
4. Lewd or indecent conduct, including public physical and/or verbal actions and distribution of obscene or libelous written materials.
5. Possession, distribution or use of alcoholic beverages/controlled substances or being in a state of intoxication on the College campus or during a college-sponsored activity.
6. Possession, use or distribution of any narcotic drugs, amphetamines, barbiturates or similar agents except as expressly permitted by law. ("Narcotic" and "dangerous drugs" are as defined by agencies of the State of North Carolina and/or the United States Government.) Any influence which may be attributed to the use of drugs or alcoholic beverages shall not in any way limit the responsibility of the individual for the consequences of his/her actions.
7. Gambling on the college campus.
8. Theft from, misuse of or damage to College property; theft of or damage to property of a member of the College community or a campus visitor, whether on College premises or at a College function. Unauthorized entry upon the property of the College, including entry after closing hours, unauthorized use of a key or entry into a restricted area, is forbidden.
9. Mental or physical abuse (hazing) of any person on College premises, or at College sponsored or supervised functions; conduct which threatens or endangers the health or safety of any such persons.
10. Forgery, alteration or misuse of College documents, records or instruments of identification with intent to deceive.
11. Intentional obstruction or disruption of teaching, research, administration, disciplinary proceedings or other College activities, including public service functions and other duly authorized activities on College premises.
12. Occupation or seizure in any manner of College property, a College facility or any portion thereof for a use inconsistent with prescribed, customary or authorized use; preventing, obstructing or substantially interfering with the use of a facility or a portion thereof by those persons to whom the space is assigned.
13. Participating in or conducting an assembly, demonstration or gathering in a manner which threatens or causes injury to persons or property; which interferes with free access of College facilities; which is harmful, obstructive or disruptive to the educational process or institutional functions of the College; or remaining at the scene of such an assembly after being asked to leave by a representative of Student Services, the Business Office, Educational Programs Office, or the President's Office.
14. Possession or use of a firearm, incendiary device or explosive, except in connection with a College approved activity. This also includes unauthorized use of any instrument designed to inflict serious bodily injury to any person.
15. Setting off a fire alarm or using or tampering with any fire- safety equipment, except with reasonable belief in the need for such alarm or equipment.
16. Failure to comply with instructions of College officials acting in performance of their duties.
17. McDowell Technical Community College is a tobacco-free campus.We no longer have designated smoking areas and smoking is not permitted on campus. Students who violate this policy will receive a verbal warning by College staff for their first offense. Continued use of tobacco products after this warning is considered a violation of this policy and ap-

propriate disciplinary action will be taken.

18. The presence of animals on campus is forbidden, except in the case of seeing-eye dogs.
19. Violation of a local, state or federal criminal law on College premises which adversely affects the College community's pursuit of its proper educational purposes.

Levels of Discipline and Appeal: Policy and Procedure

Members of the instructional staff of the College are empowered to impose upon students those sanctions within his or her jurisdiction or to recommend to appropriate administrators sanctions of a greater nature. The following disciplinary actions are authorized for use by faculty and administrators of the College:

1. Oral warning.
2. Written warning.
3. Restriction, in writing, specifying the deprivation of privilege or other terms of restriction.
4. Disciplinary probation, the conditions of which are expressed in writing, with an acknowledgment of notice signed by the individual placed on probation.
5. Oral suspension and immediate exclusion from specific institution facilities or from all institution facilities for a period not to exceed three school days unless superseded by suspension with written notice stating cause.
6. Suspension with written notice stating cause and specifying any conditions or terms of the suspension. Suspension with written notice shall be exercised only by the President, or in his absence, by his designated representative. The length of suspension will be identified in any written notice provided to the student.
7. Expulsion or dismissal for cause. This disciplinary action shall be taken only with approval of the Board of Trustees by formal resolution of motion adopted. Prior thereto, the individual shall be in a status of suspension with written notice stating cause. The Board of Trustees shall notify the individual, who shall be offered a full and fair hearing before the Board of Trustees or an impartial panel constituting a quorum of the Board, and shall have the right to be represented by counsel for defense, to bring witnesses for his defense, to confront, examine and cross-examine the witnesses against him, and to be provided at least five days before such hearing with a detailed statement of the charges against him and copies of documents which may be presented as evidence against him. A record of hearing proceedings shall be kept.

Student Records: Confidentiality and Release

McDowell Technical Community College recognizes the importance of exercising responsibility in the maintenance and security of all student records. In order to meet that responsibility and the requirements of the Family Education Rights and Privacy Act of 1974, as enacted by Congress, the College makes the following information known:

I. Types of educational records and information which directly relate to students and which are maintained by the College, such as:
   - A. Permanent Student Files: Transcripts of work at other institutions, health forms or records, recommendation letters, placement test profiles, application and residency forms.
   - B. Transcripts: Academic record of all courses taken while enrolled at the College.
   - C. Student Financial Aid Records.

II. The official responsible for the maintenance of each type of record, the persons who have access to those records and the purpose for which they have access:
   - A. The VP for Learning and Student Services is the individual responsible for the maintenance of student files and transcripts.
   - B. The permanent clerical staff in the Student Services Office have access to the files for maintenance purposes.
   - C. The Student Services counselors have access to the files for the purpose of academic advisement.
   - D. Other authorized College personnel have access whenever the nature of their responsibility requires access to student records or information contained therein.
   - E. Only Financial Aid Staff may access student financial aid records.

III. The policy of the College for reviewing, maintaining, transcribing and expunging records:
   - A. As a matter of policy, the institution destroys all student records except the official transcript five (5) years after the student leaves the College.
   - B. Parents and legal guardians of independent students 18 years of age or older do not have the right to view student records, grades, test scores, etc. unless written consent of the student is received. Parents of dependent students as defined in section 152 of the Internal Revenue Code of 1954 may review student records without the written consent of the student.

C. Requests for student transcripts will be honored for students with no outstanding debt to the College.
D. Student's records and/or official transcript will be forwarded only upon the written request of the student.
E. Whenever it is requested that grades or records of students be released to faculty or to any agency, written permission must be obtained from the student except as outlined in II preceding. Forms are available in the Student Services Office for this purpose.
F. Unless otherwise requested by the student, instructors may post final exam and end of course grades provided a numerical code is used.

IV. The procedures established by the College providing access to student records:
A. Upon receipt of a written request from the student, the VP for Learning and Student Services shall within 45 days:
1. Allow the student to inspect and review the permanent file and transcript.
2. Provide the student with copies of the material, if the student so desires.
3. Interpret the records to the student.
4. Allow the student to challenge, in writing, the content of the files. Upon receipt of the challenge, the VP for Learning and Student Services shall conduct a hearing at which time any materials found to be inappropriate or misleading will be corrected. Students shall also have the opportunity to insert into their files any written explanations they deem appropriate.

B. McDowell Technical Community College considers the following "Directory Information," and will release such information unless the student notifies the VP for Learning and Student Services in writing during the first three class days of each semester:
1. Name.
2. Program of study.
3. Dates of attendance.
4. Degrees and awards received.

Student Activities

Student Government Association

On February 5, 1981, the Board of Trustees of McDowell Technical Community College approved granting the existing Student Advisory Council full status as a Student Government Association. The duties and responsibilities of the SGA are to serve in an advisory capacity to the President, Administration and Faculty on matters pertaining to student interest and welfare. Participation in SGA is an important way for students to have input into decision-making at the college. The MTCC Student Government Association actively participates in and supports the state student government organization known as N4CSGA. The academic, educational, career and social needs and concerns of the students at MTCC are addressed and given due consideration through this association both at the local level and state level. The president of the SGA serves as an ex-officio member of the Board of Trustees of MTCC.

Any curriculum student who is attending at least half-time and has at least a 2.0 GPA is eligible to be a voting member of the SGA. Non-SGA members who wish to have input into college decisions or address issues which are of concern to themselves or others should contact an SGA member or the SGA Advisor to express those concerns. To request a time to speak before members of the Student Government Association, a student should contact the SGA advisor or an SGA officer to schedule time on the SGA meeting agenda. The SGA advisor can provide additional information about how to become an SGA member, more complete information about SGA activities, or a list of SGA members and officers. The staff member from Student Services who is designated as SGA advisor acts only to guide and represent staff and administrative viewpoints.

The Student Government Association sponsors various events, including Spring Fling, Summer Splash and Fall Festival. All curriculum students are invited to participate free of charge; these activities are paid for through student activity fees at the beginning of each semester. Students may bring a guest to these events for a nominal charge. This charge covers food for the event.

Occasionally, the Student Government Association will sponsor dances or other events. Announcements of these events will be posted or presented in class. A nominal fee may be charged for guests at these events.

Students who wish to form a new club or organization on campus must seek official recognition through the Student Government Association.

Phi Theta Kappa National Honor Society-Beta Zeta Lambda Chapter

A chapter of the Phi Theta Kappa Honor Society was organized at McDowell Tech in 1998. The purpose of Phi Theta Kappa is to recognize and encourage scholarship among associate degree students. To achieve this purpose, Phi Theta Kappa provides opportunities for the development of leadership and service, for an intellectual climate to exchange ideas and ideals, for lively fellowship for scholars, and for stimulation of interest in continuing academic excellence. The Society is recognized by the American Association of Community Colleges as the official general honor society for two-year colleges.

Each fall and spring semester, the Beta Zeta Lambda chapter may extend an invitation to MTCC students who have been recommended by their advisors and have completed at least 12 credit hours of course work required for an associate degree and who have a GPA of 3.5 or higher.

National Technical Honor Society

McDowell Technical Community College faculty and staff organized a chapter of the National Technical Honor Society during the 2000-2001 academic year. NTHS, as it is abbreviated, began in 1984 to reward excellence in workforce education. It is an internationally recognized and proven program with over 1,500 member schools and colleges. Student membership in NTHS is available to those who seek to uphold critical workplace values and high levels of achievement. Once yearly, NTHS may extend an invitation to MTCC students who have completed at least 9 credit hours of course work required for their program of study, have achieved a GPA of at least 3.25, and have been recommended by their faculty advisor.

Student Publications

McDowell Technical Community College recognizes the value of providing opportunities for students and faculty to engage in journalistic endeavors. Under the auspices of the MTCC administration and Student Government Association, manuals, newspapers and other periodicals may be published as sufficient student interest develops.

Who's Who

McDowell Technical Community College participates in *Who's Who Among Students in Universities and Colleges*. Outstanding students are nominated by faculty members.

North Carolina Community College Student Leadership Institute

McDowell Technical Community College participates in Student Leadership Institute. Outstanding students are nominated by faculty/staff members.

Continuing Education

McDowell Technical Community College, through the Department of Continuing Education, offers life-long learning opportunities to any adult, regardless of his/her educational background. A wide variety of programs are offered to provide opportunities for individuals to develop to their fullest potential whatever vocational, intellectual or cultural talents they wish.

Courses are designed to provide educational opportunities to prepare individuals for entry into an occupation, to retrain or upgrade the skills of those who are already employed, or to provide cultural and general interest courses for self-improvement. These non-curriculum classes may vary in length.

Continuing Education courses may be organized on or off campus, day or night, based upon the interest shown by the community, the availability of competent instructors, and the limitations of available equipment, space, and funds.

Admission Requirements

In general, all Continuing Education courses are open for enrollment to persons 18 years of age or older, or to those whose high school graduating class has graduated. However, because some specialty and advanced courses may be more difficult and require a greater degree of preparation, potential enrollees should be aware of the nature of the course requirements to determine their possible success in those courses. In certain specialized courses, ie:

Advanced Technology Training
Apprenticeship Training
Fire Services Training
Law Enforcement Training
Management Development Training
New & Expanding Industrial Training

potential students must be employed by or recommended by one of the requesting training agencies.

Course Descriptions/Schedules

Specific course descriptions are provided in course schedules or may be furnished upon request. A course schedule is published each semester. Brochures are placed in appropriate areas throughout the county and courses may be advertised in local newspapers or on local radio stations.

Registration and Fees

Adults should notify the College by phone, letter or personal visit to pre-register for each class. Official registration will be held on a designated pre-registration day or will be on the first class meeting. Registration fees for occupational, practical skills, avocational, and academic courses range from $70-180 per course, depending on course length. Self-supporting class fees will vary, depending on the course. Registration fees for community service classes range from $15-180 per course, depending on course length.

Registration fees for Continuing Education courses are set by the N.C. Legislature, and are subject to change. Fees are non-refundable, except when the class fails to materialize. An extra charge may be necessary in some courses for books, materials, and class supplies. Books and supplies may be purchased in the College Bookstore.

Class Locations

A number of Continuing Education classes are held on campus. Classes are conducted throughout McDowell County wherever a suitable meeting place can be arranged. Classes are organized in any community whenever a sufficient number of prospective class members indicate an interest.

Attendance

A minimum enrollment of 8 persons is needed to conduct a class. Adults are expected to attend class regularly. Insufficient enrollment may result in cancellation of the class.

Certificates

College credit is not granted for completion of courses in the Department of Continuing Education. However, certificates are awarded to students who successfully complete course requirements in classes which carry CEU credits. Licenses, diplomas, or other forms of recognition are awarded by certain agencies outside the College upon successful completion of specially designed courses. Certificates will not be released to students who have any outstanding debts to the college.

Continuing Education Units (CEU)

The Continuing Education Department will award Continuing Education Units (CEU's) for the successful completion of appropriate courses. The CEU was designed to recognize and record individual and institutional participation in non-traditional studies and special activities. The CEU is a recognized recording method for substantive non-credit learning experiences. A CEU is defined as "10 hours of participation in an organized Continuing Education experience under responsible sponsorship and qualified instruction or direction."

Programs Offered in Continuing Education

General Adult and Community Services

The College is always concerned with identifying community potentials and community needs, drawing together resources at the College and other agencies to create new educational opportunities. Programs afford the opportunity for individuals to gain personal satisfaction through self-advancement. This includes opportunities to grow intellectually, to develop creative skills or talent, to learn hobby or leisure time activities, and to gain civic and cultural awareness. The general types of programs offered are:

Academic Courses
Personal Business Education
Citizenship Development Courses
Homemaking Education
Family Life Programs
Consumer Education
Health and Safety Education
Language Arts Education
Creative Arts Education
Music/Dance Education

Occupational and Continuing Education Programs

The college offers a number of Occupational and Continuing Education Services, including Teleconference Workshops, Computer Training, and a variety of specialized programs designed to enhance an individual's employability, to help him or her learn a new career, to establish a pattern of growth and stability in business and industry, and to help individuals stay abreast of trends in their chosen field. These programs may be subdivided as follows:

Small Business Center

McDowell Technical Community College's Small Business Center (SBC) began operations on September 6, 1988. The center was established to provide McDowell County with its first comprehensive small business development and assistance program.

The mission of the SBC is to train, counsel, develop and provide needed services for small businesses and their owners. As part of its provision of services, the SBC will attempt:

- To operate as an information service on small business issues and concerns.
- To coordinate the referral of small business owners/managers to acquire legal sources for in-depth assistance, counseling and financial assistance.
- To assist in the preparation of business plans, loan packages and research projects related to small business growth and operation.
- To provide limited tax and accounting services for sole proprietorship and partnership businesses.
- To seek out information and assist in loan package preparation involving Federal and State financing programs for small business owners.
- To deliver one-on-one business counseling.
- To assist small business owners with marketing and management problems.
- To offer seminars/workshops on timely topics of interest to the small business owner.
- To offer a resource library of books and videos to be checked out by clients at no charge.

Customized Training Program

The Customized Training Program supports the economic efforts of the State by providing education and training opportunities for eligible businesses and industries. Amended in 2008, this program combines the New and Expanding Industry Training Program and the Customized Industry Training Program to more effectively respond to business and industry. The Customized Industry Training Program also includes the former Focused Industry Training Program and shall offer programs and training services to assist new and existing business and industry to remain productive, profitable, and within the State.

The purpose of the Customized Training Program is to provide customized training assistance in support of full-time production and direct customer service positions created in the State of North Carolina, thereby enhancing the growth potential of companies located in the state while simultaneously preparing North Carolina's workforce with the skills essential to successful employment in emerging industries.

Occupational Industry Training

McDowell Technical Community College conducts in-plant courses to assist manufacturing, service and/or governmental organizations with in-service training of their employees. In-plant training is defined as an occupational extension course that meets the following conditions:

1) Training shall occur in the facilities or at the sites in which the organization normally operates.
2) Enrollment shall be limited to the employees of the organization in which the training occurs; trainees may be newly-hired employees who need entry level skills or existing employees who, due to documented changes in job content, need up-grading or retraining.
3) Training may partially be conducted at the employee's assigned work station during normal working hours.
4) Training shall be directly related to job skills.

Examples of types of training offered to industry include: Statistical Process Control, Total Quality Management, Industrial Sewing, Weaving, Mold Line Training, Forklift Licensure, Blueprint Reading, Measuring Instruments, Metric System, Mathematics, Hydraulics and Pneumatics, Maintenance Mechanics, Industrial Safety, Fire Brigade Training, Upholstery, Technical Writing, Communication Skills, Furniture Making, Furniture Framing, Fixer Training, etc.

Companies officials who desire this type of training for their employees should contact MTCC for more information.

Management Development Training

MTCC offers several different training options concerning Management Development. The college has certified instructors available in areas such as: McGraw-Hill Supervision Training, Zenger Miller Management Training, Deming Quality Control Training and the latest innovations in Total Quality Management.

Apprenticeship Training

If a system of "learning by doing" under the guidance of "master craftsmen" has endured for over 4,000 years, the system undoubtedly contains basic qualitative factors for our contemporary society. These factors should be identified clearly and implemented properly where such training is needed.

North Carolina is requiring increasingly greater numbers of highly trained men and women to keep pace with our rapidly changing economy. New demands on the abilities and experience of workers, who need wider training because of changing methods, materials and technology, call for a new look into educational methods. Apprenticeship is an effective means for a young person to develop formal skills. As such, it makes a major contribution to our state's economic growth.

McDowell Technical Community College can help train an employed apprentice by making available necessary courses, instructors and classrooms for supplemental related instruction.

The main objective for the Apprenticeship Program is to combine 4,000 to 8,000 hours of on-the-job training with a program of formal related instruction through MTCC. The major objective of the related instruction is to teach an apprentice that part of the technical related information pertaining to his/her trade which can best be taught in the classroom. Other objectives include: development of an ability to apply technical related information to his or her trade, evolvement of proper attitudes and human relations, and adjustment to social problems encountered in the world of work. The North Carolina Apprentice Council and Department of Labor have mandated that related training will be required of every apprentice.

MTCC has some equivalent courses in the curriculum program that may offer the apprentice an opportunity to acquire an Associate Degree at the same time they are completing the Apprenticeship Program.

Emergency Services Training

Fire Service Training

MTCC provides a wide range of fire training opportunities to meet the continuing education training needs of area firefighters. The College offers all course and training requirements to obtain Firefighter Certification, Instructor Certification, Hazardous Material Awareness Level and Hazardous Material Operational Level. The College also holds an Annual Fire, Rescue and EMS College. In total, the College offers over 150 courses annually in virtually every area of Fire Training.

Rescue Training

MTCC provides a wide range of training opportunities to meet the continuing education training requirements of Rescue Personnel. The college offers Technical Rescue (TR) Certification for area rescue personnel. The Annual Fire and Rescue College also provides courses in areas such as Vehicle Extrication, Search Procedures, Man-Tracking, Hazardous Materials, etc.

Emergency Medical Services Training

MTCC provides a wide range of training opportunities to meet the needs of area Emergency Medical Personnel. The college provides continuing education training as well as inservice training opportunities weekly to meet local need. Advanced training opportunities are also offered including: Basic Cardiac Life Support, Advanced Cardiac Life Support, Pediatric Advanced Life Support, and Vehicle Operator Training. The College offers the following levels of Emergency Services Training: EMT Basic, Advanced EMT and Paramedic. In addition to these programs, the college offers over 100 courses annually in the areas of CPR Certification, First Aid Certification, CPR Recertification and Communicable Disease Training to help local government and industry leaders meet OSHA requirements.

Law Enforcement Training

MTCC provides a number of training opportunities to local Law Enforcement personnel. Training classes are provided to city, county and Department of Corrections officers to meet continuing education needs. The college currently offers training opportunities in the following areas: Firearms Recertification, Breathalizer Training, Unarmed Self-Defense Training, Basic Law Enforcement Training (see Curriculum Program description) and Specialized Training.

College and Career Readiness (CCR) Programs

College and Career Readiness programs are provided for students with low basic education skills in writing, reading, math, computer literacy, and communication. Students who receive these services include low-skilled adults, individuals with disabilities, family literacy program participants, youth, ex-offenders, and English language acquisition students. Goals may include completing adult high school, or obtaining a high school diploma or its recognized equivalent, and/or earning employment related credentials necessary for post-secondary education or employment success. Coursework is based on The NCCCS College and Career Readiness Standards for Adult Education by the Office of Career, Technical, and Adult Education (OCTAE).

Transitions programs and services using adult education career pathways and other platforms are also provided, and are aligned with adult education content standards, postsecondary education completion goals, college entry readiness, life skills, and employment instruction and training. They include academic instruction, non-academic services, and support for students to ensure student success and transition to postsecondary career and employment options. Transitions programs may also include integrating career awareness, bridge instruction, transitions academies, and computer skills. Current career occupation pathways based on projected Region C Workforce Development employment trends include: Advanced Manufacturing, Health Sciences, and other pathways such as, Nursing Assistant, Early Childhood Education, Computer Information Technology; Welding Technology; and others.

A student may register at any scheduled orientation held at NC Works, Marion throughout the semester and attend the class which is most convenient to their schedule. All classes are fee-waived and texts are provided for in-class use in the following CCR programs:

Adult Basic Education (ABE)

Adult Basic Education is a program of instruction designed for adults who function below the high school level. Instruction is offered in reading, writing, math, and English.

Adult Secondary Education (ASE)

Adult Secondary Education is a program of instruction (9.0 grade level and above or the equivalent) designed to prepare adults for further education or transition toward skill obtainment and employment. Adult Secondary Education includes the Adult High School (AHS) Diploma program and the High School Equivalency (HSE) Diploma program.

Adult High School (AHS)

The Adult High School Diploma program consists of classroom instruction, learning laboratory courses, distance education, or a combination of instructional methods which deliver the course objectives required to earn an Adult High School Diploma. The AHS Diploma Program is offered cooperatively with the local public school system to help adults earn an Adult High School Diploma. Diplomas are issued cooperatively by the community college and the local public school system. Official transcripts are maintained and issued by MTCC.

Required Credits - Colleges must offer at least the minimum number of credits required for graduation by the North Carolina Department of Public Instruction http://www.dpi.state.nc.us/docs/curriculum/home/graduationrequirements.pdf (link is external). Electives are selected from a variety of program offerings and structured so that students develop a range of skills which qualify them to succeed in the labor market or to enter technical, voca-

tional, or college transfer programs. There is no cost to students for courses. However, a minimal graduation fee may be required.

High School Equivalency (HSE)
The High School Equivalency Diploma program offers instruction to assist learners in preparing to successfully pass a designated high school equivalency test. This test is designed to document knowledge and skills equivalent to that of a graduating high school senior. A high school equivalency diploma is issued from the North Carolina State Board of Community Colleges upon successful completion of the complete battery of tests.

English Language Acquisition (ELA)

Integrated English literacy and Civics Education (IEL/CE)
Integrated English literacy and civics education is education services provided to English language learners who are adults, including professionals with degrees and credentials in their native countries, that enables such adults to achieve competency in the English language and acquire the basic and more advanced skills needed to function effectively as parents, workers, and citizens in the United States. Services include instruction in literacy and English language acquisition and instruction on the rights and responsibilities of citizenship and civic participation, and may include workforce training. Students may register at any ELA class.

All classes are offered at a variety of times and locations. For more information, contact the Director of College and Career Readiness at 828-652-0657 or check the current list of classes at www.mcdowelltech.edu. Those interested in attending an orientation can sign-up by callkng 828-659-6001.

Human Resources Development (HRD)

The purpose of the Human Resources Development (HRD) program is to educate and train individuals for success in the workplace. The HRD program focuses on the development of basic workplace skills by providing short-term employability skills training to unemployed and underemployed adults. Typical groups targeted for HRD training include, but are not limited to the following: unemployed insurance claimants, NC Works customers, public assistance recipients, dislocated workers, out-of-school youth, individuals in career/job transition, and probationers.

All classes in the HRD program are offered at no cost to unemployed individuals seeking employment and underemployed individuals who are working and meet special income guidelines. If you are not in either category, the usual occupational extension fee will apply. Classes are offered at the NC Works Career Center and scheduled on a continuous basis throughout the year to meet the needs of the students who enroll. For more information, call the HRD office at 659-6001, ext. 140.

HRD Employability Keyboarding
Gain basic knowledege of the keyboard to facilitate transition into advanced keyboarding, introductory computer or office technology classes. Explore careers and understand the importance of keyboarding/data entry skills in employment.

HRD Career Planning and Assessment
Find out about you, search for the ideal career, and get in touch with the resources to reach your goal.

HRD Career Readiness Certificate (CRC) Prep
Earn a North Carolina Career Readiness Certificate based on the ACT WorkKeys system. It is a portable credential recognized nationally, that shows employers your skill level in Applied Math, Reading for Information, and Locating Information. Prove to employers you have the skills to do the job by earning a bronze, silver or gold certificate.

HRD Manufacturing Certification
Gain a basic knowledge of advanced manufacturing practices and concepts and earn specific certifications in: OSHA Safety, First Aid/CPR and Career Readiness (see Career Readiness Certificate above). Students will take tours of manufacturing plants in the area, meet with selected employers and complete job interviews, depending on manufacturer availability. Apprenticeship and On-the-job Training opportunities will be explored.

HRD Resume/Interviewing/Internet Job Search
Professionally prepare for the job you want! Utilize resume development techniques to complete a professional resume; prepare for your interview; become familiar with application procedures; and do Internet job searches to assist you in locating and obtaining employment.

HRD Success By Choice
Develop a healthy self-esteem and positive attitude to ensure a happy life and a successful career. Establish goals and explore career opportunities.

HRD Basic Technology Literacy
Make the transition into technology training easy by gaining an awareness of the role of technology in the workplace. Develop basic computer use skills, compile employment-related documents, research careers, and understand the impact of social networking on employment.

Attention!

Youth: Ages 16-21

Have you dropped out of high school?
Are you thinking about obtaining a GED?
Is attending college one of your goals?
Are you looking for work but lack experience?
Are you ready to make plans for your future?

YES ????

We can help you !!!

Call Jimmy Hensley at NC Works Career Center at the Ford Miller Employment and Training Center to find out if you qualify for the WIOA Youth Program: 659-6001, ext. 140.

The Workforce Investment Act is an equal opportunity employer

NC Works Career Center at
The Ford Miller Employment and Training Center

Career Planning, Training & Placement Services

SERVICES

-**Adult High School (AHS) Diploma**
-Career Assessment/Testing
- Career Counseling
-Career Exploration/Research
-Career /Job Related Fax & Copy Services
-Career Pathway Certificate/Diploma Courses
- Career Readiness Certificate (CRC)
- Computer Software Tutorials
- Education & Training Information/Access
- English Language Acquisition (ELA)
- **High School Equivalency (HSE) Diploma**
- Internet Job Search
-Interview/Job Search Preparation
-Job Listings/Job Referrals
-Labor Market Information
-Needs & Service Referral
-Resume Preparation
-WorkKeys®Preparation (Key Train)
-WorkKeys®Testing

SHORT-TERM JOB READINESS CLASSES

*Classes are offered at **no cost** if you are unemployed, have been notified of a layoff, or are working and meet special income guidelines.*

"Manufacturing Certification" "Resume & Interviewing"
"Computer Literacy" "Microsoft Digital Literacy"
"Internet Job Search/ NCWorks Orientation"

PARTNERING AGENCIES

-Division of Workforce Solutions
-McDowell Technical Community College
-Workforce Innovations & Opportunity Act (WIOA Adult and Youth Program)
-McDowell County Dept. of Social Services (DSS)
-Vocation Rehabilitation (VR)
-Community Action Opportunities (Life Works)
-McDowell Access To Care & Health (Match Program)
-Senior Community Service Employment Program (Title V)

LOCATION & HOURS

NC Works Career Center at
The Ford Miller Employment and Training Center
316 Baldwin Avenue, Suite 2, Marion, NC 28752
Phone: 828-659-6001 / Fax: 828-659-8733
Monday – Thursday * 8:30 am—5:00 pm
Friday * 8:30 am—12 noon

Technical and Vocational Programs

Please refer to the following lists when selecting electives in Humanities/Fine Arts and Social/Behavioral Sciences in all academic programs except College Transfer and General Education.

Humanities/Fine Arts

Select one of the following:

ART	111	Art Appreciation	3	0	3
DRA	111	Theatre Appreciation	3	0	3
DRA	126	Storytelling	3	0	3
HUM	122	Southern Culture	2	2	3
MUS	110	Music Appreciation	3	0	3
MUS	210	History of Rock Music	3	0	3
PHI	210	History of Philosophy	3	0	3
REL	110	World Religion	3	0	3
REL	211	Intro to Old Testament	3	0	3
REL	212	Intro to New Testament	3	0	3

Social/Behavioral Science

Select one of the following:

ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
POL	120	American Government	3	0	3
POL	130	State and Local Government	3	0	3
PSY	150	General Psychology	3	0	3
SOC	210	Introduction to Sociology	3	0	3
SOC	213	Sociology of the Family	3	0	3
SOC	220	Social Problems	3	0	3

Academic Programs

Accounting

A25100 (Associate Degree) C25100AAB, C25100PAC, C25100ITP

This 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.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Title			Class/Lab/Credit		
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
II. Major Courses					
A. Core					
Required Courses					
ACC	120	Principles of Financial Accounting	3	2	4
ACC	121	Principles of Managerial Accounting	3	2	4
ACC	129	Individual Income Tax	2	2	3
ACC	220	Intermediate Accounting I	3	2	4
BUS	115	Business Law I	3	0	3
CIS	110	Introduction to Computers	2	2	3
ECO	252	Principles of Macroeconomics	3	0	3
B. Other Major Courses (Must be selected from identified prefixes)					
(A student must take 30 shc from the following, not to exceed 9 shc in any other prefix except ACC.					
ACC	130	Business Income Taxes	2	2	3
ACC	140	Payroll Accounting	1	2	2
ACC	150	Accounting Software Applications	1	2	2
ACC	180	Practices in Bookkeeping	3	0	3
ACC	221	Intermediate Accounting II	3	2	4
ACC	227	Practices in Accounting	3	0	3
ACC	240	Gov & Not-For-Profit Acct	3	0	3
BUS	110	Introduction to Business	3	0	3
BUS	137	Principles of Management	3	0	3
BUS	230	Small Business Management	3	0	3
WBL	111	Work-Based Learning I	0	10	2
WBL	211	Work-Based Learning IV	0	10	1
CTS	130	Spreadsheet I	2	2	3

DBA	110	Database Concepts	2	3	3
OST	122	Office Computations	2	2	3
OST	136	Word Processing	2	2	3
OST	153	Office Finance Solutions	2	2	3
OST	286	Professional Development	3	0	3

III. Other Required Courses

ACA	115	Success and Study Skills	0	2	1

Total Credits: 70

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
CIS	110	Introduction to Computers	2	2	3
ENG	111	Writing and Inquiry	2	2	3
OST	122	Office Computations	2	2	3

First Year-Spring

ACC	121	Principles of Managerial Accounting	3	2	4
ACC	140	Payroll Accounting	1	2	2
ACC	180	Practices of Bookkeeping	3	0	3
BUS	115	Business Law I	3	0	3
CTS	130	Spreadsheet I	2	2	3

First Year-Summer

DBA	110	Database Concepts and Applications	2	2	3
MAT	143	Quantitative Literacy	2	2	3
Business Elective-See other major courses list			3	0	3
Other Major Courses-Pick List					

Second Year-Fall

ACC	129	Individual Income Tax	2	2	3
ACC	220	Intermediate Accounting	3	2	4
OST	136	Word Processing	2	2	3
Social Science Elective-See list on pg. 75			3	0	3
		*Recommend Microeconomics			
Other Major Courses-Pick List					

Second Year-Spring

ACC	150	Accounting Software Applications	1	2	2
ACC	227	Practices in Accounting	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
OST	153	Office Finance Solutions	2	2	3
Accounting Elective- See other major courses list					

Second Year-Summer

COM	231	Public Speaking	3	0	3
Humanities Elective-See list of required courses			3	0	3

Accounts Payable, Accounts Receivable, Bookkeeping Certificate Program (C25100A)

Title			Class/Lab/Credit		
I. Major Courses					
ACC	120	Principles of Financial Accounting	3	2	4
ACC	121	Principles of Managerial Accounting	3	2	4
CIS	110	Introduction to Computers	2	2	3
II. Other Major Courses					
ACC	180	Practices in Bookkeeping	3	0	3
OST	153	Office Finance Solutions	2	2	3

Total Credits: 17

Recommended Semester Schedule

First Year-Fall					
ACC	120	Principles of Financial Accounting	3	2	4
CIS	110	Introduction to Computers	2	2	3
First Year-Spring					
ACC	121	Principles of Managerial Accounting	3	2	4
ACC	180	Practices in Bookkeeping	3	0	3
OST	153	Office Finance Solutions	2	2	3

Total Credits: 17

Payroll Accounting Clerk Certificate Program (C25100C)

Title			Class/Lab/Credit		
I. Major Courses					
ACC	120	Principles of Financial Accounting	3	2	4
ACC	121	Principles of Managerial Accounting	3	2	4
CIS	110	Introduction to Computers	2	2	3
II. Other Major Courses					
ACC	140	Payroll Accounting	1	2	2
OST	153	Office Finance Solutions	2	2	3

Total Credits: 16

Recommended Semester Schedule

First Year-Fall					
ACC	120	Principles of Financial Accounting	3	2	4
CIS	110	Introduction to Computers	2	2	3
First Year-Spring					
ACC	121	Principles of Managerial Accounting	3	2	4
ACC	140	Payroll Accounting	1	2	2
OST	153	Office Finance Solutions	2	2	3

Total Credits: 16

Income Tax Preparer
Certificate Program (C25100B)

Title			Class	Lab	Credit
I. Major Courses					
ACC	120	Principles of Financial Accounting	3	2	4
ACC	121	Principles of Managerial Accounting	3	2	4
ACC	129	Individual Income Tax	2	2	3
II. Other Major Courses					
ACC	130	Business Income Taxes	2	2	3
BUS	110	Introduction to Business	3	0	3

Total Credits: 17

Recommended Semester Schedule

First Year-Fall					
ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
ACC	129	Individual Income Tax	2	2	3
First Year-Spring					
ACC	121	Principles of Managerial Accounting	3	2	4
ACC	130	Business Income Taxes	2	2	3

Total Credits: 17

Advertising and Graphic Design

A30100 (Associate Degree)
D30100 (Diploma-Evening) C30100 (Certificate-Evening)

This curriculum is designed to provide students with knowledge and skills necessary for employment in the graphic design profession which emphasizes design, advertising, illustration, and digital and multimedia preparation of printed and electronic promotional materials.

Students will be trained in the development of concept and design for promotional materials such as newspaper and magazine advertisements, posters, folders, letterheads, corporate symbols, brochures, booklets, preparation of art for printing, lettering and typography, photography, and electronic media.

Graduates should qualify for employment opportunities with graphic design studios, advertising agencies, printing companies, department stores, a wide variety of manufacturing industries, newspapers, and business with in-house graphics operations.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

This curriculum was designed to be entered in the fall of each year. Some classes may not be offered every semester.

Title			Class/Lab/Credit		
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
ART	111	Art Appreciation **Recommended	3	0	3
PSY	150	General Psychology **Recommended	3	0	3
II. Major Courses					
A. Core					
Required Courses					
GRD	110	Typography I	2	2	3
GRD	280	Portfolio Design	2	4	4
Required Subject Areas					
ART	121	Two-Dimensional Design	0	6	3
GRD	121	Drawing Fundamentals I	1	3	2
GRD	131	Illustration I	1	3	2
GRD	141	Graphic Design I	2	4	4
GRD	142	Graphic Design II	2	4	4
GRD	151	Computer Design Basics	1	4	3
GRD	152	Computer Design Techniques I	1	4	3
B. Other Major Courses					
Take 19 credits:					
ART	171	Computer Art I	0	6	3
ART	275	Introduction to Graphic Design	0	6	3
GRD	113	History of Graphic Design	3	0	3
GRD	160	Photo Fundamentals I	1	4	3
GRD	241	Graphic Design III	2	4	4
GRD	263	Illustrative Imaging	1	4	3

Take 3 credits:

WBL	111	Work-Based Learning I	0	10	1
WEB	111	Introduction to Web Graphics	2	2	3
WEB	115	Web Markup and Scripting	2	2	3
WEB	120	Intro. to Internet Multimedia	2	2	3
WEB	140	Web Development Tools	2	2	3
WEB	179	JAVA Web Programming	2	3	3
WEB	210	Web Design	2	2	3
WEB	214	Social Media	2	2	3
WEB	287	Web E-Portfolio	1	2	2

III. Other Required Courses

ACA	115	Success and Study Skills	0	2	1

Total Credits: 66

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
ART	121	Two-Dimensional Design	0	6	3
ART	275	Introduction to Graphic Design	0	6	3
ENG	111	Writing and Inquiry	3	0	3
GRD	121	Drawing Fundamentals I	1	3	2
GRD	151	Computer Design Basics	1	4	3

First Year-Spring

ART	171	Computer Art I	0	6	3
COM	231	Public Speaking	3	0	3
GRD	110	Typography	2	2	3
GRD	131	Illustration I	1	3	2
GRD	141	Graphic Design I	2	4	4

First Year-Summer

GRD	160	Photo Phundamentals I	1	4	3

Second Year-Fall

GRD	113	History of Graphic Design	3	0	3
GRD	142	Graphic Design II	2	4	4
GRD	263	Illustrative Imaging	1	4	3
MAT	143	Quantitative Literacy	2	2	3

Second Year-Spring

ART	111	Art Appreciation ** Recommended	3	0	3
GRD	152	Computer Design Techniques	1	4	3
GRD	241	Graphic Design III	2	4	4
PSY	150	General Psychology **Recommended	3	0	3
Major Elective-See list of courses					

Second Year-Summer

GRD	280	Portfolio Design	2	4	4

Diploma Program (D30100)

Title			Class	Lab	Credit
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
II. Major Courses					
Core					
GRD	110	Typography I	2	2	3
GRD	280	Portfolio Design	2	4	4
Required Subject Areas					
ART	121	Two-Dimensional Design	0	6	3
GRD	121	Drawing Fundamentals I	1	3	2
GRD	131	Illustration I	1	3	2
GRD	141	Graphic Design I	2	4	4
GRD	142	Graphic Design II	2	4	4
GRD	151	Computer Design Basics	1	4	3
GRD	152	Computer Design Techniques I	1	4	3
III. Other Major Courses					
ART	171	Computer Art I	0	6	3
ART	275	Introduction to Graphic Design	0	6	3
IV. Other Required Courses					
ACA	115	Success and Study Skills	0	2	1
Total Credits: 41					

Recommended Semester Schedule

First Year-Fall					
ACA	115	Success and Study Skills	0	2	1
ART	121	Two-Dimensional Design	0	6	3
ART	275	Introduction to Graphic Design	0	6	3
ENG	111	Writing and Inquiry	3	0	3
GRD	121	Drawing Fundamentals I	1	3	2
GRD	151	Computer Design Basics	1	4	3
First Year-Spring					
ART	171	Computer Art I	0	6	3
COM	231	Public Speaking	3	0	3
GRD	110	Typography I	2	2	3
GRD	131	Illustration I	1	3	2
GRD	141	Graphic Design I	2	4	4
Second Year-Fall					
GRD	142	Graphic Design II	2	4	4
Second Year-Spring					
GRD	152	Computer Design Techniques	1	4	3
Second Year-Summer					
GRD	280	Portfolio Design	2	4	4

Certificate Program (C30100)

Title			Class	Lab	Credit
I. Major Courses					
ART	121	Two-Dimensional Design	0	6	3
GRD	141	Graphic Design I	2	4	4
GRD	151	Computer Design Basics	1	4	3
II. Other Major Courses					
ART	171	Computer Art I	0	6	3
ART	275	Introduction to Graphic Design	0	6	3

Total Credits: 16

Recommended Semester Schedule

First Year-Fall					
ART	121	Two-Dimensional Design	0	6	3
ART	275	Introduction to Graphic Design	0	6	3
GRD	151	Computer Design Basics	1	4	3
First Year-Spring					
ART	171	Computer Art I	0	6	3
GRD	141	Graphic Design I	2	4	4

Total Credits: 16

Air Conditioning, Heating and Refrigeration Technology

D35100 **(Diploma)**

This 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.

Diploma graduates should be able to assist in the start up, preventive maintenance, service, repair and/or installation of residential and light commercial systems.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Diploma Program

Title			Class	Lab	Credit
I. General Education Courses					
ENG	101	Applied Communications I	3	0	3
MAT	110	Mathematical Measurement and Literacy	2	2	3
II. Major Courses					
AHR	110	Introduction to Refrigeration	2	6	5
AHR	112	Heating Technology	2	4	4
AHR	113	Comfort Cooling	2	4	4
AHR	114	Heat Pump Technology	2	4	4
ELC	111	Introduction to Electricity	2	2	3
III. Other Major Courses (Must be selected from identified prefixes)					
AHR	130	HVAC Controls	2	2	3
AHR	160	Refrigerant Certification	1	0	1
AHR	210	Residential Building Code	1	2	2
AHR	211	Residential System Design	2	2	3
BPR	135	Schematics and Diagrams	2	0	2
CIS	113	Computer Basics	0	2	1
IV. Other Required Courses					
ACA	115	Success and Study Skills	0	2	1

Total Credits: 39

Recommended Semester Schedule

First Year-Fall					
AHR	110	Introduction to Refrigeration	2	6	5
ELC	111	Introduction to Electricity	2	2	3
ACA	115	Success and Study Skills	0	2	1
First Year-Spring					
AHR	112	Heating Technology	2	4	4
AHR	130	HVAC Controls	2	2	3
BPR	135	Schematics and Diagrams	2	0	2
ENG	101	Applied Communications	3	0	3

First Year-Summer

AHR	113	Comfort Cooling	2	4	4
AHR	211	Residential System Design	2	2	3
CIS	113	Computer Basics	0	2	1
MAT	110	Mathematical Measurement and Literacy	2	2	3

Second Year-Fall

AHR	114	Heat Pump Technology	2	4	4
AHR	210	Residential Building Code	1	2	2
AHR	160	Refrigerant Certification	1	0	1

Basic Law Enforcement Training

C55120 (Certificate)

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 examinations 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.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

**Enrollment in this program may be limited. Special admissions procedures may apply. Contact the BLET Coordinator for additional information.*
***McDowell Technical Community College students may also take a limited number of classes on the MTCC campus to apply toward a degree in Criminal Justice through Western Piedmont Community College. Contact Western Piedmont for additional information and requirements.*

Title			Class	Lab	Credit
I. Major Courses					
CJC	100	Basic Law Enforcement Tng	9	30	19
Total Credits: 19					

Business Administration

A25120B (Associate Degree)

This 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.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Title			Class	Lab	Credit
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
II. Major Courses					
ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
BUS	115	Business Law I	3	0	3
BUS	137	Principles of Management	3	0	3
CIS	110	Introduction to Computers	2	2	3
ECO	251	Principles of Microeconomics	3	0	3
MKT	120	Principles of Marketing	3	0	3
III. Concentration					
BUS	125	Personal Finance	3	0	3
BUS	153	Human Resources Management	3	0	3
BUS	225	Business Finance	2	2	3
BUS	147	Business Insurance	3	0	3
IV. Other Major Courses (Take 21 credits from this list. Must be selected from identified prefixes)					
ACC	121	Principles of Managerial Accounting	3	2	4
BUS	230	Small Business Management	3	0	3
BUS	280	REAL Small Business	4	0	4
CTS	130	Spreadsheet	2	2	3
DBA	110	Database Concepts	2	3	3
ECO	252	Principles of Macroeconomics	3	0	3
MKT	123	Fundamentals of Selling	3	0	3
OST	131	Keyboarding	1	2	2
OST	136	Word Processing	2	2	3
OST	236	Adv. Word/Information Processing	2	2	3
OST	286	Professional Development	3	0	3

WBL	111	Work-Based Learning I	0	10	1

V. Other Required Courses

ACA	115	Success and Study Skills	0	2	1

Total Credits: 71

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
CIS	110	Introduction to Computers	2	2	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3

First Year-Spring

ACC	121	Principles of Managerial Accounting	3	2	4
BUS	115	Business Law	3	0	3
CTS	130	Spreadsheet	3	2	3
MKT	120	Principles of Marketing	3	0	3
Humanites/Social Sciences Elective-See list on page 75			3	0	3

First Year-Summer

BUS	147	Business Insurance	3	0	3
BUS	230	Small Business Management	3	0	3

Second Year-Fall

BUS	125	Personal Finance	3	0	3
BUS	137	Principles of Management	3	0	3
BUS	225	Business Finance	2	2	3
ECO	251	Principles of Microeconomics	3	0	3
MKT	123	Fundamentals of Selling	3	0	3

Second Year-Spring

BUS	153	Human Resource Management	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
OST	286	Professional Development	3	0	3
OST	136	Word Processing	1	2	2
Humanities/Social Sciences Elective-See list on page 75			3	0	3

Second Year-Summer

COM	231	Public Speaking	3	0	3

Business Administration

Concentration: Marketing & Retailing

A25120M (Associate Degree)

Marketing and Retailing is a concentration under the curriculum title of Business Administration. This curriculum is designed to provide students with fundamental skills in marketing and retailing.

Course work includes: marketing, retailing, merchandising, selling, advertising, computer technology and management.

Graduates should qualify for marketing positions within organizations and employment in retailing services and product businesses.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Title			Class	Lab	Credit
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on Page75.					
II. Major Courses					
ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
BUS	115	Business Law I	3	0	3
BUS	137	Principles of Management	3	0	3
CIS	110	Introduction to Computers	2	2	3
ECO	251	Principles of Microeconomics	3	0	3
MKT	120	Principles of Marketing	3	0	3
III. Concentration					
MKT	123	Fundamentals of Selling	3	0	3
MKT	220	Advertising & Sales Promotion	3	0	3
MKT	225	Market Research	3	0	3
MKT	227	Marketing Applications	3	0	3
MKT	232	Social Media Marketing	3	2	4
IV. Other Major Courses					
Take 16 credits from this list:)					
ACC	121	Principles of Managerial Accounting	3	2	4
BUS	280	REAL Small Business	4	0	4
WBL	111	Co-Op Experience	0	10	1
CTS	130	Spreadsheet I	2	2	3
DBA	110	Database Concepts	2	3	3
ECO	252	Principles of Macroeconomics	3	0	3
MKT	121	Retailing	3	0	3
MKT	224	International Marketing	3	0	3
MKT	230	Public Relations	3	0	3
OST	131	Keyboarding	1	2	2
OST	136	Word Processing	2	2	3
OST	286	Professional Development	3	0	3

V. Other Required Courses

ACA	115	Success and Study Skills	0	2	1

Total Credits: 70

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
CIS	110	Introduction to Computers	2	2	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3

First Year-Spring

ACC	121	Principles of Managerial Accounting	3	2	4
BUS	115	Business Law	3	0	3
CTS	130	Spreadsheet I	3	2	3
MKT	120	Principles of Marketing	3	0	3
Humanites/Social Sciences Elective-See list on page 75			3	0	3

First Year-Summer

COM	231	Public Speaking	3	0	3
MKT	220	Advertising & Sales Promotion	3	0	3

Second Year-Fall

ECO	251	Principles of Microeconomics	3	0	3
BUS	137	Principles of Management	3	0	3
MKT	123	Fundamentals of Selling	3	0	3
MKT	122	Visual Merchandising	3	0	3
MKT	121	Retailing	3	0	3

Second Year-Spring

ECO	252	Principles of Macroeconomics	3	0	3
OST	136	Word Processing	1	2	2
MKT	224	International Marketing	3	0	3
MKT	225	Market Research	3	0	3
Humanities/Social Sciences Elective-See list on page 75			3	0	3

Second Year-Summer

MKT	227	Marketing Applications	3	0	3
OST	286	Professional Development	3	0	3

Business Administration

Concentration: Operations Management

A25120O(Associate Degree)

Operations Management is a concentration under the curriculum title of Business Administration. This curriculum is designed to educate individuals in the technical and managerial aspects of operations for manufacturing and service industries.

Emphasized are analytical reasoning, problem solving and continuous improvement concepts required in today's dynamic business and industry environments. Concepts include quality, productivity, organizational effectiveness, financial analysis and the management of human, physical and information resources.

Graduates should qualify for leadership positions or enhance their professional skills in supervision, team leadership, operations planning, quality assurance, manufacturing and service management, logistics/distribution, health and safety, human resources management and inventory/materials management.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Title			Class	Lab	Credit
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
II. Major Courses					
ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introducation to Business	3	0	3
BUS	115	Business Law I	3	0	3
BUS	137	Principles of Management	3	0	3
CIS	110	Introduction to Computers	2	2	3
ECO	251	Principles of Microeconomics	3	0	3
MKT	120	Principles of Marketing	3	0	3
III. Concentration					
ISC	121	Environmental Health & Safety	3	0	3
ISC	130	Introduction to Quality Control	3	0	3
ISC	210	Operation & Production Planning	3	0	3
OMT	112	Materials Management	3	0	3
OMT	260	Issues in Operations Management	3	0	3
IV. Other Major Courses (Take 12 credits from this list.)					
BUS	135	Principles of Supervision	3	0	3
BUS	153	Human Resource Management	3	0	3
BUS	225	Business Finance	2	2	3
BUS	240	Business Ethics	3	0	3
OST	131	Keyboarding	1	2	2
OST	136	Word Processing	2	2	3
OST	286	Professional Development	3	0	3
WBL	111	Work-Based Learning I	0	10	1

V. Other Required Courses

ACA	115	Success and Study Skills	0	2	1

Total Credits: 65

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
ACC	120	Principles of Financial Accounting	3	2	4
CIS	110	Introduction to Computers	2	2	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
BUS	110	Introduction to Business	3	0	3

First Year-Spring

BUS	115	Business Law	3	0	3
ISC	130	Introduction to Quality Control	3	0	3
MKT	120	Principles of Marketing	3	0	3
OMT	112	Materials Management	3	0	3
Humanites Elective-See list on page 75			3	0	3

First Year-Summer

ISC	121	Environmental Health & Safety	3	0	3
OST	131	Keyboarding	1	2	2
or					
OST	136	Word Processing	2	2	3

Second Year-Fall

BUS	137	Principles of Management	3	0	3
BUS	225	Business Finance	3	0	3
BUS	240	Business Ethics	3	0	3
ECO	251	Principles of Microeconomics	3	0	3

Second Year-Spring

BUS	135	Principles of Supervision	3	0	3
BUS	153	Human Resources Management	3	0	3
ISC	210	Operations and Production Planning	3	0	3
PSY	150	General Psychology	3	0	3

Second Year-Summer

COM	231	Public Speaking	3	0	3
OMT	260	Issues in Operations Management	3	0	3

Certificate Program (C25120O)

Title			Class/Lab/Credit		

I. Major Courses

BUS	137	Principles of Management	3	0	3
CIS	110	Introduction to Computers	2	2	3
ECO	251	Principles of Microeconomics	3	0	3

III. Concentration

ISC	121	Environmental Health & Safety	3	0	3
ISC	130	Introduction to Quality Control	3	0	3
ISC	210	Operation & Production Planning	3	0	3

Total Credits: 18

Carpentry

D35180 (Diploma) C35180 (Certificate)

This Carpentry curriculum is designed to train students to construct structures using standard building materials and hand and power tools. Carpentry skills and a general knowledge of residential construction will also be taught.

Course work includes: footings and foundations, framing, interior and exterior trim, cabinetry, blueprint reading, residential planning and estimating and other related topics. Students will develop skills through hands-on participation.

Graduates should qualify for employment in the residential building construction field as rough carpenters, framing carpenters, roofers, maintenance carpenters and other related job titles.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Title			Class/Lab/Credit		
I. General Education Courses					
ENG	101	Applied Communications I	3	0	3
MAT	110	Mathematical Measurements and Literacy	2	2	3
II. Major Requirements					
BPR	130	Blueprint Reading	3	0	3
CAR	111	Carpentry I	3	15	8
III. Other Major Requirements					
Take 13 credits from:					
CAR	110	Introduction to Carpentry	2	0	2
CAR	112	Carpentry II	3	15	8
WBL	111	Work-Based Learning	0	10	1
DFT	111	Technical Drafting I	1	3	2
ISC	110	Workplace Safety	1	0	1
Take 6 credits from:					
CAR	113	Carpentry III	3	9	6
CAR	150	Concrete Construction	2	9	5
CIS	110	Introducation to Computers	2	2	3
CIS	113	Computer Basics	0	2	1
IV. Other Required Courses					
ACA	115	Success and Study Skills	0	2	1

Total Credits: 37

Recommended Semester Schedule

First Year-Fall					
ACA	115	Success and Study Skills	0	2	1
CAR	110	Introduction to Carpentry	2	0	2
CAR	111	Carpentry I	3	15	8
CIS	113	Computer Basics	0	2	1
ISC	110	Workplace Safety	1	0	1
*MAT	110	Mathematical Measurement and Literacy	2	2	3

First Year-Spring

BPR	130	Blueprint Reading	3	0	3
CAR	112	Carpentry II	3	15	8
CAR	150	Concrete Construction	2	9	5

First Year-Summer

DFT	111	Technical Drafting I	1	3	2
ENG	101	Applied Communications I	3	0	3

Second Year-Fall

CAR	113	Carpentry III	3	9	6

Certificate Program (C35180)

Title			Class/Lab/Credit		
I. Major Courses					
CAR	111	Carpentry I	3	15	8
III. Other Major Courses					
CAR	110	Introduction to Carpentry	2	0	2
CAR	112	Carpentry II	3	15	8

Total Credits: 18

Recommended Semester Schedule

First Year-Fall

CAR	110	Introduction to Carpentry	2	0	2
CAR	111	Carpentry I	3	15	8

First Year-Spring

CAR	112	Carpentry II	3	15	8

Total Credits: 18

College Transfer - Associate In Arts Program

A10100 (Associate Degree)

This program is designed for students who intend to transfer to a four-year college or university. The student may complete course work equivalent to the first two years of study required for a bachelor's degree. Unless otherwise indicated, classes in this program satisfy the articulation agreement with colleges in the University of North Carolina System and are eligible for transfer to four-year degree programs, provided all other requirements for transfer are satisfied.

The curriculum in the College Transfer/Liberal Arts program is designed to meet students needs. It includes courses in English, humanities/fine arts, foreign languages, mathematics, science, social sciences, and physical education.

The Associate in Arts degree (A.A.) is awarded upon completion of program requirements. Graduates usually transfer to a senior insitution with junior year status. Follow up studies show that community college transfer students are generally successful in their studies at senior institutions.

***The Placement Test is required for all courses listed.**

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Title			Class/Lab/Credit		
I. General Education Requirements. 45 shc required					
English Composition (6 semester hours)					
ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3
Humanities/Communications (9 semester hours)					
Take 2 groups					
COM	231	Public Speaking	3	0	3
Select two courses from the following:					
ART	111	Art Appreciation	3	0	3
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
MUS	110	Music Appreciation	3	0	3
Social/Behavioral Sciences (9 semester hours)					
Select one history course:					
HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
Take 2 additional courses from the following:					
ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
POL	120	American Government	3	0	3
PSY	150	General Psychology	3	0	3
SOC	210	Introduction to Sociology	3	0	3

Natural Science and Math (8 semester hours)

Select one science course:

BIO	111	General Biology I	3	3	4
CHM	151	General Chemistry I	3	3	4

Select one math courses:

MAT	143	Quantitative Literacy	2	2	3
MAT`	152	Statistical Methods	3	2	4
MAT	171	Precalculus Algebra	3	2	4

II. Additional General Education

Take 3 groups

Take 3 credits:

CIS	110	Introduction to Computers	3	0	3

Take 3 credits:

MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods I	3	2	4
MAT	171	Pre-Calculus Algebra	3	2	4
MAT	172	Pre-Calculus Trigonometry	3	2	4
MAT	271	Calculus I	3	2	4

Take 8 credits

ART	111	Art Appreciation	3	0	3
AST	151	General Astronomy I	3	0	3
AST	151A	General Astronomy I Lab	0	2	1
AST	152	General Astronomy II	3	0	3
AST	152A	General Astronomy II Lab	0	2	1
BIO	111	General Biology I	3	3	4
BIO	112	General Biology II	3	3	4
CHM	131	Introduction to Chemistry	3	0	3
CHM	131A	Introduction to Chemistry Lab	0	3	1
CHM	132	Organic and Biochemistry	3	3	4
CHM	151	General Chemistry I	3	3	4
CHM	152	General Chemistry II	3	3	4
CIS	115	Intro. to Prog. & Logic	3	0	3
COM	110	Introduction to Communications	3	0	3
COM	120	Introduction to Interpersonal Communication	3	0	3
DRA	111	Theatre Appreciation	3	0	3
DRA	126	Storytelling	3	0	3
ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
ENG	114	Prof. Research and Reporting	3	0	3
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
FRE	111	Elementary French I	3	0	3
FRE	112	Elementary French II	3	0	3
HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
HUM	110	Technology and Society	3	0	3
HUM	115	Critical Thinking	3	0	3
HUM	120	Cultural Studies	3	0	3
HUM	122	Southern Culture	3	0	3
MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods I	3	2	4

MAT	171	Precalculus Algebra	3	0	3
MAT	172	Precalculus Trigonometry	3	0	3
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4
MAT	273	Calculus III	3	2	4
MUS	110	Music Appreciation	3	0	3
MUS	210	History of Rock Music	3	0	3
PHI	210	History of Philosophy	3	0	3
PHI	240	Intro. to Ethics	3	0	3
PHY	110	Conceptual Physics	3	0	3
PHY	110A	Conceptual Physics Lab	0	2	1
PHY	151	College Physics I	3	2	4
PHY	152	College Physics II	3	2	4
PHY	251	General Physics I	3	3	4
PHY	252	General Physics II	3	3	4
POL	120	American Government	3	0	3
POL	210	Comparative Government	3	0	3
PSY	150	General Psychology	3	0	3
PSY	239	Psychology of Personality	3	0	3
PSY	241	Developmental Psychology	3	0	3
PSY	281	Abnormal Psychology	3	0	3
REL	110	World Religions	3	0	3
REL	211	Intro. to Old Testament	3	0	3
REL	212	Intro. to New Testament	3	0	3
SOC	210	Intro. to Sociology	3	0	3
SOC	213	Sociology of the Family	3	0	3
SOC	220	Social Problems	3	0	3
SPA	111	Elementary Spanish I	3	0	3
SPA	112	Elementary Spanish II	3	0	3
SPA	211	Intermediate Spanish I	3	0	3
SPA	212	Intermediate Spanish II	3	0	3

III. Other Requirements (15 semester hours)

Local MTCC Requirements (3 semester hours)

ACA	122	College Transfer Success	1	0	1
PED	110	Fit and Well for Life	1	2	2

Take 12 credits:

ACC	120	Principles of Financial Accounting I	3	2	4
ACC	121	Principles of Financial Accounting II	3	2	4
ART	111	Art Appreciation	3	0	3
ART	121	Two-Dimensional Design	0	6	3
ART	171	Computer Art I	0	6	3
ART	275	Introduction to Graphic Design	0	6	3
AST	151	General Astronomy I	3	0	3
AST	151A	General Astronomy I Lab	0	2	1
AST	152	General Astronomy II	3	0	3
AST	152A	General Astronomy II Lab	0	2	1
BIO	111	General Biology I	3	3	4
BIO	112	General Biology II	3	3	4
BIO	155	Nutrition	3	0	3
BIO	163	Basic Anatomy and Physiology	4	2	5
BIO	168	Anatomy and Physiology I	3	3	4
BIO	169	Anatomy and Physiology II	3	3	4
BIO	175	General Microbiology	2	2	3
BIO	275	Microbiology	3	3	4

BUS	110	Introduction to Business	3	0	3
BUS	115	Business Law	3	0	3
BUS	137	Principles of Management	3	0	3
CHM	131	Introduction to Chemistry	3	0	3
CHM	131A	Introduction to Chemistry Lab	0	3	1
CHM	132	Organic and Biochemistry	3	3	4
CHM	151	General Chemistry I	3	3	4
CHM	152	General Chemistry II	3	3	4
CIS	110	Introduction to Computers	2	2	3
CIS	115	Introduction to Programming and Logic	2	3	3
COM	110	Introduction to Communication	3	0	3
COM	120	Introduction to Interpersonal Communication	3	0	3
CSC	134	C++ Programming	2	3	3
CSC	151	JAVA Programming	2	3	3
CTS	115	Info. Systems Business Concepts	3	0	3
DRA	111	Theatre Appreciation	3	0	3
DRA	126	Storytelling	3	0	3
ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
EGR	150	Introduction to Engineering	1	2	2
EGR	220	Engineering Statistics	3	0	3
ENG	114	Prof. Research & Reporting	3	0	3
ENG	125	Creative Writing I	3	0	3
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
ENG	271	Contemporary Literature	3	0	3
ENG	273	African-American Literature	3	0	3
FRE	111	Elementary French I	3	0	3
FRE	112	Elementary French II	3	0	3
HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
HUM	110	Technology & Society	3	0	3
HUM	115	Critical Thinking	3	0	3
HUM	120	Cultural Studies	3	0	3
HUM	122	Southern Culture	3	0	3
MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods I	3	2	4
MAT	171	Precalculus Algebra	3	0	3
MAT	172	Precalculus Trigonometry	3	0	3
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4
MAT	273	Calculus III	3	2	4
MAT	280	Linear Algebra	2	2	3
MAT	285	Differential Equations	2	2	3
MUS	110	Music Appreciation	3	0	3
MUS	210	History of Rock Music	3	0	3
PED	111	Physical Fitness I	0	3	1
PED	113	Aerobics I	0	3	1
PED	117	Weight Training I	0	3	1
PED	120	Walking For Fitness	0	3	1
PED	128	Golf-Beginning	0	2	1
PED	130	Tennis-Beginning	0	2	1

PED	139	Bowling-Beginning	0	2	1
PED	152	Swimming-Beginning	0	2	1
PED	155	Water Aerobics	0	2	1
PED	174	Wilderness Pursuits	0	2	1
PED	219	Disc Golf	0	2	1
PHI	210	History of Philosophy	3	0	3
PHI	240	Introduction to Ethics	3	0	3
PHY	110	Conceptual Physics	3	0	3
PHY	110A	Conceptual Physics Lab	0	2	1
PHY	151	College Physics I	3	2	4
PHY	152	College Physics II	3	2	4
PHY	251	General Physics I	3	3	4
PHY	252	General Physics II	3	3	4
POL	120	American Government	3	0	3
POL	130	State & Local Government	3	0	3
POL	210	Comparative Government	3	0	3
PSY	150	Intro. to Psychology	3	0	3
PSY	239	Psychology of Personality	3	0	3
PSY	241	Developmental Psychology	3	0	3
PSY	281	Abnormal Psychology	3	0	3
REL	110	World Religions	3	0	3
REL	211	Intro. to Old Testament	3	0	3
REL	212	Intro. to New Testament	3	0	3
SOC	210	Intro. to Sociology	3	0	3
SOC	213	Sociology of the Family	3	0	3
SOC	220	Social Problems	3	0	3
SOC	242	Sociology of Deviance	3	0	3
SPA	111	Elementary Spanish I	3	0	3
SPA	112	Elementary Spanish II	3	0	3
SPA	181	Spanish Lab I	0	2	1
SPA	182	Spanish Lab II	0	2	1
SPA	211	Intermediate Spanish I	3	0	3
SPA	212	Intermediate Spanish II	3	0	3
SPA	281	Spanish Lab III	0	2	1
SPA	282	Spanish Lab IV	0	2	1

Total Credits: 60-61

College Transfer - Associate In Science Program

(Associate Degree A10400)

This program is designed for students who intend to transfer to a four-year college or university. The student may complete course work equivalent to the first two years of study required for a bachelor's degree. Unless otherwise indicated, classes in this program satisfy the articulation agreement with colleges in the University of North Carolina System and are eligible for transfer to four-year degree programs, provided all other requirements for transfer are satisfied.

The Associate in Science degree (A.S.) is awarded upon completion of program requirements. Graduates usually transfer to a senior insitution with junior year status. Follow up studies show that community college transfer students are generally successful in their studies at senior institutions.

***The Placement Test is required for all courses listed.**

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Title			Class/Lab/Credit		
I. General Education Requirements.					
Natural Science					
Take 1 of 3 Groups					
Group 1					
Take 8 credits from:					
BIO	111	General Biology I	3	3	4
BIO	112	General Biology II	3	3	4
Group 2					
Take 8 credits from:					
CHM	151	General Chemistry I	3	3	4
CHM	152	General Chemistry II	3	3	4
Group 3					
Take 8 credits from:					
PHY	151	College Physics I	3	2	4
PHY	152	College Physics II	3	2	4
Math					
Take 6 credits from:					
MAT	171	Precalculus Algebra	3	0	3
MAT	172	Precalculus Trigonometry	3	0	3
MAT	263	Brief Calculus	3	2	4
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4
Required Courses (6 semester hours)					
ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3
Humanities/Communications (6 semester hours)					
COM	231	Public Speaking	3	0	3
Select one additional course from the following:					
ART	111	Art Appreciation	3	0	3

ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
MUS	110	Music Appreciation	3	0	3

Social/Behavioral Sciences (6 semester hours)

Select one history course:

HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3

Select one of the following:

ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
POL	120	American Government	3	0	3
PSY	150	General Psychology	3	0	3
SOC	210	Introduction to Sociology	3	0	3

II. Additional General Education (11 semester hours)

ART	111	Art Appreciation	3	0	3
AST	151	General Astronomy I	3	0	3
AST	151A	General Astronomy I Lab	0	2	1
AST	152	General Astronomy II	3	0	3
AST	152A	General Astronomy II Lab	0	2	1
BIO	111	General Biology I	3	3	4
BIO	112	General Biology II	3	3	4
CHM	131	Introduction to Chemistry	3	0	3
CHM	131A	Introduction to Chemistry Lab	0	3	1
CHM	132	Organic and Biochemistry	3	3	4
CHM	151	General Chemistry I	3	3	4
CHM	152	General Chemistry II	3	3	4
CIS	110	Intro. to Computers	2	2	3
CIS	115	Introduction to Prog. & Logic	2	3	3
COM	110	Introduction to Communications	3	0	3
COM	120	Intro. to Interpersonal Communications	3	0	3
DRA	111	Theatre Appreciation	3	0	3
DRA	126	Storytelling	3	0	3
ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
ENG	114	Prof. Research & Reporting	3	0	3
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
FRE	111	Elementary French I	3	0	3
FRE	112	Elementary French II	3	0	3
HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
HUM	110	Technology & Society	3	0	3
HUM	115	Critical Thinking	3	0	3
HUM	120	Cultural Studies	3	0	3
HUM	122	Southern Culture	3	0	3

MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods I	3	2	4
MAT	171	Precalculus Algebra	3	0	3
MAT	172	Precalculus Trigonometry	3	0	3
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4
MAT	273	Calculus III	3	2	4
MUS	110	Music Appreciation	3	0	3
MUS	210	History of Rock Music	3	0	3
PHI	210	History of Philosophy	3	0	3
PHI	240	Intro. to Ethics	3	0	3
PHY	110	Conceptual Physics	3	0	3
PHY	110A	Conceptual Physics Lab	0	2	1
PHY	151	College Physics I	3	2	4
PHY	152	College Physics II	3	2	4
PHY	251	General Physics I	3	3	4
PHY	252	General Physics II	3	3	4
POL	120	American Government	3	0	3
POL	210	Comparative Government	3	0	3
PSY	150	General Psychology	3	0	3
PSY	239	Psychology of Personality	3	0	3
PSY	241	Developmental Psychology	3	0	3
PSY	281	Abnormal Psychology	3	0	3
REL	110	World Religions	3	0	3
REL	211	Intro. to Old Testament	3	0	3
REL	212	Intro. to New Testament	3	0	3
SOC	210	Intro. to Sociology	3	0	3
SOC	213	Sociology of the Family	3	0	3
SOC	220	Social Problems	3	0	3
SPA	111	Elementary Spanish I	3	0	3
SPA	112	Elementary Spanish II	3	0	3
SPA	211	Intermediate Spanish I	3	0	3
SPA	212	Intermediate Spanish II	3	0	3

III. Other Requirements (15 semester hours)

Local MTCC Requirements (3 semester hours)

ACA	122	College Transfer Success	1	0	1
PED	110	Fit and Well for Life	1	2	2

Select 12 additional semester hours from the following list:

ACC	120	Principles of Financial Accounting I	3	2	4
ACC	121	Principles of Financial Accounting II	3	2	4
ART	121	Two-Dimensional Design	0	6	3
ART	171	Computer Art I	0	6	3
ART	275	Introduction to Graphic Design	0	6	3
AST	151	General Astronomy I	3	0	3
AST	151A	General Astronomy I Lab	0	2	1
AST	152	General Astronomy II	3	0	3
AST	152A	General Astronomy II Lab	0	2	1
ART	111	Art Appreciation	3	0	3
BIO	111	General Biology I	3	3	4
BIO	112	General Biology II	3	3	4
BIO	155	Nutrition	3	0	3
BIO	163	Basic Anatomy and Physiology	4	2	5
BIO	168	Anatomy and Physiology I	3	3	4
BIO	169	Anatomy and Physiology II	3	3	4

BIO	175	General Microbiology	2	2	4
BIO	275	Microbiology	3	3	4
BUS	110	Introduction to Business	3	0	3
BUS	115	Business Law I	3	0	3
BUS	137	Principles of Management	3	0	3
CHM	131	Introduction to Chemistry	3	0	3
CHM	131A	Introduction to Chemistry Lab	0	3	1
CHM	132	Organic and Biochemistry	3	3	4
CHM	151	General Chemistry I	3	3	4
CHM	152	General Chemistry II	3	3	4
CIS	110	Introduction to Computers	2	2	3
CIS	115	Introduction to Programming and Logic	2	3	3
COM	110	Introduction to Communications	3	0	3
COM	120	Introduction to Interpersonal Communication	3	0	3
COM	231	Public Speaking	3	0	3
CSC	134	C++ Programming	2	3	3
CSC	151	JAVA Programming	2	3	3
CTS	115	Info. Systems Business Concepts	3	0	3
DRA	111	Theatre Appreciation	3	0	3
DRA	126	Storytelling	3	0	3
ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
EGR	150	Intro. to Engineering	1	2	2
EGR	220	Engineering Statistics	1	2	2
ENG	114	Prof. Research & Reporting	3	0	3
ENG	125	Creative Writing	3	0	3
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
ENG	271	Contemporary Literature	3	0	3
ENG	273	African-American Literature	3	0	3
FRE	111	Elementary French I	3	0	3
FRE	112	Elementary French II	3	0	3
HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
HUM	110	Technology & Society	3	0	3
HUM	115	Critical Thinking	3	0	3
HUM	120	Cultural Studies	3	0	3
HUM	122	Southern Culture	3	0	3
MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods I	3	0	3
MAT	171	Precalculus Algebra	3	0	3
MAT	172	Precalculus Trigonometry	3	0	3
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4
MAT	273	Calculus III	3	2	4
MAT	280	Linear Algebra	2	2	3
MAT	285	Differential Equations	2	2	3
MUS	110	Music Appreciation	3	0	3
MUS	210	History of Rock Music	3	0	3
PED	111	Physical Fitness I	0	3	1
PED	113	Aerobics I	0	3	1
PED	117	Weight Training I	0	3	1

PED	120	Walking for Fitness	0	3	1
PED	128	Golf-Beginning	0	2	1
PED	130	Tennis-Beginning	0	2	1
PED	139	Bowling-Beginning	0	2	1
PED	152	Swimming-Beginning	0	2	1
PED	155	Water Aerobics	0	3	1
PED	174	Wilderness Pursuits	0	2	1
PED	219	Disc Golf	0	2	1
PHI	210	History of Philosophy	3	0	3
PHI	240	Intro. to Ethics	3	0	3
PHY	110	Conceptual Physics	3	0	3
PHY	110A	Conceptual Physics Lab	0	2	1
PHY	151	College Physics I	3	2	4
PHY	152	College Physics II	3	2	4
PHY	251	General Physics I	3	3	4
PHY	252	General Physics II	3	3	4
POL	120	American Government	3	0	3
POL	130	State & Local Government	3	0	3
POL	210	Comparative Government	3	0	3
PSY	150	Intro. to Psychology	3	0	3
PSY	239	Psychology of Personality	3	0	3
PSY	241	Developmental Psychology	3	0	3
PSY	281	Abnormal Psychology	3	0	3
REL	110	World Religions	3	0	3
REL	211	Intro. to Old Testament	3	0	3
REL	212	Intro. to New Testament	3	0	3
SOC	210	Intro. to Sociology	3	0	3
SOC	213	Sociology of the Family	3	0	3
SOC	220	Social Problems	3	0	3
SOC	242	Sociology of Deviance	3	0	3
SPA	111	Elementary Spanish I	3	0	3
SPA	112	Elementary Spanish II	3	0	3
SPA	181	Spanish Lab I	0	2	1
SPA	182	Spanish Lab II	0	2	1
SPA	211	Intermediate Spanish I	3	0	3
SPA	212	Intermediate Spanish II	3	0	3
SPA	281	Spanish Lab III	0	2	1
SPA	282	Spanish Lab IV	0	2	1

Total Credits: 60

Computer Integrated Machining

A50210 (Associate) D50210 (Diploma)

This curriculum prepares students with the analytical, creative and innovative skills necessary to take a production idea from an initial concept through design development and production, resulting in a finished product.

Coursework may include manual machining, computer applications, engineering design, computer-aided drafting (CAD), computer-aided machining (CAM), blueprint interpretation, advanced computerized numeric control (CNC) equipment, basic and advanced machining operations, precision measurement and high-speed multi-axis machining.

Graduates should qualify for employment as machining technicians in high-tech manufacturing, rapid-prototyping and rapid-manufacturing industries, specialty machine shops, fabrication industries, and high-tech or emerging industries such as aerospace, aviation, medical, and renewable energy and to sit for machining certification examinations.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Associate Degree Program

Title			Class	Lab	Credit
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	171	Pre-Calculus Algebra	3	2	4
Select one course each from page 75:					
Humanities/Fine Arts			3	0	3
Social and Behavioral Science			3	0	3
II. Major Courses					
BPR	111	Print Reading	1	2	2
MAC	121	Introduction to CNC	2	0	2
MAC	124	CNC Milling	1	3	2
MAC	122	CNC Turning	1	3	2
MAC	141	Machining Applications I	2	6	4
MAC	142	Machining Applications II	2	6	4
III. Other Major Requirements					
Take 33 credits					
BPR	121	Blueprint Reading Mechanics	1	2	2
CIS	110	Introduction to Computers	2	2	3
MAC	114	Introduction to Metrology	2	0	2
MAC	143	Machining Applications III	2	6	4
MAC	151	Machining Calculations	1	2	2
MAC	152	Advanced Machining Calculations	1	2	2
MAC	222	Advanced CNC Turning	1	3	2
MAC	224	Advanced CNC Milling	1	3	2
MAC	231	CNC Graphics Prog: Turning	1	4	3
MAC	232	CNC Graphics Prog: Milling	1	4	3
MAC	247	Production Tooling	2	0	2
MEC	142	Physical Metallurgy	1	2	2
PLA	110	Introduction to Plastics	2	0	2
WLD	112	Basic Welding Processes	1	3	2

IV. Other Required Courses

ACA	115	Study Skills	0	2	1

Total Credits: 66

Recommended Semester Schedule

First Year-Fall

BPR	111	Blueprint Reading	1	2	2
MAC	121	Introduction to CNC	1	3	2
MAC	141	Machining Applications I	2	6	4
MAC	151	Machining Calculations	1	2	2
MAC	247	Production Tooling	2	0	2

First Year-Spring

BPR	121	Blueprint Reading Mechanical	1	2	2
MAC	122	CNC Turning	1	3	2
MAC	124	CNC Milling	1	3	2
MAC	142	Machining Applications II	2	6	4
PLA	110	Introduction to Plastics	2	0	2

First Year-Summer

ACA	115	Study Skills	0	2	1
CIS	110	Introduction to Computers	2	2	3
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
Social/Behavioral Science Elective-see list on page 75			3	0	3

Second Year-Fall

MAC	222	Advanced CNC Turning	1	3	2
MAC	231	CNC Graphics Prog.: Turning	1	4	3
MAT	171	Pre-Calculus Algebra	3	2	4
MAC	143	Machining Applications III	2	6	4
MEC	142	Physical Metallurgy	1	2	2

Second Year-Spring

MAC	114	Introduction to Metrology	2	0	2
MAC	152	Advanced Machining Calculations	1	2	2
MAC	224	Advanced CNC Milling	1	3	2
MAC	232	CNC Graphics Prog.: Milling	1	4	3
WLD	112	Basic Welding Processes	1	3	2
Humanities/Fine Arts Elective- see list on page 75			3	0	3

Diploma Program (D50210)

Title			Class	Lab	Credit
I. General Education Courses					
ENG	101	Applied Communications	3	0	3
MAT	110	Mathematical Measurement and Literacy	2	2	3
I. Major Courses					
BPR	111	Print Reading	1	2	2
MAC	122	CNC Turning	1	3	2
MAC	124	CNC Milling	1	3	2
MAC	141	Machining Applications I	2	6	4
MAC	142	Machining Applications II	2	6	4
III. Other Major Requirements					
Take 15 credits					
BPR	121	Blueprint Reading Mechanics	1	2	2
CIS	110	Introduction to Computers	2	2	3
MAC	143	Machining Applications III	2	6	4
MAC	151	Machining Calculations	1	2	2
MEC	142	Physical Metallurgy	1	2	2
PLA	110	Introduction to Plastics	2	0	2
IV. Other Required Courses					
ACA	115	Success and Study Skills	0	2	1

Total Credits: 36

Recommended Semester Schedule

First Year-Fall					
BPR	111	Blueprint Reading	1	2	2
CIS	110	Introduction to Computers	2	2	3
MAC	122	CNC Turning	1	3	2
MAC	141	Machining Applications I	2	6	4
First Year-Spring					
BPR	121	Blueprint Reading Mechanical	1	2	2
MAC	124	CNC Milling	1	3	2
MAC	142	Machining Applications II	2	6	4
MAC	151	Machining Calculations	1	2	2
PLA	110	Introduction to Plastics	2	0	2
First Year-Summer					
ENG	101	Applied Communications	3	0	3
MAT	110	Mathematical Measurement and Literacy	2	2	3
Second Year-Fall					
MAC	143	Machining Applications III	2	6	4
MEC	142	Physical Metallurgy	1	2	2

Cosmetology

A55140 (Associate Degree) D55140 (Diploma)

This 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.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Although no certificate information is listed below, a student may receive a certificate for completing 1200 hours. For further information, see the Department Chair for Cosmetology.

Associate Degree Program

Title			Class	Lab	Credit
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
II. Major Courses					
COS	111	Cosmetology Concepts I	4	0	4
COS	112	Salon I	0	24	8
COS	113	Cosmetology Concepts II	4	0	4
COS	114	Salon II	0	24	8
COS	115	Cosmetology Concepts III	4	0	4
COS	116	Salon III	0	12	4
COS	117	Cosmetology Concepts IV	2	0	2
III. Other Major Courses					
COS	118	Salon IV	0	21	7
COS	224	Trichology Chemistry	1	3	2
COS	240	Contemporary Design	1	3	2
COS	250	Computerized Salon Operation	1	0	1
CTS	115	Information System Business Concepts	3	0	3
IV. Other Required Courses					
ACA	115	Success and Study Skills	0	2	1

Total Credits: 65

Recommended Semester Schedule

DAY AND NIGHT CLASS

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
COS	111	Cosmetology Concepts I	4	0	4

COS	112	Salon I	0	24	8
MAT	143	Quantitative Literacy	2	2	3

First Year-Spring

COS	113	Cosmetology Concepts II	4	0	4
COS	114	Salon II	0	24	8
ENG	111	Writing and Inquiry	3	0	3

First Year-Summer

COS	115	Cosmetology Concepts III	4	0	4
COS	116	Salon III	0	12	4
COS	250	Computerized Salon Operation	1	0	1
Humanities Elective-See list on page 75			3	0	3

Second Year-Fall

COS	117	Cosmetology Concepts IV	2	0	2
COS	118	Salon IV	0	21	7
COS	240	Contemporary Design	1	3	2
COS	224	Trichology Chemistry	1	3	2
Social Sciences Elective-See list on page 75			3	0	3

Second Year-Spring

COM	231	Public Speaking	3	0	3
CTS	115	Information Systems Business Concepts	3	0	3

Diploma Program (D55140)

Title			Class/Lab/Credit		
I. General Education Courses					
ENG	101	Applied Communications I	3	0	3
PSY	150	General Psychology	3	0	3
II. Major Courses					
COS	111	Cosmetology Concepts I	4	0	4
COS	112	Salon I	0	24	8
COS	113	Cosmetology Concepts II	4	0	4
COS	114	Salon II	0	24	8
COS	115	Cosmetology Concepts III	4	0	4
COS	116	Salon III	0	12	4
COS	117	Cosmetology Concepts IV	2	0	2
III. Other Major Courses					
COS	118	Salon IV	0	21	7
COS	250	Computerized Salon	1	0	1

Total Credits: 48

Recommended Semester Schedule

DAY AND NIGHT CLASS

First Year-Fall

COS	111	Cosmetology Concepts I	4	0	4
COS	112	Salon I	0	24	8
PSY	150	General Psychology	3	0	3

First Year-Spring

COS	113	Cosmetology Concepts II	4	0	4
COS	114	Salon II	0	24	8
ENG	101	Applied Communications I	3	0	3

First Year-Summer

COS	115	Cosmetology Concepts III	4	0	4
COS	116	Salon III	0	12	4
COS	250	Computerized Salon Operation	1	0	1

Second Year-Fall

COS	117	Cosmetology Concepts IV	2	0	2
COS	118	Salon IV	0	21	7

Cosmetology-Esthetics Technology

C55230 (Certificate)

This 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 qualified for employment in beauty and cosmetic/skin care salons, as a platform artist, and in related businesses.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Students may enter this curriculum at the start of any semester. Availability of this curriculum will be determined by a sufficient number of students enrolling in this program.

Title			Class	Lab	Credit
I. Major Courses					
COS	119	Esthetics Concepts I	2	0	2
COS	120	Esthetics Salon I	0	18	6
COS	125	Esthetics Concepts II	2	0	2
COS	126	Esthetics Salon II	0	18	6

Total Credits: 16

Recommended Semester Schedule

Student Starting in Fall Semester:

Fall					
COS	119	Esthetics Concepts I	2	0	2
COS	120	Esthetics Salon I	0	18	6
Spring					
COS	125	Esthetics Concepts II	2	0	2
COS	126	Esthetics Salon II	0	18	6

Student Starting in Spring Semester:

Spring					
COS	119	Esthetics Concepts I	2	0	2
COS	120	Esthetics Salon I	0	18	6
Summer					
COS	125A	Esthetics Concepts II A	1	0	1
COS	126A	Esthetics Salon II A	0	9	3
Fall					
COS	125B	Esthetics Concepts II B	1	0	1
COS	126B	Esthetics Salon II B	0	9	3

Student Starting in Summer Semester:

Summer					
COS	119A	Esthetics Concepts I A	1	0	1
COS	120A	Esthetics Salon I A	0	9	3

Fall

COS	119B	Esthetics Concepts I B *	1	0	1
COS	120B	Esthetics Salon I B*	0	9	3
COS	125A	Esthetics Concepts II A **	1	0	1
COS	126A	Esthetics Salon II A **	0	9	3

Spring

COS	125B	Esthetics Concepts II B*	1	0	1
COS	126B	Esthetics Salon II B*	0	9	3

*First 8 weeks only
**Second 8 weeks only

Students may enter this curriculum at the start of any semester. Availability of this curriculum will be determined by a sufficient number of students enrolling in this program.

Cosmetology - Manicurist/Nail Technology

C55400 (Certificate)

This 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.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

This curriculum was designed to be taken during the fall or spring semester. No classes are offered during the summer semester. Availability of this curriculum will be determined by a sufficient number of students enrolling in this program. COS 121 will be offered during the first 8 weeks of the semester; COS 122 will be offered during the second 8 weeks of the semester.

Title			Class	Lab	Credit
I. Major Courses					
COS	121	Manicure/Nail Technology I	4	6	6
COS	222	Manicure/Nail Technology II	4	6	6

Total Credits: 12

Recommended Semester Schedule

First Year-Fall* or Spring*					
COS	121	Manicure/Nail Technology I	4	6	6
COS	222	Manicure/Nail Technology II	4	6	6

Cosmetology- Instructor

C55160 (Certificate)

This 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.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

**This curriculum is offered on an individual basis in fall and spring semester, based on student demand and waiting list.*

Title			Class	Lab	Credit
I. Major Courses					
COS	271	Instructor Concepts I	5	0	5
COS	272	Instructor Practicum I	0	21	7
COS	273	Instructor Concepts II	5	0	5
COS	274	Instructor Practicum II	0	21	7

Total Credits: 24

Recommended Semester Schedule

First Year-Fall, Spring					
COS	271	Instructor Concepts I**	5	0	5
and					
COS	272	Instructor Practicum I**	0	21	7
or					
COS	273	Instructor Concepts II**	5	0	5
and					
COS	274	Instructor Practicum II**	0	21	7

**This curriculum is offered on an individual basis in fall or spring semesters, based on student demand.*

***Students may select COS 271 and COS 272 or they may select COS 273 and COS 274 during any one semester. COS 271 and COS 272 are required before COS 273 and COS 274.* COE 113 may also be taken.

Cosmetology- Esthetics Instructor

C55270 (Certificate)

This curriculum provides a course of study covering the skills needed to teach the theory and practices of esthetics as required by the North Carolina State Board of Cosmetology.

Course work includes all phases of esthetics theory laboratory instruction.

Graduates should be prepared to take the North Carolina Cosmetology State Board Esthetics Instructor Licensing Exam and upon passing be qualified for employment in a cosmetology or esthetics school.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

**This curriculum is offered on an individual basis in any semester, based on student demand.*

Title			Class	Lab	Credit
I. Major Courses					
COS	253	Esthetics Instructor I	6	15	11
COS	254	Esthetics Instructor II	6	15	11

Total Credits: 22

Recommended Semester Schedule

Student Starting in Fall Semester:

Fall					
COS	253	Esthetics Instructor I	6	15	11
Spring					
COS	254	Esthetics Instructor II	6	15	11

Student Starting in Spring Semester:

Spring					
COS	253	Esthetics Instructor I	6	15	11
Summer					
COS	254A	Esthetics Instructor II A	3	8	6
Fall					
COS	254B	Esthetics Instructor II B	3	7	5

Teaching/Training: Early Childhood Education

A55220 (Associate Degree) D55220 (Diploma)
C55220ITC (Certificate) C55220S (Certificate-Special Education)

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.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Associate Degree Program

Title			Class	Lab	Credit
I. General Education Courses					
Take 3 groups:					
Group I:					
ENG	111	Writing and Inquiry	3	0	3
Group II: (Take 3 credits)					
COM	231	Public Speaking	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3
Group III: (Take 3 credits from each)					
Humanities, Social/Behavioral Science and Natural Science/Math (see list on page 75)					
II. Major Courses					
Take 35 credits from:					
EDU	119	Introduction to Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3
EDU	144	Child Development I	3	0	3
EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance	3	0	3
EDU	151	Creative Activities	3	0	3
EDU	153	Health, Safety, Nutrition	3	0	3
EDU	221	Children with Exceptionalities	3	0	3
EDU	234	Infants, Toddlers, and Twos	3	0	3
EDU	280	Language & Literacy Experiences	3	0	3
EDU	284	Early Childhood Capstone	1	9	4
III. Other Major Courses (Must be selected from identified prefixes)					
Take 15 credits:					
CIS	110	Intro. to Computers	2	2	3
EDU	252	Math and Science Activities	3	0	3
EDU	261	Early Childhood Administration I	3	0	3

PSY	150	General Psychology	3	0	3
EDU	271	Educational Technology	2	2	3

Other Major Requirements:
Take 3 credits from:

EDU	153A	Health, Safety and Nutrition Lab	0	2	1
EDU	184	Early Childhood Practicum	1	3	2
EDU	222	Learn with Behavioral Disorder	3	0	3
EDU	223	Specific Learning Disability	3	0	3
EDU	247	Sensory & Physical Disability	3	0	3
EDU	248	Developmental Delays	3	0	3
EDU	262	Early Childhood Administration II	3	0	3

IV. Other Required Courses
Take 1 credit:

ACA	115	Success and Study Skills	0	2	1
ACA	122	College Transfer Success	0	2	1

Total Credits: 69

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
or					
ACA	122	College Transfer Success	0	2	1
EDU	119	Introduction to Childhood Education	4	0	4
EDU	144	Child Development I	3	0	3
ENG	111	Expository Writing	3	0	3
Choose from the Natural Science/Math pick list on page 75					

First Year-Spring

EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	153A	Health, Safety and Nutrition Lab	0	2	1
EDU	184	Early Childhood Practicum	1	3	2
Choose from Humanities/Fine Arts pick list on page 75					

First Year-Summer

CIS	110	Introduction to Computers	2	2	3
PSY	150	General Psychology	3	0	3

Second Year-Fall

EDU	131	Child, Family, & Community	3	0	3
EDU	151	Creative Activities	3	0	3
EDU	221	Children With Exceptionalities	3	0	3
EDU	261	Early Childhood Admin. I	3	0	3
Choose from Social /Behavioral Science pick list on page 75			3	0	3

Second Year-Spring

EDU	234	Infant, Toddler and Two's	3	0	3
EDU	271	Educational Technology	2	2	3
EDU	280	Language & Literacy Experiences	3	0	3

EDU	284	Early Childhood Practicum	1	9	4

Second Year-Summer

COM	231	Public Speaking	3	0	3
or					
ENG	112	Writing/Research in the Disciplines	3	0	3
EDU	252	Math and Science Activities	3	0	3

Diploma Program (D55220)

Title			Class/Lab/Credit		
I. General Education Courses					
Take 3 groups:					
Group I:					
ENG	111	Writing and Inquiry	3	0	3
Group II: (Take 3 credits)					
COM	231	Public Speaking	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3
Group III: (Take 3 credits)					
BIO	111	General Biology I	3	3	4
BIO	112	General Biology II	3	3	4
CHM	151	General Chemistry I	3	3	4
CHM	152	General Chemistry II	3	3	4
MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods I	3	2	4
MAT	171	Precalculus Algebra	3	0	3
II. Major Courses					
EDU	119	Introduction to Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3
EDU	144	Child Development I	3	0	3
EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance	3	0	3
EDU	151	Creative Activities	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	221	Children with Exceptionalities	3	0	3
III. Other Major Courses					
EDU	153A	Health, Safety and Nutrition Lab	0	2	1
EDU	184	Early Childhood Practicuum	1	3	2
PSY	150	General Psychology	3	0	3
IV. Other Required Courses					
ACA	115	Success and Study Skills	0	2	1
or					
ACA	122	College Transfer Success	0	2	1

Total Credits: 41

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
or					
ACA	122	College Transfer Success	0	2	1

EDU	119	Introduction to Childhood Education	4	0	4
EDU	144	Child Development I	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
PSY	150	General Psychology	3	0	3

First Year-Spring

COM	231	Public Speaking	3	0	3
or					
ENG	112	Writing/Research in the Disciplines	3	0	3
EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	153A	Health, Safety and Nutrition Lab	0	2	1
EDU	184	Early Childhood Practicum	1	3	2

Second Year-Fall

EDU	131	Child, Family & Community	3	0	3
EDU	151	Creative Activities	3	0	3
EDU	221	Children With Exceptionalities	3	0	3

Choose from Natural Science/Math pick list on page 75

Early Childhood Certificate Program (C55220)

Title			Class/Lab/Credit		
I. Major Courses					
EDU	119	Introduction to Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3
EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance*	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
II. Other Major Courses					
EDU	153A	Health, Safety and Nutrition Lab	0	2	1

Total Credits: 17

Recommended Semester Schedule

First Year-Fall

EDU	119	Introduction to Early Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3

First Year-Spring

EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	153A	Health, Safety and Nutrition Lab	0	2	1

Infant/Toddler Care Certificate Program (C55290)

Title			Class/Lab/Credit		
I. Major Courses					
EDU	119	Introduction to Early Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3
EDU	144	Child Development I	3	0	3

EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	234	Infants, Toddlers and Twos	3	0	3

II. Other Major Courses

EDU	153A	Health, Safety and Nutrition Lab	0	2	1

Total Credits: 17

Recommended Semester Schedule

First Year-Fall

EDU	119	Introduction to Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3
EDU	144	Child Development I	3	0	3

First Year-Spring

EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	153A	Health, Safety and Nutrition Lab	0	2	1
EDU	234	Infant, Toddler, & Twos	3	0	3

Total Credits: 17

Early Childhood Administration Certificate Program (C55850)

Title			Class/Lab/Credit		
I. Major Courses					
EDU	119	Introduction to Early Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	261	Early Childhood Administration I	3	0	3
EDU	262	Early Childhood Administration II	3	0	3

II. Other Major Courses

EDU	153A	Health, Safety and Nutrition Lab	0	2	1

Total Credits: 17

Recommended Semester Schedule

First Year-Fall

EDU	119	Introduction to Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3
EDU	261	Early Childhood Administration I	3	0	3
EDU	262	Early Childhood Administration II	3	0	3

First Year-Spring

EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	153A	Health, Safety and Nutrition Lab	0	2	1

Total Credits: 17

Special Education Certificate Program-Early Childhood (C55220S)

Title			Class/Lab/Credit		
I. Major Courses					
EDU	144	Child Development I	3	0	3
EDU	145	Child Development II	3	0	3

EDU	146	Child Guidance	3	0	3
EDU	221	Children with Exceptionalities	3	0	3

II. Other Major Courses

EDU	223	Specific Learning Disabilities	3	0	3
EDU	247	Sensory-Physical Disabilities	3	0	3

Total Credits: 18

Recommended Semester Schedule

First Year-Fall

EDU	144	Child Development I	3	0	3

First Year-Spring

EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance	3	0	3

First Year-Fall

EDU	221	Children with Exceptionalities	3	0	3
EDU	247	Sensory-Physical Disabilities	3	0	3

Second Year-Spring

EDU	223	Specific Learning Disabilities	3	0	3

School-Age Education

A55440 (Associate Degree) D55440 (Diploma) C55440 (Certificate)

This curriculum prepares individuals to work with children in elementary through middle grades in diverse learning environments. Students will combine learned theories with practice in actual settings with school-age children under the supervision of qualified teachers.

Course work includes child growth/development; computer technology in education; physical/nutritional needs of school-age children; care and guidance of school-age children; and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of school-age populations.

Graduates are prepared to plan and implement developmentally appropriate programs in school-aged environments. Employment opportunities include school-age teachers in child care programs, before/after-school programs, paraprofessional positions in public/ private schools, recreational centers, and other programs that work with school-age populations.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Title			Class	Lab	Credit
I. General Education Courses					
Take 3 groups:					
Group I:					
ENG	111	Writing and Inquiry	3	0	3
Group II: (Take 3 credits)					
COM	231	Public Speaking	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3
Group III: (Take 3 credits from each)					
Humanities, Social/Behavioral Science and Natural Science/Math (see list on page 75)					
II. Major Courses					
EDU	131	Child, Family & Community	3	0	3
EDU	144	Child Development I	3	0	3
EDU	145	Child Development II	3	0	3
EDU	163	Classroom Mgt. & Inst.	3	0	3
EDU	216	Foundations of Education	4	0	4
EDU	221	Children with Exceptionalities	3	0	3
EDU	271	Educational Technology	2	2	3
EDU	285	Internship Experiences- School Age	1	9	4
EDU	289	Adv. Issues-School Age	2	0	2
III. Other Major Courses					
Take 22 credits fom this list:					
CIS	110	Intro. to Computers	2	2	3
EDU	151	Creative Activities	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	153A	Health, Safety and Nutrition Lab	0	2	1
EDU	161	Intro. to Exceptional Children	3	0	3
EDU	175	Intro. to Trade and Industrial Educ.	3	0	3
EDU	177	Instructional Methods	2	2	3

EDU	179	Vocational Student Organizations	3	0	3
EDU	243	Learning Theory	3	0	3
EDU	252	Math & Science Activities	3	0	3
EDU	280	Language & Literacy Experiences	3	0	3
EDU	281	Instructional Strategies/Reading & Writing	2	2	3
PSY	150	General Psychology	3	0	3

IV. Other Required Courses

ACA	115	Success and Study Skills	0	2	1
or					
ACA	122	College Transfer Success	0	2	1

Total Credits: 66

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
or					
ACA	122	College Transfer Success	0	2	1
EDU	144	Child Development I	3	0	3
EDU	163	Classroom Management	3	0	3
EDU	216	Foundations of Education	4	0	4
Choose from the Natural Science/Math pick list on page 75			3	0	3

First Year-Spring

EDU	145	Child Development II	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	153A	Health, Safety and Nutrition Lab	0	2	1
EDU	271	Educational Technology	2	2	3
ENG	111	Writing and Inquiry	3	0	3

First Year-Summer

CIS	110	Introduction to Computers	2	2	3
Choose from the Humanities/Fine Arts pick list on page 75			3	0	3

Second Year-Fall

EDU	131	Child, Family, & Community	3	0	3
EDU	151	Creative Activities	3	0	3
EDU	221	Children With Exceptionalities	3	0	3
EDU	289	Adv. Issues- School Age	2	0	2
PSY	150	General Psychology	3	0	3

Second Year-Spring

EDU	280	Language & Literacy Exp.	3	0	3
EDU	281	Instructional Strategies-Reading/Writing	2	2	3
EDU	285	Intern. Experiences-School Age	1	9	4
Choose from the Social/Behavioral Science pick list			3	0	3

Second Year-Summer

COM	231	Public Speaking	3	0	3
or					
ENG	112	Writing/Research in the Disciplines	3	0	3
EDU	252	Math & Science Activities	3	0	3

School-Age Diploma Program (D55440)

Title			Class	Lab	Credit
I. General Education Courses					
Group I:					
ENG	111	Writing and Inquiry	3	0	3
Group II: (Take 3 credits)					
Choose one course from Natural Science/Math pick list on page 75					
II. Major Courses					
EDU	131	Child, Family & Community	3	0	3
EDU	144	Child Development I	3	0	3
EDU	145	Child Development II	3	0	3
EDU	163	Classroom Management & Instruction	3	0	3
EDU	216	Foundations of Education	4	0	4
EDU	221	Children with Exceptionalities	3	0	3
EDU	271	Educational Technology	2	2	3
EDU	285	Internship Experiences- School Age	1	9	4
III. Other Major Courses					
CIS	110	Intro. to Computers	2	2	3
EDU	151	Creative Activities*	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	153A	Health, Safety and Nutrition Lab	0	2	1
IV. Other Required Courses					
ACA	115	Success and Study Skills	0	2	1
or					
ACA	122	College Transfer Success	0	2	1
Total Credits: 43					

Recommended Semester Schedule

First Year-Fall					
ACA	115	Success and Study Skills	0	2	1
or					
ACA	122	College Transfer Success	0	2	1
CIS	110	Intro. to Computers	2	2	3
EDU	144	Child Development I	3	0	3
EDU	163	Classroom Management	3	0	3
EDU	216	Foundations of Education	4	0	4
First Year-Spring					
EDU	145	Child Development II	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	153A	Health, Safety and Nutrition Lab	0	2	1
EDU	271	Educational Technology	2	2	3
ENG	111	Writing and Inquiry	3	0	3
Second Year-Fall					
EDU	131	Child, Family, & Community	3	0	3
EDU	151	Creative Activities	3	0	3

EDU	221	Children With Exceptionalities	3	0	3

Choose from Natural Science /Math pick list on page 75

Second Year-Spring

EDU	285	Internship Exp.- School Age	1	9	4

School-Age Certificate (C55440)

Title			Class/Lab/Credit		
I. Major Courses					
EDU	131	Child, Family & Community	3	0	3
EDU	144	Child Development I	3	0	3
EDU	145	Child Development II	3	0	3
EDU	163	Classroom Management & Instruction	3	0	3
EDU	216	Foundations of Education	4	0	4

Total Credits: 16

Recommended Semester Schedule

First Year-Fall

EDU	131	Child, Family & Community	3	0	3
EDU	144	Child Development I	3	0	3
EDU	163	Classroom Management & Instruction	3	0	3
EDU	216	Foundations of Education	4	0	4

First Year-Spring

EDU	145	Child Development II	3	0	3

Early Childhood/School-Age Child Pick List

****Prerequisites-DRE 096 and 097**
***Prerequisites-DRE 098**

Humanities/Fine Arts Pick List

ART	111	Art Appreciation	3	0	3
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
MUS	110	Music Appreciation	3	0	3

Social/Behavioral Sciences Pick List

HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
POL	120	American Government	3	0	3
SOC	210	Intro. to Sociology	3	0	3

Natural Science/Mathematics Pick List

BIO	111	General Biology I	3	3	4
BIO	112	General Biology II	3	3	4
CHM	151	General Chemistry I	3	3	4
CHM	152	General Chemistry II	3	3	4
MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods I	3	2	4
MAT	171	Pre-Calculus Algebra	3	2	4

Electrical Systems Technology

A35130 (Associate Degree) D35130 (Diploma)

This curriculum is designed to provide training for persons interested in the installation and maintenance of electrical/electronic 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, digital electronics, programmable logic controllers, industrial motor controls, the National Electric Code and other subjects as local needs require.

Graduates should qualify for a variety of jobs in the electrical/electronics field as an on-the-job trainee or apprentice, assisting in the layout, installation and maintenance of electrical/electronics systems.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Associate Degree Program

Title			Class	Lab	Credit
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
*MAT	171	Pre-Calculus Algebra	3	2	4
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
II. Major Courses					
ELC	112	DC/AC Electricity	3	6	5
ELC	113	Residential Wiring	2	6	4
ELC	128	Introduction to PLC	2	3	3
ELN	231	Industrial Controls	2	3	3
III. Concentration					
ELC	115	Industrial Wiring	2	6	4
ELC	118	National Electric Code	1	2	2
ELC	119	NEC Calculations	1	2	2
ELC	213	Instrumentation	3	2	4
IV. Other Major Courses Select 22 credits					
EGR	125	Applied Software for Technology	1	2	2
ELN	133	Digital Electronics	3	3	4
ELN	233	Microprocessor Fundamentals	3	3	4
HYD	110	Hydraulics/Pneumatics I	2	3	3
ISC	110	Workplace Safety	1	0	1
PCI	264	Process Control with PLC's	3	3	4
PHY	131	Physics-Mechanics	3	2	4
WBL	111	Work-Based Learning I	0	10	1
WBL	121	Work-Based Learning II	0	10	1
V. Other Required Courses					
ACA	115	Success and Study Skills	0	2	1

*Students planning to pursue a Bachelor's degree should take MAT 171, 171A, MAT 172, MAT 172A and MAT 271.

Total Credits: 66

Recommended Semester Schedule

First Year-Fall					
ACA	115	Success and Study Skills	0	2	1
EGR	125	Appl. Software for Technology	1	2	2
ELC	113	Residential Wiring	2	6	4
HYD	110	Hydraulics/Pneumatics I	2	3	3
ISC	110	Workplace Safety	1	0	1
MAT	171	Pre-Calculus Algebra	3	2	4
First Year-Spring					
ELC	112	DC/AC Electricity	3	6	5
ELC	128	Introduction to PLC	2	3	3
ELN	231	Industrial Controls	2	3	3
Humanities/FA Elective-See list on page 75			3	0	3
First Year-Summer					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
Social Sciences Elective-See list on page 75			3	0	3
Second Year-Fall					
ELC	213	Instrumentation	3	2	4
ELN	133	Digital Electronics	3	3	4
ELN	229	Industrial Electronics	3	3	4
PCI	264	Process Control with PLC's	3	3	4
Second Year-Spring					
ELC	115	Industrial Wiring	2	6	4
ELN	233	Microprocessor Fundamentals	3	3	4
PHY	131	Physics-Mechanics	3	2	4

Diploma Program (D35130)

Title			Class/Lab/Credit		
I. General Education Courses					
ENG	111	Writing and Inquiry	3	0	3
MAT	171	Pre-Calculus Algebra	3	2	4
II. Major Courses					
ELC	112	DC/AC Electricity	3	6	5
ELC	113	Residential Wiring	2	6	4
ELC	128	Introduction to PLC	2	3	3
ELN	231	Industrial Controls	2	3	3
III. Other Major Courses					
EGR	125	Appl. Software for Technology	1	2	2
ELC	115	Industrial Wiring	2	6	4
ELC	118	National Electric Code	1	2	2
ELN	133	Digital Electronics	3	3	4
ISC	110	Workplace Safety	1	0	1
IV. Other Required Courses					
ACA	115	Success and Study Skills	0	2	1
Total Credits: 36					

Recommended Semester Schedule

First Year-Fall					
EGR	125	Appl. Software for Technology	2	6	4
ELC	113	Residential Wiring	2	6	4
MAT	171	Pre-Calculus Algebra	3	2	4
ISC	110	Workplace Safety	1	0	1
First Year-Spring					
ELC	112	DC/AC Electricity	3	6	5
ELC	128	Introduction to PLC	2	3	3
ELN	231	Industrial Controls	2	3	3
First Year-Summer					
ENG	111	Writing and Inquiry	3	0	3
Second Year-Fall					
ELN	133	Digital Electronics	3	3	4
ELN	229	Industrial Electronics	3	3	4
Second Year-Spring					
ELC	115	Industrial Wiring	2	6	4

Emergency Management

(A55460)

The Emergency Management curriculum is designed to provide students with a foundation of technical and professional knowledge needed for emergency services delivery in local and state government agencies. Study involves both management and technical aspects of law enforcement, fire protection, emergency medical services, and emergency planning.

Course work includes classroom and laboratory exercises to introduce the student to various aspects of emergency preparedness, protection, and enforcement. Students will learn technical and administrative skills such as investigative principles, hazardous materials, codes, standards, emergency agency operations, and finance.

Employment opportunities include ambulance services, fire/rescue agencies, law enforcement agencies, fire marshal offices, industrial firms, educational institutions, emergency management offices, and other government agencies. Employed persons should have opportunities for skilled and supervisory-level positions

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Title			Class	Lab	Credit
I. General Education					
Minimum 15 hours:					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	3	0	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
II. Core					
Required Courses (27 Hours)					
EPT	120	Sociology of Disaster	3	0	3
EPT	130	Mitigation & Preparedness	3	0	3
EPT	140	Emergency Management	3	0	3
EPT	210	Response & Recovery	3	0	3
EPT	220	Terrorism & Emer. Mgt	3	0	3
EPT	275	Emergency OPS Center Mgt	3	0	3
FIP	228	Local Gov't Finance	3	0	3
Incident Management.					
EPT	150	Incident Management	3	0	3
Law and Ethics.					
EPT	124	EM Services Law & Ethics	3	0	3
III. Other Major Hours					
Take 27 hours from the following list (with no more than 9 hours per prefix):					
BUS	135	Principles of Supervision	3	0	3
CIS	110	Introduction to Computers	2	2	3
CJC	111	Intro to Criminal Justice	3	0	3
CJC	112	Criminology	3	0	3
CJC	120	Interviews/Interrogations	1	2	2
CJC	121	Law Enforcement Operations	3	0	3
CJC	122	Community Policing	3	0	3
CJC	131	Criminal Law	3	0	3

CJC	132	Court Procedure & Evidence	3	0	3
CJC	141	Corrections	3	0	3
CJC	160	Terrorism: Underlying Issues	3	0	3
CJC	161	Intro to Homeland Security	3	0	3
CJC	212	Ethics & Comm Relations	3	0	3
CJC	231	Constitutional Law	3	0	3
CJC	232	Civil Liability	3	0	3
EMS	110	EMT	6	6	8
FIP	110	Fire Prot/Rest & Hotels	1	0	1
FIP	120	Intro to Fire Protection	3	0	3
FIP	124	Fire Prevention & Public Ed	3	0	3
FIP	132	Building Construction	3	0	3
FIP	146	Fire Protection Systems	3	2	4
FIP	162	Firefighter Safety & Wellness	3	0	3
FIP	176	HazMat: Operations	4	0	4
FIP	180	Wildland Fire Behavior	3	0	3
FIP	184	Wildland Fire Safety	3	0	3
FIP	220	Fire Fighting Strategies	3	0	3
FIP	229	Fire Dynamics and Combust	3	0	3
FIP	232	Hydraulics & Water Dist	2	2	3
POL	130	State and Local Goverment	3	0	3

IV. Other Required Courses

ACA	115	Success & Study Skills	0	2	1
or					
ACA	122	College Transfer Success	0	2	1

Total Credits: 70

Recommended Semester Schedule

First Year-Fall

ACA	115	Success & Study Skills	0	2	1
or					
ACA	122	College Transfer Success	0	2	1
CIS	110	Introduction to Computers	2	2	3
ENG	111	Writing and Inquiry	3	0	3
EPT	120	Sociology of Disaster	3	0	3
EPT	140	Emergency Management	3	0	3
FIP	120	Intro to Fire Protection	3	0	3

First Year-Spring

COM	231	Public Speaking	3	0	3
EPT	130	Mitigation & Preparedness	3	0	3
EPT	150	Incident Management	3	0	3

Choose 6 credits from CJC, FIP, EPT, EMS, BUS

First Year-Summer

MAT	143	Quantitative Literacy	3	0	3
SOC	210	Introduction to Sociology	3	0	3

Humanities Elective-see list on page 75

Second Year-Fall

EPT	124	EM Services Law & Ethics	3	0	3
EPT	210	Response & Recovery	3	0	3
EPT	220	Terrorism & Emer. Mgt	3	0	3

POL	130	State and Local Goverment	3	0	3
FIP	228	Local Government Finance	3	0	3

Second Year-Spring

CJC	111	Intro to Criminal Justice*	3	0	3
CJC	132	Court Procedure & Evidence	3	0	3
EPT	275	Emergency OPS Center Mgt	3	0	3

Choose 6 credits from CJC, FIP, EPT, EMS, BUS

Emergency Management-Criminal Justice Certificate (C55460C)

Title			Class/Lab/Credit		
I. Other Major Courses					
CJC	111	Intro to Criminal Justice	3	0	3
CJC	131	Criminal Law	3	0	3
CJC	132	Court Procedure & Evidence	3	0	3
CJC	231	Constitutional Law	3	0	3
II**. Other Required Courses**					
ACA	115	Success & Study Skills	0	2	1

Total Credits: 13

Emergency Management Certificate (C55460E)

Title			Class/Lab/Credit		
I. Major Courses					
EPT	130	Mitigation & Preparedness	3	0	3
EPT	140	Emergency Management	3	0	3
II. Other Major Courses					
EMS	110	EMT	6	6	8
IV. Other Required Courses					
ACA	115	Success & Study Skills	0	2	1

Total Credits: 15

Emergency Management-Fire Technology Certificate (C55460F)

Title			Class/Lab/Credit		
I. Other Major Courses					
FIP	120	Intro to Fire Protection	3	0	3
FIP	124	Fire Prevention & Public Ed	3	0	3
FIP	132	Building Construction	3	0	3
FIP	162	Firefighter Safety & Wellness	3	0	3
FIP	228	Local Government Finance	3	0	3
II**. Other Required Courses**					
ACA	115	Success & Study Skills	0	2	1

Total Credits: 16

Associate in Engineering

(A10500)

This program is designed to promote educational advancement opportunities for Associate in Engineering degree completers moving between the NC community colleges and the constituent institutions of The University of North Carolina in order to complete Bachelor of Science in Engineering degrees. The student may complete course work equivalent to the first two years of study required for a bachelor's degree. Unless otherwise indicated, classes in this program satisfy the articulation agreement with colleges in the University of North Carolina System and are eligible for transfer to four-year degree programs, provided all other requirements for transfer are satisfied.

The Associate in Engineering degree (A.E.) is awarded upon completion of program requirements. Graduates usually transfer to a senior institution with junior status. Follow up studies show that community college transfer students are generally successful in their studies at senior institutions.

***The Placement Test is required for all courses listed.**

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

UNIVERSAL GENERAL EDUCATION TRANSFER COMPONENT (42 SHC)

Title			Class/Lab/Credit		
English Composition					
ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3
Humanities: Choose One					
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
REL	110	World Religions	3	0	3
Fine Arts and Communications: Choose One					
COM	231	Public Speaking	3	0	3
ART	111	Art Appreciation	3	0	3
MUS	110	Music Appreciation	3	0	3
Social/Behavioral Sciences					
ECO	251	Principles of Microeconomics	3	0	3
	Choose One:				
HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
POL	120	American Government	3	0	3
PSY	150	General Psychology	3	0	3
SOC	210	Introduction to Sociology	3	0	3
Mathematics					
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4
MAT	273	Calculus III	3	2	4

Natural Sciences

CHM	151	General Chemistry I	3	3	4
PHY	251	General Physics I	3	3	4
PHY	252	General Physics II	3	3	4

OTHER REQUIRED HOURS (18 SHC)

Local MTCC Requirements (5 semester hours)

ACA 122	College Transfer Success	0	2	1
EGR 150	Introduction to Engineering	1	2	2
PED 110	Fitness and Wellness for Life	1	2	2

Other General Education and Pre-major Electives (13 SHC)

Select 13 SHC of courses from the following courses classified as pre-major, elective, or general education courses within the Comprehensive Articulation Agreement. *(Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution. Students should choose courses appropriate to the specific university and engineering major requirements.)*

BIO	111	General Biology I	3	3	4
CHM	152	General Chemistry II	3	3	4
COM	110	Introduction to Communication	3	0	3
CSC	134	C++ Programming	2	3	3
CSC	151	JAVA Programming	2	3	3
ECO	252	Principles of Macroeconomics	3	0	3
EGR	220	Engineering Statics	3	0	3
HUM	110	Technology and Society	3	0	3
MAT	280	Linear Algebra	2	2	3
MAT	285	Differential Equations	2	2	3

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

General Education

A10300 (Associate Degree)

The Associate in General Education is designed for the academic enrichment of students who wish to broaden their education, with emphasis on personal interest, growth and development.

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

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

***The Placement Test is required for all courses listed in this program.**

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Title			Class	Lab	Credit
I. General Education Courses 15 shc required					
English Composition 6 shc					
ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3
Humanities/Fine Arts					
Take 3 credits					
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	251	Western World Literature I	3	0	3
ENG	273	African-American Literature	3	0	3
Social/Behavioral Sciences					
HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
Natural Science/Mathematics					
Take 3 credits					
MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods I	3	2	4
MAT	171	Precalculus Algebra	3	2	4
MAT	172	Precalculus Trigonometry	3	2	4
MAT	271	Calculus I	3	2	4

II. Major Courses

A. Core

1. Required Courses
2. Required Subject Areas

B. Concentration

C. Other Major Courses

III. Other Required Courses

After meeting program requirements, electives may be selected from the following approved courses: (Choose 49-50 shc.) 3 shc must be CIS 110.

Computer Science 3 shc

CIS	110	Introduction to Computers	2	2	3

Health/Physical Education

PED	110	Fit and Well For Life	1	2	2
PED	111	Physical Fitness	0	3	1
PED	113	Aerobics I	0	3	1
PED	117	Weight Training	0	3	1
PED	120	Walking For Fitness	0	3	1
PED	130	Tennis-Beginning	0	2	1
PED	128	Golf-Beginning	0	2	1
PED	139	Bowling-Beginning	0	2	1
PED	152	Swimming-Beginning	0	2	1
PED	155	Water Aerobics	0	3	1
PED	174	Wilderness Pursuits	0	2	1
PED	219	Disc Golf	0	2	1

Humanities/Fine Arts

ART	111	Art Appreciation	3	0	3
ART	121	Two-Dimensional Design	0	6	3
ART	171	Computer Art I	0	6	3
ART	275	Introduction to Graphic Design	0	6	3
COM	231	Public Speaking	3	0	3
DRA	111	Theatre Appreciation	3	0	3
DRA	126	Storytelling	3	0	3
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
ENG	273	African-American Literature	3	0	3
FRE	111	Elementary French I*	3	0	3
FRE	112	Elementary French II*	3	0	3
HUM	115	Critical Thinking	3	0	3
HUM	122	Southern Culture	3	0	3
MUS	110	Music Appreciation	3	0	3
PHI	210	History of Philosophy	3	0	3
PHI	240	Introduction to Ethics	3	0	3
REL	110	World Religion	3	0	3
REL	211	Introduction to Old Testament	3	0	3
REL	212	Introduction to New Testament	3	0	3
SPA	111	Elementary Spanish I	4	0	4
SPA	112	Elementary Spanish II	4	0	4
SPA	181	Spanish Lab I	0	2	1
SPA	182	Spanish Lab II	0	2	1
SPA	211	Intermediate Spanish I	3	0	3
SPA	212	Intermediate Spanish II	3	0	3
SPA	281	Spanish Lab III	0	2	1
SPA	282	Spanish Lab IV	0	2	1

Social/Behavioral Sciences

ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
HIS	236	North Carolina History	3	0	3
POL	120	American Government	3	0	3
POL	130	State and Local Government	3	0	3
POL	210	Comparative Government	3	0	3
PSY	150	General Psychology	3	0	3
PSY	239	Psychology of Personality	3	0	3
PSY	241	Developmental Psychology	3	0	3
PSY	244	Child Development I	3	0	3
PSY	245	Child Development II	3	0	3
PSY	281	Abnormal Psychology	3	0	3
SOC	210	Introduction to Sociology	3	0	3
SOC	213	Sociology of the Family	3	0	3
SOC	220	Social Problems	3	0	3
SOC	242	Sociology of Deviance	3	0	3

Natural Science

BIO	155	Nutrition	3	0	3
BIO	163	Basic Anatomy and Physiology	4	2	5
BIO	165	Anatomy and Physiology I	3	3	4
BIO	166	Anatomy and Physiology II	3	3	4
BIO	168	Anatomy and Physiology I	3	3	4
BIO	169	Anatomy and Physiology II	3	3	4
BIO	175	General Microbiology	2	2	3
BIO	111	General Biology I	3	3	4
BIO	112	General Biology II	3	3	4
BIO	275	Microbiology	3	3	4
CHM	131	Introduction to Chemistry	3	0	3
CHM	131A	Introduction to Chemistry Lab	0	3	1
CHM	132	Organic and Biochemistry	3	3	4
CHM	151	General Chemistry I	3	3	4
CHM	152	General Chemistry II	3	3	4
CHM	251	Organic Chemistry I	3	3	4
CHM	252	Organic Chemistry II	3	3	4
CHM	271	Biochemical Principles	3	3	4

Mathematics

MAT	115	Mathematical Models	2	2	3
MAT	143	Quantitative Literacy	2	2	3
MAT	151	Statistics I	3	0	3
MAT	151A	Statistics I Lab	0	2	1
MAT	161	College Algebra	3	0	3
MAT	161A	College Algebra Lab	0	2	1
MAT	171	Precalculus Algebra	3	0	3
MAT	171A	Precalculus Algebra Lab	0	2	1
MAT	172	Precalculus Trigonometry	3	0	3
MAT	172A	Precalculus Trigonometry Lab	0	2	1
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4
MAT	273	Calculus III	3	2	4
MAT	280	Linear Algebra	2	2	3
MAT	285	Differential Equations	2	2	3

Students must meet the receiving university's foreign language and/or health and physical education requirements either before or after transfer to the senior institution.

Other Electives

ACA	115	Success & Study Skills	0	2		1
ACA	122	College Transfer Success	1	0		1
ACC	120	Principles of Financial Accounting	3	2		4
ACC	121	Principles of Managerial Accounting	3	2		4
BUS	110	Introduction to Business	3	0		3
BUS	115	Business Law	3	0		3
CIS	113	Computer Basics	0	2		1
CIS	115	Introduction to Programming and Logic	2	2		3
CSC	134	C++ Programming	2	3		3
CSC	148	JAVA Programming	2	3		3
MED	121	Medical Terminology I	3	0		3
MED	122	Medical Terminology II	3	0		3
NAS	101	Nursing Assistant I	3	2	3	5
NAS	102	Nursing Assistant II	3	2	6	6
NAS	103	Nursing Assistant III	2	0	0	2
NUT	110	Nutrition	3	0	0	3

Total Credits: 64-65

Associate in General Education Nursing

A1030N (Associate Degree)

The Associate in General Education (AGE)-Nursing is designed for students who wish to begin their study toward the Associate in Nursing degree and a Baccalaureate degree in Nursing as based on Blocks 1 through 3 of the Uniform Articulation Agreement between the University of North Carolina's Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) programs and the North Carolina Community College Associate Degree Nursing Programs which was approved by the State Board of Community Colleges and the UNC Board of Governors in February 2015. The AGE-Nursing shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of courses.

A student who completes an Associate in Applied Science (AAS) in Nursing with a GPA of at least 2.0 and a grade of C or better in the AGE-Nursing courses listed below and who holds a current unrestricted license as a Registered Nurse in North Carolina will have fulfilled the UNC institutions lower-division general education requirements as well as nursing program entry requirements. However, because nursing program admissions are competitive, no student is guaranteed admission to the program of his or her choice.

***The Placement Test is required for all courses listed in this program.**

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Title			Class/Lab/Credit		
I. General Education Courses 15 shc required					
English Composition (6 semester hours)					
ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3
Humanities/Communications (9 semester hours)					
Take 2 Groups/ Take 6 credits					
ART	111	Art Appreciation	3	0	3
ART	114	Art History Survey I	3	0	3
ART	115	Art History Survey II	3	0	3
HUM	115	Critical Thinking	3	0	3
MUS	110	Music Appreciation	3	0	3
MUS	112	Introduction to Jazz	3	0	3
PHI	215	Philosophical Issues	3	0	3
PHI	240	Introduction to Ethics	3	0	3
Take 3 credits					
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
Social/Behavioral Sciences (9 semester hours)					
Take 3 Groups					
PSY	150	General Psychology	3	0	3
PSY	241	Developmental Psychology	3	0	3
SOC	210	Introduction to Sociology	3	0	3
Take 3 credits					
SOC	213	Sociology of the Family	3	0	3
SOC	220	Social Problems	3	0	3
SOC	225	Social Diversity	3	0	3

SOC	230	Race and Ethnic Relations	3	0	3
SOC	240	Social Psychology	3	0	3

Take 3 credits

HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3

Natural Science

Take 8 credits

BIO	168	Anatomy and Physiology	3	3	4
BIO	169	Anatomy and Physiology	3	3	4

Take 3 credits

BIO	175	General Microbiology	2	2	3
BIO	275	Microbiology	3	3	4

Take 1 of 2 Groups

CHM	151	General Chemistry I	3	3	4
or					
CHM	131	Introduction to Chemistry	3	0	3
CHM	131A	Introduction to Chemistry Lab	0	3	1

Math

Take 4 credits

MAT	152	Statistical Methods I	3	2	4

Take 3 credits

MAT	143	Quantitative Literacy	2	2	3
MAT	171	Pre-Calculus	3	2	4

II. Other Required Courses

ACA	122	College Transfer Success	0	2	1

III. Additional General Education

Take 7 credits

ART	111	Art Appreciation	3	0	3
AST	151	General Astronomy I	3	0	3
AST	151A	General Astronomy I Lab	0	2	1
AST	152	General Astronomy II	3	0	3
AST	152A	General Astronomy II Lab	0	2	1
BIO	111	General Biology I	3	3	4
BIO	112	General Biology II	3	3	4
CHM	131	Introduction to Chemistry	3	0	3
CHM	131A	Introduction to Chemistry Lab	0	3	1
CHM	132	Organic and Biochemistry	3	3	4
CHM	151	General Chemistry I	3	3	4
CHM	152	General Chemistry II	3	3	4
CIS	110	Introduction to Computers	2	2	3
CIS	115	Introduction to Programming and Logic	2	3	3
COM	110	Introduction to Communication	3	0	3
COM	120	Introduction to Interpersonal Communication	3	0	3
COM	231	Public Speaking	3	0	3
DRA	111	Theatre Appreciation	3	0	3
DRA	126	Storytelling	3	0	3

ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
ENG	114	Professional Research and Reporting	3	0	3
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
FRE	111	Elementary French I	3	0	3
FRE	112	Elementary French II	3	0	3
HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
HUM	110	Technology and Society	3	0	3
HUM	115	Critical Thinking	3	0	3
HUM	120	Cultural Studies	3	0	3
HUM	122	Southern Culture	3	0	3
MAT	143	Quantitative Literacy	2	2	3
MAT	171	Precalculus Algebra	3	2	4
MAT	172	Precalculus Trigonometry	3	2	4
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4
MAT	273	Calculus III	3	2	4
MUS	110	Music Appreciation	3	0	3
MUS	210	History of Rock Music	3	0	3
PHI	210	History of Philosophy	3	0	3
PHI	240	Introduction to Ethics	3	0	3
PHY	110	Conceptual Physics	3	0	3
PHY	110A	Conceptual Physics Lab	0	2	1
PHY	151	College Physics I	3	2	4
PHY	152	College Physics II	3	2	4
PHY	251	General Physics I	3	3	4
PHY	252	General Physics II	3	3	4
POL	120	American Government	3	0	3
POL	210	Comparative Government	3	0	3
PSY	239	Psychology of Personality	3	0	3
PSY	281	Abnormal Psychology	3	0	3
REL	110	World Religion	3	0	3
REL	211	Introduction to Old Testament	3	0	3
REL	212	Introduction to New Testament	3	0	3
SOC	213	Sociology of the Family	3	0	3
SOC	220	Social Problems	3	0	3
SPA	111	Elementary Spanish I	3	0	3
SPA	112	Elementary Spanish II	3	0	3
SPA	211	Intermediate Spanish I	3	0	3
SPA	212	Intermediate Spanish II	3	0	3

Total Credits: 60

General Occupational Technology (GOT)

A55280 (Associate of Applied Science Degree)

Curriculum Description:
The General Occupational Technology (GOT) curriculum provides individuals with the opportunity to upgrade their skills and earn an associate degree by taking courses that offer specific job knowledge and skills.

The curriculum content will be individualized for students according to their occupational interests and needs. A program of study for each student will be developed from any non-developmental level courses from approved curriculum programs of study offered by MTCC.

Graduates will become more effective and diverse workers, better qualified for advancements within their field of employment and better equipped for a wide range of entry-level employment opportunities.

**All courses included in the individualized GOT curriculum must be taken from approved associate of applied science, diploma or certificate programs.

General Education Requirements:
A.A.S. General Education Core: 15 semester credit hours

Communication
A.A.S. programs must contain a minimum of 6 credit hours(two courses) in communications. Students may choose from the following:

ENG	111	Writing and Inquiry	3
ENG	112	Writing/Research in the Disciplines	3
COM	110	Introduction to Communication	3
COM	120	Introd. to Interpersonal Communication	3
COM	231	Public Speaking	3

Humanities/Fine Arts
A.A.S. and Diploma programs must contain a minimum of 3 credit hours(1 course) in humanities/fine arts. Students may choose from the following:

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	126	Storytelling	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
ENG	273	African-American Literature	3
HUM	110	Technology and Society	3
HUM	115	Critical Thinking	3
HUM	122	Southern Culture	3
MUS	110	Music Appreciation	3
MUS	112	Introduction to Jazz	3
MUS	210	History of Rock Music	3
PHI	210	History of Philosophy	3
PHI	215	Philosophical Issues	3
PHI	240	Introduction to Ethics	3

REL	110	World Religions	3
REL	211	Introduction to Old Testament	3
REL	212	Introduction to New Testament	3
SPA	111	Elementary Spanish I	3
SPA	112	Elementary Spanish II	3

Social/Behavioral Science
A.A.S. and Diploma programs must contain a minimum of 3 credit hours(1 course) in humanities/fine arts. Students may choose from the following:

ECO	251	Principles of Microeconomics	3
ECO	251	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
POL	130	State and Local Government	3
POL	210	Comparative Government	3
PSY	150	General Psychology	3
PSY	239	Psychology of the Family	3
PSY	241	Developmental Psychology	3
PSY	244	Child Development I	3
PSY	244	Child Development II	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	242	Sociology of Deviance	3

Natural Science/Mathematics
A.A.S. and Diploma programs must contain a minimum of 3 credit hours(1 course) in humanities/fine arts. Students may choose from the following:

AST	151	General Astronomy I	3
AST	151A	General Astronomy I Lab	1
AST	152	General Astronomy II	3
AST	152A	General Astronomy II Lab	1
BIO	111	General Biology I	4
BIO	112	General Biology II	4
CHM	131	Introduction to Chemistry	3
CHM	131A	Introduction to Chemistry Lab	1
MAT	110	Math Measurement and Literacy	3
MAT	121	Algebra and Trigonometry I	3
MAT	143	Quantitative Literacy	3
MAT	152	Statistical Methods I	3
MAT	171	Precalculus Algebra	4
MAT	172	Precalculus Trigonometry	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	151	College Physics I	4

Major Courses:

A.A.S. Major Courses: 49 semester credit hours

**Of the 49, 18 credit hours must be selected from courses of associate degree-level curriculum programs offered at the College
**Thirty-one additional hours must be chosen from courses in curriculums offered by the College, including a maximum of eight credit hours through work experience, cooperative education, practicums and internships.

Other Required Hours:

ACA	115	Success and Study Skills	1
ACA	122	College Transfer Success	1
ACC	110	Ten-Key Skills	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	3
ACC	129	Individual Income Taxes	3
ACC	130	Business Income Taxes	3
ACC	140	Payroll Accounting	2
ACC	150	Accounting Software Applications	2
ACC	152	Advanced Software Applications	2
ACC	180	Practices in Bookkeeping	3
ACC	220	Intermediate Accounting I	4
ACC	221	Intermediate Accounting II	4
ACC	225	Cost Accounting	3
ACC	227	Practices in Accounting	3
ACC	240	Government and Not-for-Profit Accounting	3
ACC	250	Advanced Accounting	3
ACC	269	Audit and Assurance Services	3
AGR	265	Organic Crop Production: Spring	3
AGR	266	Organic Crop Production: Fall	3
AHR	110	Introduction to Refrigeration	5
AHR	111	HVACR Electricity	3
AHR	112	Heating Technology	4
AHR	113	Comfort Cooling	4
AHR	114	Heat Pump Technology	4
AHR	115	Refrigeration Systems	2
AHR	120	HVACR Maintenance	2
AHR	125	HVAC Electronics	2
AHR	130	HVAC Controls	3
AHR	135	Transportation Refrigeration	4
AHR	160	Refrigerant Certification	1
AHR	180	HVACR Customer Relations	1
AHR	210	Residential Building Code	2
AHR	211	Residential System Design	3
AHR	235	Refrigeration Design	3
AHR	245	Chiller Systems	2
ART	111	Art Appreciation	3
ART	114	Art History Survey I	3
ART	115	Art History Survey II	3
ART	121	Two-Dimensional Design	3
ART	171	Computer Art I	3
ART	275	Introduction to Commercial Art	3
AST	151	General Astronomy I	3
AST	151A	General Astronomy I Lab	1

AST	152	General Astronomy II	3
AST	152A	General Astronomy II Lab	1
AUB	111	Painting and Refinishing I	4
AUB	112	Painting and Refinishing II	4
AUB	114	Special Finishes	2
AUB	121	Non-Structural Damage I	3
AUB	122	Non-Structural Damage II	3
AUB	131	Structural Damage I	4
AUB	132	Structural Damage II	4
AUB	136	Plastics and Adhesives	3
AUB	141	Mechanical and Electrical Components I	3
AUB	160	Body Shop Operations	1
AUB	162	Autobody Estimating	2
AUT	113	Automotive Servicing I	2
AUT	114	Safety and Emissions	2
AUT	114A	Safety and Emissions Lab	1
AUT	116	Engine Repair	3
AUT	116A	Engine Repair Lab	1
AUT	141	Suspension and Steering Systems	3
AUT	141A	Suspension and Steering Systems Lab	1
AUT	151	Brake Systems	3
AUT	151A	Brake Systems Lab	1
AUT	161	Basic Auto Electricity	5
AUT	181	Engine Performance I	3
AUT	181A	Engine Performance I Lab	1
AUT	183	Engine Performance II	4
AUT	212	Auto Shop Management	3
AUT	221	Automatic Transmissions/Transaxles	3
AUT	221A	Auto Trans/Transaxles Lab	1
AUT	231	Manual Transmissions/Ax/Drtrains	3
AUT	231A	Manual Transmissions/Ax/Drtrains Lab	1
BIO	111	General Biology I	4
BIO	112	General Biology II	4
BIO	155	Nutrition	3
BIO	163	Basic Anatomy and Physiology	5
BIO	168	Anatomy and Physiology I	4
BIO	169	Anatomy and Physiology II	4
BIO	175	General Microbiology	3
BIO	275	Microbiology	4
BPR	111	Print Reading	2
BPR	121	Blueprint Reading: Mechanical	2
BPR	122	Blueprint Reading: Mechanical Advanced	2
BPR	130	Print Reading-Construction	3
BPR	135	Schematics and Diagrams	2
BUS	110	Introduction to Business	3
BUS	115	Business Law I	3
BUS	125	Personal Finance	3
BUS	135	Principles of Supervision	3
BUS	137	Principles of Management	3
BUS	147	Business Insurance	3
BUS	153	Human Resource Management	3
BUS	225	Business Finance	3
BUS	230	Small Business Management	3
BUS	240	Business Ethics	3
BUS	253	Leadership and Management Skills	3
BUS	260	Business Communication	3

BUS	280	REAL Small Business	4
CAR	110	Introduction to Carpentry	2
CAR	111	Carpentry I	8
CAR	112	Carpentry II	8
CAR	113	Carpentry III	6
CAR	114	Residential Building Codes	3
CAR	115	Residential Planning/Estimating	3
CAR	116	Metal Framing	2
CAR	150	Concrete Construction	5
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
CHM	251	Organic Chemistry I	4
CHM	252	Organic Chemistry II	4
CHM	271	Biochemical Principles	3
CHM	271A	Biochemical Principles Lab	1
CIS	110	Introduction to Computers	3
CJC	111	Intro to Criminal Justice*	3
CJC	112	Criminology	3
CJC	120	Interviews/Interrogations	2
CJC	121	Law Enforcement Operations*	3
CJC	122	Community Policing	3
CJC	131	Criminal Law	3
CJC	132	Court Procedures & Evidence	3
CJC	141	Corrections	3
CJC	160	Terrorism: Underlying Issues	3
CJC	161	Intro to Homeland Security	3
CJC	212	Ethics & Comm Relations	3
CJC	231	Constitutional Law	3
CJC	232	Civil Liability	3
CIS	070	Fundamentals of Computing	1
CIS	110	Introduction to Computers	3
CIS	111	Basic PC Literacy	2
CIS	113	Computer Basics	1
CIS	115	Introduction to Programming and Logic	3
CJC	100	Basic Law Enforcement Training	19
COM	110	Introduction to Communication	3
COM	120	Introducation to Interpersonal Communication	3
COM	231	Public Speaking	3
COS	111	Cosmetology Concepts I	4
COS	112	Salon I	8
COS	113	Cosmetology Concepts II	4
COS	114	Salon II	8
COS	115	Cosmetology Concepts III	4
COS	116	Salon III	4
COS	117	Cosmetology Concepts IV	2
COS	118	Salon IV	7
COS	119	Esthetics Concepts I	2
COS	120	Esthetics Salon I	6
COS	121	Manicure/Nail Technology I	6
COS	125	Esthetics Concepts II	2
COS	126	Esthetics Salon II	6
COS	222	Manicure/Nail Technology II	6
COS	224	Trichology and Chemistry	2

COS	240	Contemporary Design	2
COS	250	Computerized Salon Ops	1
COS	251	Manicure Instructor Concepts	8
COS	252	Manicure Instructor Practicum	5
COS	253	Esthetics Instructor Concepts I	11
COS	254	Esthetics Instructor Concepts II	11
COS	271	Instructor Concepts I	5
COS	272	Instructor Practicum I	7
COS	273	Instructor Concepts II	5
COS	274	Instructor Practicum II	7
CSC	134	C++ Programming	3
CSC	151	JAVA Programming	3
CTI	110	Web, PGM and Db Foundation	3
CTI	120	Network and Security Foundations	3
CTI	140	Virtualization Concepts	3
CTS	115	Information Systems Business Concepts	3
CTS	120	Hardware/Software Support	3
CTS	130	Spreadsheet	3
CTS	135	Integrated Software Introduction	4
CTS	285	Systems Analysis and Design	3
CTS	289	System Support Project	3
DBA	110	Database Concepts	3
DDF	110	Cabinet Design/Drafting	2
DES	135	Principles and Elements of Design I	4
DFT	111	Technical Drafting I	2
DFT	119	Basic CAD	2
ECO	251	Principles of Microeconomics	3
ECO	252	Principles of Macroeconomics	3
EDU	114	Introduction to Family Childcare	3
EDU	118	Principles and Practices of Inst Asst	3
EDU	119	Introduction to Early Child Education	4
EDU	131	Child, Family and Communication	3
EDU	144	Child Development I	3
EDU	145	Child Development II	3
EDU	146	Child Guidance	3
EDU	151	Creative Activities	3
EDU	151A	Creative Activities Lab	1
EDU	152	Music, Movement and Language	3
EDU	152A	Music, Movement and Language Lab	1
EDU	153	Health, Safety and Nutrition	3
EDU	153A	Health, Safety and Nutrition Lab	1
EDU	154	Social/Emotional/Behavioral Development	3
EDU	155	Art and Drama for Children	2
EDU	157	Active Play	3
EDU	162	Observation and Assessment in ECE	3
EDU	163	Classroom Management and Instruction	3
EDU	171	Instructional Media	3
EDU	173	Becoming a Professional in ECE	3
EDU	175	Introduction to Trade and Industry	3
EDU	175	Occ Analysis and Course Development	3
EDU	184	Early Childhood Intro Practicum	2
EDU	216	Foundations of Education	4
EDU	221	Children with Exceptional	3
EDU	222	Learn w/ Behavioral Disorders	3
EDU	223	Specific Learning Disabilities	3
EDU	234	Infants, Toddlers and Twos	3

EDU 234A Infants, Toddlers and Twos Lab	1
EDU 235 School-Age Dev and Program	3
EDU 241 Adult-Child Relations	2
EDU 247 Sensory and Physical Disabilities	3
EDU 248 Developmental Delays	3
EDU 251 Exploration Activities	3
EDU 251A Exploration Activities Lab	1
EDU 252 Math and Science Activities	3
EDU 252A Math and Science Activities Lab	1
EDU 261 Early Childhood Administration I	3
EDU 262 Early Childhood Administration II	3
EDU 271 Educational Technology	3
EDU 275 Effective Teaching Training	2
EDU 280 Language and Literacy Experience	3
EDU 280A Language and Literacy Experience Lab	1
EDU 281 Instructor Strategies/Read and Write	3
EDU 284 Early Childhood Capstone Practicum	4
EDU 285 Internship Experience—School Age	4
EDU 289 Advanced Issues/School Age	1
EGR 150 Introduction to Engineering	2
EGR 220 Engineering Statistics	3
ELC 111 Introduction to Electricity	3
ELC 112 DC/AC Electricity	5
ELC 113 Residential Wiring	4
ELC 115 Industrial Wiring	4
ELC 118 National Electric Code	2
ELC 119 NEC Calculations	2
ELC 128 Introduction to PLC	3
ELC 131 Circuit Analysis	4
ELC 213 Instrumentation	4
ELN 131 Analog Electronics	4
ELN 133 Digital Electronics	4
ELN 135 Electronic Circuits	3
ELN 140 Semiconductor Devices	6
ELN 141 Digital Fundamentals	6
ELN 229 Industrial Electronics	4
ELN 231 Industrial Controls	3
ELN 233 Microprocessor Systems	4
ELN 247 Electronic App Project	2
ELN 275 Troubleshooting	2
EGR 125 Appl Software for Tech	2
EMS 110 EMT	8
ENG 101 Applied Communications I	3
ENG 111 Writing and Inquiry	3
ENG 112 Writing/Research in the Disciplines	3
ENG 114 Prof. Research & Reporting	3
ENG 125 Prof. Research & Reporting	3
ENG 125 Creative Writing I	3
ENG 231 American Literature	3
ENG 232 American Literature II	3
ENG 241 British Literature I	3
ENG 242 British Literature II	3
ENG 272 Southern Literature	3
ENG 273 African-American Literature	3
EPT 120 Sociology of Disaster	3
EPT 124 EM Services Law & Ethics	3

EPT 130	Mitigation & Preparedness	3
EPT 140	Emergency Management	3
EPT 150	Incident Management	3
EPT 210	Response & Recovery	3
EPT 220	Terrorism & Emer. Mgt	3
EPT 228	Local Gov't Finance	3
EPT 275	Emergency OPS Center Mgt	3
FIP 110	Fire Prot/Rest & Hotels	1
FIP 120	Intro to Fire Protection	3
FIP 124	Fire Prevention & Public Ed	3
FIP 132	Building Construction	3
FIP 146	Fire Protection Systems	4
FIP 162	Firefighter Safety & Wellness	3
FIP 176	HazMat: Operations	4
FIP 180	Wildland Fire Behavior	3
FIP 184	Wildland Fire Safety	3
FIP 220	Fire Fighting Strategies	3
FIP 229	Fire Dynamics and Combust	3
FIP 232	Hydraulics & Water Dist	3
FRE 111	Elementary French I	3
FRE 112	Elementary French II	3
GRD 110	Typography I	3
GRD 113	History of Graphic Design	3
GRD 121	Drawing Fundamentals I	3
GRD 131	Illustration I	2
GRD 141	Graphic Design I	4
GRD 142	Graphic Design II	4
GRD 151	Computer Design Basics	3
GRD 152	Computer Design Tech I	3
GRD 160	Photo Fundamentals I	3
GRD 180	Interactive Design	3
GRD 241	Graphic Design III	4
GRD 242	Graphic Design IV	4
GRD 249	Advanced Design Practice	4
GRD 263	Illustrative Imaging	3
GRD 271	Multimedia Design I	2
GRD 280	Portfolio Design	4
GRD 281	Design of Advertising	2
GRD 285	Client/Media Relations	2
HIT 110	Fundamentals of HIM	3
HIT 112	Health Law and Ethics	3
HIT 114	Health Data Systems/Standards	3
HIT 122	Professional Practice Exp I	1
HIT 124	Professional Practice Exp II	1
HIT 210	Healthcare Statistics	3
HIT 211	ICD Coding	4
HIT 214	CPT/Other Coding Systems	2
HIT 215	Reimbursement Methodology	2
HIT 216	Quality Management	2
HIT 218	Mgmt Principles in HIT	3
HIT 221	Lifecycle of HER	3
HIT 222	Prof Practice Exp III	2
HIT 225	Healthcare Informatics	4
HIT 226	Principles of Disease	3
HIT 227	Informatics Project Mgt	3
HIT 280	Professional Issues	2

HIS 111 World Civilizations I	3
HIS 112 World Civilizations II	3
HIS 131 American History I	3
HIS 132 American History II	3
HOR 112 Landscape Design	3
HOR 114 Landscape Construction	3
HOR 116 Landscape Management I	3
HOR 118 Equipment Operation and Maintenance	2
HOR 134 Greenhouse Operations	3
HOR 154 Introduction to Horticulture Therapy	4
HOR 160 Plant Materials I	3
HOR 161 Plant Materials II	3
HOR 162 Applied Plant Science	3
HOR 164 Horticultural Pest Management	3
HOR 166 Soil and Fertilizer	3
HOR 168 Plant Propogation	3
HOR 213 Landscape Design II	3
HOR 225 Nursery Production	3
HOR 245 Horticultural Specialty Crops	3
HOR 255 Interiorscapes	2
HOR 257 Aboriculture Practices	2
HOR 265 Advanced Plant Materials	2
HOR 266 Micropropagation	3
HOR 266A Micropropagation Lab Techniques	4
HUM 115 Critical Thinking	3
HUM 110 Technology & Society	3
HUM 120 Technology and Society	3
HUM 122 Southern Culture	3
HYD 110 Hydraulics/Pneumatics I	3
ISC 110 Workplace Safety	1
ISC 112 Industrial Safety	2
ISC 115 Construction Safety	2
ISC 121 Environmental Health and Safety	3
ISC 130 Introduction of Quality Control	3
ISC 210 Oper and Prod Planning	3
LSG 111 Basic Landscape Technique	2
LSG 121 Fall Gardening Lab	2
LSG 122 Spring Gardening Lab	2
LSG 123 Summer Gardening Lab	2
LSG 231 Landscape Supervision	4
LSG 232 Garden Management	2
MAC 114 Introduction to Metrology	2
MAC 121 Introduction to CNC	2
MAC 122 CNC Turning	2
MAC 124 CNC Milling	2
MAC 141 Machining Applications I	4
MAC 142 Machining Applications II	4
MAC 143 Machining Applications III	4
MAC 151 Machining Calculations	2
MAC 152 Adv Machining Calculations	2
MAC 222 Advanced CNC Turning	2
MAC 224 Advanced CNC Milling	2
MAC 231 CAM: CNC Turning	3
MAC 232 CAM: CNC Milling	3
MAS 140 Introduction to Masonry	2
MAT 110 Math Measurement and Literacy	3

MAT 121 Algebra/Trigonometry I	3
MAT 122 Algebra/Trigonometry II	3
MAT 143 Quantitative Literacy	3
MAT 152 Statistical Methods I	4
MAT 171 Precalculus Algebra	4
MAT 172 Precalculus Trigonometry	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
MEC 111 Machine Processes I	3
MEC 112 Machine Processes II	3
MEC 130 Mechanisms	3
MEC 141 Introduction Mfg Processes	3
MEC 142 Physical Metallurgy	2
MED 120 Survey of Medical Terminology	2
MED 121 Medical Terminology I	3
MED 122 Medical Terminology II	3
MKT 120 Principles of Marketing	3
MKT 121 Retailing	3
MKT 122 Visual Merchandising	3
MKT 123 Fundamentals of Selling	3
MKT 220 Advertising and Sales Promotion	3
MKT 224 International Marketing	3
MKT 225 Marketing Research	3
MKT 227 Marketing Applications	3
MKT 230 Public Relations	3
MKT 232 Social Media Marketing	3
MNT 110 Introduction to Maintenance Procedures	2
MNT 111 Maintenance Practices	3
MUS 110 Music Appreciation	3
MUS 112 Introduction to Jazz	3
MUS 210 History of Rock Music	3
NAS 101 Nursing Assistant I	6
NAS 102 Nursing Assistant II	6
NAS 103 Home Health Care	6
NET 110 Networking Concepts	3
NET 125 Networking Basics	3
NET 126 Routing Basics	3
NET 225 Routing and Switching I	3
NET 226 Routing and Switching II	3
NET 240 Network Design	3
NET 260 Internet Development and Support	3
NOS 110 Operating System Concepts	3
NOS 120 Linux/UNIX Single User	3
NOS 130 Windows Single User	3
NOS 230 Windows Admin I	3
NUR 101 Practical Nursing I	11
NUR 102 Practical Nursing II	12
NUR 103 Practical Nursing III	10
NUR 111 Introduction to Health Concepts	8
NUR 112 Health Illness Concepts	5
NUR 113 Family Health Concepts	5
NUR 114 Holistic Health Concepts	5
NUR 211 Health Care Concepts	5

NUR 212 Health System Concepts	5
NUR 214 Nursing Transition Concepts	4
NUT 110 Nutrition	3
OMT 112 Materials Management	3
OMT 143 Just-in-Time	2
OMT 260 Issues in Operations Mgmt	3
OST 080 Keyboarding Literacy	2
OST 122 Office Computations	2
OST 131 Keyboarding	2
OST 134 Text Entry and Formatting	3
OST 135 Adv Text Entry and Formatting	4
OST 136 Word Processing	3
OST 153 Office Finance Solutions	2
OST 164 Text Editing Applications	3
OST 184 Records Management	3
OST 223 Admin Office Transcription I	3
OST 236 Adv Word/Information Processing	3
OST 241 Medical Office Transcription I	2
OST 242 Medical Office Transcription II	2
OST 244 Medical Document Production	2
OST 247 Procedure Coding	2
OST 248 Diagnostic Coding	2
OST 286 Professional Development	3
OST 289 Office Systems Management	3
PCI 264 Process Control with PLC's	4
PCW 132 Composite Materials Construction	2
PED 110 Fit and Well for Life	2
PED 111 Physical Fitness	1
PED 113 Aerobics I	1
PED 117 Weight Training I	1
PED 120 Walking for Fitness	1
PED 128 Golf-Beginning	1
PED 130 Tennis-Beginning	1
PED 139 Bowling-Beginning	1
PED 152 Swimming-Beginning	1
PED 155 Water Aerobics	1
PED 174 Wilderness Pursuits	1
PED 219 Disc Golf	1
PHI 210 History of Philosophy	3
PHI 215 Philosophical Issues	3
PHI 240 Introduction to Ethics	3
PHO 110 Fundamentals of Photography	5
PHO 113 History of Photography	3
PHO 115 Basic Studio Lighting	4
PHO 120 Intermediate Photography	4
PHO 132 Small-Format Photography	4
PHO 139 Introduction to Digital Imaging	2
PHO 140 Digital Photo Imaging I	4
PHO 150 Portfolio Development I	4
PHO 180 Creative Problem Solving	3
PHO 216 Documentary Photography	4
PHO 217 Photojournalism I	4
PHO 220 Business of Photography	3
PHO 224 Multimedia Production	3
PHO 226 Portraiture	4
PHO 235 Commercial Photography	4

PHY 110 Conceptual Physics	3
PHY 110A Conceptual Physics Lab	1
PHY 131 Physics-Mechanics	4
PHY 151 College Physics I	4
PHY 152 College Physics II	4
PHY 251 General Physics I	4
PHY 252 General Physics II	4
PLA 110 Introduction to Plastics	2
POL 120 American Government	3
POL 130 State and Local Government	3
POL 210 Comparative Government	3
PSY 118 Interpersonal Psychology	3
PSY 150 General Psychology	3
PSY 239 Psychology of Personality	3
PSY 241 Developmental Psychology	3
PSY 281 Abnormal Psychology	3
REF 116 Commercial Systems	4
REF 117 Refrigeration Controls	4
REF 123 Electrical Devices	3
REL 110 World Religions	3
REL 211 Introduction to Old Testament	3
REL 212 Introduction to New Testament	3
SEC 110 Security Concepts	3
SOC 210 Introduction to Sociology	3
SOC 213 Sociology of the Family	3
SOC 220 Social Problems	3
SOC 242 Sociology of Deviance	3
SPA 110 Introduction to Spanish	2
SPA 111 Elementary Spanish I	3
SPA 112 Elementary Spanish II	3
SPA 181 Spanish Lab I	1
SPA 182 Spanish Lab II	1
SPA 211 Intermediate Spanish I	3
SPA 212 Intermediate Spanish II	3
SPA 281 Spanish Lab III	1
SPA 282 Spanish Lab IV	1
SUR 110 Introduction to Surgical Technology	3
SUR 111 Periop Patient Care	7
SUR 122 Surgical Procedures I	6
SUR 123 Surgical Clinical Practice I	7
SUR 134 Surgical Procedures II	5
SUR 135 Surgical Clinical Practice II	4
SUR 137 Prof Success Prep	1
TRN 170 PC Skills for Transportation	2
TRN 180 Basic Welding for Transportation	3
WBL 111 Work-Based Learning I	1
WBL 112 Work-Based Learning II	2
WBL 113 Work-Based Learning III	3
WBL 121 Work-Based Learning II	1
WBL 131 Work-Based Learning III	1
WBL 211 Work-Based Learning IV	1
WBL 212 Work-Based Learning IV	2
WEB 110 Internet/Web Fundamentals	3
WEB 111 Introduction to Web Graphics	3
WEB 115 Web Markup and Scripting	3
WEB 120 Introduction to Internet Multimedia	3

WEB 140 Web Development Tools	3
WEB 151 Mobile Application Dev. I	3
WEB 179 JAVA Web Programming	3
WEB 182 PHP Programming	3
WEB 210 Web Design	3
WEB 214 Social Media	3
WEB 225 Content Management Systems	3
WEB 230 Implementing Web Services	3
WEB 250 Database Driven Websites	3
WEB 285 Emerging Web Technologies	3
WEB 287 Web E-Portfolio	2
WLD 110 Cutting Processes	2
WLD 112 Basic Welding Processes	2
WLD 115 SMAW(Stick)Plate	5
WLD 116 SMAW(Stick)Plate/Pipe	4
WLD 121 GMAW(MIG)FCAW/Plate	4
WLD 131 GTAW(TIG)Plate	4
WLD 141 Symbols and Specifications	3
WLD 151 Fabrication I	4
WLD 261 Certification Practices	2

Health Information Technology

A45360 (Associate) D45360 (Diploma)
C45360A (Certificate) C45360B (Certificate)
C45360IF (Certificate)

This 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.

The Health Information Technology program is accredited by the Commission on the Accreditation for Health Informatics and Information Management (CAHIIM) Education.

Please visit the McDowell Technical Community College Health Science website for current admission information:

http://www.mcdowelltech.edu/health_science.html

Associate Degree Program (A45360)

Title			Class/Lab/Credit		
I. General Education Courses					
ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Discipline	3	0	3
MAT	143	Quantitative Literacy	2	2	3

Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.

II. Major Courses			Class	Lab	Clin.	Credit
BIO	168	Anatomy and Physiology I	3	3	0	4
BIO	169	Anatomy and Physiology II	3	3	0	4
HIT	110	Fundamentals of Health Information Mgt.	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	122	Professional Practice Experience I	0	0	3	1
HIT	124	Professional Practice Experience II	0	0	3	1
HIT	210	Healthcare Statistics	2	2	0	3
HIT	211	ICD Coding	2	6	0	4
HIT	214	CPT/Other Coding Systems	1	3	0	2
HIT	216	Quality Management	1	3	0	2
HIT	218	Management Principles in HIT	3	0	0	3
HIT	222	Professional Practice Experience III	0	0	6	2
HIT	226	Principles of Disease	3	0	0	3
HIT	280	Professional Issues	2	0	0	2
MED	121	Medical Terminology I	3	0	0	3
MED	122	Medical Terminology II	3	0	0	3

III. Other Major Courses Select 11 credits						
CIS	110	Introduction to Computers*	2	2	0	3
HIT	215	Reimbursement Methodology*	1	2	0	2

HIT	221	Lifecycle of EHR*	2	2	0	3
HIT	227	Informatics Project Management	2	2	0	3

IV. Other Required Courses

ACA	115	Success and Study Skills	0	2	0	1

Total Credits: 73

Recommended Semester Schedule

First Year-Fall

BIO	168	Anatomy and Physiology I	3	3	0	4
CIS	110	Introduction to Computers	2	2	0	3
HIT	110	Fundamentals of Health Information Mgt.	3	0	0	3
HIT	112	Health Law Ethics	3	0	0	3
MED	121	Medical Terminology I	3	0	0	3

First Year-Spring

BIO	169	Anatomy and Physiology II	3	3	0	4
ENG	111	Writing and Inquiry	3	0	0	3
HIT	114	Health Data Systems/Standards	2	3	0	3
MAT	143	Quantitative Literacy	2	2	0	3
MED	122	Medical Terminology II	3	0	0	3

First Year-Summer

ENG	112	Writing/Research in the Discipline	3	0	0	3
HIT	226	Principles of Disease	3	0	0	3
PSY	150	General Psychology	3	0	0	3
Humanities/Art Elective-see list on page 75			3	0	0	3

Second Year-Fall

HIT	122	Professional Practice Experience I	0	0	3	1
HIT	124	Professional Practice Experience II	1	0	3	1
HIT	210	Healthcare Statistics	2	2	0	3
HIT	211	ICD Coding	2	6	0	4
HIT	215	Reimbursement Methodology	1	2	0	2
HIT	218	Management Principles in HIT	3	0	0	3

Second Year-Spring

HIT	214	CPT/Other Coding Systems	1	3	0	2
HIT	216	Quality Management	1	3	0	2
HIT	221	Lifecycle of EHR*	2	2	0	3
HIT	222	Professional Practice Experience III	0	0	6	2
HIT	227	Informatics Project Management	2	2	0	3
HIT	280	Professional Issues	2	0	0	2

Health Information Technology Coding Diploma (D45360)
Medical Coding Concentration

Title			Class	Lab	Clin.	Credit
I. General Education Courses						
ENG	111	Writing and Inquiry	3	0	0	3
MAT	143	Quantitative Literacy	2	2	0	3
II. Major Courses						
BIO	168	Anatomy and Physiology	3	3	0	4
BIO	169	Anatomy and Physiology II	3	3	0	4

HIT	110	Fundamentals of Health Information Mgt.	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	124	Professional Practice Experience II	0	0	3	1
HIT	211	ICD Coding	2	6	0	4
HIT	214	CPT/Other Coding Systems	1	3	0	2
HIT	222	Professional Practice Experience III	0	0	6	2
HIT	226	Principles of Disease	3	0	0	3
MED	121	Medical Terminology I	3	0	0	3
MED	122	Medical Terminology II	3	0	0	3
III. Other Major Courses						
CIS	110	Introduction to Computers	2	2	0	3
HIT	215	Reimbursement Methodology	1	2	0	2
IV. Other Required Courses						
ACA	115	Success and Study Skills	0	2	0	1

Total Credits: 47

Recommended Semester Schedule

Title			Class	Lab	Clin.	Credit
First Year-Fall						
BIO	168	Anatomy and Physiology I	3	3	0	4
CIS	110	Introduction to Computers	2	2	0	3
HIT	110	Fundamentals of Health Information Mgt.	3	0	0	3
HIT	112	Health Law & Ethics	3	0	0	3
MED	121	Medical Terminology I	3	0	0	3
First Year-Spring						
BIO	169	Anatomy and Physiology II	3	3	0	4
ENG	111	Writing and Inquiry	3	0	0	3
HIT	114	Health Data Systems/Standards	2	3	0	3
MED	122	Medical Terminology II	3	0	0	3
First Year-Summer						
HIT	226	Principles of Disease	3	0	0	3
Second Year-Fall						
HIT	124	Professional Practice Experience II	0	0	3	1
HIT	211	ICD Coding	2	6	0	4
Second Year-Spring						
HIT	214	CPT/Other Coding Systems	1	3	0	2
HIT	215	Reimbursement Methodology	1	2	0	2
HIT	222	Professional Practice Experience III	0	0	6	2

Certificate Program (C45360A)
Release of Information Concentration

Title			Class	Lab	Clin.	Credit
I. Major Courses						
HIT	110	Fundamentals of Health Information Mgt.	3	0	0	3
HIT	112	Health Law & Ethics	3	0	0	3
HIT	114	Health Data Systems/Standards	2	3	0	3

MED	121	Medical Terminology I	3	0	0	3
MED	122	Medical Terminology II	3	0	0	3

II. Other Major Courses

CIS	110	Introduction to Computers	2	2	0	3

Total Credits: 18

Recommended Semester Schedule

First Year-Fall

CIS	110	Introduction to Computers	2	2	0	3
HIT	110	Fundamentals of Health Information Mgt.	3	0	0	3
HIT	112	Health Law Ethics	3	0	0	3
MED	121	Medical Terminology I	3	0	0	3

First Year-Spring

HIT	114	Health Data Systems/Standards	2	3	0	3
MED	122	Medical Terminology II	3	0	0	3

Healthcare Informatics Certificate (C45360-IF)

Title			Class	Lab	Clin.	Credit
I. Major Courses						
HIT	112	Health Law and Ethics	3	0	0	3
HIT	114	Health Data Systems/Standards	2	3	0	3
II. Other Major Courses						
CIS	113	Computer Basics	0	2	0	1
HIT	221	Lifecycle of EHR	2	2	0	3
HIT	225	Healthcare Informatics	3	2	0	4
HIT	227	Informatics Project Management	2	2	0	3

Total Credits: 17

Recommended Semester Schedule

First Year-Fall

HIT	112	Health Law and Ethics	3	0	0	3
HIT	114	Health Data Systems/Standards	2	3	0	3
HIT	225	Healthcare Informatics	3	2	0	4

First Year-Spring

CIS	113	Computer Basics	0	2	0	1
HIT	221	Lifecycle of EHR	2	2	0	3
HIT	227	Informatics Project Management	2	2	0	3

HIT Certificate in Medical Billing and Coding (C45360B)

Title			Class	Lab	Clin.	Credit
I. Major Courses						
HIT	124	Professional Practice Experience	0	0	3	1
MED	121	Medical Terminology I	3	0	0	3

MED	122	Medical Terminology II	3	0	0	3

II. Other Major Courses

HIT	215	Reimbursement Methodology.	1	2	0	2
OST	247	Procedural Coding	2	2	0	3
OST	248	Diagnostic Coding	2	2	0	3
OST	249	Medical Coding Certification Prep	2	3	0	3

Total Credits: 18

Recommended Semester Schedule

First Year-Fall

HIT	215	Reimbursement Methodology	1	2	0	2
MED	121	Medical Terminology I	3	0	0	3
MED	122	Medical Terminology II	3	0	0	3

First Year-Spring

OST	247	Procedural Coding	2	2	0	3
OST	248	Diagnostic Coding	2	2	0	3

First Year-Summer

HIT	124	Professional Practice Experience	0	0	3	1
OST	249	Medical Coding Certification Prep	2	3	0	3

Health Science: Therapeutic and Diagnostic Services/Nurse Aide

D45970 (Diploma)

This curriculum is designed to prepare students for careers in the Health Sciences.

Students will complete general education courses that provide a foundation for success in nursing and allied health curricula. Students may select a career pathway that will prepare them for an entry level position in health care. Courses may also provide foundational knowledge needed in the pursuit of advanced health science degrees or programs.

Graduates should qualify for an entry-level job associated with the program major such as Emergency Medical Technician (EMT) or Advanced Emergency Medical Technician (AEMT), Medical Assistant, Nurse Aide, Pharmacy Technician, Phlebotomist, or Massage Therapist dependent upon the selected program major.

Nurse Aide: 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.

Diploma Program

Title			Class	Lab	Clinical	Credit
I. General Education Courses						
ENG	111	Writing and Inquiry	3	0	0	3
PSY	150	General Psychology	3	0	0	3
II. Major Courses						
NAS	101	Nurse Aide I	3	4	3	6
NAS	102	Nurse Aide II	3	2	6	6
MED	121	Medical Terminology I	3	0	0	3
MED	122	Medical Terminology II	3	0	0	3
III. Other Major Courses						
BIO	168	Anatomy and Physiology I	3	3	0	4
BIO	169	Anatomy and Physiology II	3	3	0	4
CIS	110	Introduction to Computers	2	2	0	3
NUT	110	Nutrition	3	0	0	3
IV. Other Required Courses						
ACA	115	Success and Study Skills	0	2	0	1

Total Credits: 39

Recommended Semester Schedule

First Year-Fall			Class	Lab	Clinical	Credit
NAS	101	Nurse Aide I	3	4	3	6
ACA	115	Success and Study Skills	0	2	0	1
ENG	111	Writing and Inquiry	3	0	0	3
MED	121	Medical Terminology I	3	0	0	3
BIO	168	Anatomy and Physiology I	3	3	0	4

Spring Semester

NAS	102	Nurse Aide II	3	2	6	6
MED	122	Medical Terminology II	3	0	0	3
NUT	110	Nutrition	3	0	0	3
BIO	169	Anatomy and Physiology II	3	3	0	4

Summer Semester

CIS	110	Introduction to Computers	2	2	0	3
PSY	150	General Psychology	3	0	0	3

Industrial Systems Technology

A50240 (Associate Degree) D50240 (Diploma)

This curriculum is designed to prepare or up-grade individuals to safely service, maintain, repair or install equipment. Instruction includes theory and skill training needed for inspecting, testing, troubleshooting and diagnosing industrial systems.

Students will learn multi-craft technical skills in blueprint reading, mechanical systems maintenance, electricity, hydraulics/pneumatics, welding, machining or fabrication, and includes various diagnostic and repair procedures. Practical application in these industrial systems will be emphasized and additional advanced course work may be offered.

Upon completion of this curriculum, graduates should be able to individually, or with a team, safely install, inspect, diagnose, repair and maintain industrial process and support equipment. Students will also be encouraged to develop their skills as life-long learners.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Associate Degree Program

Title			Class	Lab	Credit
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	171	Pre-Calculus Algebra	3	2	4
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
II. Major Courses					
Required Courses					
ELC	112	DC/AC Electricity	3	6	5
HYD	110	Hydraulics/Pneumatics	2	3	3
ISC	110	Workplace Safety	1	0	1
MAC	141	Machining Applications I	2	6	4
MNT	110	Intro to Maintenance Processes	1	3	2
WLD	112	Basic Welding Processes	1	3	2
Select one:					
BPR	111	Blueprint Reading	1	2	2
BPR	135	Schematics and Diagrams	2	0	2
III. Concentration Requirements					
ELC	113	Residential Wiring	2	6	4
ELC	115	Industrial Wiring	2	6	4
ELC	128	Intro. to PLC	2	3	3
MAC	114	Introduction to Metrology	2	0	2
IV. Other Major Courses (Must be selected from identified prefixes)					
Take 2 groups					
Group I- Take 13 credits from:					
AHR	160	Refrigerant Certification	1	0	1
ATR	212	Industrial Robots	2	3	3
EGR	125	Appl. Software for Tech	1	2	2
ELC	213	Instrumentation	3	2	4
ELN	231	Industrial Controls	2	3	3
MEC	130	Mechanisms	2	2	3

WBL	111	Work-Based Learning	0	10	1
WBL	112	Work-Based Learning	0	20	2
WBL	113	Work-Based Learning	0	30	3
WLD	110	Cutting Processes	1	3	2

Group II- Take 4 credits from:

PCI	264	Process Controls with PLC's	3	3	4
WLD	121	GMAW (MIG) FACW/Plate	2	6	4

IV. Other Required Courses

ACA	115	Success and Study Skills	0	2	1

Total Credits: 66

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
ELC	113	Residential Wiring	2	6	4
EGR	125	Appl. Software for Tech	1	2	2
HYD	110	Hydraulics/Pneumatics	2	3	3
ISC	110	Workplace Safety	1	0	1
MAT	171	Pre-Calculus Algebra	3	2	4

First Year-Spring

ELC	112	DC/AC Electricity	3	6	5
ELC	128	Intro. to PLC	2	3	3
ELN	231	Industrial Controls	2	3	3
MNT	110	Intro to Maintenance Processes	1	3	2
WLD	112	Basic Welding Processes	1	3	2

First Year-Summer

COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
Social Science Elective-see list on page 75			3	0	3
Humanities/Fine Arts Elective-see list on page 75			3	0	3

Second Year-Fall

ATR	212	Industrial Robots	2	3	3
ELC	213	Instrumentation	3	2	4
MAC	141	Machining Applications I	2	6	4
PCI/WLD Elective					

Second Year-Spring

AHR	160	Refrigerant Certification	1	0	1
ELC	115	Industrial Wiring	2	6	4
MAC	114	Introduction to Metrology	2	0	2
PCI/WLD Elective					

Diploma Program (D50240)

Title			Class/Lab/Credit		
I. General Education Courses					
ENG	111	Writing and Inquiry	3	0	3
MAT	171	Pre-Calculus Algebra	3	2	4

II. Major Courses

BPR	111	Print Reading	1	2	2
ELC	112	DC/AC Electricity	3	6	5
HYD	110	Hydraulics/Pneumatics	2	3	3
ISC	110	Workplace Safety	1	0	1
MAC	141	Machining Applications I	2	6	4
MNT	110	Intro to Maintenance Processes	1	3	2
WLD	112	Basic Welding Processes	1	3	2

III. Other Major Courses

ATR	212	Industrial Robots	2	3	3
ELC	113	Residential Wiring	2	6	4
ELC	115	Industrial Wiring	2	6	4
ELC	128	Intro. to PLC	2	3	3
ELN	231	Industrial Controls	2	3	3

IV. Other Required Courses

ACA	115	Success and Study Skills	1	0	1

Total Credits: 44

Recommended Semester Schedule (Diploma)

First Year-Fall

ACA	115	Success and Study Skills	1	0	1
ELC	113	Residential Wiring	2	6	4
HYD	110	Hydraulics/Pneumatics	2	3	3
ISC	110	Workplace Safety	1	0	1
MAT	171	Pre-Calculus Algebra	3	2	4

First Year-Spring

ELC	112	DC/AC Electricity	3	6	5
ELC	128	Intro. to PLC	2	3	3
ELN	231	Industrial Controls	2	3	3
MNT	110	Intro to Maintenance Processes	1	3	2
WLD	112	Basic Welding Processes	1	3	2

First Year-Summer

ENG	111	Writing and Inquiry	3	0	3
MAC	141	Machining Applications I	2	6	4

Second Year-Fall

ATR	212	Industrial Robots	2	3	3
BPR	111	Print Reading	1	2	2

Second Year-Spring

ELC	115	Industrial Wiring	2	6	4

Industrial Systems Technology, Refrigeration Stackable Certificates

Level 1 Certificate (C50240A)
First Semester

AHR	110	Introduction to Refrigeration
AHR	180	HVACR Customer Relations
ELC	111	Introduction to Electricity

Second Semester

AHR	160	Refrigeration Certification
AHR	115	Refrigeration Systems
REF	117	Refrigeration Controls

Level 2 Certificate (C50240B)

First Semester

REF	123	Electrical Devices
REF	116	Commercial Systems

Second Semester

AHR	235	Refrigeration Design
AHR	135	Transportation Refrigeration
AHR	245	Chiller Systems

Information Technology: Information Systems

A25590A (Associate Degree) C25590A (Certificate)
C25590B (Certificate)

Information Systems is a curriculum within the Information Technology Pathway:
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.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Information Systems Associate Degree Program (A25590A)

Title			Class	Lab	Credit
I. General Education Courses					
ENG	111	Writing and Inquiry	3	0	3
COM	231	Public Speaking	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
II. Major Courses					
CIS	110	Introduction to Computers	2	2	3
CTI	110	Web, Pgm,and Db Foundation	2	2	3
CTI	120	Network & Sec Foundation	2	2	3
CTS	115	Info Sys Business Concepts	3	0	3
III. Concentration					
CTS	120	Hardware/Software Support	2	3	3
NOS	120	Linux/Unix Single User	2	2	3
NOS	130	Windows Single User	2	2	3
NOS	230	Windows Admin I	2	2	3
IV. Other Major Courses					
Take 25 Credits					
ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
CSC	134	C++ Programming	2	3	3
CSC	151	Java Programming	2	3	3
DBA	110	Database Concepts	2	3	3
NET	125	Introduction to Networks	1	4	3
WEB	115	Web Markup and Scripting	2	2	3
WEB	214	Social Media	2	2	3
Take 3 credits from:					
CTI	140	Virtualization Concepts	1	4	3
CTS	130	Spreadsheet	2	2	3

ELN	233	Microprocessor Systems	3	3	4
NOS	110	Operating Systems Concepts	2	3	3
OST	136	Word Processing	2	2	3
WEB	120	Introduction to Internet Multimedia	2	2	3
WEB	225	Content Management Systems	2	2	3

Take 3 credits from:

WEB	111	Intro to Web Graphics	2	2	3
WEB	140	Web Development Tools	2	2	3
WEB	210	Web Design	2	2	3
WEB	285	Emerging Web Technologies	2	2	3

Take 2 credits from:

OST	286	Professional Development	3	0	3
WEB	287	Web E-Portfolio	1	2	2

V. Other Required Courses

ACA	115	Success and Study Skills	0	2	1

Total Credits: 73

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
CIS	110	Intro to Computers	2	2	3
CTI	110	Web, Pgm, & Db Foundation	2	2	3
CTS	115	Info Sys Business Concepts	3	0	3
NET	125	Introduction to Networks	1	4	3
WEB	115	Web Markup and Scripting	2	2	3

First Year-Spring

CSC	151	Java Programming	2	3	3
CTS	120	Hardware/Software Support	2	3	3
DBA	110	Database Concepts	2	3	3
NOS	130	Windows Single User	2	2	3

Pick List 1(Select one)

CTI	140	Virtualization Concepts	1	4	3
CTS	130	Spreadsheet	2	2	3
NOS	110	Operating Systems Concepts	2	3	3
ELN	233	Fundamentals of Microprocessors	3	3	4
OST	136	Word Processing	2	2	3
WEB	120	Intro Internet Multimedia	2	2	3
WEB	225	Content Management System	2	2	3

First Year-Summer

COM	231	Public Speaking	3	0	3
Humanities Elective			3	0	3
Social Science Elective			3	0	3

Second Year-Fall

ACC	120	Prin Fin Accounting	3	2	4
NOS	120	Linux/Unix Single User	2	2	3
NOS	230	Windows Admin I	2	2	3

Pick List 2(Select one)

WEB	111	Web Graphics	2	2	3
WEB	140	Web Development Tools	2	2	3
WEB	210	Web Design	2	2	3
WEB	285	Emerging Web Technologies	2	2	3

Second Year-Spring

BUS	110	Intro to Business	3	0	3
CSC	134	C++ Programming	2	3	3
CTI	120	Network & Security Foundation	2	2	3
WEB	214	Social Media	2	2	3

Second Year-Summer

ENG	111	Expository Writing	3	0	3
MAT	143	Quantitative Literacy	2	2	3

Pick List 3(Select one)

WEB	287	Web E-Portfolio	1	2	2
OST	286	Professional Development	3	0	3

Information Systems Certificate (C25590A)

Title			Class/Lab/Credit		
I. Major Courses					
CIS	110	Introduction to Computers	2	2	3
CTS	120	Hardware/Software Support	2	3	3
NOS	130	Windows Single User	2	2	3
III. Other Major Courses					
WEB	115	Web Markup and Scripting	2	2	3

Total Credits: 12

Recommended Semester Schedule

First Year-Fall

CIS	110	Intro to Computers	2	2	3
WEB	115	Web Markup and Scripting	2	2	3

First Year-Spring

NOS	130	Windows Single User	2	2	3
CTS	120	Hardware/Software Support	2	3	3

Information Systems Advanced Certificate (C25590B)

Title			Class/Lab/Credit		
I. Major Courses					
CTI	120	Network & Sec Foundation	2	2	3
NOS	120	Linux/Unix Single User	2	2	3
NOS	230	Windows Admin I	2	2	3
III. Other Major Courses					
CSC	151	JAVA Programming	2	3	3

Total Credits: 12

Recommended Semester Schedule

First Year-Fall

NOS	230	Windows Admin I	2	2	3
NOS	120	Linux/Unix Single User	2	2	3

First Year-Spring

CSC	151	Java Programming	2	3	3
CTI	120	Network & Sec Foundation	2	2	3

Information Technology: Networking Management

A25590B (Associate Degree) D25590B (Diploma)
C25590C (Certificate) C25590D (Certificate)

Networking Management is a curriculum within the Information Technology Pathway: 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.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Network Management Associate Degree Program (A25590B)

Title			Class	Lab	Credit
I. General Education Courses					
ENG	111	Writing and Inquiry	3	0	3
COM	231	Public Speaking	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
II. Major Courses					
CIS	110	Introduction to Computers	2	2	3
CTI	110	Web, Pgm,and Db Foundation	2	2	3
CTI	120	Network & Sec Foundation	2	2	3
CTS	115	Info Sys Business Concepts	3	0	3
III. Concentration					
CTI	140	Virtualization Concepts	1	4	3
NET	125	Introduction to Networks	1	4	3
IV. Other Major Courses					
Take 3 credits from:					
NET	240	Network Design	3	0	3
NOS	110	Operating Systems Concepts	2	3	3
Take 3 credits from:					
WEB	111	Intro to Web Graphics	2	2	3
WEB	140	Web Development Tools	2	2	3
WEB	210	Web Design	2	2	3
WEB	285	Emerging Web Technologies	2	2	3
Take 2 credits from:					
OST	286	Professional Development	3	0	3
WEB	287	Web E-Portfolio	1	2	2

Take 30 credits from:

CSC	151	Java Programming	2	3	3
CTS	120	Hardware/Software Support	2	3	3
DBA	110	Database Concepts	2	3	3
NET	126	Routing Basics	1	4	3
NET	225	Routing & Switching	1	4	3
NOS	120	Linux/Unix Single User	2	2	3
NOS	130	Windows Single User	2	2	3
NOS	230	Windows Admin I	2	2	3
WEB	115	Web Markup and Scripting	2	2	3
WEB	214	Social Media	2	2	3

V. Other Required Courses

ACA	115	Success and Study Skills	0	2	1

Total Credits: 72

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
CIS	110	Intro to Computers	2	2	3
CTI	110	Web, Pgm, & Db Foundation	2	2	3
CTS	115	Info Sys Business Concepts	3	0	3
NET	125	Introduction to Networks	1	4	3
WEB	115	Web Markup and Scripting	2	2	3

First Year-Spring

CTS	120	Hardware/Software Support	2	3	3
DBA	110	Database Concepts	2	3	3
NET	126	Routing Basics	1	4	3
NOS	130	Windows Single User	2	2	3
Pick List 1(Select one)					
NET	240	Network Design	3	0	3
NOS	110	Operating Systems Concepts	2	3	3

First Year-Summer

COM	231	Public Speaking	3	0	3
Humanities Elective, Recommended:					
Art	111	Art Appreciation	3	0	3
Social Science Elective, Recommended:					
Eco	251 Or Eco 252		3	0	3

Second Year-Fall

NET	225	Routing & Switching I	1	4	3
NOS	120	Linux/Unix Single User	2	2	3
NOS	230	Windows Admin I	2	2	3
Pick List 2(Select one)					
WEB	140	Web Development Tools	2	2	3
WEB	210	Web Design	2	2	3
WEB	285	Emerging Web Technologies	2	2	3

Second Year-Spring

CSC	151	Java Programming	2	3	3
CTI	120	Network & Security Foundation	2	2	3
CTI	140	Virtualization Concepts	1	4	3
WEB	214	Social Media	2	2	3

Second Year-Summer

ENG	111	Expository Writing	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Pick List 3(Select one)					
WEB 287		Web E-Portfolio	1	2	2
OST 286		Professional Development	3	0	3

Network Management Diploma Program (D25590B)

Title			Class/Lab/Credit		
I. General Education Courses					
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
II. Major Courses					
CIS	110	Introduction to Computers	2	2	3
CTI	110	Web, Pgm,and Db Foundation	2	2	3
CTI	120	Network & Sec Foundation	2	2	3
CTS	115	Info Sys Business Concepts	3	0	3
III. Concentration					
CTI	140	Virtualization Concepts	1	4	3
NET	125	Introduction to Networks	1	4	3
IV. Other Major Courses					
Take 21 credits from:					
CSC	151	Java Programming	2	3	3
CTS	120	Hardware/Software Support	2	3	3
NET	126	Routing Basics	1	4	3
NET	225	Routing & Switching	1	4	3
NOS	120	Linux/Unix Single User	2	2	3
NOS	130	Windows Single User	2	2	3
NOS	230	Windows Admin I	2	2	3
V. Other Required Courses					
ACA	115	Success and Study Skills	0	2	1

Total Credits: 46

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
CIS	110	Intro to Computers	2	2	3
CTI	110	Web, Pgm, & Db Foundation	2	2	3
CTS	115	Info Sys Business Concepts	3	0	3
NET	125	Introduction to Networks	1	4	3

First Year-Spring

CTS	120	Hardware/Software Support	2	3	3
NET	126	Routing Basics	1	4	3
NOS	130	Windows Single User	2	2	3
MAT	143	Quantitative Literacy	2	2	3

First Year-Summer

ENG	111	Expository Writing	3	0	3

Second Year-Fall

NET	225	Routing & Switching I	1	4	3
NOS	120	Linux/Unix Single User	2	2	3
NOS	230	Windows Admin I	2	2	3

Second Year-Spring

CSC	151	Java Programming	2	3	3
CTI	120	Network & Security Foundation	2	2	3
CTI	140	Virtualization Concepts	1	4	3

Network Management Certificate Program (C25590C)

Title			Class/Lab/Credit		
I. Major Courses					
NET	125	Introduction to Networks	1	4	3
II. Other Major Courses					
CTS	120	Hardware/Software Support	2	3	3
NET	126	Routing Basics	1	4	3
NOS	120	Linux/Unix Single User	2	2	3

Total Credits: 12

Recommended Semester Schedule

First Year-Fall

NOS	120	Linux/Unix Single User	2	2	3
NET	125	Introduction to Networks	1	4	3

First Year-Spring

NET	126	Routing Basics	1	4	3
CTS	120	Hardware/Software Support	2	3	3

Network Management Advanced Certificate Program (C25590D)

Title			Class/Lab/Credit		
I. Major Courses					
CTI	120	Network & Sec Foundation	2	2	3
CTI	140	Virtualization Concepts	1	4	3
II. Other Major Courses					
NET	225	Routing & Switching	1	4	3
NOS	230	Windows Admin I	2	2	3

Total Credits: 12

Recommended Semester Schedule

First Year-Fall

NET	225	Routing & Switching I	1	4	3
NOS	230	Windows Admin I	2	2	3

First Year-Spring

CTI	120	Network & Sec Foundation	2	2	3
CTI	140	Virtualization Concepts	1	4	3

Information Technology: Software and Web Development

A25590C (Associate Degree)
C25590E (Certificate) C25590F (Certificate)

Software and Web Development is a curriculum within the Information Technology Pathway: 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.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Software and Web Development Associate Degree Program (A25590C)

Title			Class	Lab	Credit
I. General Education Courses					
ENG	111	Writing and Inquiry	3	0	3
COM	231	Public Speaking	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
II. Major Courses					
CIS	110	Introduction to Computers	2	2	3
CTI	110	Web, Pgm,and Db Foundation	2	2	3
CTI	120	Network & Sec Foundation	2	2	3
CTS	115	Info Sys Business Concepts	3	0	3
III. Concentration					
CSC	151	Java Programming	2	3	3
WEB	115	Web Markup and Scripting	2	2	3
IV. Other Major Courses					
DBA	110	Database Concepts	2	3	3
GRD	151	Computer Design Basics	1	4	3
GRD	152	Computer Design Tech I	1	4	3
WEB	111	Intro to Web Graphics	2	2	3
WEB	120	Intro to Internet Multimedia	2	2	3
WEB	140	Web Development Tools	2	2	3
WEB	151	Mobile Application Dev I	2	2	3
WEB	182	PHP Programming	2	2	3
WEB	210	Web Design	2	2	3
WEB	225	Content Management Systems	2	2	3
WEB	250	Database Driven Websites	2	2	3
WEB	285	Emerging Web Technologies	2	2	3
WEB	287	Web E-Portfolio	1	2	2

V. Other Required Courses

ACA	115	Success and Study Skills	0	2	1

Total Credits: 72

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
CIS	110	Intro to Computers	2	2	3
CTS	115	Info Sys Business Concepts	3	0	3
CTI	110	Web, Pgm, & Db Foundation	2	2	3
WEB	111	Intro to Web Graphics	2	2	3
WEB	115	Web Markup & Scripting	2	2	3

First Year-Spring

CSC	151	Java Programming	2	3	3
DBA	110	Database Concepts	2	3	3
WEB	120	Intro Internet Multimedia	2	2	3
WEB	225	Content Management System	2	2	3

First Year-Summer

COM	231	Public Speaking	3	0	3
Humanities Elective			3	0	3
Social Science Elective			3	0	3

Second Year-Fall

GRD	151	Computer Design Basics	1	4	3
WEB	140	Web Development Tools	2	2	3
WEB	182	PHP Programming	2	2	3
WEB	210	Web Design	2	2	3
WEB	285	Emerging Web Technologies	2	2	3

Second Year-Spring

CTI	120	Network & Security Foundation	2	2	3
GRD	152	Computer Design Tech I	1	4	3
WEB	151	Mobile Application Dev I	2	2	3
WEB	250	Database Driven Websites	2	2	3

Second Year-Summer

ENG	111	Expository Writing	3	0	3
MAT	143	Quantitative Literacy	2	2	3
WEB	287	Web E-Portfolio	1	2	2

Software and Web Development Certificate Program (C25590E)

Title			Class/Lab/Credit		
I. Major Courses					
CSC	151	Java Programming	2	3	3
WEB	115	Web Markup and Scripting	2	2	3
II. Other Major Courses					
DBA	110	Database Concepts	2	3	3
WEB	111	Intro to Web Graphics	2	2	3

Total Credits: 12

Recommended Semester Schedule

First Year-Fall

WEB 111	Web Graphics	2	2	3
WEB 115	Web Markup and Scripting	2	2	3

First Year-Spring

CSC 151	Java Programming	2	3	3
DBA 110	Database Concepts	2	3	3

Software and Web Development Advanced Certificate Program (C25590F)

Title			Class/Lab/Credit		
I. Major Courses					
CTI	120	Network & Sec Foundation	2	2	3
II. Other Major Courses					
WEB	182	PHP Programming	2	2	3
WEB	210	Web Design	2	2	3
WEB	250	Database Driven Websites	2	2	3

Total Credits: 12

Recommended Semester Schedule

First Year-Fall

WEB	182	PHP Programming	2	2	3
WEB	210	Web Design	2	2	3

First Year-Spring

CTI	120	Network & Sec Foundation	2	2	3
WEB	250	Database Driven Websites	2	2	3

Information Technology: Web Administration & Design

A25590D (Associate Degree)
C25590G (Certificate) C25590H (Certificate)

Web Administration & Design is a curriculum within the Information Technology Pathway:
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.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Web Administration & Design Associate Degree Program (A25590D)

Title			Class	Lab	Credit
I. General Education Courses					
ENG	111	Writing and Inquiry	3	0	3
COM	231	Public Speaking	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
II. Major Courses					
CIS	110	Introduction to Computers	2	2	3
CTI	110	Web, Pgm,and Db Foundation	2	2	3
CTI	120	Network & Sec Foundation	2	2	3
CTS	115	Info Sys Business Concepts	3	0	3
III. Concentration					
WEB	115	Web Markup and Scripting	2	2	3
WEB	210	Web Design	2	2	3
IV. Other Major Courses					
CSC	151	Java Programming	2	3	3
DBA	110	Database Concepts	2	3	3
GRD	151	Computer Design Basics	1	4	3
GRD	152	Computer Design Tech I	1	4	3
WEB	111	Intro to Web Graphics	2	2	3
WEB	120	Intro to Internet Multimedia	2	2	3
WEB	140	Web Development Tools	2	2	3
WEB	151	Mobile Application Dev I	2	2	3
WEB	182	PHP Programming	2	2	3
WEB	214	Social Media	2	2	3
WEB	250	Database Driven Websites	2	2	3

WEB	285	Emerging Web Technologies	2	2	3
WEB	287	Web E-Portfolio	1	2	2

V. Other Required Courses

ACA	115	Success and Study Skills	0	2	1

Total Credits: 72

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
CIS	110	Intro to Computers	2	2	3
CTS	115	Info Sys Business Concepts	3	0	3
CTI	110	Web, Pgm, & Db Foundation	2	2	3
WEB	111	Intro to Web Graphics	2	2	3
WEB	115	Web Markup & Scripting	2	2	3

First Year-Spring

CSC	151	Java Programming	2	3	3
DBA	110	Database Concepts	2	3	3
WEB	120	Intro Internet Multimedia	2	2	3
WEB	214	Social Media	2	2	3

First Year-Summer

COM 231		Public Speaking	3	0	3
Humanities Elective			3	0	3
Social Science Elective			3	0	3

Second Year-Fall

GRD	151	Computer Design Basics	1	4	3
WEB	140	Web Development Tools	2	2	3
WEB	182	PHP Programming	2	2	3
WEB	210	Web Design	2	2	3
WEB	285	Emerging Web Technologies	2	2	3

First Year-Spring

CTI	120	Network & Security Foundation	2	2	3
GRD	152	Computer Design Tech I	1	4	3
WEB	151	Mobile Application Dev I	2	2	3
WEB	250	Database Driven Websites	2	2	3

First Year-Summer

ENG	111	Expository Writing	3	0	3
MAT	143	Quantitative Literacy	2	2	3
WEB	287	Web E-Portfolio	1	2	2

Web Administration & Design Certificate Program (C25590G)

Title			Class/Lab/Credit		
I. Major Courses					
WEB	115	Web Markup and Scripting	2	2	3

II. Other Major Courses

WEB	111	Intro to Web Graphics	2	2	3

WEB	120	Intro to Internet Multimedia	2	2	3
WEB	214	Social Media	2	2	3

Total Credits: 12

First Year-Fall

WEB 111		Web Graphics	2	2	3
WEB 115		Web Markup and Scripting	2	2	3

First Year-Spring

WEB 120		Intro Internet Multimedia	2	2	3
WEB 214		Social Media	2	2	3

Web Administration & Design Advanced Certificate Program (C25590H)

Title			Class/Lab/Credit		
I. Major Courses					
CTI	120	Network & Sec Foundation	2	2	3
WEB	210	Web Design	2	2	3
II. Other Major Courses					
GRD	151	Computer Design Basics	1	4	3
GRD	152	Computer Design Tech I	1	4	3

Total Credits: 12

First Year-Fall

GRD	151	Computer Design Basics	1	4	3
WEB	210	Web Design	2	2	3

First Year-Spring

CTI	120	Network & Sec Foundation	2	2	3
GRD	152	Computer Design Tech I	1	4	3

Landscape Gardening
(Plant Systems: Horticultural Science Technology)

A15260 (Associate Degree)
C15260G (Certificate) C15260I (Certificate) C15260P (Certificate)

This curriculum is designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study.

Course work includes plant identification, pest management, plant science and soil science. Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses.

Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, governmental agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens. Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination.

Landscape gardening prepares individuals to manage and maintain indoor and/or outdoor ornamental and recreational plants and groundcovers and related conceptual designs established by landscape architects, interior designers, enterprise owners or managers, and individual clients. Potential course work includes instruction in applicable principles of horticulture, gardening, plant and soil irrigation and nutrition, turf maintenance, plant maintenance, equipment operation and maintenance, personnel supervision, and purchasing.

Title			Class/Lab/Credit		
I. Major Courses					
ENG	111	Writing and Inquiry	3	0	3
MAT	110	Math Measurement & Literacy	3	0	3
Chose one from:					
COM	120	Introduction to Personal Communication	3	0	3
COM	231	Public Speaking	3	0	3

Select one course each from Humanities/Fine Arts and Social/Behavioral Science on page 75.

II. Major Hours					
A. Technical Core					
HOR	160	Plant Materials I	2	2	3
HOR	164	Horticultural Pest Management	2	2	3
HOR	112	Landscape Design I	2	3	3
LSG	111	Basic Landscape Techniques	2	0	2
B. Program Major					
HOR	114	Landscape Construction	2	2	3
HOR	134	Greenhouse Operations	2	2	3
LSG	121	Fall Gardening Lab	0	6	2
LSG	122	Spring Gardening Lab	0	6	2
III. Other Major Hours					
Choose at least three hours from:					
BUS	137	Principles of Management	3	0	3
BUS	230	Small Business Management	3	0	3
BUS	280	REAL Small Business	4	0	4

Choose 6 hours from:

AGR	265	Organic Crop Production: Spring	2	2	3
AGR	266	Organic Crop Production: Fall	2	2	3
HOR	116	Landscape Management I	2	2	3
HOR	118	Equipment Operation and Maintenance	1	3	2
HOR	154	Introduction to Horticulture Therapy	2	4	4
HOR	162	Applied Plant Science	2	2	3
HOR	166	Soil and Fertilizer	2	2	3
HOR	225	Nursery Production	2	3	3
HOR	245	Horticultural Specialty Crops	2	3	3
HOR	255	Interiorscapes	1	2	2
HOR	265	Advanced Plant Materials	1	2	2
HOR	266	Micropropagation	3	0	3
HOR	266A	Micropropagation Lab Techniques	2	4	4

Choose 18 hours from the following:

HOR	161	Plant Materials II	2	2	3
HOR	168	Plant Propagation	2	2	3
HOR	213	Landscape Design II	2	2	3
HOR	257	Aboriculture Practices	1	3	2
LSG	231	Landscape Supervision	2	6	4
LSG	232	Garden Management	1	2	2
TRF	110	Introduction to Turfgrass Culture & Identification	3	2	4
WBL	111	LSG Work-Based Learning I	0	10	1
WBL	121	LSG Work-Based Learning II	0	10	1
WBL	131	LSG Work-Based Learning III	0	10	1
WBL	212	LSG Work-Based Learning IV	0	20	2

IV. Other Required Course

ACA	115	Success and Study Skills	0	2	1

Total Hours: 66

Recommended Semester Schedule

First Year-Fall

ENG	111	Writing and Inquiry	3	0	3
HOR	114	Landscape Construction	2	2	3
HOR	160	Plant Materials I	2	2	3
HOR	257	Aboriculture Practices	1	3	2
LSG	111	Basic Landscape Techniques	2	0	2
LSG	121	Fall Gardening Lab	0	6	2

First Year-Spring

HOR	112	Landscape Design I	2	3	3
HOR	134	Greenhouse Operations	2	2	3
HOR	161	Plant Materials II	2	2	3
HOR	164	Horticultural Pest Management	2	2	3
HOR	168	Plant Propagation	2	2	3
LSG	122	Spring Gardening Lab	0	6	2
WBL	111	LSG Work-Based Learning I	0	10	1

First Year-Summer

HOR	213	Landscape Design II	2	2	3
LSG	123	Summer Gardening Lab	0	6	2
WBL	121	LSG Work-Based Learning II	0	10	1
Humanities Elective			3	0	3

Second Year-Fall

COM	120	Introduction to Personal Communication	3	0	3
or					
COM	231	Public Speaking	3	0	3
LSG	232	Garden Management	1	2	2
MAT	110	Math Measurement & Literacy	3	0	3
TRF	110	Introduction to Turfgrass Culture & Identification	3	2	4
WBL	131	LSG Work-Based Learning III	0	10	1
Choose one Major or AGR Elective from:					
AGR	265	Organic Crop Production: Spring	2	2	3
AGR	266	Organic Crop Production: Fall	2	2	3
HOR	116	Landscape Management I	2	2	3
HOR	118	Equipment Operation and Maintenance	1	3	2
HOR	154	Introduction to Horticulture Therapy	2	4	4
HOR	162	Applied Plant Science	2	2	3
HOR	166	Soil and Fertilizer	2	2	3
HOR	168	Plant Propagation	2	2	3
HOR	225	Nursery Production	2	3	3
HOR	245	Horticultural Specialty Crops	2	3	3
HOR	255	Interiorscapes	1	2	2
HOR	257	Aboriculture Practices	1	3	2
HOR	265	Advanced Plant Materials	1	2	2
HOR	266	Micropropagation	3	0	3
HOR	266A	Micropropagation Lab Techniques	2	4	4

Second Year-Spring

LSG	231	Landscape Supervision	2	6	4
WBL	212	LSG Work-Based Learning IV	0	20	2
Choose one Business elective from:					
BUS	137	Principles of Management	3	0	3
BUS	230	Small Business Management	3	0	3
BUS	280	REAL Small Business	4	0	4
Humanities/Fine Arts Elective			3	0	3
Choose one Major or AGR Elective from:					

Landscape Gardening - General Certificate (C15260G)

Title			Class/Lab/Credit		
I. Major Courses					
HOR	114	Landscape Construction	2	2	3
HOR	160	Plant Materials I	2	2	3
HOR	164	Horticultural Pest Management	2	2	3
LSG	111	Basic Landscape Technique	2	0	2
LSG	121	Fall Gardening Lab	0	6	2
II. Other Major Courses					
TRF	110	Introduction to Turfgrass Culture & Identification	3	2	4

Total Credits: 17

Recommended Semester Schedule

First Year-Fall

HOR	114	Landscape Construction	2	2	3
HOR	160	Plant Materials I	2	2	3
LSG	111	Basic Landscape Techniques	2	0	2
The following class can be taken either First or Second Year Fall					
LSG	121	Fall Gardening Lab	0	6	2

First Year-Spring

HOR	164	Horticultural Pest Management	2	2	3

Second Year-Fall

TRF	110	Introduction to Turfgrass Culture & Identification	3	2	4
The following class can be taken either First or Second Year Fall					
LSG	121	Fall Gardening Lab	0	6	2

Landscape Gardening - Installation and Maintenance Certificate (C15260I)

Title			Class/Lab/Credit		
I. Major Courses					
HOR	112	Landscape Design I	2	3	3
HOR	114	Landscape Construction	2	2	3
HOR	160	Plant Materials I	2	2	3
HOR	164	Horticultural Pest Management	2	2	3
LSG	111	Basic Landscape Technique	2	0	2
II. Other Major Courses					
HOR	257	Aboriculture Practices	1	3	2

Total Credits: 16

Recommended Semester Schedule

First Year-Fall

HOR	114	Landscape Construction	2	2	3
HOR	160	Plant Materials I	2	2	3
HOR	257	Aboriculture Practices	1	3	2
LSG	111	Basic Landscape Techniques	2	0	2

First Year-Spring

HOR	112	Landscape Design I	2	3	3
HOR	164	Horticultural Pest Management	2	2	3

Landscape Gardening - Production Certificate (C15260P)

Title			Class/Lab/Credit		
I. Major Courses					
HOR	114	Landscape Construction	2	2	3
HOR	134	Greenhouse Operations	2	2	3
HOR	160	Plant Materials I	2	2	3
HOR	164	Horticultural Pest Management	2	2	3
LSG	122	Spring Gardening Lab	0	6	2

II. Other Major Courses

HOR	168	Plant Propagation	2	2	3

Total Credits: 17

Recommended Semester Schedule

First Year-Fall

HOR	114	Landscape Construction	2	2	3
HOR	160	Plant Materials I	2	2	3
LSG	111	Basic Landscape Techniques	2	0	2

First Year-Spring

HOR	134	Greenhouse Operations	2	2	3
HOR	168	Plant Propagation	2	2	3

Nurse Aide

C45840 (Certificate)

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.

Please visit the McDowell Technical Community College Health Science website for current admission information:

http://www.mcdowelltech.edu/health_science.html

Title			Class	Lab	Clinical	Credit
I. Major Courses						
MED	121	Medical Terminology I	3	0	0	3
MED	122	Medical Terminology II	3	0	0	3
NAS	101	Nurse Aide I	3	4	3	6
NAS	102	Nurse Aide II	3	2	6	6

Total Credits: 18

Recommended Semester Schedule

First Year-Fall						
NAS	101	Nurse Aide I	3	4	3	6
MED	121	Medical Terminology I	3	0	0	3
First Year-Spring						
NAS	102	Nurse Aide II	3	2	6	6
MED	122	Medical Terminology II	3	0	0	3

Associate Degree Nursing, Non-Integrated

A45110 (Associate Degree)

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.

Program Student Learning Outcomes

Graduates will be able to:

1. Advocate for patients and families in ways that promote their self-determination, integrity, and ongoing growth as human beings.
2. Make judgements in practice, substantiated with evidence that integrates nursing science in the provision of safe, quality care and that promote the health of patients within a family and community context.
3. Implement one's role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving identity as a nurse committed to evidence-based practice, caring, advocacy, and safe, quality care for diverse patients within a family and community context.
4. Examine the evidence that underlines clinical nursing practice to challenge the status quo, question underlying assumptions, and offer new insights to improve the quality of care for patients, families, and communities.

Foothills Nursing Consortium

The Foothills Nursing Consortium includes:

McDowell Technical Community College, Marion
Cleveland Community College, Shelby
Isothermal Community College, Spindale and

The Foothills Nursing Consortium (FNC), Associate Degree Nursing (AD Nursing) program is approved by the NC Community College System Office and the NC Board of Nursing.

Characteristics of the AD Nursing program:
a) will prepare students to apply to sit for the National Council Licensure Examination (NCLEX-RN) which is required to practice as a registered nurse.
b)is designed for five sequential semesters in length.
c) will be separate from the existing practical nurse programs in the above colleges.

Isothermal Community College is the administrative unit and the central location of the three colleges.The commuting time to the administrative unit from the other two colleges is approximately 30 minutes or twenty miles. This means that the greatest distance between the consortium colleges is approximately one hour or 50 miles.

Nursing classes will be held on all three campuses at some period of time during the program.When possible, non-nursing courses will be scheduled on the campus of the student's county of residence.

Please visit the McDowell Technical Community College Health Science website for the complete admission packets for generic and advanced placement entries:
http://www.mcdowelltech.edu/health_science.html

Title			Class/Lab/Clinical/Credit			
I. General Education Courses						
BIO	168	Anatomy and Physiology I	3	3	0	4
BIO	169	Anatomy and Physiology II	3	3	0	4
BIO	175	General Microbiology	2	2	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
PSY	241	Developmental Psychology	3	0	0	3
Humanities Elective-Select one from the list below:			3	0	0	3
ART 111, ART 114, ART 115, MUS 110, MUS 112, PHI 215, PHI 240, or HUM 115						
II. Major Courses						
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
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
NUR	214*	Nsg. Transition Concepts	3	0	3	4
*For Advanced Placement Students only						
III. Other Required Courses - Select 1 credit hour (Maximum of 7 shc for AAS, 4 shc for diploma and 1 shc for certificate) (Includes free electives, orientation, and/or study skills courses)						
ACA	115	Success and Study Skills	0	2	0	1
ACA	122	College Transfer Success	0	2	0	1
Total Credits: 70						

Recommended Semester Schedule

Students are not allowed to enroll in the NUR courses until formally accepted into the program. Please see admission requirements.

First Year-Fall						
ACA	115	College Student Success	0	2	0	1
BIO	168	Anatomy & Physiology I	3	3	0	4
NUR	111	Introduction to Health Concepts	4	6	6	8
PSY	150	General Psychology	3	0	0	3
First Year-Spring						
BIO	169	Anatomy & Physiology II	3	3	0	4
NUR	112	Health-Illness Concepts (8 weeks)	3	0	6	5
NUR	211	Health Care Concepts (8 weeks)	3	0	6	5
NUR	214*	Nsg. Transition Concepts	3	0	3	4
*Advanced Placements students						

First Year-Summer

ENG	111	Writing and Inquiry	3	0	0	3
NUR	114	Holistic Health Concepts	3	0	6	5
PSY	241	Developmental Psychology	3	0	0	3

Second Year-Fall

BIO	175	Microbiology	2	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	0	3
NUR	113	Family Health Concepts (8 weeks)	3	0	6	5
NUR	212	Health System Concepts (8 weeks)	3	0	6	5

Second Year-Spring

NUR	213	Complex Health Concepts	4	3	15	10
Humanities Elec.-See list on preceding page			3	0	0	3

Total Credits: 70

Office Administration: General Office Administration

A25370A (Associate Degree) D25370A (Diploma) C25370A (Certificate)

The Office Administration curriculum prepares individuals for employment as administrative office personnel who use skills in the areas of office management, office finance, legal office, virtual office, customer service, and office software.

Course work includes computer applications, oral and written communication, analysis and coordination of office tasks and procedures, records management, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of office positions in business, government, and industry. Upon graduation, students may be eligible to sit for industry recognized certification exams.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Associate Degree Program

Title			Class	Lab	Credit
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	3	0	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
II. Major Courses					
CIS	110	Introduction to Computers	2	2	3
OST	136	Word Processing	2	2	3
OST	164	Office Editing	3	0	3
OST	184	Records Management	2	2	3
OST	289	Office Admin. Capstone	2	2	3
III. Concentration					
OST	122	Office Computations	2	2	3
OST	236	Adv Word Processing	2	2	3
OST	286	Professional Development	3	0	3
IV. Other Major Courses					
Take 30 credits from this list:					
ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
BUS	260	Business Communication	3	0	3
CTS	130	Spreadsheet	2	2	3
CTS	135	Integrated Software Intro	2	4	4
DBA	110	Database Concepts	2	3	3
MED	121	Medical Terminology I	3	0	3
MED	122	Medical Terminology II	3	0	3
MKT	223	Customer Service	3	0	3
OST	131	Keyboarding	1	2	2
OST	134	Text Entry and Formatting	2	2	3
OST	135	Advanced Text Entry and Formatting	2	2	3
OST	153	Office Finance Solutions	2	2	3

OST	223	Administrative Office Transcription I	2	2	3
OST	241	Medical Office Transcription I	2	2	3
OST	242	Medical Office Transcription II	2	2	3
WEB	214	Social Media	2	2	3

IV. Other Required Courses

ACA	115	Success and Study Skills	0	2	1

Total Credits: 70-71

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
CIS	110	Introduction to Computers	2	2	3
OST	122	Office Computations	2	2	3
OST	131	Keyboarding	1	2	2
OST	164	Office Editing	3	0	3

First Year-Spring

CTS	130	Spreadsheet	3	2	3
OST	134	Text Entry and Formatting	2	2	3
OST	136	Word Processing	2	2	3
OST	184	Records Management	2	2	3

First Year-Summer

DBA	110	Database Concepts	2	3	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	3	0	3
Humanites Elective-See list on page 75			3	0	3

Second Year-Fall

ACC	120	Principles of Financial Accounting	3	2	4
BUS	260	Business Communications	3	0	3
MKT	223	Customer Service	3	0	3
OST	236	Advanced Word Processing	3	0	3

Second Year-Spring

CTS	135	Integrated Software Intro	2	4	4
OST	153	Office Finance Solutions	2	2	3
OST	223	Administrative Office Transcription	3	0	3
OST	286	Professional Development	3	0	3

Second Year-Summer

COM	231	Public Speaking	3	0	3
OST	289	Office Administration Capstone	2	2	3
Social Sciences Elective-See list under required courses			3	0	3

General Office Administrative Diploma Program (D25370A)

Title			Class/Lab/Credit		

I. General Education Courses

ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3

II. Major Courses

1. Required Courses

OST	164	Text Editing Applications	3	0	3
CIS	110	Introduction to Computers	2	2	3
OST	136	Word Processing	2	2	3
OST	184	Records Management	2	2	3
OST	289	Office Administration Capstone	2	2	3

III. Concentration Requirements

OST	122	Office Computations	2	2	3
OST	236	Advanced Word Processing	2	2	3
OST	286	Professional Development	3	0	3

IV. Other Major Courses

(A total of 9 Semester Hours must be selected from identified prefixes)

BUS	110	Introduction to Business	3	0	3
BUS	260	Business Communications	3	0	3
CTS	130	Spreadsheet	2	2	3
CTS	135	Integrated Software Intro	2	4	4
DBA	110	Database Concepts	2	3	3
MED	121	Medical Terminology I	3	0	3
MED	122	Medical Terminology II	3	0	3
MKT	223	Customer Service	3	0	3
OST	131	Keyboarding	1	2	2
OST	134	Text Entry and Formatting	2	2	3
OST	223	Administrative Office Transcription I	2	2	3
OST	241	Medical Office Transcription I	2	2	3
OST	242	Medical Office Transcription II	2	2	3
WEB	214	Social Media	2	2	3

IV. Other Required Courses

ACA	115	Success and Study Skills	0	2	1

Total Credits: 40

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
CIS	110	Introduction to Computers	2	2	3
OST	122	Office Computations	2	2	3
OST	136	Word Processing	2	2	3
OST	164	Office Editing	3	0	3

First Year-Spring

CTS	130	Spreadsheet	3	2	3
OST	134	Text Entry and Formatting	2	2	3
OST	184	Records Management	2	2	3
OST	236	Advanced Word Processing	2	2	3
OST	286	Professional Development	3	0	3

First Year-Summer

DBA	110	Database Concepts	2	3	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	3	0	3
OST	289	Office Administratrion Capstone	2	2	3

General Office Administrative Certificate (C25370A)

Title			Class	Lab	Credit
I. Major Courses					
CIS	110	Introduction to Computers	2	2	3
OST	136	Word Processing	2	2	3
OST	164	Office Editing	3	0	3
OST	184	Records Management	2	2	3
OST	289	Office Systems Management	2	2	3
II. Other Required Course					
ACA	115	Success and Study Skills	0	2	1
Total Credits: 16					
First Year-Fall					
ACA	115	Success and Study Skills	0	2	1
CIS	110	Introduction to Computers	2	2	3
OST	164	Office Editing	3	0	3
First Year-Spring					
OST	136	Word Processing	2	2	3
OST	184	Records Management	2	2	3
OST	289	Office Administration Capstone	2	2	3

Office Administration: Office Finance

A25370B (Office Finance Associate Degree)

The Office Administration curriculum prepares individuals for employment as administrative office personnel who use skills in the areas of office management, office finance, legal office, virtual office, customer service, and office software.

Course work includes computer applications, oral and written communication, analysis and coordination of office tasks and procedures, records management, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of office positions in business, government, and industry. Upon graduation, students may be eligible to sit for industry recognized certification exams.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Associate Degree Program

Title			Class	Lab	Credit
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	3	0	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
II. Major Courses					
CIS	110	Introduction to Computers	2	2	3
OST	136	Word Processing	2	2	3
OST	164	Office Editing	3	0	3
OST	184	Records Management	2	2	3
OST	289	Office Administration Capstone	2	2	3
III. Concentration					
ACC	120	Principles of Financial Accounting	3	2	4
OST	122	Office Computations	2	2	3
OST	153	Office Finance Solutions	2	2	3
IV. Other Major Courses					
Take 30 credits from this list:					
BUS	110	Introduction to Business	3	0	3
BUS	260	Business Communications	3	0	3
CTS	130	Spreadsheet	2	2	3
CTS	135	Integrated Software Intro	2	4	4
DBA	110	Database Concepts	2	3	3
MED	121	Medical Terminology I	3	0	3
MED	122	Medical Terminology II	3	0	3
MKT	223	Customer Service	3	0	3
OST	131	Keyboarding	1	2	2
OST	134	Text Entry and Formatting	2	2	3
OST	135	Advanced Text Entry and Formatting	2	2	3
OST	223	Administrative Office Transcription I	2	2	3
OST	236	Advanced Word Processing	2	2	3
OST	241	Medical Office Transcription I	2	2	3
OST	242	Medical Office Transcription II	2	2	3

OST	286	Professional Development	3	0	3
WEB	214	Social Media	2	2	3

IV. Other Required Courses

ACA	115	Success and Study Skills	0	2	1

Total Credits: 70-71

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
CIS	110	Introduction to Computers	2	2	3
OST	122	Office Computations	2	2	3
OST	131	Keyboarding	1	2	2
OST	164	Text Editing Applications	3	0	3

First Year-Spring

CTS	130	Spreadsheet	3	2	3
OST	134	Text Entry and Formatting	2	2	3
OST	136	Word Processing	2	2	3
OST	184	Records Management	2	2	3

First Year-Summer

DBA	110	Database Concepts	2	3	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	3	0	3
Humanites Elective-See list on page 75			3	0	3

Second Year-Fall

ACC	120	Principles of Financial Accounting	3	2	4
BUS	260	Business Communications	3	0	3
MKT	223	Customer Service	3	0	3
OST	236	Advanced Word Processing	3	0	3

Second Year-Spring

CTS	135	Integrated Software Intro	2	4	4
OST	153	Office Finance Solutions	2	2	3
OST	223	Administrative Office Transcription	3	0	3
OST	286	Professional Development	3	0	3

Second Year-Summer

COM	231	Public Speaking	3	0	3
OST	289	Office Administration Capstone	2	2	3
Social Sciences Elective-See list under required courses			3	0	3

Office Administration: Office Software

A25370C (Office Software Associate Degree)

The Office Administration curriculum prepares individuals for employment as administrative office personnel who use skills in the areas of office management, office finance, legal office, virtual office, customer service, and office software.

Course work includes computer applications, oral and written communication, analysis and coordination of office tasks and procedures, records management, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of office positions in business, government, and industry. Upon graduation, students may be eligible to sit for industry recognized certification exams.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Associate Degree Program

Title			Class	Lab	Credit
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	3	0	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
II. Major Courses					
CIS	110	Introduction to Computers	2	2	3
OST	136	Word Processing	2	2	3
OST	164	Office Editing	3	0	3
OST	184	Records Management	2	2	3
OST	289	Office Administration Capstone	2	2	3
III. Concentration					
CTS	130	Spreadsheet	2	2	3
DBA	110	Database Concepts	2	3	3
OST	236	Advanced Word Processing	2	2	3
IV. Other Major Courses					
Take 30 credits from this list:					
ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
BUS	260	Business Communications	3	0	3
CTS	135	Integrated Software Intro	2	4	4
MED	121	Medical Terminology I	3	0	3
MED	122	Medical Terminology II	3	0	3
MKT	223	Customer Service	3	0	3
OST	122	Office Computations	2	2	3
OST	131	Keyboarding	1	2	2
OST	134	Text Entry and Formatting	2	2	3
OST	135	Advanced Text Entry and Formatting	2	2	3
OST	153	Office Finance Solutions	2	2	3
OST	223	Administrative Office Transcription I	2	2	3
OST	241	Medical Office Transcription I	2	2	3
OST	242	Medical Office Transcription II	2	2	3
OST	286	Professional Development	3	0	3
WEB	214	Social Media	2	2	3

IV. Other Required Courses

ACA	115	Success and Study Skills	0	2	1

Total Credits: 70-71

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
CIS	110	Introduction to Computers	2	2	3
OST	122	Office Computations	2	2	3
OST	131	Keyboarding	1	2	2
OST	164	Office Editing	3	0	3

First Year-Spring

CTS	130	Spreadsheet	3	2	3
OST	134	Text Entry and Formatting	2	2	3
OST	136	Word Processing	2	2	3
OST	184	Records Management	2	2	3

First Year-Summer

DBA	110	Database Concepts	2	3	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	3	0	3
Humanites Elective-See list on page 75			3	0	3

Second Year-Fall

ACC	120	Principles of Financial Accounting	3	2	4
BUS	260	Business Communications	3	0	3
MKT	223	Customer Service	3	0	3
OST	236	Advanced Word Processing	3	0	3

Second Year-Spring

CTS	135	Integrated Software Intro	2	4	4
OST	153	Office Finance Solutions	2	2	3
OST	223	Administrative Office Transcription	3	0	3
OST	286	Professional Development	3	0	3

Second Year-Summer

COM	231	Public Speaking	3	0	3
OST	289	Office Administration Capstone	2	2	3
Social Sciences Elective-See list under required courses			3	0	3

Photographic Technology

A30280 (Associate Degree) C30280 (Certificate)

This curriculum offers training in photographic techniques and their application in professional photographic disciplines. Where offered, students will receive comprehensive course work in four areas of concentration: Photojournalism, Commercial Photography and Portrait Studio Management.

Special emphasis is placed on developing skills in the following areas: fundamentals of camera systems, lighting, photographic process, digital imaging, design and business practices.

Graduates should qualify for entry level jobs in the diverse photographic industry. Employment opportunities exist in the following areas: commercial photography, photojournalism, biomedical photography, portrait, photographic equipment sales, photographic laboratories, and imagining technologies; dependant upon courses offered and completed.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

This curriculum was designed to be entered in the fall of each year. Some classes may not be offered every semester.

Title			Class	Lab	Credit
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
II. Major Courses					
PHO	110	Fundamentals of Photography	3	6	5
PHO	115	Basic Studio Lighting	2	6	4
PHO	139	Intro. to Digital Imaging	1	3	2
PHO	224	Multimedia Production	2	3	3
III. Concentration					
PHO	113	History of Photography	3	0	3
PHO	216	Documentary Photography	2	4	4
PHO	217	Photojournalism I	1	6	4
PHO	226	Portraiture	3	3	4
IV. Other Major Courses (Must be selected from identified prefixes)					
Group I- Take 23 Hours:					
PHO	120	Intermediate Photography	2	4	4
PHO	132	Small Format Photography	2	6	4
PHO	140	Digital Photo Imaging I	2	4	4
PHO	150	Portfolio Development I	3	3	4
PHO	180	Creative Problem Solving	1	4	3
PHO	220	Business of Photography	3	0	3
PHO	235	Commercial Photography	2	4	4
Group II- Take 3 Hours:					
BUS	110	Introduction To Business	3	0	3
BUS	125	Personal Finance	3	0	3
BUS	230	Small Business Management	3	0	3
CIS	110	Introduction to Computers	2	2	3
GRD	151	Computer Design Basics	1	4	3

WBL	111	Work-Based Learning	0	10	1
WEB	115	Web Markup & Scripting	2	2	3
WEB	210	Web Design	2	2	3
WEB	214	Social Media	2	2	3

V. Other Required Courses

ACA	115	Success and Study Skills	0	2	1

Total Credits: 71

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
COM	231	Public Speaking	3	0	3
PHO	110	Fundamentals of Photography	3	6	5
PHO	113	History of Photography	3	0	3
PHO	139	Introduction to Digital Imaging	1	3	2

First Year-Spring

PHO	115	Basic Studio Lighting	2	6	4
PHO	120	Intermediate Photography	2	4	4
PHO	132	Small Format Photography	2	6	4
PHO	220	Business of Photography	3	0	3

First Year-Summer

BUS	110	Introduction To Business	3	0	3
ENG	111	Writing and Inquiry	3	0	3
Humanities Elective-See list on page 75			3	0	3

Second Year-Fall

PHO	140	Digital Photo Imaging I	2	4	4
PHO	216	Documentary Photography	2	4	4
PHO	224	Multimedia Production	2	3	3
PHO	226	Portraiture	3	3	4

Second Year-Spring

PHO	150	Portfolio Development I	3	3	4
PHO	217	Photojournalism	1	6	4
PHO	235	Commercial Photography	2	4	4

Second Year-Summer

MAT	143	Quantitative Literacy	2	2	3
		**Recommended for transfer to four-year colleges			
Social Science Elective-See list on page 75			3	0	3

Certificate Program (C30280)

I. Major Courses

PHO	110	Fundamentals of Photography	3	6	5
PHO	115	Basic Studio Lighting	2	6	4
PHO	139	Introduction to Digital Imaging	1	3	2

II. Other Major Courses

PHO	120	Intermediate Photography	2	4	4

III. Other Requirements

ACA	115	Success and Study Skills	0	2	1

Total Credits: 16

Recommended Semester Schedule

First Year-Fall

PHO	110	Fundamentals of Photography	3	6	5

First Year-Spring

PHO	120	Intermediate Photography	2	4	4

Second Year-Fall

PHO	140	Digital Photo Imaging	2	4	4

Second Year-Spring

PHO	115	Basic Studio Lighting	2	6	4

Practical Nursing Education

D45660 (Diploma)

The Practical Nursing curriculum provides knowledge and skills to integrate safety and quality into nursing care to meet the needs of the holistic individual 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 safe, individualized nursing care and participation in the interdisciplinary team while employing evidence-based practice, quality improvement, and informatics.

Graduates are eligible to apply to take the National Council Licensure Examination (NCLEX-PN) which is required for practice as a Licensed Practical Nurse. Employment opportunities include hospitals, rehabilitation/long term care/home health facilities, clinics, and physicians' offices.

Please visit the McDowell Technical Community College Health Science website for current admission information:

http://www.mcdowelltech.edu/health_science.html

Title			Class/	Lab/	Clinical/	Credit
I. General Education Courses						
ENG	111	Writing and Inquiry	3	0	0	3
PSY	150	General Psychology	3	0	0	3
II. Major Courses						
NUR	101	Practical Nursing I	7	6	6	11
NUR	102	Practical Nursing II	7	0	9	10
NUR	103	Practical Nursing III	6	0	9	9
III. Other Major Courses						
BIO	168	Anatomy & Physiology I	3	3	0	4
BIO	169	Anatomy & Physiology II	3	3	0	4
IV. Other Required Courses						
ACA	115	Success and Study Skills	0	2	0	1
Total Credits: 45						

Recommended Semester Schedule

Fall Semester			Class	Lab	Clinical	Credit
ACA	115	Success and Study Skills	0	2	0	1
BIO	168	Anatomy & Physiology I	3	3	0	4
NUR	101	Practical Nursing I	7	6	6	11
PSY	150	General Psychology	3	0	0	3
Spring Semester						
BIO	169	Anatomy & Physiology II	3	3	0	4
ENG	111	Writing and Inquiry	3	0	0	3
NUR	102	Practical Nursing II	7	0	9	10
Summer Semester						
NUR	103	Practical Nursing III	6	0	9	9

Surgical Technology

D45740 (Diploma)

The Surgical Technology curriculum prepares individuals to assist in the care of the surgical patient in the operating room and to function as a member of the surgical team.

Students will apply theoretical knowledge to the care of patients undergoing surgery and develop skills necessary to prepare supplies, equipment, and instruments: maintain aseptic conditions; prepare patients for surgery; and assist surgeons during operations.

Employment opportunities include labor/delivery/emergency departments, inpatient/outpatient surgery centers, dialysis units/facilities, physicians' offices, and central supply processing units.

Students of Commission on Accreditation of Allied Health Education Programs (AAHEP) are required to take the national certification exam administered by the National Board on Certification in Surgical Technology and Surgical Assisting (NBSTSA) within a four-week period prior to or after graduation.

Please visit the McDowell Technical Community College Health Science website for current admission information:

http://www.mcdowelltech.edu/health_science.html

Title			Class	Lab	Clinical	Credit
I. General Education Courses						
BIO	175	General Microbiology	2	2	0	3
ENG	111	Writing and Inquiry	3	0	0	3
II. Major Courses						
SUR	110	Introduction to Surgical Technology	3	0	0	3
SUR	111	Perioperative Patient Care	5	6	0	7
SUR	122	Surgical Procedures I	5	3	0	6
SUR	123	Surgical Clinical Practice I	0	0	21	7
SUR	134	Surgical Procedures II	5	0	0	5
SUR	135	Surgical Clinical Practice II	0	0	12	4
SUR	137	Professional Success Preparation	1	0	0	1
III. Other Major Courses						
BIO	163	Anatomy and Physiology I	4	2	0	5
CIS	110	Introduction to Computers	2	2	0	3
IV. Other Required Courses						
ACA	115	Success and Study Skills	0	2	0	1

Total Credits: 48

Recommended Semester Schedule

Fall Semester						
ACA	115	Success and Study Skills	0	2	0	1
BIO	163	Anatomy and Physiology I	4	2	0	5
ENG	111	Writing and Inquiry	3	0	0	3
SUR	110	Introduction to Surgical Technology	3	0	0	3
SUR	111	Perioperative Patient Care	5	6	0	7

Spring Semester

BIO	175	General Microbiology	2	2	0	3
CIS	110	Introduction to Computers	2	2	0	3
SUR	122	Surgical Procedures I	5	3	0	6
SUR	123	Surgical Clinical Practice I	0	0	21	7

Summer Semester

SUR	134	Surgical Procedures II	5	0	0	5
SUR	135	Surgical Clinical Practice II	0	0	12	4
SUR	137	Professional Success Preparation	1	0	0	1

Transportation: Automotive Systems Technology

A60160 (Associate Degree) D60160 (Diploma) C60160 (Certificate)

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entrylevel transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, transmission/transaxles, and sustainable transportation, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

Automotive Systems Technology: A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles. Includes instruction in brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drive trains, and heating and air condition systems.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Title			Class	Lab	Credit
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	110	Math Measurement and Literacy	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 75.					
II. Major Courses					
TRN	130	Intro. to Sustainable Transportation	2	2	3
TRN	145	Advanced Transportation Electronics	2	3	3
TRN	170	PC Skills for Transportation	1	2	2
TRN	180	Basic Welding for Transportation	1	4	3
III. Concentration					
AUT	141	Suspension and Steering Systems	2	3	3
AUT	151	Brake Systems	2	3	3
AUT	181	Engine Performance-1	2	3	3
AUT	212	Auto Shop Management	3	0	3
IV. Other Major Courses					
Take 33 credits:					
AUT	113	Automotive Servicing I	0	6	2
AUT	114	Safety and Emissions	1	2	2
AUT	114A	Safety and Emissions Lab	0	2	1
AUT	116	Engine Repair	2	3	3
AUT	116A	Engine Repair Lab	0	3	1
AUT	141A	Suspension and Steering Lab	0	3	1
AUT	151A	Brake Systems Lab	0	3	1
AUT	181A	Engine Performance I Lab	0	3	1
AUT	183	Engine Performance-2	2	6	4
AUT	221	Auto Transmissions/Transaxles	2	3	3
AUT	221A	Auto Transmissions/Transaxles Lab	0	3	1

AUT	231	Manual Transmissions/Transaxles/Drivetrains	2	3	3
AUT	231A	Manual Transmissions/Transaxles/Drivetrains Lab	0	3	1
TRN	120	Basic Transportation Electricity	4	3	5
TRN	140	Transportation Climate Control	1	2	2
TRN	140A	Transportation Climate Control Lab	1	2	2

III. Other Required Courses

ACA	115	Success and Study Skills	0	2	1

Total Credits: 72

Recommended Semester Schedule

First Year-Fall

ACA	115	Success and Study Skills	0	2	1
AUT	116	Engine Repair	2	3	3
AUT	116A	Engine Repair Lab	0	3	1
TRN	120	Basic Transportation Electricity	4	3	5
TRN	170	PC Skills for Transportation	1	2	2

First Year-Spring

AUT	114	Safety and Emissions	1	2	2
AUT	114A	Safety and Emissions Lab	0	2	1
AUT	181	Engine Performance I	2	3	3
AUT	181A	Engine Performance I Lab	0	3	1
MAT	110	Math Measurement and Literacy	2	2	3
TRN	145	Adv. Transportation Electronics	2	3	3

First Year-Summer

AUT	183	Engine Performance II	2	6	4
TRN	140	Transportation Climate Control	1	2	2
TRN	140A	Transportation Climate Control Lab	1	2	2

Humanities Elective-see page 75

Second Year-Fall

AUT	221	Auto Transmissions/Transaxles	2	3	3
AUT	221A	Auto Transmissions/Transaxles Lab	0	3	1
AUT	231	Manual Transmissions/Transaxles/Drivetrains	2	3	3
AUT	231A	Manual Transmissions/Transaxles/Drivetrains Lab	0	3	1
TRN	180	Basic Welding for Transportation	1	4	3

Social/Behavioral Science Elective- See page 75

Second Year-Spring

AUT	113	Automotive Servicing I	0	6	2
AUT	212	Auto Shop Management	3	0	3
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
TRN	130	Intro. to Sustainable Transportation	2	2	3

Second Year-Summer

AUT	141	Suspension and Steering Systems	2	3	3
AUT	141A	Suspension and Steering Lab	0	3	1
AUT	151	Brake Systems	2	3	3
AUT	151A	Brake Systems Lab	0	3	1

Diploma Program (D60160)

Title			Class	Lab	Credit
I. General Education Courses					
ENG	101	Applied Communications I	3	0	3
MAT	110	Mathematical Measurement and Literacy	2	2	3
II. Major Courses					
TRN	130	Intro. to Sustainable Transportation	2	3	3
TRN	170	PC Skills for Transportation	1	2	2
III. Concentration					
AUT	141	Suspension and Steering Systems	2	3	3
AUT	151	Brake Systems	2	3	3
AUT	181	Engine Performance-1	2	3	3
IV. Other Major Courses					
AUT	113	Automotive Servicing I	0	6	2
AUT	116	Engine Repair	2	3	3
AUT	116A	Engine Repair Lab	0	3	1
AUT	141A	Suspension and Steering Lab	0	3	1
AUT	151A	Brake Systems Lab	0	3	1
AUT	181A	Engine Performance I Lab	0	3	1
AUT	183	Engine Performance-2	2	6	4
AUT	221	Auto Transmissions/Transaxles	2	3	3
AUT	221A	Auto Transmissions/Transaxles Lab	0	3	1
AUT	231	Manual Transmissions/Transaxles/Drivetrains	2	3	3
AUT	231A	Manual Transmissions/Transaxles/Drivetrains Lab	0	3	1
TRN	120	Basic Transportation Electricity	4	3	5
III. Other Required Courses					
ACA	115	Success and Study Skills	0	2	1

Total Credits: 47

Recommended Semester Schedule

First Year-Fall					
ACA	115	Success and Study Skills	0	2	1
AUT	116	Engine Repair	2	3	3
AUT	116A	Engine Repair Lab	0	3	1
TRN	120	Basic Transportation Electricity	4	3	5
TRN	170	PC Skills for Transportation	1	2	2
First Year-Spring					
AUT	181	Engine Performance I	2	3	3
AUT	181A	Engine Performance I Lab	0	3	1
MAT	110	Mathematical Measurement and Literacy	2	2	3
First Year-Summer					
AUT	183	Engine Performance II	2	6	4
Second Year-Fall					
AUT	221	Auto Transmissions/Transaxles	2	3	3
AUT	221A	Auto Transmissions/Tranaxles Lab	0	3	1
AUT	231	Manual Transmissions/Transaxles/Drivetrains	2	3	3
AUT	231A	Manual Transmissions/Transaxles/Drivetrains Lab	0	3	1

Second Year-Spring

AUT	113	Automotive Servicing I	0	6	2
ENG	101	Applied Communications I	3	0	3
TRN	130	Intro. to Sustainable Transportation	2	2	3

Second Year-Summer

AUT	141	Suspension and Steering Systems	2	3	3
AUT	141A	Suspension and Steering Systems Lab	0	3	1
AUT	151	Brake Systems	2	3	3
AUT	151A	Brake Systems Lab	0	3	1

Certificate Program (C60160)

Title			Class/Lab/Credit		
I. Major Courses					
AUT	116	Engine Repair	2	3	3
AUT	116A	Engine Repair Lab	0	3	1
AUT	181	Engine Performance-1	2	3	3
AUT	181A	Engine Performance-1 Lab	0	3	1
AUT	183	Engine Performance-2	2	6	4
TRN	120	Basic Transportation Electricity	4	3	5

Total Credits: 17

Recommended Semester Schedule

First Year-Fall

AUT	116	Engine Repair	2	3	3
AUT	116A	Engine Repair Lab	0	3	1
TRN	120	Basic Transportation Electricity	4	3	5

First Year-Spring

AUT	181	Engine Performance I	2	3	3
AUT	181A	Engine Performance I Lab	0	3	1

First Year-Summer

AUT	183	Engine Performance II	2	6	4

Transportation: Collision Repair & Refinishing Technology

D60130 (Diploma) C60130 (Certificate)

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entrylevel transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, transmission/transaxles, and sustainable transportation, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

Collision Repair and Refinishing Technology: A program that prepares individuals to apply technical knowledge and skills to repair, reconstruct and finish automobile bodies, fenders, and external features. Includes instruction in structure analysis, damage repair, non-structural analysis, mechanical and electrical components, plastics and adhesives, painting and refinishing techniques, and damage analysis and estimating.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Title			Class	Lab	Credit
I. General Education Courses					
ENG	101	Applied Communications I	3	0	3
MAT	110	Mathematical Measurement and Literacy	2	2	3
II. Major Courses					
AUB	111	Painting & Refinishing I	2	6	4
AUB	121	Non-Structural Damage I	1	4	3
AUB	131	Structural Damage I	2	4	4
TRN	170	PC Skills for Transportation	1	2	2
TRN	180	Basic Welding for Transportation	1	4	3
III. Other Major Courses					
AUB	112	Painting and Refinishing II	2	6	4
AUB	114	Special Finishes	1	2	2
AUB	122	Non Structural Damage II	2	6	4
AUB	132	Structural Damage II	2	6	4
AUB	136	Plastics and Adhesives	1	4	3
AUB	141	Mechanical and Electrical Components I	2	2	3
AUB	160	Autobody Shop Operations	1	0	1
AUB	162	Autobody Estimating	1	2	2
IV. Other Required Courses					
ACA	115	Success and Study Skills	0	2	1

Total Credits: 46

Recommended Semester Schedule

First Year-Fall					
ACA	115	Success and Study Skills	0	2	1
AUB	111	Painting & Refinishing I	2	6	4
AUB	121	Non-Structural Damage I	1	4	3
AUB	160	Autobody Shop Operations	1	0	1
ENG	101	Applied Communications I	3	0	3
TRN	170	PC Skills for Transportation	1	2	2
TRN	180	Basic Welding for Transportation	1	4	3
First Year-Spring					
AUB	112	Painting and Refinishing II	2	6	4
AUB	122	Non Structural Damage II	2	6	4
AUB	131	Structural Damage I	2	4	4
AUB	141	Mechanical and Electrical Components I	2	2	3
First Year-Summer					
AUB	114	Special Finishes	1	2	2
AUB	132	Structural Damage II	2	6	4
AUB	136	Plastics and Adhesives	1	4	3
AUB	162	Autobody Estimating	1	2	2
MAT	110	Mathematical Measurement and Literacy	2	2	3

Certificate Program (C60130)

Title			Class/Lab/Credit		
I. Major Courses					
AUB	111	Painting & Refinishing I	2	6	4
AUB	121	Non-Structural Damage I	1	4	3
TRN	170	PC Skills for Transportation	1	2	2
TRN	180	Basic Welding for Transportation	1	4	3
II. Other Major Courses					
AUB	160	Autobody Shop Operations	1	0	1

Total Credits: 13

Structural Damage Certificate Program (C60130SD)

Title			Class/Lab/Credit		
I. Major Courses					
AUB	131	Structural Damage I	2	4	4
II. Other Major Courses					
AUB	132	Structural Damage II	2	6	4
AUB	136	Plastics and Adhesives	1	4	3
AUB	141	Mechanical and Electrical Components I	2	2	3

Total Credits: 14

Welding Technology

D50420 **(Diploma) C50420 (Certificate)**

This curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry.

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

Successful graduates of the Welding Technology curriculum may be employed as entry-level technicians in welding and metal-working industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.

Diploma Program

Title			Class	Lab	Credit
I.	**General Education Courses**				
ENG	101	Applied Communications I	3	0	3
MAT	110	Mathematical Measurement and Literacy	2	2	3
II. Major Courses					
WLD	110	Cutting Processes	1	3	2
WLD	115	SMAW (Stick) Plate	2	9	5
WLD	121	GMAW (MIG) FCAW/Plate	2	6	4
WLD	131	GTAW (TIG) Plate	2	6	4
WLD	141	Symbols & Specifications	2	2	3
III. Other Major Courses (Must be selected from identified prefixes)					
CIS	113	Computer Basics	0	2	1
WLD	261	Certification Practices	1	3	2
WLD	151	Fabrication I	2	6	4
WLD	143	Welding Metallurgy	1	2	2
WLD	116	SMAW (Stick) Plate/Pipe	1	9	4
WLD	112	Basic Welding	1	3	2
IV. Other Required Courses					
ACA	115	Success and Study Skills	0	2	1

Total Credits: 40

Recommended Semester Schedule

*The knowledge and skills learned in welding classes often builds upon information from previous classes. It is preferable, therefore, for students to take welding classes in the recommended course sequence. WLD 115 shoud be the first welding course, for example; WLD 110 should be the second. Following the recommended course sequence will allow students to complete their degree in the easiest and most logical sequence.

First Year-Fall					
ACA	115	Success and Study Skills	0	2	1
WLD	112	Basic Welding	1	3	2
WLD	141	Symbols & Specifications	2	2	3
First Year-Spring					
ENG	101	Applied Communications	3	0	3
MAT	110	Mathematical Measurement and Literacy	2	2	3
WLD	115	SMAW (Stick) Plate	2	9	5
First Year-Summer					
WLD	110	Cutting Processes	1	3	2
WLD	131	GTAW (TIG) Plate	2	6	4
Second Year-Fall					
WLD	116	SMAW (Stick) Plate/Pipe	1	9	4
WLD	121	GMAW (MIG) FCAW/Plate	2	6	4
Second Year-Spring					
WLD	143	Welding Metallurgy	1	2	2
WLD	151	Fabrication I	2	6	4
Second Year-Summer					
CIS	113	Computer Basics	0	2	1
WLD	261	Certification Practices	1	3	2

Certificate Program (C50420)

Title			Class/Lab/Credit		
I. Major Courses					
WLD	110	Cutting Processes*	1	3	2
WLD	115	SMAW (Stick) Plate	2	9	5
WLD	121	GMAW (MIG) FCAW/Plate	2	6	4
WLD	131	GTAW (TIG) Plate	2	6	4
WLD	141	Symbols & Specifications	2	2	3

Total Credits: 18

*WLD 112 may be substituted for WLD 110 with advisor approval

Recommended Semester Schedule

First Year-Fall					
*WLD	112	Basic Welding	1	3	2
WLD	141	Symbols & Specifications	2	2	3

First Year-Spring

WLD	115	SMAW (Stick) Plate	2	9	5

First Year-Summer

WLD	110	Cutting Processes *	1	3	2
WLD	131	GTAW (TIG) Plate	2	6	4

*WLD 112 may be substituted for WLD 110 with advisor approval

Second Year-Fall

WLD	121	GMAW (MIG) FCAW/Plate	2	6	4

Course Descriptions

Classes labled "*VLC" are available through the Virtual Learning Community (VLC).

Academic Related

ACA 115 Success & Study Skills
0 2 1
Prerequisites: None
Corequisites: None
This course provides an orientation to the campus resources and academic skills necessary to achieve educational objectives. Emphasis is placed on an exploration of facilities and services, study skills, library skills, self-assessment, wellness, goal-setting, and critical thinking. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals. **(*VLC)**

ACA 122 College Transfer Success
0 2 1
Prerequisites: None
Corequisites: None

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

Accounting

ACC 120 Prin of Financial Accounting
3 2 4
Prerequisites None
Corequisites: None
This course introduces business decision-making accounting information systems. Emphasis is placed on analyzing, summarizing, reporting and interpreting financial information. Upon completion, students should be able to prepare financial statements, understand the role of financial information in decision-making and address ethical considerations. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).*

ACC 121 Prin of Managerial Accounting
3 2 4
Prerequisites: ACC 120
Corequisites: None
This course includes a greater emphasis on managerial and cost accounting skills. Emphasis is placed on managerial accounting concepts for external and internal analysis, reporting and decision-making. Upon completion, students should be able to analyze and interpret transactions relating to managerial concepts including product-costing systems. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).*

ACC 129 Individual Income Taxes
2 2 3
Prerequisites: None
Corequisites: None

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**. (VLC)**

ACC 130 Business Income Taxes
2 2 3
Prerequisites: None
Corequisites: None

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 2
Prerequisites: ACC 115 or ACC 120
Corequisites: None
This course covers federal and state laws pertaining to wages, payroll taxes, payroll tax forms, and journal and general ledger transactions. Emphasis is placed on computing wages; calculating social security, income, and unemployment taxes; preparing appropriate payroll tax forms; and journalizing/posting transactions. Upon completion, students should be able to analyze data, make appropriate computations, complete forms, and prepare accounting entries using appropriate technology. *This course is also available through the Virtual Learning Community (VLC).*

ACC 150 Accounting Software Applications
1 2 2
Prerequisites: ACC 115 or ACC 120
Corequisites: None
This course introduces microcomputer applications related to the major accounting systems. Topics include general ledger, accounts receivable, accounts payable, inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting package to solve accounting problems. *This course is also available through the Virtual Learning Community (VLC).*

ACC 180 Practices in Bookkeeping
3 0 3
Prerequisites: ACC 120
Corequisites: None
This course provides advanced instruction in bookkeeping and record-keeping functions. Emphasis is placed on mastering adjusting entries, correction of errors, depreciation, payroll, and inventory. Upon completion, students should be able to conduct all key bookkeeping functions for small business.

ACC 220 Intermediate Accounting I
3 2 4
Prerequisites: ACC 120
Corequisites: None
This course is a continuation of the study of accounting principles with in-depth coverage of theoretical concepts and financial statements. Topics include generally accepted accounting principles and an extensive 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 4
Prerequisites: ACC 220
Corequisites: None
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 3
Prerequisites: ACC 220
Corequisites: None
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.

ACC 240 Gov & Not-for-Profit Acct
3 0 3
Prerequisites: ACC 121
Corequisites: None
This course introduces principles and procedures applicable to governmental and not-for-profit organizations. Emphasis is placed on various budgetary accounting procedures and fund accounting. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

ACC 250 Adv Accounting
3 0 3
Prerequisites: ACC 220
Corequisites: None

This course is designed to analyze special accounting issues, which may include business combinations , partnerships, international accounting, estates, and trusts. Emphasis is placed on analyzing transactions and preparing working papers and financial statements. Upon completion, students should be able to solve a wide variety of problems by advanced application of accounting principles and procedures.

ACC 269 Audit & Assurance Servcs
3 0 3
Prerequisites: ACC 220
Corequisites: None

This course introduces selected topics pertaining to the objectives, theory and practices in engagements providing auditing and other assurance services. Topics will include planning, conducting and reporting, with emphasis on the related professional ethics and

Class/Lab/Credit or Class/Lab/Exp./Credit

standards. Upon completion, students should be able to demonstrate an understanding of the types of professional services, the related professional standards, and engagement methodology.

Accounting

AGR-265 Organic Crop Prod: Spring
2 2 3

Prerequisites: None
Corequisites: None
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 Prod: Fall
2 2 3

Prerequisites: None
Corequisites: None
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 Intro to Refrigeration
2 6 5

Prerequisites: None
Corequisites: None
This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components; refrigeration cycle; and tools and instrumentation used in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instrumentation of the trade.

Competencies
Student Learning Outcomes
1. Demonstrate safe practices and procedures with tools, materials, and industry accepted test equipment covered in the course.
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.
4. 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
2 2 3

Prerequisites: None
Corequisites: None
This course introduces electricity as it applies to HVACR equipment. Emphasis is placed on power sources, interaction of electrical components, wiring of simple circuits, and the use of electrical test equipment. Upon completion, students should be able to demonstrate good wiring practices and the ability to read simple wiring diagrams.

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.
4. 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.
7. Follow systematic troubleshooting procedure to diagnose electrical problems and control circuit problems.

AHR 112 Heating Technology
2 4 4

Prerequisites: None
Corequisites: None
This course covers the fundamentals of heating including oil, gas, and electric heating systems. Topics include safety, tools and instrumentation, system operating characteristics, installation techniques, efficiency testing, electrical power, and control systems. Upon completion, students should be able to explain the basic oil, gas, and electrical heating systems and describe the major components of a heating system.
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 4

Prerequisites: None
Corequisites: None
This course covers the installation procedures, system operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to 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.

Class/Lab/Credit or Class/Lab/Exp./Credit

AHR 114 Heat Pump Technology
2 4 4

Prerequisites: AHR 110 or AHR 113
Corequisites: None
This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures
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.

AHR 115 Refrigeration Systems
1 3 2

Prerequisites: AHR 110
Corequisites: None
This course introduces refrigeration systems and applications. Topics include defrost methods, safety and operational control, refrigerant piping, refrigerant recovery and charging, and leak testing. Upon completion, students should be able to assist in installing and testing refrigeration systems and perform simple repairs.

AHR 120 HVACR Maintenance
1 3 2

Prerequisites: None
Corequisites: None
This course introduces the basic principles of industrial air conditioning and heating systems. Emphasis is placed on preventive maintenance procedures for heating and cooling equipment and related components. Upon completion, students should be able to perform routine preventive maintenance tasks, maintain records, and assist in routine equipment repairs.

AHR 125 HVAC Electronics
1 3 2

Prerequisites:
Take one: AHR 111, ELC 111, or ELC 112
Corequisites: None
This course introduces the common electronic control components in HVAC systems. Emphasis is placed on identifying electronic components and their functions in HVAC systems and motor-driven control circuits. Upon completion, students should be able to identify components, describe control circuitry and functions, and use test instruments to measure electronic circuit values and identify malfunctions.

AHR 130 HVAC Controls
2 2 3

Prerequisites:
Take one: AHR 111, ELC 111, or ELC 112
Corequisites: None
This course covers the types of controls found in residential and commercial comfort systems. Topics include electrical and electronic controls, control schematics and diagrams, test instruments, and analyis and troubleshooting of electrical systems. Upon completion, students should be able to diagnose and repair common residential and commercial comfort system controls.

Class/Lab/Credit or Class/Lab/Exp./Credit

AHR 135 Transport Refrigeration

2 6 4

Prerequisites: AHR 110
Corequisites: None

This course introduces the equipment and components commonly found in commercial transport refrigeration systems. Topics include compressors, evaporators, metering devices, accessories, and related electrical components. Upon completion, students should be able to safely maintain, troubleshoot, and repair transport refrigeration components.

AHR 160 Refrigerant Certification

1 0 1

Prerequisites: None
Corequisites: None

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 1

Prerequisites: None
Corequisites: None

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

AHR 210 Residential Building Code

1 2 2

Prerequisites: None
Corequisites: None

This course covers the residential building codes that are applicable to the design and installation of HVAC systems. Topics include current residential codes as applied to HVAC design, service, and installation. Upon completion, students should be able to demonstrate the correct usage of residential building codes that apply to specific areas of the HVAC trade.

AHR 211 Residential System Design

2 2 3

Prerequisites: None
Corequisites: None

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

AHR 235 Refrigeration Design

2 2 3

Prerequisites: AHR 110
Corequisites: None

This course covers the principles of commercial refrigeration system operation and design. Topics include walk-in coolers, walk-in freezers, system components, load calculations, equipment selection, defrost systems, refrigerant line sizing, and electric controls. Upon completion, students should be able to design, adjust, and perform routine service procedures on a commercial refrigeration system.

Class/Lab/Credit or Class/Lab/Exp./Credit

AHR 245 Chiller Systems

1 3 2

Prerequisites: AHR 110
Corequisites: None

This course introduces the fundamentals of liquid chilling equipment. Topics include characteristics of water, principles of water chilling, the chiller, the refrigerant, water and piping circuits, freeze prevention, purging, and equipment flexibility. Upon completion, students should be able to describe the components, controls, and overall operation of liquid chilling equipment and perform basic maintenance tasks.

Art

ART 111 Art Appreciation

3 0 3

Prerequisites: None
Corequisites: None

This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* **(*VLC)**

ART 114 Art History Survey I

3 0 3

Prerequisites: None
Corequisites: None

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

ART 115 Art History Survey II

3 0 3

Prerequisites: None
Corequisites: None

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

ART-121 Two-Dimensional Design

0 6 3

Prerequisites None
Corequisites None

This course introduces the elements and principles of design as applied to two-dimensional art. Emphasis is placed on the structural elements, the principles of visual organization, and the theories of color mixing and interaction. Upon completion, students should be able to understand and use critical and analytical approaches as they apply to two-dimensional visual art. *College Transfer This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

ART-171 Computer Art I

0 6 3

Prerequisites None
Corequisites None

This course introduces the use of the computer as a tool for solving visual problems. Emphasis is placed on

Class/Lab/Credit or Class/Lab/Exp./Credit

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. *College Transfer This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

ART-275 Introduction to Graphic Design

0 6 3

Prerequisites None
Corequisites None

This course introduces students to the field of graphic design. Emphasis is placed on the basic concepts of visual communication, the design process and the ability to evaluate and discuss design issues in a critical manner. Upon completion, students should be able to use contemporary design software and visual language techniques as they apply to creative visual problem-solving involving typography, image manipulation, symbolic representation and page management while being responsive to the relationship between client, designer and audience. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

Automation and Robotics

ATR 212 Industrial Robots

2 3 3

Prerequisites: None
Corequisites: None

This course covers the operation of industrial robots. Topics include the classification of robots, activators, grippers, work envelopes, computer interfaces, overlapping work envelopes, installation, and programming. Upon completion, students should be able to install, program, and troubleshoot industrial robots.

Automotive Body Repair

AUB 111 Painting & Refinishing I

2 6 4

Prerequisites: None
Corequisites: None

This course introduces the proper procedures for using automotive refinishing equipment and materials in surface preparation and application. Topics include federal, state, and local regulations, personal safety, refinishing equipment and materials, surface preparation, masking, application techniques, and other related topics. Upon completion, students should be able to identify and use proper equipment and materials in refinishing following accepted industry standards.

AUB 112 Painting & Refinishing II

2 6 4

Prerequisites: AUB 111
Corequisites: None

This course covers advanced painting techniques and technologies with an emphasis on identifying problems encountered by the refinishing technician. Topics include materials application, color matching, correction of refinishing problems, and other related topics. Upon completion, students should be able to perform spot, panel, and overall refinishing repairs and identify and correct refinish problems.

AUB 114 Special Finishes

1 2 2

Prerequisites: AUB 111
Corequisites: None

This course introduces multistage finishes, custom painting, and protective coatings. Topics include base coats, advanced intermediate coats, clear coats, and other

related topics. Upon completion, students should be able to identify and apply specialized finishes based on accepted industry standards.

AUB 121 Non-Structural Damage I
1 4 3
Prerequisites: None
Corequisites: None
This course introduces safety, tools, and the basic fundamentals of body repair. Topics include shop safety, damage analysis, tools and equipment, repair techniques, materials selection, materials usage, and other related topics. Upon completion, students should be able to identify and repair minor direct and indirect damage including removal/repairing/ replacing of body panels to accepted standards.

AUB 122 Non-Structural Damage II
2 6 4
Prerequisites: None
Corequisites: None
This course covers safety, tools, and advanced body repair . Topics include shop safety, damage analysis, tools and equipment, advanced repair techniques, materials selection, materials usage, movable glass, and other related topics. Upon completion, students should be able to identify and repair or replace direct and indirect damage to accepted standards including movable glass and hardware.

AUB 131 Structural Damage I
2 4 4
Prerequisites: None
Corequisites: None
This course introduces safety, equipment, structural damage analysis, and damage repairs. Topics include shop safety, design and construction, structural analysis and measurement, equipment, structural glass, repair techniques, and other related topics. Upon completion, students should be able to analyze and perform repairs to a vehicle which has received light/moderate structural damage.

AUB 132 Structural Damage II
2 6 4
Prerequisites: AUB 131
Corequisites: None
This course provides an in-depth study of structural damage analysis and repairs to vehicles that have received moderate to heavy structural damage. Topics include shop safety, structural analysis and measurement, equipment, structural glass, advanced repair techniques, structural component replacement and alignment, and other related topics. Upon completion, students should be able to analyze and perform repairs according to industry standards.

AUB 136 Plastics & Adhesives
1 4 3
Prerequisites: None
Corequisites: None
This course covers safety, plastic and adhesive identification, and the various repair methods of automotive plastic components. Topics include safety, identification, preparation, material selection, and the various repair procedures including refinishing. Upon completion, students should be able to identify, remove, repair, and/ or replace automotive plastic components in accordance with industry standards.

AUB 141 Mech & Elec Components I
2 2 3
Prerequisite: None
Corequisites: None

This course covers the basic principles of automotive mechanical and electrical components. Topics include personal and environmental safety and suspension and steering, electrical, brake, heating and air-conditioning, cooling, drive train, and restraint systems. Upon completion, students should be able to identify system components and perform basic system diagnostic checks and/or repairs according to industry standards.

AUB 160 Body Shop Operations
1 0 1

Prerequisite: None
Corequisites: None

This course introduces the day-to-day operations of autobody repair facilities. Topics include work habits and ethics, customer relations, equipment types, materials cost and control, policies and procedures, shop safety and liabilities, and other related topics. Upon completion, students should be able to understand the general operating policies and procedures associated with an autobody repair facility.

AUB 162 Autobody Estimating
1 2 2
Prerequisites: None
Corequisites: None
This course provides a comprehensive study of autobody estimating. Topics include collision damage analysis, industry regulations, flat-rate and estimated time, and collision estimating manuals. Upon completion, students should be able to prepare and interpret a damage report.

Automotive

AUT 113 Automotive Servicing I
0 6 2
Prerequisites: None
Corequisites: None
This course is a lab used as an alternative to co-op placement. Emphasis is placed on shop operations, troubleshooting, testing, adjusting, repairing, and replacing components using appropriate test equipment and service information. Upon completion, students should be able to perform a variety of automotive repairs using proper service procedures and to operate appropriate equipment.

AUT 114 Safety and Emissions
1 2 2
Prerequisites: None
Corequisites: None
This course covers the laws, procedures, and specifications needed to perform a North Carolina State Safety and Emissions inspection. Topics include brake, steering and suspension, lighting, horn, windshield wiper, tire, mirrors, and emission control devices inspection. Upon completion, students should be able to perform complete and thorough North Carolina State Safety and Emissions inspections.

AUT 114A Safety and Emissions Lab
0 2 1
Prerequisites: None
Corequisites: AUT 114

This course is an optional lab that allows students to enhance their understanding of North Carolina State Emissions Inspection failures. Topics include evaporative, positive crankcase ventilation, exhaust gas recirculation and exhaust emissions systems operation, including catalytic converter failure diagnosis. Upon completion, students should be able to employ diagnostic strategies to repair vehicle emissions failures resulting from North Carolina State Emissions inspection.

AUT 116 Engine Repair
2 3 3
Prerequisites: None
Corequisites: None
This course covers the theory, construction, inspection, diagnosis, and repair of internal combustion engines and related systems. Topics include fundamental operating principles of engines and diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement and repair of automotive engines using appropriate tools, equipment, procedures, and service information.

AUT 116A Engine Repair Lab
0 3 1
Prerequisites: None
Corequisites: AUT 116
This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement and repair of automotive engines using appropriate tools, equipment, procedures, and service information.

AUT 141 Suspension & Steering Systems
2 3 3
Prerequisites: None
Corequisites: None
This course covers principles of operation, types, and diagnosis/repair of suspension and steering systems to include steering geometry. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

AUT 141A Suspension & Steering Lab
0 3 1
Prerequisites: None
Corequisites: AUT 141
This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

AUT 151 Brake Systems
2 3 3
Prerequisites: None
Corequisites: None
This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

AUT 151A Brakes Systems Lab
0 3 1
Prerequisites: None
Corequisites: AUT 151
This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for

Class/Lab/Credit or Class/Lab/Exp./Credit

total hours. Topics include drum and disc brakes involving hydraulic, vacuum-boost, hydra-boost, electrically powered boost, and anti-lock, parking brake systems and emerging brake systems technologies. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

AUT 161 Basic Auto Electricity
4 3 5
Prerequisites: None
Corequisites: None
This course covers basic electrical theory, wiring diagrams, test equipment, and diagnosis, repair, and replacement of batteries, starters, and alternators. Topics include Ohm's Law, circuit construction, wiring diagrams, circuit testing, and basic troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair basic wiring, battery, starting, charging, and electrical concerns.

AUT 181 Engine Performance I
2 3 3
Prerequisites: None
Corequisites: None
This course covers the introduction, theory of operation, and basic diagnostic procedures required to restore engine performance to vehicles equipped with complex engine control systems. Topics include an overview of engine operation, ignition components and systems, fuel delivery, injection components and systems and emission control devices. Upon completion, students should be able to describe operation and diagnose/repair basic ignition, fuel and emission related driveability problems using appropriate test equipment/service information.

AUT 181A Engine Performance 1 Lab
0 3 1
Prerequisites: None
Corequisites: AUT 181
This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include overviews of engine operation, ignition components and systems, fuel delivery, injection components and systems and emission control devices and emerging engine performance technologies. Upon completion, students should be able to describe operation and diagnose/repair basic ignition, fuel and emission related driveability problems using appropriate test equipment/service information.

AUT 183 Engine Performance 2
2 6 4
Prerequisites: AUT 181
Corequisites: None
This course covers study of the electronic engine control systems, the diagnostic process used to locate engine performance concerns, and procedures used to restore normal operation. Topics will include currently used fuels and fuel systems, exhaust gas analysis, emission control components and systems, OBD II (on-board diagnostics) and inter-related electrical/electronic systems. Upon completion, students should be able to diagnose and repair complex engine performance concerns using appropriate test equipment and service information.

AUT 212 Auto Shop Management
3 0 3
Prerequisites: None
Corequisites: None
This course covers the principals of management essential to decision-making, communication, authority, and leadership. Topics include shop supervision, shop organization, customer relations, cost effectiveness and work place ethics. Upon completion, students should be able to describe basic automotive shop operation from a management standpoint.

Class/Lab/Credit or Class/Lab/Exp./Credit

AUT 221 Auto Transmissions/Transaxles
2 3 3
Prerequisites: None
Corequisites: None
This course covers operation, diagnosis, service, and repair of automatic transmissions/transaxles. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to explain operational theory and diagnose and repair automatic drive trains.

AUT 221A Auto Transm./Transaxles Lab
0 3 1
Prerequisites: None
Corequisites: AUT 221

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to diagnose and repair automatic drive trains.

AUT 231 Manual Trans/Ax/Drtrains
2 3 3
Prerequisites: None
Corequisites: None
This course covers the operation, diagnosis, and repair of manual transmissions/transaxles, clutches, driveshafts, axles, and final drives. Topics include theory of torque, power flow, and manual drive train service and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to explain operational theory and diagnose and repair manual drive trains.

AUT 231A Manual Trans/Ax/Drtrains Lab
0 3 1
Prerequisites: None
Corequisites: AUT 231
This course is an optional lab for the program that needs to meet NATEF hour standards but does not have a co-op component in the program. Topics include manual drive train diagnosis, service and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to diagnose and repair manual drive trains.

Biology

BIO 111 General Biology I
3 3 4
Prerequisites None
Corequisites: None
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 to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.* **(*VLC)**

BIO 112 General Biology II
3 3 4
Prerequisites: BIO 111
Corequisites: None
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

Class/Lab/Credit or Class/Lab/Exp./Credit

completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.* **(*VLC)**

BIO 155 Nutrition
3 0 3
Prerequisites: None
Corequisites: None
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 to satisfy the Comprehensive Articulation Agreement for transferrability as a pre-major and/or elective course requirement.*

BIO 163 Basic Anatomy and Physiology
4 2 5
Prerequisites: None
Corequisites: None
This course provides a basic study of the structure and function of the human body. Topics include a basic study of the body systems as well as an introduction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.*

BIO 168 Anatomy and Physiology I
3 3 4
Prerequisites: None
Corequisites: None

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, and nervous systems and special senses. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

BIO 169 Anatomy and Physiology II
3 3 4
Prerequisites: BIO 168
Corequisites: None

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

Class/Lab/Credit or Class/Lab/Exp./Credit

BIO 175 General Microbiology
2 2 3
Prerequisites: BIO 110, BIO 111, BIO 163, BIO 165, or BIO 168
Corequisites: None
This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.*

BIO 275 Microbiology
3 3 4
Prerequisites: BIO 110, BIO 112, BIO 163, BIO 165, or BIO 168
Corequisites: None
This course covers principles of microbiology and the impact these organisms have on man and the environment. Topics include the various groups of microorganisms, their structure, physiology, genetics, microbial pathogenicity, infectious diseases, immunology, and selected practical applications. Upon completion, students should be able to demonstrate knowledge and skills including microscopy, aseptic technique, staining, culture methods, and identification of microorganisms. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

Blueprint Reading

BPR 111 Print Reading
1 2 2
Prerequisite: None
Corequisites: None
This course introduces the basic principles of print reading. Topics include line types, orthographic projections, dimensioning methods, and notes. Upon completion, students should be able to interpret basic prints and visualize the features of a part or system.

Competencies
Student Learning Outcomes
•1. Interpret symbols, abbreviations, and line types.
•2. Identify and describe types of projection and use of views.
•3. Draw freehand sketches.
•4. Calculate measurements of features.
•5. Identify and interpret dimensioning and tolerancing.

BPR 121 Blueprint Reading: Mechanical
1 2 2
Prerequisites: BPR 111 or MAC 131
Corequisites: None
This course covers the interpretation of intermediate blueprints. Topics include tolerancing, auxiliary views, sectional views, and assembly drawings. Upon completion, students should be able to read and interpret a mechanical working drawing.

BPR 122 Blueprint Reading-Mechanical Advanced
1 2 2
Prerequisites: BPR 121or MAC 132
Corequisites: None
This course covers the interpretation of advanced blueprints. Topics include working drawings of complex parts and the applications of GD & T. Upon completion, students should be able to interpret drawings of complex parts and mechanisms for features of fabrication, construction, and assembly.

BPR 130 Print Reading-Construction
3 0 3
Prerequisite: None
Corequisites: None
This course covers the interpretation of prints and specifications that are associated with design and construction projects. Topics include interpretation of documents for foundations, floor plans, elevations, and related topics. Upon completion, students should be able to read and interpret construction prints and documents.

Competencies
•Student Learning Outcomes
•1.Identify the different symbols and line types in a set of working drawings.
•2.Correctly measure lines to a specific scale using an architectural or engineering scale.
•3.Demonstrate proficiency in interpreting construction prints in the form of floor plans, elevations, details, schedules, and specifications.
•4.Convert fractional dimensions to decimal dimensions and decimal dimensions to fractional dimensions.
•5.Describe and explain the difference between working drawings and construction drawings.

BPR 135 Schematics & Diagrams
2 0 2
Prerequisites: None
Corequisites: None
This course introduces schematics and diagrams used in a variety of occupations. Topics include interpretation of wiring diagrams, assembly drawings, exploded views, sectional drawings, and service manuals, specifications, and charts. Upon completion, students should be able to research and locate components and assemblies denoting factory specifications and requirements from service and repair manuals.

Business

BUS-110 Introduction to Business
3 0 3
Prerequisites: None
Corequisites: None
This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

Competencies
Student Learning Outcomes
1. Identify various forms of business organizations.
2. Define business vocabulary.
3. Describe the basics of business ethics.
4. Explain basic management principles.
Competencies

BUS 115 Business Law I
3 0 3
Prerequisites: None
Corequisites: None
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 them. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement* **(*VLC).**

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 125 Personal Finance
3 0 3
Prerequisites: None
Corequisites: None
This course provides a study of individual and family financial decisions. Emphasis is placed on building useful skills in buying, managing finances, increasing resources, and coping with current economic conditions. Upon completion, students should be able to develop a personal financial plan.

BUS 135 Principles of Supervision
3 0 3
Prerequisites: None
Corequisites: None
This course introduces the basic responsibilities and duties of the supervisor and his/her relationship to higher-level supervisors, subordinates, and associates. Emphasis is placed on effective utilization of the work force and understanding the role of the supervisor. Upon completion, students should be able to apply supervisory principles in the work place. **(*VLC)**

BUS 137 Principles of Management
3 0 3
Prerequisites: None
Corequisites: None
This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.* **(*VLC)**

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 147 Business Insurance
3 0 3
Prerequisites: None
Corequisites: None
This course surveys the basic concepts of risk management. Topics include principles and applications of health, property, life, and casualty insurance. Upon completion, students should be able to evaluate different insurance needs and assist an organization in acquiring adequate insurance coverage.

BUS 153 Human Resource Management
3 0 3
Prerequisites: None
Corequisites: None
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. **(*VLC)**

BUS 225 Business Finance
2 2 3
Prerequisites: ACC 120
Corequisites: None
This course provides an overview of business financial management. Emphasis is placed on financial statement analysis, time value of money, management of cash flow, risk and return, and sources of financing. Upon completion, students should be able to interpret and apply the principles of financial management.

BUS 230 Small Business Management
3 0 3
Prerequisites: None
Corequisites: None
This course introduces the challenges of entrepreneurship including the startup and operation of a small business. Topics include market research techniques, feasibility studies, site analysis, financing alternatives, and managerial decision making. Upon completion, students should be able to develop a small business plan.(***VLC)**

BUS 240 Business Ethics
3 0 3
Prerequisites: None
Corequisites: None
This course introduces contemporary and controversial ethical issues that face the business community. Topics include moral reasoning, moral dilemmas, law and morality, equity, justice and fairness, ethical standards, and moral development. Upon completion, students should be able to demonstrate an understanding of their moral responsibilities and obligations as members of the workforce and society.

BUS 253 Leadership and Mgt Skills
3 0 3
Prerequisites: None
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 260 Business Communication
3 0 3
Prerequisites: Take one: ENG 110 or ENG 111
Corequisites: None
This course is designed to develop skills in writing business communications. Emphasis is placed on business reports, correspondence, and professional presentations. Upon completion, students should be able to communicate effectively in the work place. **(*VLC)**

Cabinetmaking

CAB 110 Shop Operations
3 3 4
Prerequisites: None
Corequisites: None
This course covers establishing and maintaining a custom cabinet shop. Topics include financing, equipment acquisition, maintenance, inventory techniques, OSHA requirements, shop organization, and safety and delivery systems. Upon completion, students should be able to organize and maintain a custom cabinet business. *This is a diploma-level course.*

CAB 111 Cabinetmaking I
4 9 7
Prerequisites: None
Corequisites: None
This course introduces wood technology, materials, purchasing, estimating, design considerations, and cabinet construction. Topics include wood identification and use, hand tools, safe machine operation, glue and clamping, abrasives, wood joinery, kitchen and bath layout, laminates, and finishing techniques. Upon completion, students should be able to select and process materials; make sound production decisions; and design, lay out, construct, and install cabinets.

CAB 112 Cabinetmaking II
5 12 9
Prerequisites: CAB 111
Corequisites: None
This course uses previously learned skills in the design and construction of furniture, European cabinetry, and special cabinet requirements. Topics include furniture repair, wood carving, inlaying, veneering, and millwork products. Upon completion, students should be able to design and construct a piece of furniture, repair defects, and understand the foundation of the 32 mm system. *This is a diploma-level course.*

CAB 113 Cabinetmaking III
4 6 6
Prerequisites: CAB 112
Corequisites: None
This course provides an opportunity to construct a cabinetmaking project. Emphasis is placed on following construction plans, quality construction, and efficient use of time and materials. Upon completion, students should be able to plan and construct an item of furniture and/or set of cabinets. *This is a diploma-level course.*

Carpentry

CAR 110 Introduction to Carpentry
2 0 2
Prerequisites: None
Corequisites: None

This course introduces the student to the carpentry trade. Topics include duties of a carpenter, hand and power tools, building materials, construction methods, and safety. Upon completion, students should be able to identify hand and power tools, common building materials, and basic construction methods.

CAR 111 Carpentry I
3 15 8
Prerequisites: None
Corequisites: None
This course introduces the theory and construction methods associated with the building industry, including framing, materials, tools, and equipment. Topics include safety, hand/power tool use, site preparation, measurement and layout, footings and foundations, construction framing, and other related topics. Upon completion, students should be able to safely lay out and perform basic framing skills with supervision. *This is a diploma-level course.*

CAR 112 Carpentry II
3 15 8
Prerequisites: CAR 111
Corequisites: None
This course covers the advanced theory and construction methods associated with the building industry including framing and exterior finishes. Topics include safety, hand/power tool use, measurement and layout, construction framing, exterior trim and finish, and other related topics. Upon completion, students should be able to safely frame and apply exterior finishes to a residential building with supervision.

CAR 113 Carpentry III
3 9 6
Prerequisites: CAR 111
Corequisites: None
This course covers interior trim and finishes. Topics include safety, hand/power tool use, measurement and layout, specialty framing, interior trim and finishes, cabinetry, and other related topics. Upon completion, students should be able to safely install various interior trim and finishes in a residential building with supervision.

CAR 114 Residential Building Codes
3 0 3
Prerequisites: None
Corequisites: None
This course covers building codes and the requirements of state and local construction regulations. Emphasis is placed on the minimum requirements of the North Carolina building codes related to residential structures. Upon completion, students should be able to determine if a structure is in compliance with North Carolina building codes.

CAR 115 Residential Planning/Estimating
3 0 3
Prerequisites: BPR 130
Corequisites: None
This course covers project planning, management, and estimating for residential or light commercial buildings. Topics include planning and scheduling, interpretation of working drawings and specifications, estimating practices, and other related topics. Upon completion, students should be able to perform quantity take-offs and cost estimates.

CAR 116 Metal Framing
1 3 2
Prerequisites: None
Corequisites: None
This course covers basic metal framing associated with residential and light construction. Topics include methods and procedures for framing floor, wall, and roof sections and other related topics. Upon completion, students should be able to properly install various metal framing components.

CAR 150 Concrete Construction
2 9 5
Prerequisite: None
Corequisites: None
This course covers methods of erecting forms and placing concrete. Topics include safety, hand/power tool use, blueprints, rigging, form construction, reinforcement, and placement. Upon completion, students should be able to demonstrate skills in concrete construction procedures and processes with supervision.

Chemistry

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by the college's placement test.

Class/Lab/Credit or Class/Lab/Exp./Credit

CHM 131 Introduction to Chemistry
3 0 3
Prerequisites: DMA 040
Corequisites: None
This course introduces the fundamental concepts of inorganic chemistry. Topics include measurement, matter and energy, atomic and molecular structure, nuclear chemistry, stoichiometry, chemical formulas and reactions, chemical bonding, gas laws, solutions, and acids and bases. Upon completion, students should be able to demonstrate a basic understanding of chemistry as it applies to other fields. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.* **(*VLC)**

CHM 131A Introduction to Chemistry Lab
0 3 1
Prerequisites: DMA 040
Corequisites: CHM 131
This course is a laboratory to accompany CHM 131. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 131. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 131. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

CHM 132 Organic and Biochemistry
3 3 4
Prerequisites: CHM 131 and CHM 131A or CHM 151
Corequisites: None
This course provides a survey of major functional classes of compounds in organic and biochemistry. Topics include structure, properties, and reactions of the major organic and biological molecules and basic principles of metabolism. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts needed to pursue studies in related professional fields. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.* **(*VLC)**

CHM 151 General Chemistry I
3 3 4
Prerequisites: DMA 080
Corequisites: None
This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

CHM 152 General Chemistry II
3 3 4
Prerequisites: CHM 151
Corequisites: None
This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

Class/Lab/Credit or Class/Lab/Exp./Credit

CHM 251 Organic Chemistry I
3 3 4
Prerequisites: CHM 152
Corequisites: None
This course provides a systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of hydrocarbons, alkyl halides, alcohols, and ethers; further topics include isomerization, stereochemistry, and spectroscopy. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of covered organic topics as needed in CHM 252. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.*

CHM 252 Organic Chemistry II
3 3 4
Prerequisites: CHM 251
Corequisites: None
This course provides continuation of the systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of aromatics, aldehydes, ketones, carboxylic acids and derivatives, amines and heterocyclics; multi-step synthesis will be emphasized. Upon completion, students should be able to demonstrate an understanding of organic concepts as needed to pursue further study in chemistry and related professional fields. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.*

CHM 271 Biochemical Principles
3 0 3
Prerequisites: CHM 252
Corequisites: None
The course covers fundamental principles of biochemistry. Topics include structures, properties, reactions, and mechanisms of biomacromolecules including amino acids, peptides, proteins, carbohydrates and nucleic acids, enzymatic metabolic pathways, and biochemical genetics. Upon completion, students should be able to demonstrate an understanding of fundamental biochemical processes. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

CHM 271A Biochemical Prin Laboratory
0 3 1
Prerequisites: CHM 252
Corequisites: CHM 271
This course is a laboratory for CHM 271. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 271. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 271. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.*

Computer Information Systems

CIS 070 Fundamentals of Computing
0 2 1
Prerequisites: None
Corequisities: None
This course covers fundamental functions and operations of the computer. Topics include identification of components, overview of operating systems, and other

Class/Lab/Credit or Class/Lab/Exp./Credit

basic computer operations. Upon completion, students should be able to operate computers, access files, print documents and perform basic applications operations.

CIS 110 Introduction to Computers
2 2 3
Prerequisites: None
Corequisites: None
This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

CIS 111 Basic PC Literacy
1 2 2
Prerequisites: None
Corequisites: None
This course provides a brief overview of computer concepts. Emphasis is placed on the use of personal computers and software applications for personal and workplace use. Upon completion, students should be able to demonstrate basic personal computer skills. *This course is also available through the Virtual Learning Community (VLC).*

CIS 113 Computer Basics
0 2 1
Prerequisites: None
Corequisities: None
This course introduces basic computer usage for non-computer majors. Emphasis is placed on developing basic personal computer skills. Upon completion, students should be able to demonstrate competence in basic computer applications sufficient to use computer-assisted instructional software. *This course is also available through the Virtual Learning Community (VLC).*

CIS 115 Intro to Programming & Logic
2 3 3
Prerequisites: Take One Set:
Set 1: DMA-010, DMA-020, DMA-030, and DMA-040
Set 2: MAT-121
Set 3: MAT-171
Corequisites: None
This course introduces computer programming and problem solving in a programming environment. Topics include language syntax, data types, program organization, problem-solving methods, algorithm design, and logic control structures. Upon completion, students should be able to manage files with operating system commands, use top-down algorithm design, and implement algorithmic solutions in a programming language. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

Criminal Justice

CJC 100 Basic Law Enforcement Trn
9 30 19
Prerequisites: None
Corequisites: None
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

Class/Lab/Credit or Class/Lab/Exp./Credit

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 Introd. to Criminal Justice
3 0 3
Prerequisites: None
Corequisites: None
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. *TThis course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

CJC 112 Criminology
3 0 3
Prerequisites: None
Corequisites: None
This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.

CJC 120 Interviews/Interrogations
1 2 2
Prerequisites: None
Corequisites: None
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
3 0 3
Prerequisites: None
Corequisites: None
This course introduces fundamental law enforcement operations. Topics include the contemporary evolution of law enforcement operations and related issues. Upon completion, student should be able to explain theories, practices, and issues related to law enforcement operations. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

CJC 122 Community Policing
3 0 3
Prerequisites: None
Corequisites: None
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.

Class/Lab/Credit or Class/Lab/Exp./Credit

CJC 131 Criminal Law
3 0 3
Prerequisites: None
Corequisites: None
This course covers the history/evolution/principles and contemporary applications of criminal law. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, matters of criminal responsibility, and other related topics. Upon completion, students should be able to discuss the sources of law and identify, interpret, and apply the appropriate statutes/elements.

CJC 132 Court Procedure and Evidence
3 0 3
Prerequisites: None
Corequisites: None
This course covers judicial structure/process/procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of evidence in court. Topics include consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper judicial procedures, and the admissibility of evidence.

CJC 141 Corrections
3 0 3
Prerequisites: None
Corequisites: None
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 as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

CJC 144 Crime Scene Processing
2 3 3
Prerequisites: None
Corequisites: None
This course introduces the theories and practices of crime scene processing and investigating. Topics include legal considerations at the crime scene, processing indoor and outdoor scenes, recording, note taking, collection and preservation of evidence and submission to the crime laboratory. Upon completion, the student should be able to evaluate and search various crime scenes and demonstrate the appropriate techniques.

CJC 160 Terrorism: Underlying Issues
3 0 3
Prerequisites: None
Corequisites: None
This course identifies the fundamental reasons why America is a target for terrorists, covering various domestic/international terrorist groups and ideologies from a historical aspect. Emphasis is placed upon recognition of terrorist crime scene; weapons of mass destruction; chemical, biological, and nuclear terrorism; and planning considerations involving threat assessments. Upon completion, students should be able to identify and discuss the methods used in terrorists' activities and complete a threat assessment for terrorists' incidents.

Class/Lab/Credit or Class/Lab/Exp./Credit

CJC 161 Intro. to Homeland Security
3 0 3
Prerequisites: None
Corequisites: None
This course introduces the historical, organizational and practical aspects of Homeland Security. Topics include a historic overview, definitions and concepts, organizational structure, communications, technology, mitigation, prevention and preparedness, response and recovery, and the future of Homeland Security. Upon completion, students should be able to explain essential characteristics of terrorism and Homeland Security, and define roles, functions and interdependency between agencies.

CJC 212 Ethics and Comm. Relations
3 0 3
Prerequisites: None
Corequisites: None
This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems; social change, values, and norms; cultural diversity; citizen involvement in criminal justice issues; and other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations.

CJC 231 Constitutional Law
3 0 3
Prerequisites: None
Corequisites: None
This 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 232 Civil Liability
3 0 3
Prerequisites: None
Corequisites: None
This course covers liability issues for the criminal justice professional. Topics include civil rights violations, tort liability, employment issues, and other related topics. Upon completion, students should be able to explain civil trial procedures and discuss contemporary liability issues.

Communication

For AA, AS, and AFA programs, 3 SHC in Speech/Communication may be substituted for 3 SHC in Humanities/ Fine Arts. Speech/Communication may not substitute for the literature requirement.

COM 110 Intro. to Communication
3 0 3
Prerequisites: None
Corequisites: None
This course provides an overview of the basic concepts of communication and the skills necessary to communicate in various contexts. Emphasis is placed on communication theories and techniques used in interpersonal group, public, intercultural, and mass communication situations. Upon completion, students should be able to explain and illustrate the forms and purposes of human communication in a variety of contexts. *College Tranfer: This course has been approved for transfer under the CAA*

Class/Lab/Credit or Class/Lab/Exp./Credit

and ICAA as a general education course in English Composition. This couse has been approved for transfer under the CAA and ICAA as a Communications course for the following degrees: AS, AA, AAS.

COM 231 Public Speaking
3 0 3
Prerequisites: None
Corequisites: None
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

Cosmetology

COS 111 Cosmetology Concepts I
4 0 4
Prerequisites: None
Corequisites: COS 112
This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting.

COS 112 Salon I
0 24 8
Prerequisites: None
Corequisites: COS 111
This course introduces basic salon services. Topics include scalp treatments, shampooing, rinsing, hair color, design, haircutting, permanent waving, pressing, relaxing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate salon services.

COS 113 Cosmetology Concepts II
4 0 4
Prerequisites: COS 111 and COS 112
Corequisites: none
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 8
Prerequisites: COS 111 and COS 112
Corequisites: none
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 4
Prerequisites: COS 111 and COS 112
Corequisites: none

Class/Lab/Credit or Class/Lab/Exp./Credit

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 4
Prerequisites: COS 111 and COS 112
Corequisites: none
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 2
Prerequisites: COS 111 and COS 112
Corequisites: none
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 7
Prerequisites: COS 111 and COS 112
Corequisites: none
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 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 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, make-up applications, and color analysis. Upon completion, students should be able to safely and competently demonstrate esthetic services on clients in a salon setting.

COS 121 Manicure/Nail Technology I
4 6 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,

Class/Lab/Credit or Class/Lab/Exp./Credit

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 2
Prerequisites: None
Corequisites: None
This course covers more comprehensive esthetics concepts. Topics include nutrition, business management, makeup, and color analysis. Upon completion students should be able to demonstrate an understanding of the advanced esthetics concepts and meet course requirements.

COS 126 Esthetics Salon II
0 18 6
Prerequisites: None
Corequisites: None
This course provides experience in a simulated esthetics setting. Topics include machine facials, aromatherapy, surface manipulation in relation to skin care, 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.

COS 222 Manicure/Nail Technology II
4 6 6
Prerequisites: COS 121
Corequisites: None
This course covers advanced techniques of nail technology and hand and 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 224 Trichology & Chemistry
1 3 2
Prerequisites: None
Corequisites: None
This course is a study of hair and the interaction of applied chemicals. Emphasis is placed on pH actions and the reactions and effects of chemical ingredients. Upon completion, students should be able to demonstrate an understanding of chemical terminology, pH testing, and chemical reactions on hair.

COS 240 Contemporary Design
1 3 2
Prerequisites: COS 111 and COS 112
Corequisites: None
This course covers methods and techniques for contemporary designs. Emphasis is placed on contemporary designs and other related topics. Upon completion, students should be able to demonstrate and apply techniques associated with contemporary design.

COS 250 Computerized Salon Ops
1 0 1
Prerequisites: None
Corequisites: None
This course introduces computer and salon software. Emphasis is placed on various computer and salon software applications. Upon completion, students should be able to utilize computer skills and software applications in the salon setting.

Class/Lab/Credit or Class/Lab/Exp./Credit

COS 251 Manicure Instructor Concepts
8 0 8
Prerequisites: None
Corequisites: NC Cosmetology or Manicurist License and six months work experience in a cosmetic arts salon
This course introduces manicuring 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 supervision techniques, and assess student classroom performance.

COS 252 Manicure Instructor Practicum
0 15 5
Prerequisites: NC Cosmetology or Manicurist License and six months work experience in a cosmetic arts salon
Corequisites: COS 251
This course covers supervisory and instructional skills for teaching manicuring students in a laboratory setting. Topics include demonstrations of services, supervision, student assessment, and other related topics. Upon completion, students should be able to demonstrate competence in the areas covered by the Manicuring Instructor Licensing Examination and meet program completion requirements.

COS 253 Esthetics Ins. Concepts I
6 15 11
Prerequisites: None
Corequisites: None
This course introduces esthetic instructional concepts and skills. Topics include orientation, theories of education, unit planning, daily lesson plans, laboratory management, student assessment in a laboratory setting. Upon completion, students should be able to demonstrate esthetic services and instruct and objectively assess student performance in a classroom setting.

COS 254 Esthetic Ins. Concepts II
6 15 11
Prerequisites: None
Corequisites: None
This course covers advanced esthetic instructional concepts and skills. 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 demonostrate competencies in the areas covered by the Esthetics Instructor Licensing examination and meet program requirements.

COS 271 Instructor Concepts I
5 0 5
Prerequisites: Cosmetology License and six months experience as a licensed cosmetologist
Corequisites: COS 272
This course introduces the basic cosmetology instructional concepts. Topics include orientation, theories of education, unit planning, daily lesson planning, laboratory management, student assessment, record keeping, and other related topics. Upon completion, students should be able to identify theories of education, develop lesson plans, demonstrate supervisory techniques, and assess student performance in a classroom setting.

COS 272 Instructor Practicum I
0 21 7
Prerequisites: Cosmetology License and six months experience as a licensed cosmetologist
Corequisites: COS 271
This course covers supervisory and instructional skills for teaching entry-level cosmetology students in a laboratory setting. Topics include demonstrations of services, supervision, and entry-level student assessment. Upon completion, students should be able to demonstrate salon services and instruct and objectively assess the entry-level student.

COS 273 Instructor Concepts II
5 0 5
Prerequisites: COS 271 and COS 272
Corequisites: COS 274
This course covers advanced cosmetology instructional concepts. Topics include practical demonstrations, lesson planning, lecture techniques, development and administration of assessment tools, record keeping, and other related topics. Upon completion, students should be able to develop lesson plans, demonstrate supervision techniques, assess student performance in a classroom setting, and keep accurate records.

COS 274 Instructor Practicum II
0 21 7
Prerequisites: COS 271 and COS 272
Corequisites: COS 273
This course is designed to develop supervisory and instructional skills for teaching advanced cosmetology students in a laboratory setting. Topics include practical demonstrations, supervision, and advanced student assessment. Upon completion, students should be able to demonstrate competence in the areas covered by the Instructor Licensing Examination and meet program completion requirements. *This is a certificate-level course.*

Computer Science

CSC 134 C++ Programming
2 3 3
Prerequisites: None
Corequisites: None
This course introduces computer programming using the C++ programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).*

CSC 151 JAVA Programming
2 3 3
Prerequisites: None
Corequisites: None
This course introduces computer programming using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion students should be able to design, code, test, debug JAVA language programs. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. This course available through VLC.*

Computer Technology Integration

CTI-120 Network & Security Foundations
2 2 3
Prerequisites: None
Corequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

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.

Competencies
1. Perform basic calculations necessary for network operations.
2. Identify the components of local and wide area networks.
3. Identify security risks to a networked information system.

CTI-140 Virtualization Concepts
1 4 3
Prerequisites: None
Corequisites: None
This course introduces operating system virtualization. Emphasis is placed on virtualization terminology, virtual machine storage, virtual networking and access control. Upon completion, students should be able to perform tasks related to installation, configuration and management of virtual machines.

Computer Information Technology

CTS 115 Info Sys Business Concept
3 0 3
Prerequisites: None
Corequisites: None
The course introduces the role of IT in managing business processes and the need for business process and IT alignment. Emphasis is placed on industry need for understanding business challenges and developing/managing information systems to contribute to the decision making process based on these challenges. Upon completion, students should be able to demonstrate knowledge of the 'hybrid business manager' and the potential offered by new technology and systems. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

CTS 120 Hardware/Software Support
2 3 3
Prerequisites: None
Corequisites: None
This course covers the basic hardware of a personal computer, including installation, operations and interactions with software. Topics include component identification, memory-system, peripheral installation and configuration, preventive maintenance, hardware diagnostics/repair, installation and optimization of system software, commercial programs, system configuration, and device-drivers. Upon completion, students should be able to select appropriate computer equipment and software, upgrade/maintain existing equipment and software, and troubleshoot/repair non-functioning personal computers.

CTS 130 Spreadsheet
2 2 3
Prerequisites: None
Corequisites: None
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.

Class/Lab/Credit or Class/Lab/Exp./Credit

CTS 285 Systems Analysis & Design
3 0 3
Prerequisites: CIS 115
Corequisites: None
This course introduces established and evolving methodologies for the analysis, design, and development of an information system. Emphasis is placed on system characteristics, managing projects, prototyping, CASE/OOM tools, and systems development life cycle phases. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques.

CTS 289 System Support Project
1 4 3
Prerequisites: CTS 285
Corequisites: None

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.

Database Management Technology

DBA 110 Database Concepts
2 3 3
Prerequisites: CIS 110
Corequisites: None
This course introduces database design and creation using a DBMS product. Emphasis is placed on data dictionaries, normalization, data integrity, data modeling, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to design and implement normalized database structures by creating simple database tables, queries, reports, and forms.

Design Drafting

DDF 110 Cabinet Design/Drafting
1 2 2
Prerequisites: DFT 117
Corequisites: None
This course covers the production of shop drawings and equipment lists. Topics include the use of orthographic projections and axonometric, oblique, and perspective projections in production drawings. Upon completion, students should be able to design and produce a set of plans that will facilitate the economical production of a project.

Design

DES 135 Principles & Elements of Design I
2 4 4
Prerequisites: None
Corequisites: None
This course introduces the basic concepts and terminology of design as they relate to the design profession. Topics include line, pattern, space, mass, shape, texture, color, unity, variety, rhythm, emphasis, balance, proportion, scale, and function. Upon completion, students should be able to demonstrate an understanding of the principles covered through hands-on application.

Class/Lab/Credit or Class/Lab/Exp./Credit

Drafting

DFT 111 Technical Drafting I
1 3 2
Prerequisite: None
Corequisites: None
This course introduces basic drafting skills, equipment, and applications. Topics include sketching, measurements, lettering, dimensioning, geometric construction, orthographic projections and pictorials drawings, sections, and auxiliary views. Upon completion, students should be able to understand and apply basic drawing principles and practices.

DFT 119 Basic CAD
1 2 2
Prerequisites: None
Corequisites: None
This course introduces computer-aided drafting software for specific technologies to non-drafting majors. Emphasis is placed on understanding the software command structure and drafting standards for specific technical fields. Upon completion, students should be able to create and plot basic drawings.

Developmental Mathematics

DMA 010 Operations with Integers
0.75 0.5 1
Prerequisites: None
Corequisites: None
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
1.1 Demonstrate an understanding of the concept of integers within contextual application problems
1.2 Correctly represent integers on a number line
1.3 Demonstrate the correct use of additive inverses
1.4 Evaluate the absolute value of a number
1.5 Apply integer operations in solving contextual application problems
1.6 Correctly apply the associative and commutative properties
1.7 Demonstrate understanding of exponents by converting between exponential and expanded form
1.8 Evaluate exponents
1.9 Calculate the square root of numbers containing perfect squares
1.10 Evaluate integer expressions by using the correct order of operations
1.11 Distinguish between appropriate use of area and perimeter formulas to solve geometric application problems
1.12 Use the Pythagorean Theorem to solve geometric problems
1.13 Represent the events of a geometric application problem included in this module pictorially and evaluate the correct solution using the appropriate formula
1.14 Demonstrate an understanding of what a variable represents
1.15 Evaluate variable expressions and formulas

Class/Lab/Credit or Class/Lab/Exp./Credit

DMA 020 Fractions and Decimals
0.75 0.5 1
Prerequisites: DMA 010
Corequisites: None
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
2.1 Solve conceptual problems involving fractions and decimals
2.2 Visually represent fractions and decimals
2.3 Simplify fractions
2.4 Visually represent equivalent fractions and correctly place the values on the number line
2.5 Add and subtract fractions with like denominators
2.6 Write an equivalent fraction with a given denominator
2.7 Add and subtract fractions with unlike denominators using the correct LCD
2.8 Visually represent the sum and difference of two fractions with unlike denominators
2.9 Multiply fractions
2.10 Visually represent multiplication of fractions
2.11 Divide fractions using reciprocals
2.12 Correctly round decimals to a specific place value
2.13 Estimate sums, differences, products, and quotients with decimals
2.14 Demonstrate an understanding of the connection between fractions and decimals
2.15 Distinguish between the appropriate use of circumference and area of a circle in solving geometric applications
2.16 Represent events in geometric problems pictorially and evaluate the solution using correct formulas

2.17 Correlate negative exponents to fractions and decimals in base 10
2.18 Convert between standard notation and scientific notation

DMA 030 **Propor/Ratio/Rate/Percent**
0.75 0.5 1
Prerequisites: DMA 010 and DMA 020
Corequisites: None
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

Student Learning Outcomes
3.1 Demonstrate an understanding of the concepts of ratios, rates, proportions, and percents in the context of application problems
3.2 Write a ratio using a variety of notations
3.3 Distinguish between events in a problem that should be represented by a ratio or a rate
3.4 Calculate a unit rate
3.5 Convert measurements within the U.S. customary and metric system using unit analysis
3.6 Convert measurements between the U.S customary and metric systems using unit analysis
3.7 Represent percent as "parts of 100"
3.8 Correctly convert between fractions, decimals, and percents
3.9 Solve application problems using ratios, rates, proportions, and percents
3.10 Recognize that two triangles are similar and solve for unknown sides using proportions in contextual applications

DMA 040 **Express/Lin Equat/Inequal**
0.75 0.5 1
Prerequisites: DMA 010, 020 and 030
or
MAT 060
Corequisites: None
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
4.1 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
4.2 Represent verbal statements as algebraic expressions, equations, and inequalities
4.3 Distinguish between problem events that use expressions, equations, or inequalities
4.4 Solve linear equations and inequalities in one variable using algebraic properties of equality
4.5 Demonstrate an understanding of the meaning of solutions to problems, i.e. identity, contradiction, conditional
4.6 Represent solutions of inequalities on a number line

DMA 050 **Graphs/Equations of Lines**
0.75 0.5 1
Prerequisites: DMA 010, 020, 030, and 040
or
DMA 040 and MAT 060
Corequisites: None
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

Student Learning Outcomes
5.1 Analyze and interpret basic graphs to solve problems
5.2 Represent real world situations in tabular, graphical, and algebraic equation form using two variables
5.3 Generate a table of values given an equation in two variables and plot in Cartesian plane to graph a line
5.4 Demonstrate an understanding of the concept of slope as a rate of change in real world situations using the slope formula
5.5 Find and interpret the x- and y-intercepts of linear models in real world situations
5.6 Graph linear equations using a variety of strategies
5.7 Given a contextual application, write a linear equation and use the equation to make predictions
5.8 Demonstrate a conceptual understanding of horizontal and vertical lines in terms of slope and graphically
5.9 Demonstrate a conceptual understanding of the concept of an algebraic function

DMA 060 **Polynomial/Quadratic Appl**
0.75 0.5 1
Prerequisites: DMA 010, 020, 030, 040 and 050
or
DMA 040, 050 and MAT 060
or
MAT 060 and MAT 070
Corequisites: None
This course provides a conceptual study of problems involving graphic and algebraic representations of quadratics. Topics include basic polynomial operations, factoring polynomials, and solving polynomial equations by means of factoring. Upon completion, students should be able to find algebraic solutions to contextual problems with quadratic applications.
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
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 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 Pre-Calculus**
1.5 1 2
Prerequisites: DMA 010, 020, 030, 040 and 050
Corequisites: None
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
•Represent real-world applications as quadratic equations
•Apply exponent rules
•Solve application problems involving polynomial
•Apply the principles of factoring when solving problems
•Represent and solve contextual application problems involving operations on expressions and/or equations
•Explain the reasonableness of solutions found
•Solve radical equations
•Perform operations with radical expressions

Student Learning Outcomes
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
9. 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

Class/Lab/Credit or Class/Lab/Exp./Credit

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

DMA 070 Rational Express/Equation
0.75 0.5 1
Prerequisites: DMA 010, 020, 030, 040 050 and 060 or DMA 040, 050, 060 and MAT 060 or DMA 060, MAT 060 and MAT 070 or DMA 010, 020, 030, 060 and MAT 070
Corequisites: None

This course provides a conceptual study of problems involving graphic and algebraic representations of rational equations. Topics include simplifying and performing operations with rational expressions and equations, understanding the domain, and determining the reasonableness of an answer. Upon completion, students should be able to find algebraic solutions to contextual problems with rational applications.
Competencies
•Represent and solve contextual application problems involving operations on rational expressions and/or equations.
•Explain the reasonableness of solutions found.

Student Learning Outcomes
1. Demonstrate the use of a problem solving strategy to include multiple representations of the situation, organization of the information, and algebraic representation of rational equations.
2. Identify the domain of a rational expression.
3. Multiply and divide rational expressions.
4. Add and subtract rational expressions.
5. Solve basic rational equations.

DMA 080 Radical Express/Equation
0.75 0.5 1
Prerequisites: DMA 010, 020, 030, 040 050, 060 and 070 or DMA 060, 070, and MAT 060 and 070 or DMA 040, 050, 060, 070, and MAT 060 or DMA 010, 020, 030, 060, 070 and MAT 070
Corequisites: None

This course provides a conceptual study of the manipulation of radicals and the application of radical equations to real-world problems. Topics include simplifying and performing operations with radical expressions and rational exponents, solving equations, and determining the reasonableness of an answer. Upon completion, students should be able to find algebraic solutions to contextual problems with radical applications.
Competencies
•Solve radical equations.
•Explain the reasonableness of solutions found.
•Perform operations with radical expressions.

Student Learning Outcomes
1. Use rational exponents to rewrite radical expressions.
2. Simplify radical expressions.
3. Add and subtract radical expressions.

Class/Lab/Credit or Class/Lab/Exp./Credit

4. Multiply radical expressions.
5. Divide radical expressions.
6. Solve radical equations with one radical term.
7. Solve quadratic equations and applications using the quadratic formula.

Drama/Theatre

DRA 111 Theatre Appreciation
3 0 3
Prerequisites: None
Corequisites: None

This course provides a study of the art, craft, and business of the theatre. Emphasis is placed on the audience's appreciation of the work of the playwright, director, actor, designer, producer, and critic. Upon completion, students should be able to demonstrate a vocabulary of theatre terms and to recognize the contributions of various theatre artists. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

DRA 126 Storytelling
3 0 3
Prerequisites: None
Corequisites: None

This course introduces the art of storytelling and the oral traditions of folk literature. Topics include the history of storytelling, its value and purpose, techniques of the storyteller, and methods of collecting verbal art. Upon completion, students should be able to present and discuss critically stories from the world's repertory of traditional lore. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

Developmental Reading/English

DRE 096 Integrated Reading & Writing
2.5 1 3
Prerequisites: None
Corequisites: None

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 paragraph-length texts; and making text-to-self connections.
•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.
•Students will demonstrate an understanding of purpose, point of view, and tense.
•Students will demonstrate an understanding of fact and opinion in reading and by writing paragraphs using

Class/Lab/Credit or Class/Lab/Exp./Credit

facts and opinions for support of main ideas.
•Students will recognize inferences in texts and analyze and evaluate graphic materials in a text.
•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.
•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.
•Students will apply the conventions of Standard Written English.

DRE 097 Integrated Reading & Writing II
2.5 1 3
Prerequisites: DRE 096
Corequisites: None

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
•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.
•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.
•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.
•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.
•Students will apply the conventions of Standard Written English.
•Students will employ appropriate technology when composing texts.

DRE 098 Integrated Reading & Writing III

2.5 1 3
Prerequisites: DRE 097
Corequisites: None
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
•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; recognizing organizational patterns in career and college ready texts; summarizing; and responding to texts using text-to-world connections.
•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.
•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.
•Students will apply the conventions of Standard Written English.
•Students will employ appropriate technology when composing texts.

DRE 099 Integrated Reading & Writing III

2 0 2
Prerequisites: 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
•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.
•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.
•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.
•Students will apply the conventions of Standard Written English.
•Students will employ appropriate technology when composing texts.

Economics

ECO 251 Principles of Microeconomics

3 0 3
Prerequisites: None
Corequisites: None
This course introduces economic analysis of individual, business, and industry choices in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

ECO 252 Principles of Macroeconomics

3 0 3
Prerequisites: None
Corequisites: None
This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

Education

EDU 118 Princ & Prac of Inst Asst

3 0 3
Prerequisites: None
Corequisites: DRE 097

This course covers the instructional assistant's role in the educational system. Topics include history of education, professional responsibilities and ethics, cultural diversity, communication skills, and identification of the optimal learning environment. Upon completion, students should be able to describe the supporting role of the instructional assistant, demonstrate positive communication skills, and discuss educational philosophy.

EDU 119 Intro to Early Child Education

4 0 4
Prerequisites: None
Corequisites: None

This course covers the foundations of the education profession, the diverse educational settings for young children, professionalism and planning developmentally appropriate programs for children. Topics include historical foundations, program types, career options, professionalism, and creating inclusive environments and curriculum that are responsive to the needs of children and families. Upon completion, students should be able design career plans and develop
appropriate schedules, environments and activity plans for children. (*VLC)

EDU-131 Child, Family, & Commun

3 0 3
Prerequisites None
Corequisites Take DRE-097

Class/Lab/Credit or Class/Lab/Exp./Credit

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 3

Prerequisites None

Corequisites Take DRE-097

This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from conception through approximately 36 months. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse.

EDU-145 Child Development II

3 0 3

Prerequisites None

Corequisites Take DRE-097

This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from preschool through middle childhood. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse.

EDU-146 Child Guidance

3 0 3

Prerequisites None

Corequisites Take DRE-097

This course introduces evidence-based strategies to build nurturing relationships with each child by applying principles and practical techniques to facilitate developmentally appropriate guidance. Topics include designing responsive/supportive learning environments, cultural, linguistic and socio-economic influences on behavior, appropriate expectations, the importance of communication with children/families including using technology and the use of formative assessments in establishing intentional strategies for children with unique needs. Upon completion, students should be able to demonstrate direct/indirect strategies to encourage social skills, self-regulation, emotional expression and positive behaviors while recognizing the relationship between children's social, emotional and cognitive development.

EDU-151 Creative Activities

3 0 3

Prerequisites None

Corequisites Take DRE-097

Class/Lab/Credit or Class/Lab/Exp./Credit

This course introduces developmentally supportive creative learning environments with attention to divergent thinking, creative problem-solving, evidence-based teaching practices, and open-ended learning materials while applying NC Foundations for Early Learning and Development. Emphasis is placed on observation of process driven learning experiences in art, music, creative movement, dance, and dramatics for every young child age birth through eight, integrated through all domains and academic content. Upon completion, students should be able to examine, create, and adapt developmentally creative learning materials, experiences, and environments for children that are culturally, linguistically, and ability diverse.

EDU 153 Health, Safety, & Nutrition

3 0 3

Prerequisites: **None**

Corequisites: DRE 097

This course covers promoting and maintaining the health and well-being of all children. Topics include health and nutritional guidelines, common childhood illnesses, maintaining safe and healthy learning environments, recognition and reporting of abuse and neglect and state regulations. Upon completion, students should be able to demonstrate knowledge of health, safety, and nutritional needs, safe learning environments, and adhere to state regulations. *This course is also available through the Virtual Learning Community (VLC).*

EDU 153A Health, Safety, & Nutrition Lab

0 2 1

Prerequisites: None

Corequisites: DRE 097 and EDU 153

This course provides a laboratory component to complement EDU 153. Emphasis is placed on practical experiences that enhance concepts introduced in the classroom. Upon completion, students should be able to demonstrate a practical understanding of the development and implementation of safe indoor/outdoor environments and nutrition education programs.

EDU-153 Health, Safety and Nutrition

3 0 3

Prerequisites None

Corequisites Take DRE-097

This course covers promoting and maintaining the health and well-being of every child. Topics include health and nutritional guidelines, common childhood illnesses, maintaining safe and healthy learning environments, health benefits of active play, recognition and reporting of abuse/neglect, and state regulations. Upon completion, students should be able to apply knowledge of NC Foundations for Early Learning and Development for health, safety, nutritional needs and safe learning environments.

EDU-153A Health, Safety & Nutrition Lab

0 2 1

Prerequisites None

Corequisites Take EDU-153 and DRE-097

This course provides a laboratory component to complement EDU 153. Emphasis is placed on practical experiences that enhance concepts introduced in the classroom. Upon completion, students should be able to demonstrate a practical understanding of the development and implementation of safe indoor/outdoor environments and programs that promote healthy lifestyles.

EDU-161 Intro to Exceptional Children

3 0 3

Prerequisites None

Corequisites Take DRE-097

Class/Lab/Credit or Class/Lab/Exp./Credit

This course covers children with exceptionalities as life long learners within the context of the community, school and family. Emphasis is placed on inclusion, legal, social/political, environmental, and cultural issues relating to the teaching of children with exceptionalities. Upon completion, students should be able to demonstrate knowledge of identification processes, inclusive techniques, and professional practices and attitudes.

EDU-163 Classroom Mgmt and Instruction

3 0 3

Prerequisites None

Corequisites Take DRE-097

This course examines classroom management and evidence-based instructional strategies that create supportive learning environments to provide developmentally appropriate guidance for school-age populations. Topics include classroom management and organization, teaching strategies, individual student differences and learning styles, ongoing systematic observation, and developmentally appropriate classroom guidance techniques. Upon completion, students should be able to utilize developmentally appropriate behavior management and high quality instructional strategies that enhance the teaching/learning process and promote students' academic success.

EDU 175 Intro to Trade & Industri

3 0 3

Prerequisites: None

Corequisites: DRE 097

This course introduces the philosophy, scope, and objectives of industrial education. Topics include the development of industrial education, employment opportunities, current events, current practices, and emerging trends. Upon completion, students should be able to describe the history, identify current practices, and describe current trends in industrial education.

EDU-177 Instructional Methods

2 2 3

Prerequisites None

Corequisites: Take DRE-097

This course covers instructional methods in technical education with emphasis on competency-based instruction. Topics include writing objectives, industrial methods, and determining learning styles. Upon completion, students should be able to select and demonstrate the use of a variety of instructional methods.

EDU-179 Vocational Student Organizations

3 0 3

Prerequisites None

Corequisites: Take DRE-097

This course covers planning and organizing vocational youth clubs by understanding the structure and operating procedures to use club activities for personal and professional growth. Topics include self-assessment to set goals, club structure, election and installation of officers, club activities, function of committees, running meetings, contest preparation, and leadership skills. Upon completion students should be able to set personal goals, outline club structure, elect and install officers.

EDU 184 Early Childhood Intro Prac

1 3 2

Prerequisites: None

Corequisites: DRE 097

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 4
Prerequisites None
Corequisites Take DRE-098
This course introduces the American educational system and the teaching profession. Topics include the historical and philosophical influences on education, various perspectives on educational issues, and experiences in K-12 classrooms. Upon completion, students should be able to reflect on classroom observations, analyze the different educational approaches, including classical/traditional and progressive, and have knowledge of the various roles of educational systems at the federal, state and local level.

EDU-221 Children With Exceptionalities
3 0 3
Prerequisites Take one set:
Set 1: EDU-144, EDU-145
Set 2: PSY-244 PSY-245
Corequisites Take DRE-098
This course covers atypical patterns of child development, inclusive/diverse settings, evidenced-based educational/family plans, differentiated instruction, adaptive materials, and assistive technology. Emphasis is placed on the characteristics of exceptionalities and delays, early intervention/special education, transitions, observation, developmental screening, formative assessment of children, and collaborating with families and community partners. Upon completion, students should be able to recognize diverse abilities, describe the referral process, identify community resources, explain the importance of collaboration with families/professionals, and develop appropriate strategies/adaptations to support children in all environments with best practices as defined by laws, policies and the NC Foundations for Early Learning and Development.

EDU-222 Learners W/ Behavior Disorders
3 0 3
Prerequisites Take one set:
Set 1: EDU-144 and EDU-145
Set 2: PSY-244 and PSY-245
Corequisites Take DRE-098
This course provides a comprehensive study of learners with behavioral disorders encompassing characteristics, assessments, placement alternatives, inclusive environments and family interventions. Topics include etiology of behavior disorders, appropriate intervention strategies, early intervention/special education referral processes, family and community partnerships, inclusive environments, and legislative mandates. Upon completion, students should be able to identify characteristics of behavior for which additional supports are needed, describe the referral processes, identify community resources, and the importance of collaboration with families/professionals, and recognize appropriate intervention strategies in inclusive environments.

EDU 223 Specific Learning Disab
(EDU 223 replaced EDU 148)
3 0 3
Prerequisites: Take one set
Set 1: EDU 144, EDU 145
Set 2: PSY 244, PSY 245
Corequisites: DRE 098
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 3
Prerequisites Take EDU-119
Corequisites Take DRE-098
This course covers the development of high-quality, individualized, responsive/engaging relationships and experiences for infants, toddlers, and twos. Emphasis is placed on typical and atypical child development, positive early learning experiences, supporting and engaging diverse families, providing safe, warm and nurturing interactions, and the application of the NC Foundations for Early Learning and Development. Upon completion, students should be able to demonstrate responsive planning, respectful relationships and exposure to a variety of developmentally appropriate experiences/materials that support a foundation for healthy development and growth of culturally, linguistically and ability diverse children birth to 36 months.

EDU-234A Infants/Toddlers and Twos Lab
0 2 1
Prerequisites None
Corequisites Take EDU-234 and DRE-098
This course focuses on practical applications that support the healthy development of children birth to 36 months by applying principles of quality, individualized, responsive/engaging relationships and experiences. Emphasis is placed on typical and atypical child development, positive early learning experiences, supporting and engaging diverse families, providing safe, warm and nurturing interactions, and the application of the NC Foundations for Early Learning and Development. Upon completion, students should be able to demonstrate the ability to engage in respectful, responsive care to support a foundation for healthy development and growth of children birth to 36 months culturally, linguistically, and ability diverse through responsive planning and positive exposure to a variety of experiences/materials.

EDU-235 School-Age Develop & Programs
3 0 3
Prerequisites None
Corequisites Take DRE-098
This course includes developmentally appropriate practices in group settings for school-age children. Emphasis is placed on principles of development, environmental planning, and positive guidance techniques and program development. Upon completion, students should be able to discuss developmental principles for culturally, linguistically, and ability diverse children ages five to twelve and plan and implement developmentally appropriate programs and activities.

EDU-243 Learning Theory
3 0 3
Prerequisites None
Corequisites Take DRE-098
This course provides lateral entry teachers an introduction to learning theory, various styles of learning, and motivational factors involved in the learning process. Emphasis is placed on the development of cognitive skills using the eight types of intelligence and applying these to practical classroom situations. Upon completion, students should be able to describe theories and styles of learning and discuss the relationship between different types of intelligence to learning motivation.

EDU 247 Sensory & Physical Disab
3 0 3
Prerequisites: Take one set
Set 1: EDU 144, EDU 145
Set 2: PSY 244, PSY 245
Corequisites: DRE 098
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 3
Prerequisites: Take one set
Set 1: EDU 144, EDU 145
Set 2: PSY 244, PSY 245
Corequisites: DRE 098
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 & Sci Activities
3 0 3
Prerequisites: None
Corequisites: DRE 098
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 252A Math & Sci Act Lab
0 2 1
Prerequisites: None
Corequisites: EDU 252 and DRE 098
This course provides a laboratory component to complement EDU 252. Emphasis is placed on practical experiences that enhance concepts introduced in the classroom. Upon completion, students should be able to demonstrate a practical understanding of the development and implementation of appropriate math and science activities.

EDU-261 Early Childhood Admin I
3 0 3
Prerequisites None
Corequisites Take EDU-119 and DRE-098 This course introduces principles and practices essential to preparing and supporting child care administrators. Topics include program philosophy, policies and procedures, NC Child Care Law and Rules, business planning, personnel and fiscal management, and NAEYC Code of Ethical Conduct Supplement for Early Childhood Program Administration. Upon completion, students should be able to articulate a developmentally appropriate program philosophy, locate current state licensing regulations, analyze a business plan and examine comprehensive program policies and procedures.

EDU-262 Early Childhood Admin II
3 0 3
Prerequisites Take All: DRE-098, EDU-119 and EDU-261
Corequisites None

Class/Lab/Credit or Class/Lab/Exp./Credit

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.

EDU-271 Educational Technology
2 2 3
Prerequisites None
Corequisites Take DRE-098
This course introduces the ethical use of technology to enhance teaching and learning in all educational settings. Emphasis is placed on technology concepts, ethical issues, digital citizenship, instructional strategies, assistive technology, and the use of technology for professional development and communication. Upon completion, students should be able to discuss technology concepts, ethically use a variety of technology resources, demonstrate appropriate technology skills in educational environments, and identify assistive technology.

EDU 275 Effective Teach Train
2 0 2
Prerequisites: None
Corequisites: DRE 098
This course provides specialized training using an experienced-based approach to learning. Topics include instructional preparation and presentation, student interaction, time management, learning expectations, evaluation, and curriculum principles and planning. Upon completion, students should be able to prepare and present a six-step lesson plan and demonstrate ways to improve students' time-on-task.

EDU-280 Language/Literacy Experiences
3 0 3
Prerequisites None
Corequisites Take DRE-098
This course provides evidence-based strategies for enhancing language and literacy experiences that align with NC Foundations for Early Learning and Development. Topics include developmental sequences for children's emergent receptive and expressive language, print concepts, appropriate observations/assessments, literacy enriched environments, quality selection of diverse literature, interactive media, and inclusive practices. Upon completion, students should be able to select, plan, implement and evaluate developmentally appropriate language and literacy experiences for children who are culturally, linguistically and ability diverse.

EDU 280A Literacy Exp Lab
0 2 1
Prerequisites: None
Corequisites: EDU 280 and DRE 098
This course provides a laboratory component to complement EDU 280. Emphasis is placed on practical experiences that enhance concepts introduced in the classroom. Upon completion, students should be able to demonstrate a practical understanding of the development and implementation of appropriate early literacy experiences.

EDU 281 Instruct. Strat./Read & Writ
2 2 3
Prerequisites: None

Corequisites: DRE 098

Class/Lab/Credit or Class/Lab/Exp./Credit

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 Child Capstone Prac
1 9 4
Prerequisites Take One Set:
Set 1: EDU-119, EDU-144, EDU-145, EDU-146, and EDU-151
Set 2: EDU-119, PSY-244, PSY-245, EDU-146, and EDU-151
Set 3: EDU-119, PSY-245, EDU-144, EDU-146, and EDU-151
Set 4: EDU-119, PSY-244, EDU-145, EDU-146, and EDU-151
Corequisites Take DRE-098
This course is designed to allow students to demonstrate acquired skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on designing, implementing and evaluating developmentally appropriate activities and environments for all children; supporting/engaging families; and modeling reflective and professional practices based on national and state guidelines. Upon completion, students should be able to apply NC Foundations for Early Learning and Development to demonstrate developmentally appropriate plans/assessments, appropriate guidance techniques and ethical/professional behaviors, including the use of appropriate technology, as indicated by assignments and onsite faculty assessments.

EDU-285 Internship Exp-School Age
1 9 4
Prerequisites Take One Set:
Set 1: EDU 144, EDU 145, EDU 118, EDU 163
Set 2: PSY 244, PSY 245, EDU 118, EDU 163
Set 3: PSY 244, EDU 145, EDU 118, EDU 163
Set 4: EDU 144, PSY 245, EDU 118, EDU 163
Set 5: PSY 244, PSY 245, EDU 216, EDU 163
Set 6: EDU 144, EDU 145, EDU 216, EDU 163
Set 7: EDU 144, PSY 245, EDU 216, EDU 163
Set 8: PSY 244, EDU 145, EDU 216, EDU 163
Corequisites Take DRE-098
College Transfer N/A
This course is designed to allow students to demonstrate acquired skills in a quality public or private school environment. Emphasis is placed on designing, implementing and evaluating developmentally appropriate activities and environments for all children; supporting/engaging families; and modeling reflective and professional practices based on national and state guidelines. Upon completion, students should be able to demonstrate developmentally appropriate lesson plans/assessments, appropriate guidance techniques, ethical/professional behaviors including the use of appropriate technology, as indicated by assignments and onsite faculty visits.

EDU 289 Adv Issues/School Age
0 2 1
Prerequisites: None
Corequisites: DRE 098
This course covers advanced topics and issues that relate to school-age programs. Emphasis is placed on current advocacy issues, emerging technology, professional growth, ethics, and organizations for providers/teachers working with school-age populations. Upon completion, students should be able to list, discuss, and explain advanced current topics and issues surrounding school-aged populations.

Class/Lab/Credit or Class/Lab/Exp./Credit

Electricity

ELC 111 Intro to Electricity
2 2 3
Prerequisites: None
Corequisites: None
This course introduces the fundamental concepts of electricity and test equipment to non-electrical/electronics majors. Topics include basic DC and AC principles (voltage, resistance, current, impedance); components (resistors, inductors, and capacitors); power; and operation of test equipment. Upon completion, students should be able to construct and analyze simple DC and AC circuits using electrical test equipment.

ELC 112 DC/AC Electricity
3 6 5
Prerequisite: None
Corequisites: None
This course introduces the fundamental concepts of and computations related to DC/AC electricity. Emphasis is placed on DC/AC circuits, components, operation of test equipment; and other related topics. Upon completion, students should be able to construct, verify, and analyze simple DC/AC circuits.

Competencies
•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 electrical circuits.
•3. Construct and analyze series, parallel and combinations circuits using appropriate components.
•4. Use appropriate laws and formulas to perform circuit calculations.
•5. Interpret electrical schematics.
•6. Describe the characteristics of various power sources.

ELC 113 Residential Wiring
2 6 4
Prerequisite: None
Corequisites: None

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.

Class/Lab/Credit or Class/Lab/Exp./Credit

ELC 115 Industrial Wiring
2 6 4
Prerequisites: None
Corequisites: None
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
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 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-118 National Electrical Code
1 2 2
Prerequisites: None
Corequisites: None
This course covers the use of the current National Electrical Code. Topics include the NEC history, wiring methods, overcurrent protection, materials, and other related topics. Upon completion, students should be able to effectively use the NEC.

ELC-119 NEC Calculations
1 2 2
Prerequisites: None
Corequisites: None
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 128 Intro to PLC
2 3 3
Prerequisite: None
Corequisites: None
This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to understand basic PLC systems and create simple programs.

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. List and describe the hardware components used in PLC systems.
•3. Utilize numbering systems as applied to PLCs.
•4. Demonstrate and describe the use of various PLC instruction sets.
•5. Create various simple PLC programs using the appropriate instruction set.
•6. Apply appropriate troubleshooting methods to PLCs.

Class/Lab/Credit or Class/Lab/Exp./Credit

ELC 131 Circuit Analysis
3 3 4
Prerequisite: None
Corequisites: None
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.
•6. Using appropriate troubleshooting techniques evaluate circuit performance applying suitable repair methods.
•7. Identify and demonstrate safe workplace practices.

ELC 213 Instrumentation
3 2 4
Prerequisites: None
Corequisites: None
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.

Electronics

ELN 131 Analog Electronics
3 3 4
Prerequisites: None
Corequisites: None
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
Student Learning Outcomes
1. Identify and describe operation of semiconductor devices.
2. Analyze where and how analog components are used.
3. 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.
6. Using appropriate troubleshooting techniques evaluate circuit performance applying suitable repair methods.
7. Identify and demonstrate safe workplace practices.

ELN 133 Digital Electronics
3 3 4
Prerequisite: None
Corequisites: None
This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, medium scale integration (MSI) and

Class/Lab/Credit or Class/Lab/Exp./Credit

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.
•6. Using appropriate troubleshooting techniques evaluate circuit performance applying suitable repair methods.
•7. Identify and demonstrate safe workplace practices.

ELN 135 Electronic Circuits
2 3 3
Prerequisites: None
Corequisites: None
This course covers discrete component amplifiers, power supplies, wave-shaping, oscillators, and special purpose ICs. Topics include feedback, analog arithmetic circuits, current and voltage sources, amplifiers, timers, filters, regulators, and other related circuits. Upon completion, students should be able to determine, by the configuration, the function of common analog circuits and troubleshoot circuits based on applications.

ELN 140 Semiconductor Devices
4 6 6
Prerequisites: None
Corequisites: None
This course covers semiconductor devices and circuits as they apply to the area of electronic servicing. Topics include semiconductor theory, diodes, transistors, linear integrated circuits, biasing, amplifiers, power supplies, and other related topics. Upon completion, students should be able to construct, verify, analyze, and troubleshoot semiconductor circuits.

ELN 141 Digital Fundamentals
4 6 6
Prerequisites: None
Corequisites: None
This course covers combinational and sequential logic circuits. Topics include number systems, logic elements, Boolean algebra, Demorgan's theorem, logic families, flip flops, registers, counters, and other related topics. Upon completion, students should be able to analyze, verify, and troubleshoot digital circuits

ELN 231 Industrial Controls
2 3 3
Prerequisites: None
Corequisites: None
This course introduces the fundamental concepts of control of rotating machinery and associated peripheral devices. Topics include rotating machine theory, ladder logic, electromechanical and solid state relays, motor controls, pilot devices, three-phase power systems, and other related topics. Upon completion, students should be able to interpret schematics and demonstrate an understanding of electromechanical and electronic control of rotating machinery.

Class/Lab/Credit or Class/Lab/Exp./Credit

ELN 233 Microprocessor Systems
3 3 4
Prerequisites: None
Corequisites: None
This course covers the application and design of microprocessor control systems. Topics include control and interfacing of systems using AD/DA, serial/parallel I/O, communication protocols, and other related applications. Upon completion, students should be able to design, construct, program, verify, analyze, and troubleshoot fundamental microprocessor interface and control circuits using related equipment.

ELN 247 Electronic App Project
1 3 2
Prerequisites: None
Corequisites: None
This course provides a structured approach to an application-oriented electronics project. Emphasis is placed on selecting, planning, implementing, testing, and presenting an application-oriented project. Upon completion, students should be able to present and demonstrate an electronics application-oriented project.

ELN 275 Troubleshooting
1 3 2
Prerequisites: None
Corequisites: None
This course covers techniques of analyzing and repairing failures in electronic equipment. Topics include safety, signal tracing, use of service manuals, and specific troubleshooting methods for analog, digital, and other electronics-based circuits and systems. Upon completion, students should be able to logically diagnose and isolate faults and perform necessary repairs to meet manufacturers' specifications.

Engineering

EGR 125 Appl Software for Tech
1 2 2
Prerequisite: None
Corequisites: None
This course introduces personal computer software and teaches students how to customize the software for technical applications. Emphasis is placed on the use of common office applications software programs such as spreadsheets, word processing, graphics, and internet access. Upon completion, students should be able to demonstrate competency in using applications software to solve technical problems and communicate the results in text and graphical formats.

EGR 150 Intro. to Engineering
1 2 2
Prerequisite: 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 as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

EGR 220 Engineering Statistics
3 0 3
Prerequisite: PHY 251
Corequisites: MAT 272

Class/Lab/Credit or Class/Lab/Exp./Credit

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 as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

Emergency Medical Services

EMS 110 EMT
6 6 8
Prerequisites: None
Corequisites: None
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.

EMS 122 EMS Clinical Practicum I
0 6 3 1
Prerequisites: None
Corequisites: None
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 4
Prerequisites: EMS 110
Corequisites: EMS 122
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 140 Rescue Scene Management
1 3 2
Prerequisites: None
Corequisites: None
This course introduces rescue scene management. Topics include response to hazardous material conditions, incident command, and extrication of patients from a variety of situations. Upon completion, students should be able to recognize and manage rescue operations based upon initial and follow-up scene assessment.

EMS 140A Rescue Scene Skills Lab
0 3 1
Prerequisites: None
Corequisites: EMS 140
This course is designed to provide enhanced rescue scene skills for EMS providers. Emphasis is placed on advanced rescue scene evolutions including hazardous materials and major incident response. Upon completion, students should be able to demonstrate skills necessary to safely effect patients rescue in a variety of situations.

Class/Lab/Credit or Class/Lab/Exp./Credit

EMS 150 Emerg. Vehicles & EMS Comm.
1 3 2
Prerequisites: None
Corequisites: None
This course covers the principles governing emergency vehicles, maintenance of emergency vehicles, and EMS communication equipment. Topics include applicable motor vehicle laws affecting emergency vehicle operation, defensive driving, collision avoidance techniques, communication systems, and information management systems. Upon completion, students should have a basic knowledge of emergency vehicles, maintenance, and communication needs.

EMS 160 Cardiology
1 3 2
Prerequisites: None
Corequisites: None
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 3
Prerequisites: Take all: EMS 122, 130. 160
Corequisites: None
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, cardia pharmacology, and patient care. Upon completion, students should be able to assess and treat patients utilizing American Heart Association guidelines.

EMS 235 EMS Management
2 0 2
Prerequisites: None
Corequisites: None
This course stresses the principles of managing a modern emergency medical service system. Topics include structure and function of municipal governments, EMS grantsmanship, finance, regulatory agencies, system management, legal issues, and other topics relevant to the EMS manager. Upon completion, students should be able to understand the principles of managing emergency medical service delivery systems.

EMS 240 Patients with Special Challenges
1 2 2
Prerequisites: Take all: EMS 122, 130
Corequisites: None
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 243 Wilderness EMT
1 2 2
Prerequisites: EMS 110
Corequisites: None
This course provides an overview of emergency care when separated from definitive care by distance, time,

Class/Lab/Credit or Class/Lab/Exp./Credit

or circumstance. Topics include principles of long-term patient care, wilderness patient assessment system, medical and environmental emergencies, medication administration, modified CPR, and spine management. Upon completion, students should be able to demonstrate the knowledge and skills necessary to gain Wilderness-EMT certification.

EMS 250 Medical Emergencies
3 3 4
Prerequisites: Take all: EMS 122, 130
Corequisites: None
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 follow 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 2
Prerequisites: Take all: EMS 122, 130
Corequisites: None
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 3
Prerequisites: Take all: EMS 122, 130
Corequisites: None
This course covers medical/ethical/legal issues and the spectrum of age-specific emergencies from conception through death and is required for 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 280 EMS Bridging Course
2 2 3
Prerequisites: None
Corequisites: None
This course is designed to bridge the knowledge gained in a continuing education paramedic program with the knowledge gained in an EMS curriculum program. Emphasis is placed on patient assessment, advanced electrocardiography utilizing the twelve-lead ECG, advance pharmacology, the appropriate intervention and treatment of multi-system injuries/disorders, ethics, and NC laws and rules. Upon completion, students should be able to perform advanced patient assessment and practice skills.

EMS 285 EMS Capstone
1 3 2
Prerequisites: Take all: EMS 220, 250, 260
Corequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

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

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by the college's placement test.

ENG 101 Applied Communications I
3 0 3
Prerequisites: None
Corequisites: None
This course is designed to enhance reading and writing skills for the workplace. Emphasis is placed on technical reading, job-related vocabulary, sentence writing, punctuation, and spelling. Upon completion, students should be able to identify main ideas with supporting details and produce mechanically correct short writings appropriate to the workplace. *This is a diploma-level course.*

ENG 111 Writing and Inquiry
3 0 3
Prerequisites: Take one set:
Set 1: ENG 090 and RED 090
Set 2: ENG 095
Set 3: DRE 098
Corequisites: None
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 to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.*
Competencies
Student Learning Outcomes
1. Demonstrate writing as a recursive process.
2. Demonstrate writing and inquiry in context using different rhetorical strategies to reflect, analyze, explain, and persuade in a variety of genres and formats.
3. Students will reflect upon and explain their 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 3
Prerequisites: ENG 111
Corequisites: None
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

Class/Lab/Credit or Class/Lab/Exp./Credit

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 as a general education course in English Composition. This course has been approved for transfer under the ICAA as a general education course in English Composition.*

ENG 231 American Literature I
3 0 3
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites: None
This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* **(*VLC)**
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 3
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites: None
This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* **(*VLC)**
Competencies
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 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.

ENG 241 British Literature I
3 0 3
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites: None
This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* **(*VLC)**

Class/Lab/Credit or Class/Lab/Exp./Credit

ENG 242 British Literature II
3 0 3
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites: None
This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* **(*VLC)**

ENG 251 Western World Literature I
3 0 3
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites: None
This course provides a survey of selected European works from the Classical period through the Renaissance. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

ENG 272 Southern Literature
3 0 3
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites: None
This course provides an analytical study of the works of several Southern authors. Emphasis is placed on the historical and cultural contexts, themes, aesthetic features of individual works, and biographical backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and discuss selected works. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

ENG 273 African-American Literature
3 0 3
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites: None

This course provides a survey of the development of African-American literature from its beginnings to the present. Emphasis is placed on historical and cultural context, themes, literary traditions, and backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and respond to selected texts. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.* **(*VLC)**

Emergency Preparedness

EPT 120 Sociology of Disaster
3 0 3
Prerequisites: None
Corequisites: None
This course is designed to overview sociological disaster research, disaster systems, and alternative research approaches. Topics include human and organizational behaviors, long disaster impact on communities, disaster warning, and evacuation considerations. Upon completion, students should be able to assess and predict the impact of disaster-related human behavior.

Class/Lab/Credit or Class/Lab/Exp./Credit

EPT 124 EM Services Law and Ethics
3 0 3
Prerequisites: None
Corequisites: None
This course covers federal and state laws that affect emergency service personnel in the event of a natural disaster or terrorist incident. Topics include initial response and long-term management strategies, with an emphasis on legal and ethical considerations and coordination between local, state, and federal agencies. Upon completion, students should have an understanding of the role of private industry, government agencies, public policies, and federal/state declarations of disasters in emergency situations.

EPT 130 Mitigation & Preparedness
3 0 3
Prerequisites: None
Corequisites: None
This course introduces the mitigation and preparation techniques and methods necessary to minimize the impact of natural, technological, and man-made disaster. Topics include hazard identification and mapping, design and construction applications, financial incentives, insurance, structural controls, preparation, planning, assessment, implementation, and exercises. Upon completion, students should be able to develop a mitigation and preparedness plan.

EPT 140 Emergency Management
3 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.

EPT 140 Incident Management
3 0 3
Prerequisites: None
Corequisites: None
This course introduces the National Incident Management System (NIMS). Topics include integrating command and control systems, maintaining communication within command and control systems, and using NIMS procedures. Upon completion, students should be able to demonstrate knowledge of key concepts necessary for operating within the National Incident Management System.

EPT 210 Response and Recovery
3 0 3
Prerequisites: None
Corequisites: None
This course introduces the basic concepts, operational procedures, and authorities involved in response and recovery efforts to major disasters. Topics include federal, state, and local roles and responsibilities in major disaster, response, and recovery work, with an emphasis on governmental coordination. Upon completion, students should be able to implement a disaster response plan and assess the needs of those involved in a major disaster.

EPT 220 Terrorism and Emergency Mgt.
3 0 3
Prerequisites: None
Corequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

This course covers preparing for, responding to, and safely mitigating terrorism incidents. Topics include the history of terrorism, scene hazards, evidence preservation, risk assessment, roles and responsibilities, explosive recognition, and terrorism planning. Upon completion, student should be able to recognize the threat of terrorism and operate within the emergency management framework at a terrorism incident.

EPT 275 Emergency Ops Center Mgt.
3 0 3
Prerequisites: None
Corequisites: None
This course provides students with the knowledge and skills to effectively manage and operate an emergency operations center (EOC) during crisis situations. Topics include properly locating and designing and EOC, staffing, training and briefing EOC personnel, and how to operate an EOC. Upon completion, students should be able to demonstrate how to set up and operate an effective emergency operations center.

Fire Protection

FIP 110 Fire Prot./Rest. & Hotels
1 0 1
Prerequisites: None
Corequisites: None
This course provides a general overview of fire protection terms and devices and their use as found in hotels, motels, and restaurants. Topics include understanding ventilation hood systems, alarms, in-house fire brigades, and other related topics. Upon completion, students should be able to operate a fire extinguisher and demonstrate knowledge of fire alarm systems, emergency features, and fire service terminology.
Competencies
• Student Learning Outcomes
1. Provide an overview of fire protection terms and devices.
2. Operate a fire extinguisher properly.
3. Demonstrate knowledge of fire alarms and their maintenance.
4. Describe the importance of alarms in commercial structures.

FIP 120 Intro. to Fire Protection
3 0 3
Prerequisites: None
Corequisites: None
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 dire 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 related to emergency services.
5. Identify the primary responsibilities of fire prevention personnel including: code enforcement, public information, and public and private fire protection systems.

Class/Lab/Credit or Class/Lab/Exp./Credit

FIP 124 Fire Protection and Public Ed.
3 0 3
Prerequisites: None
Corequisites: None
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
• Student Learning Outcomes
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 132 Building Construction
3 0 3
Prerequisites: None
Corequisites: None
This course covers the principles and practices referenced in NFPA standard 220 related to various types of building construction, including residential and commercial, as impacted by fire conditions. Topics include types of construction and related elements, fire resistive aspects of construction materials, building codes, collapse, and other related topics. Upon completion, students should be able to understand and recognize various types of construction 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.
2. 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 building during fires and fire suppression activities.
4. Identify the indicators of potential structural failure as they relate to fire fighter safety.
5. Classify major types of building construction according to materials and methods used.

FIP 146 Fire Protection Systems
3 2 4
Prerequisites: None
Corequisites: None
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.

Class/Lab/Credit or Class/Lab/Exp./Credit

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 162 Firefighter Safety and Wellness
3 0 3
Prerequisites: None
Corequisites: None
The purpose of this course is to reduce firefighter injuries and fatalities by discussing topics that impact firefighter safety. Emphasis is placed on national standards, the 16 Life Safety Initiatives, and current events to identify changes needed to create a culture of safety. Upon completion, students should be able to define and describe the need for cultural and behavioral changes within the emergency services.

FIP 176 HazMat: Operations
4 0 4
Prerequisites: None
Corequisites: None
This course is designed to increase first responder awareness of the type, nature, physiological effects of, and defensive techniques for mitigation of HazMat incidents. Topics include recognition, identification, regulations and standards, zoning, resource usage, defensive operations, and other related topics. Upon completion, students should be able to recognize and identify the presence of hazardous materials and use proper defensive techniques for incident mitigation.
Competencies
• Student Learning Outcomes
1. Describe the nature and physiological effects of a hazardous materials event.
2. Describe defensive techniques for mitigation of a hazardous materials event.
3. Demonstrate the ability of use the emergency response guide.
4. Demonstrate the ability to recognize and identify the presence of hazardous materials.

FIP 180 Wildland Fire Behavior
3 0 3
Prerequisites: None
Corequisites: None
This course covers the principles of wildland fire behavior and meteorology referenced in NFPA standard 1143. Emphasis is placed on fire calculations, fuels, and related weather effects. Upon completion, students should be able to demonstrate and apply fire behavior theories through written and performance evaluations.
Competencies
• Student Learning Outcomes
1. Determine the role of fuels, topography, and atmospheric conditions that leads to extreme fire behavior.
2. Define the important determinants of wildland fire occurrence and behavior.
3. Identify the fire's effects on and interactions with the ecosystem properties, processes, and components.
4. Analyze the social and political forces that affect wildland fire, and explain how they can be incorporated into land management decisions.
5. Demonstrate knowledge of risk/hazard Assessment and Mitigation concerning wildland fires.

FIP 184 Wildland Fire Safety
3 0 3
Prerequisites: None
Corequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

This course covers safety principles used when working in the wildland fire environment referenced in NFPA standard1143. Emphasis is place on personal safety and working with equipment, aircraft, and fire-ground operations. Upon completion, students should be able to understand and demonstrate fire safety procedures through written and performance evaluations.
Competencies
• Student Learning Outcomes
1. Demonstrate knowledge of how the Incident Command System is used in relation to a major wildland fire scenario.
2. Demonstrate knowledge of safe practices of wildland firefighting.
3. Compare and contrast structural firefighting strategies and tactics with those of wildland fires.
4. Define the 18 Watch Out situation and 10 Standing Firefighting Orders in wildland firefighting.
5. Demonstrate the ability to gather research about wildland fire deaths in the United States.
6. Identify aircraft safety precautions during all phases of wildland firefighting.

FIP 220 Fire Fighting Strategies
3 0 3
Prerequisites: None
Corequisites: None
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
• Student Learning Outcomes
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 attach methods for appropriate conditions and scenarios.

FIP 228 Local Govt. Finance
3 0 3
Prerequisites: None
Corequisites: None
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.

Class/Lab/Credit or Class/Lab/Exp./Credit

FIP 229 Fire Dynamics and Combust.
3 0 3
Prerequisites: None
Corequisites: None
This course covers the theories and fundamentals of how and why fires start and spread, and how they are safely controlled reference 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 232 Water and Hydraulics Dist.
2 2 3
Prerequisites: None
Corequisites: None
This course covers the flow of fluids through fire hoses, nozzles, appliances, pumps, standpipes, water mains, and other devices referenced 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.

French

FRE 111 Elementary French I
3 0 3
Prerequisites: None
Corequisites: None
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 to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

FRE 112 Elementary French II
3 0 3
Prerequisites: FRE 111
Corequisites: None
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 to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

Graphic Design

GRD 110 Typography I
2 2 3
Prerequisites: None
Corequisites: None
This course introduces the history and mechanics of type and its application to layout and design. Topics include typographic fundamentals, anatomy, measurements, composition, identification, and terminology. Upon completion, students should be able to demonstrate proficiency in design application, analysis, specification, and creation of typographic elements.

GRD 121 Drawing Fundamentals I
1 3 2
Prerequisites: None
Corequisites: None
This course increases observation skills using basic drawing techniques and media in graphic design. Emphasis is placed on developing the use of graphic design principles, media applications, spatial considerations, drawing styles, and approaches. Upon completion, students should be able to show competence and proficiency in finished works.

GRD 131 Illustration I
1 3 2
Prerequisites: ART 131, DES 125, or GRD 121
Corequisites: None
This course introduces the application of rendering techniques to create illustrations. Emphasis is placed on controlling various media, methods, surfaces, design problems, and the appropriate media selection process. Upon completion, students should be able to produce quality illustrations from conception through finished artwork.

GRD 141 Graphic Design I
2 4 4
Prerequisites: None
Corequisites: None
This course introduces the conceptualization process used in visual problem solving. Emphasis is placed on learning the principles of design and on the manipulation and organization of elements. Upon completion, students should be able to apply design principles and visual elements to projects.

GRD 142 Graphic Design II
2 4 4
Prerequisites: ART 121, DES 135, or GRD 141
Corequisites: None
This course covers the application of visual elements and design principles in advertising and graphic design. Topics include creation of various designs, such as logos, advertisements, posters, outdoor advertising, and publication design. Upon completion, students should be able to effectively apply design principles and visual elements to projects.

GRD 151 Computer Design Basics
1 4 3
Prerequisites: None
Corequisites: None
This course covers designing and drawing with various types of software applications for advertising and graphic design. Emphasis is placed on creative and imaginative use of space, shapes, value, texture, color, and typography to provide effective solutions to advertising and graphic design problems. Upon completion, students should be able to use the computer as a creative tool.

GRD 152 Computer Design Tech I
1 4 3
Prerequisites: GRD 151
Corequisites: None
This course covers complex design problems utilizing various design and drawing software applications. Topics include the expressive use of typography, image, and organization to communicate a message. Upon completion, students should be able to use appropriate computer software to professionally present their work.

GRD 160 Photo Fundamentals I
1 4 3
Prerequisites: None
Corequisites: None
This course introduces basic camera operations, roll film processing, and photographic print production. Topics include contrast, depth-of-field, subject composition, enlarger operation, and density control. Upon completion, students should be able to produce photographic prints with acceptable density values and quality.

GRD 180 Interactive Design
1 4 3
Prerequisites: GRD 151 or GRA 151
Corequisites: None
This course covers skills and techniques used in designing interactive presentations. Emphasis is placed on design, including interface design, color, illustration, scripting, audio, typography, and animated elements. Upon completion, students should be able to design and produce interactive presentations.

GRD 241 Graphic Design III
2 4 4
Prerequisites: DES 136 or GRD 142
Corequisites: None
This course is an advanced exploration of various techniques and media for advertising and graphic design. Emphasis is placed on advanced concepts and solutions to complex and challenging graphic design problems. Upon completion, students should be able to demonstrate competence and professionalism in visual problem solving.

GRD 242 Graphic Design IV
2 4 4
Prerequisites: GRD 241
Corequisites: None
This course is a continuation of GRD 241. Emphasis is placed on using advanced media techniques, concepts, strategies, and professionalism in all aspects of design. Upon completion, students should be able to conceptualize, create, and produce designs for reproduction.

GRD 249 Advanced Design Practice
1 9 4
Prerequisites: GRD 241
Corequisites: None
This course covers advanced techniques used in graphic design. Emphasis is placed on providing solutions to complex design problems. Upon completion, students should be able to demonstrate advanced levels of competence and professionalism in visual problem solving.

GRD 263 Illustrative Imaging
1 4 3
Prerequisites: GRD 151 or GRA 151
Corequisites : None
This course covers the creative manipulation of images utilizing digital techniques of masking, layering, airbrushing, and painting. Topics include the aesthetic analysis of visual imagery as well as the legalities of ma-

nipulating images. Upon completion, students should be able to utilize software applications to creatively manipulate and illustratively build digital images which accomplish design objectives.

GRD 271 Multimedia Design I
1 3 2
Prerequisites: GRD 151
Corequisites: None
This course introduces the fundamentals of multimedia design and production for computer-related presentations. Topics include interface design, typography, storyboarding, scripting, simple animation, graphics, digital audiovideo, and copyright issues. Upon completion, students should be able to design and produce multimedia presentations.

GRD 280 Portfolio Design
2 4 4
Prerequisites: GRD 142 and GRD 152 or GRA 152
Corequisites: None
This course covers the organization and presentation of a design/advertising or graphic art portfolio and appropriate related materials. Emphasis is placed on development and evaluation of the portfolio, design and production of a résumé and self-promotional materials, and interview techniques. Upon completion, students should be able to prepare and professionally present an effective portfolio and related self-promotional materials.

GRD 281 Design of Advertising
2 0 2
Prerequisites: None
Corequisites: None
This course explores the origins, roles, scope, forms, and development of advertising. Emphasis is placed on advertising development from idea through production and the interrelationship of marketing to types of advertising, media, and organizational structure. Upon completion, students should be able to demonstrate an understanding of the complexities and relationships involved in advertising design.

GRD 285 Client/Media Relations
1 2 2
Prerequisites: GRD 142 and GRD 152
Corequisites: None
This course introduces media pricing, scheduling, and business ethics. Emphasis is placed on communication with clients and determination of clients' advertising needs. Upon completion, students should be able to use professional communication skills to effectively orchestrate client/media relationships.

Health Information Technology

HIT 110 Fundamentals of HIM
3 0 0 3
Prerequisites: DRE 098
Corequisites: None
This course introduces Health Information Management (HIM) and its role in healthcare delivery systems. Topics include standards, regulations, and initiatives; payment and reimbursement systems and healthcare providers and disciplines; and Electronic Health Records (EHRs). Upon completion, students should be able to demonstrate an understanding of health information management and healthcare organizations, professions, and trends.

HIT 112 Health Law and Ethics
3 0 0 3
Prerequisites: DRE 098
Corequisites: None
This course covers legislative and regulatory processes, legal terminology, and professional-related and practice-related ethical issues. Topics include confidentiality; privacy and security policies, procedures and monitoring; release of information policies and procedures; and professional-related and practice-related ethical issues. Upon completion, students should be able to apply policies and procedures for access and disclosure of Protected Health Information and apply and promote ethical standards. *This course is also available through the Virtual Learning Community (VLC).*

HIT 114 Health Data Sys/Standards
2 3 0 3
Prerequisites: DRE 098
Corequisites: None
This course covers basic concepts and techniques for managing and maintaining manual and electronic health records (EHRs). Topics include structure and use of health information including data collection and analysis, data sources/sets, archival systems, and quality and integrity of healthcare data. Upon completion, students should be able to monitor and apply organization-wide clinical documentation guidelines and comply with regulatory standards.

HIT 122 Prof Practice Exp I
0 0 3 1
Prerequisites: HIT 112
Corequisites: None

This course provides supervised clinical experience in healthcare settings. Emphasis is placed on practical application of curriculum concepts to the healthcare setting. Upon completion, students should be able to apply health information theory to healthcare facility practices.

HIT 124 Prof Practice Exp II
0 0 3 1
Prerequisites: HIT 112
Corequisites: None
This course provides supervised clinical experience in healthcare settings. Emphasis is placed on practical application of curriculum concepts to the healthcare setting. Upon completion, students should be able to apply health information theory to healthcare facility practices.

HIT 210 Healthcare Statistics
2 2 0 3
Prerequisites: MAT 110 or 143
Corequisites: None
This course covers maintenance, compilation, analysis, and presentation of healthcare statistics and research protocols and techniques. Topics include basic statistical principles, indices, databases, registries, vital statistics, descriptive statistics, research protocol monitoring, Institutional Review Board processes, and knowledge-based research techniques. Upon completion, students should be able to apply, interpret, and present healthcare statistics and utilize research techniques to gather and interpret healthcare data.

HIT 211 ICD Coding
2 6 0 4
Prerequisites: BIO 166 or 169, and MED 122, and HIT 110
Corequisites: None
This course covers ICD diagnostics and procedural coding conventions and guidelines for inpatient, out-

patient and ambulatory care. Emphasis is placed on a comprehensive application of anatomy, physiology and interrelationships among organ systems. Upon completion, students should be able to accurately assign and sequence diagnostic and procedural codes for patient outcomes, statistical and reimbursement purposes.

HIT 214 CPT/Other Coding Systems
1 3 0 2
Prerequisites: HIT 211
Corequisites: None
This course covers application of principles and guidelines of CPT/HCPCS coding. Topics include clinical classification/nomenclature systems such as SNOMED, DSM, ICD-O and the use of encoders. Upon completion, students should be able to apply coding principles to correctly assign CPT/HCPCS codes.

HIT 215 Reimbursement Methodology
1 2 0 2
Prerequisites: DRE 098
Corequisites: None
This course covers reimbursement methodologies used in all healthcare settings as they relate to national billing, compliance, and reporting requirements. Topics include prospective payment systems, billing process and procedures, chargemaster maintenance, regulatory guidelines, reimbursement monitoring, and compliance strategies and reporting. Upon completion, students should be able to perform data quality reviews to validate code assignment and comply with reimbursement and reporting requirements.

HIT 216 Quality Management
1 3 0 2
Prerequisites: HIT 114
Corequisites: None
This course introduces principles of quality assessment and improvement, and utilization, risk, and case management, in healthcare. Topics include Continuous Quality Improvement, and case management processes, data analysis/reporting techniques, credentialing, regulatory quality monitoring requirements, and outcome measures and monitoring. Upon completion, students should be able to abstract, analyze, and report clinical data for facility-wide quality management/performance improvement programs and monitor compliance measures.

HIT 218 Mgmt Principles in HIT
3 0 0 3
Prerequisites: HIT 110
Corequisites: None
This course covers organizational management concepts as applied to healthcare settings. Topics include roles/functions of teams/committees, leadership, communication and interpersonal skills, designing and implementing orientation/training programs, monitoring workflow, performance standards, revenue cycles, and organizational resources. Upon completion, students should be able to apply management, leadership, and supervisory concepts to various healthcare settings.

HIT 221 Lifecycle of EHR
2 2 0 3
Prerequisites: DRE 098
Corequisites: None
This course covers the system selection, design and implementation of an electronic health record (EHR) in integrated delivery networks. Topics include the system development life cycle, analysis of existing systems, required resources, and common resource constraints. Upon completion, students should be able

to understand system development life cycles, analyze design and engineering, and make recommendations to improve efficiency of operations.

HIT 222 Prof Practice Exp III
0 0 6 2
Prerequisites: HIT 122
Corequisites: None
This course provides supervised clinical experience in healthcare settings. Emphasis is placed on practical application of curriculum concepts to the healthcare setting. Upon completion, students should be able to apply health information theory to healthcare facility practices.

HIT 225 Healthcare Informatics
3 2 0 4
Prerequisites: DRE 098
Corequisites: None
This course covers data analysis to support decision making, patient care, and regulatory compliance. Topics include clinical terminology and vocabulary systems, data capture methodology, data presentation and reporting, and initiatives to improve the quality of patient care. Upon completion, students should be able to identify data elements and sets, analyze capture methodology in healthcare settings, analyze compliance issues and make improvement recommendations.

HIT 226 Principles of Disease
3 0 0 3
Prerequisites: BIO 166 or BIO 169 and MED 122
Corequisites: None
This course covers disease etiology and organ system involvement, including physical signs and symptoms, prognoses, and common complications and their management. Topics include basic microbiology, basic pharmacology, and principles of disease. Upon completion, students should be able to relate disease processes to etiology, physical signs and symptoms, prognosis, and common complications and their management.

HIT 227 Informatics Project Mgt.
2 2 0 3
Prerequisites: None
Corequisites: None
This course covers the required skills needed for implementing healthcare IT applications, with emphasis on electronic health records (EHR). Topics include leadership development skills, interdisciplinary collaboration, organizational change management, project management software, and the study of communication skills required across healthcare disciplines. Upon completion, students should be able to effectively collaborate and communicate with healthcare disciplines to implement informatics projects within the healthcare setting.

HIT 280 Professional Issues
2 0 0 2
Prerequisites: HIT 211 and must be during the last semester of program
Corequisites: None
This course provides a comprehensive discussion of topics common to the health information profession. Emphasis is placed on application of professional competencies, job search tools, and preparation for the certification examination. Upon completion, students should be able to demonstrate competence in entry-level domains and subdomains for health information technologies. This course will prepare students for the RHIT Certification Exam.

History

HIS 111 World Civilizations I
3 0 3
Prerequisites: None
Corequisites: None
This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

HIS 112 World Civilizations II
3 0 3
Prerequisites: None
Corequisites: None
This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

HIS 131 American History I
3 0 3
Prerequisites: None
Corequisites: None
This course is a survey of American history from prehistory through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.* **(*VLC)**

HIS 132 American History II
3 0 3
Prerequisites: None
Corequisites: None
This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.* ***VLC)**

Horticulture

HOR-112 Landscape Design I
2 3 3
Prerequisites None
Corequisites None
This course covers landscape principles and practices for residential and commercial sites. Emphasis is placed on drafting, site analysis, and common elements of good design, plant material selection, and proper plant utilization (encouraged use of native plants and discouraged use of invasive species). Upon completion, students should be able to read plans and draft a landscape design according to sustainable practices.

Competencies
·Student Learning Outcomes
1. Create hand drawn landscape designs.
2. Use design tools and create a landscape design.
3. Incorporate elements of sustainability into design process.

HOR-114 Landscape Construction
2 2 3
Prerequisites None
Corequisites None
This course introduces the design and fabrication of landscape structures/features. Emphasis is placed on safety, tool identification and use, material selection, construction techniques, and fabrication. Upon completion, students should be able to design and construct common landscape structures/features.

HOR-116 Landscape Management I
2 2 3
Prerequisites None
Corequisites None
This course covers information and skills necessary to analyze a property and develop a management schedule. Emphasis is placed on property measurement, plant condition, analysis of client needs, and plant culture needs. Upon completion, students should be able to analyze a property, develop management schedules, and implement practices based on client needs.

HOR-118 Equipment Op & Maintenance
1 3 2
Prerequisites None
Corequisites None
This course covers the proper operation and maintenance of selected equipment used in horticulture. Emphasis is placed on the maintenance, minor repairs, safety devices, and actual operation of selected equipment. Upon completion, students should be able to design a maintenance schedule, service equipment, and demonstrate safe operation of selected equipment.

HOR-124 Nursery Operations
2 3 3
Prerequisites None
Corequisites None
This course covers nursery site and crop selection, cultural practices, and production and marketing methods. Topics include site considerations, water availability, equipment, irrigation, fertilization, containers, media, and pest control. Upon completion, students should be able to design and implement a nursery operation and grow and harvest nursery crops.

HOR-134 Greenhouse Operations
2 2 3
Prerequisites None
Corequisites None
This course covers the principles and procedures involved in the operation and maintenance of greenhouse facilities. Emphasis is placed on the operation of greenhouse systems, including the environmental control, record keeping, scheduling, and production practices. Upon completion, students should be able to demonstrate the ability to operate greenhouse systems and facilities to produce greenhouse crops.

HOR-154 Intro to Horticultural Therapy
2 4 4
Prerequisites None
Corequisites None

Class/Lab/Credit or Class/Lab/Exp./Credit

This course introduces the concept of horticulture therapy and how it can be applied to improve human well-being. Emphasis is placed on developing a horticulture therapy program, planning activities, and adjusting activities based on the age, disability, or need of the individual. Upon completion, students should be able to develop project ideas, write lesson plans, and lead informal classes using horticulture therapy techniques.

HOR-160 Plant Materials I

2 2 3

Prerequisites None
Corequisites None

This course covers identification, culture, characteristics, and use of plants in a sustainable landscape. Emphasis is placed on nomenclature, identification, growth requirements, cultural requirements, soil preferences, and landscape applications. Upon completion, students should be able to demonstrate knowledge of the proper selection and utilization of plant materials, including natives and invasive plants.

Competencies
Student Learning Outcomes
1.Identify landscape plants, including natives by both botanical and common name using morphological characteristics.
2.Explain the cultural practices used for growing each plant in the landscape.
3. Select plant materials for specific horticultural applications.
4.Discuss plant growth characteristics, site requirements, and sustainable landscape uses.

HOR-161 Plant Materials II

2 2 3

Prerequisites None
Corequisites None

This course provides a supplementary opportunity to cover identification, culture, characteristics, and use of plants in a sustainable landscape, giving students a broader knowledge of available landscape plants for utilization in landscapes and plant production. Emphasis is placed on nomenclature, identification, growth requirements, cultural requirements, soil preferences, landscape applications and expansion of the plant palette. Upon completion, students should be able to demonstrate knowledge of the proper selection and utilization of plant materials, including natives and invasive plants.

Competencies
Student Learning Outcomes
1.Identify landscape plants, including natives, by both botanical and common name using morphological characteristics.
2.Explain the cultural practices used for growing each plant in the landscape.
3.Select plant materials for specific horticultural applications.
4.Discuss plant growth characteristics, site requirements, and sustainable landscape uses.

HOR-162 Applied Plant Science

2 2 3

State Prerequisites: None
State Corequisites: None

This course introduces the basic concepts of botany as they apply to horticulture. Topics include nomenclature, physiology, morphology, and anatomy as they apply to plant culture. Upon completion, students should be able to apply the basic principles of botany to horticulture.

HOR-164 Hort Pest Management

2 2 3

Prerequisites None
Corequisites None

Class/Lab/Credit or Class/Lab/Exp./Credit

This course covers the identification and management of plant pests including insects, diseases, and weeds. Topics include pest identification and beneficial organisms, pesticide application safety and use of least toxic methods of management. Upon completion, students should be able to manage common landscape pests using least toxic methods of control and be prepared to sit for North Carolina Commercial Pesticide Ground Applicators license.

Competencies
·Student Learning Outcomes
1. Demonstrate pest identification and management using sustainable methods.
2. Identify major horticultural pests, such as insects, pathogen and weeds and create an integrated pest management plan.
3. Prepare for the North Carolina Pesticide Applicator?s exam.

HOR-166 Soils & Fertilizers

2 2 3

Prerequisites None
Corequisites None

This course covers the physical and chemical properties of soils and soil fertility and management. Topics include soil formation; classification; physical, chemical, and biological properties (including microorganisms); testing; and fertilizer application. Upon completion, students should be able to analyze, evaluate, and properly amend soils/media according to sustainable practices.

Competencies
·Student Learning Outcomes
1. Identify the physical, chemical and biological properties of soils.
2. Collect soil sample and interpret the results.
3. Select and apply fertilizers according to sustainable practices.

HOR-168 Plant Propagation

2 2 3

Prerequisites None
Corequisites None

This course is a study of sexual and asexual reproduction of plants. Emphasis is placed on seed propagation, grafting, stem and root propagation, micro-propagation, and other propagation techniques. Upon completion, students should be able to successfully propagate ornamental plants.

HOR-213 Landscape Design II

2 2 3

Prerequisites Take HOR-112
Corequisites None

This course covers residential and commercial landscape design, cost analysis, and installation. Emphasis is placed on job cost estimates, installation of the landscape design, and maintenance techniques. Upon completion, students should be able to read landscape design blueprints, develop cost estimates, and implement the design.

HOR-225 Nursery Production

2 2 3

Prerequisites None
Corequisites None

This course covers all aspects of nursery crop production. Emphasis is placed on field production and covers soils, nutrition, irrigation, pest control, and harvesting. Upon completion, students should be able to produce a marketable nursery crop.

HOR-245 Hor Specialty Crops

2 2 3

Prerequisites None
Corequisites None

Class/Lab/Credit or Class/Lab/Exp./Credit

This course introduces the techniques and requirements for the production of horticultural crops of special or local interest. Topics include development of a local market, proper varietal selection, cultural practices, site selection, and harvesting and marketing practices. Upon completion, students should be able to choose, grow, and market a horticultural crop of special or local interest.

HOR-255 Interiorscapes

1 2 2

Prerequisites None
Corequisites None

This course covers plant selection, design, and management for interior settings. Topics include tropical plant identification, cultural requirements, insect and disease identification and control, and design and management requirements for interior plants. Upon completion, students should be able to design, install, and manage plants in interior settings.

HOR-257 Arboriculture Practices

1 3 2

Prerequisites None
Corequisites None

This course covers the culture and maintenance of trees and shrubs. Topics include fertilization, pruning, approved climbing techniques, pest control, and equipment use and safety. Upon completion, students should be able to properly prune trees and shrubs and perform arboricultural practices.

HOR-265 Advanced Plant Materials

1 2 2

Prerequisites None
Corequisites None

This course covers important landscape plants. Emphasis is placed on identification, plant nomenclature, growth characteristics, cultural requirements, and landscape uses. Upon completion, studentsshould be able to correctly select plants for specific landscape uses.

HOR-266 Micropropagation

3 0 3

Prerequisites Take All: HOR-162 and HOR-168
Corequisites None

This course provides an introduction to the science of micropropagation. Emphasis will be placed on the propagation of plant material in vitro. Upon completion, students should be able to demonstrate an understanding of the principles and practices of micropropagation.

HOR-266A Microprop Lab Techniques

2 4 4

Prerequisites None
Corequisites Take HOR-266

This course provides hands-on experience in micropropagation. Emphasis will be placed on basic lab techniques and procedures, including lab safety, accurate measuring, sterile technique, and plant production methods. Upon completion, students should be able to utilize micropropagation to propagate a variety of plant species.

Humanities

HUM 110 Technology and Society

3 0 3

Prerequisites: None
Corequisites: None

This course considers technological change from historical, artistic, and philosophical perspectives and

its effect on human needs and concerns. Emphasis is placed on the causes and consequences of technological change. Upon completion, students should be able to critically evaluate the implications of technology. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

HUM 115 **Critical Thinking**
3 0 3
Prerequisites: Take One Set
Set 1: DRE 098
Set 2: ENG 090 and RED 090
Set 3: ENG 095
Corequisites: None
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. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.*

HUM 122 **Southern Culture**
3 0 3
Prerequisites: None
Corequisites: None
This course explores the major qualities that make the South a distinct region. Topics include music,politics, literature, art, religion, race relations, and the role of social class in historical and contemporary contexts. Upon completion, students should be able to identify the characteristics that distinguish Southern culture. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

Hydraulics

HYD 110 **Hydraulics/Pneumatics I**
2 3 3
Prerequisites: None
Corequisites: None
This course introduces the basic components and functions of hydraulic and pneumatic systems. Topics include standard symbols, pumps, control valves, control assemblies, actuators, FRL, maintenance procedures, and switching and control devices. Upon completion, students should be able to understand the operation of a fluid power system, including design, application, and troubleshooting. Emphasis will be placed on drawing of hydraulic and pneumatic circuits. 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 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 110 **Workplace Safety**
1 0 1
Prerequisites: None
Corequisites: None

This course introduces the basic concepts of workplace safety. Topics include fire, ladders, lifting, lock-out/tag-out, personal protective devices, and other workplace safety issues related to OSHA compliance. Upon completion, students should be able to demonstrate an understanding of the components of a safe workplace. **(*VLC)**

ISC 112 **Industrial Safety**
2 0 2
Prerequisites: None
Corequisites: None
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.
Competencies
Student Learning Outcomes
1. Describe and identify safety practices required to perform various job-related activities.
2. Describe the application of OSHA procedures and requirements for compliance. **(*VLC)**

ISC 115 **Construction Safety**
2 0 2
Prerequisites: None
Corequisites: None
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.

ISC 121 **Envir Health & Safety**
3 0 3
Prerequisites: None
Corequisites: None
This course covers workplace environmental, health, and safety issues. Emphasis is placed on managing the implementation and enforcement of environmental health and safety regulations and on preventing accidents, injuries, and illnesses. Upon completion, students should be able to demonstrate an understanding of basic concepts of environmental, health, and safety issues.

ISC 130 **Intro to Quality Control**
3 0 3
Prerequisites: None
Corequisites: None
This course introduces the philosophies, principles, and techniques of managing quality. Topics include the functions, responsibilities, structures, costs, reports, personnel, and vendor-customer relationships associated with quality control and management. Upon completion, students should be able to demonstrate an understanding of quality control and management.

ISC 210 **Oper & Prod Planning**
3 0 3
Prerequisites: None
Corequisites: None
This course includes the fundamentals of operations and production planning, forecasting, and scheduling. Topics include demand management, production planning and control, scheduling, and budgeting. Upon completion, students should be able to demonstrate an understanding of the concepts and techniques involved in operations and production planning. *This course is a unique concentration requirement of the Operations Management concentration in the Business Administration program.*

Landscape Gardening

LSG-111 **Basic Landscape Technique**
2 2 3
Prerequisites None
Corequisites None
This course introduces basic principles essential to sustainable landscape gardening. Topics include soils, propagation, watering, fertilizing, pruning, pest control, and planting. Upon completion, students should be able to perform basic sustainable gardening techniques essential to maintaining a sustainable landscape.

Competencies
·Student Learning Outcomes
1. Demonstrate landscape techniques that address environmental concerns.
2. Employ integrated pest management protocols to identified plant pests and diseases.
3. Identify soils and propagation methods used for landscape plants.
4. Employ water and fertilizer in a manner consistent with plant health and safe and sustainable practices.
5. Perform pruning consistent with plant growth habit and seasonal cycles.

LSG-121 **Fall Gardening Lab**
0 6 2
Prerequisites None
Corequisites None
This course provides basic hands-on experience in fall gardening techniques. Emphasis is placed on pruning, irrigation, planting, fertilizing, pest control, equipment operation, and turf maintenance. Upon completion, students should be able to perform various techniques essential to maintaining the fall landscape.

LSG-122 **Spring Gardening Lab**
0 6 2
Prerequisites None
Corequisites None
This course provides familiarization with basic gardening techniques by performing practical hands-on exercises required for the spring season. Emphasis is placed on pruning, irrigation, planting, fertilizing, pest control, equipment operation, turf maintenance, and landscape construction. Upon completion, students should be able to satisfactorily perform various practices essential to maintaining the landscape in the spring season.

LSG-123 **Summer Gardening Lab**
0 6 2
Prerequisites None
Corequisites None
This course provides basic hands-on experience in summer gardening techniques. Emphasis is placed on pruning, irrigation, planting, fertilizing, pest control, equipment operation, turf maintenance, landscape construction, and maintaining fruits and vegetables. Upon completion, students should be able to perform various techniques essential to maintaining the summer landscape.

LSG-231 **Landscape Supervision**
2 6 4
Prerequisites Take All: LSG-123 and HOR-161
Corequisites None
This course provides experience in planning, implementing, and supervising various landscape manage-

ment projects. Emphasis is placed on supervisory skills, organizing, and scheduling. Upon completion, students should be able to supervise employees in various landscape management jobs.

LSG-232 Garden Management
1 2 2
Prerequisites Take All: LSG-123 and HOR-161
Corequisites None
This course covers the implementation of knowledge gained in previous landscape gardening courses. Emphasis is placed on scheduling, designing, renovation, and plant management. Upon completion, students should be able to collate the material learned in the Landscape Gardening curriculum and apply it to various landscape gardening situations.

Machining

MAC 114 Introduction to Metrology
2 0 2
Prerequisites: None
Corequisites: None
This course introduces the care and use of precision measuirng instruments. Emphasis is placed on the inspection of machine parts and use of a wide variety of measuring instruments. Upon completion, students should be able to demonstrate the correct use of measuring instruments.

MAC 121 Intro to CNC
2 0 2
Prerequisites: None
Corequisites: None
This course introduces the concepts and capabilities of computer numerical control machine tools. Topics include setup, operation, and basic applications. Upon completion, students should be able to explain operator safety, machine protection, data input, program preparation, and program storage.

MAC 122 CNC Turning
1 3 2
Prerequisites: None
Corequisites: None
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 2
Prerequisites: None
Corequisites: None
This course introduces the manual programming, setup, and operation of CNC machining centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC machining centers.

MAC-141 Machining Applications I
2 6 4
Prerequisites: None
Corequisites: None
This course provides an introduction to a variety of material-working processes that are common to the machining industry. Topics include safety, process-specific machining equipment, measurement devices, set-up and layout instruments, and common shop practices. Upon completion, students should be able to safely demonstrate basic machining operations, accurately measure components, and effectively use layout instruments.

MAC-142 Machining Applications II
2 6 4
Prerequisites: None
Corequisites: None
This course provides instruction in the wide variety of processes associated with machining. Topics include safety, equipment set-up, holding fixtures, tooling, cutting speeds and depths, metal properties, and proper finishes. Upon completion, students should be able to safely demonstrate advanced machining operations, accurately measure components, and produce accurate components with a proper finish.

MAC-143 Machining Applications III
2 6 4
Prerequisites: None
Corequisites: None
This course provides instruction in the field of advanced machining. Emphasis is placed on creating complex components, close-tolerance machining, precise measurement, and proper equipment usage. Upon completion, students should be able to demonstrate the ability to produce an accurately machined component with a quality finish using the proper machining process.

MAC 151 Machining Calculations
1 2 2
Prerequisites: None
Corequisites: None
This course introduces basic calculations as they relate to machining occupations. Emphasis is placed on basic calculations and their applications in the machine shop. Upon completion, students should be able to perform basic shop calculations.

MAC 152 Adv Machining Calc
1 2 2
Prerequisites: None
Corequisites: None
This course combines mathematical functions with practical machine shop applications and problems. Emphasis is placed on gear ratios, lead screws, indexing problems, and their applications in the machine shop. Upon completion, students should be able to calculate solutions to machining problems.

MAC 222 Advanced CNC Turning
1 3 2
Prerequisites: None
Corequisites: None
This course covers advanced methods in setup and operation of CNC turning centers. Emphasis is placed on programming and production of complex parts. Upon completion, students should be able to demonstrate skills in programming, operations, and setup of CNC turning centers.

MAC 224 Advanced CNC Milling
1 3 2
Prerequisites: MAC 124
Corequisites: None
This course covers advanced methods in setup and operation of CNC machining centers. Emphasis is placed on programming and production of complex parts. Upon completion, students should be able to demonstrate skills in programming, operations, and setup of CNC machining centers.

MAC 231 CAM: CNC Turning
1 4 3
Prerequisite: None
Corequisites: None
This course introduces Computer Numerical Control graphics programming and concepts for turning center applications. Emphasis is placed on the interaction of menus to develop a shape file in a graphics CAM system

and to develop tool path geometry and part geometry. Upon completion, students should be able to develop a job plan using CAM software, including machine selection, tool selection, operational sequence, speed, feed, and cutting depth.

MAC 232 CAM: CNC Milling
1 4 3
Prerequisite: None
Corequisites: None
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.

MAC-247 Production Tooling
2 0 2
Prerequisites: None
Corequisites: None
This course provides advanced study in tooling currently utilized in the production of metal parts. Emphasis is placed on the proper use of tooling used on CNC and other production machine tools. Upon completion, students should be able to choose proper tool grades based on manufacturing requirements and troubleshoot carbide tooling problems.

Maintenance

MNT-110 Intro to Maint Procedures
1 3 2
Prerequisite: None
Corequisites: None
This course covers basic maintenance fundamentals for power transmission equipment. Topics include equipment inspection, lubrication, alignment, and other scheduled maintenance procedures. Upon completion, students should be able to demonstrate knowledge of accepted maintenance procedures and practices according to current industry standards.

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. Identify and demonstrate use of hand tools.
•3. Identify grades of bolts and fasteners and demonstrate proper tightening techniques
•4. Describe the operation of and assemble mechanical power transmissions and systems.
•5. Identify bearings, seals, gaskets, and packing material and demonstrate appropriate assembly techniques.
•6. Perform preventative and predictive maintenance and mechanical troubleshooting.

Masonry

MAS 140 Intro to Masonry
1 2 2
Prerequisites: None
Corequisites: None
This course introduces basic principles and practices of masonry. Topics include standard tools, materials, and practices used in basic masonry and other related topics. Upon completion, students should be able to demonstrate an understanding of masonry and be able to use basic masonry techniques.

Class/Lab/Credit or Class/Lab/Exp./Credit

Mathematics

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by that college's placement test.

MAT 110 Math Measurement & Literacy
2 2 3
Prerequisites: Take all:
DMA-010, DMA-020, and DMA-030
Corequisites: None
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 and Trigonometry I
2 2 3
Prerequisites: Take all:
Set 1: DMA-010, DMA-020, DMA-030, DMA-040, DMA 050 and DMA-060
Corequisites: None
This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include 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
1. 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.

Class/Lab/Credit or Class/Lab/Exp./Credit

MAT 122 Algebra/Trigonometry II
2 2 3
Prerequisites: MAT 121, 161, 171, or 175
Corequisites: None
This course extends the concepts covered in MAT 121 to include additional topics in algebra, function analysis, and trigonometry. Topics include exponential and logarithmic functions, translation and scaling of functions, Sine Law, Cosine Law, vectors, and statistics. Upon completion, students should be able to demonstrate an understanding of the use of technology to solve problems and to analyze and communicate results.

MAT 143 Quantitative Literacy
2 2 3
Prerequisites: Take One Set:
Set 1: DMA-010, DMA-020, DMA-030, and DMA-040
Set 1: DMA-010, DMA-020, DMA-030, DMA-040, DMA-050, and
DRE-098
Set 2: DMA-010, DMA-020, DMA-030, DMA-040, DMA-050, and
ENG-095*
Set 3: DMA-010, DMA-020, DMA-030, DMA-040, DMA-050, and
ENG-090* and RED-090*
Corequisites: None
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 as a general education course in Mathematics (Quantitative). This course has been approved for transfer under the ICAA as a general education course in Mathematics (Quantitative).*
Competencies
Student Learning Outcomes
1. 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 4
Prerequisites: Take All: DMA-010, DMA-020, DMA-030, DMA-040, DMA-050, and DRE-098
Corequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

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 as a general education course in Mathematics (Quantitative). This course has been approved for transfer under the ICAA as a general education course in Mathematics (Quantitative).*
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 4
Prerequisites: 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: MAT-121
Corequisites: None
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 to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*
Competencies
•Student Learning Outcomes
1. 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 4
Prerequisites: MAT 171
Corequisites: None
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 to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

Competencies

Student Learning Outcomes

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.
2. 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 271 Calculus I

3 2 4

Prerequisites: MAT 172

Corequisites: None

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 to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

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 4

Prerequisites: MAT 271

Corequisites: None

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 to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.* Competencies

Student Learning Outcomes

1. 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 4

Prerequisites: MAT 272

Corequisites: None

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 to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

Competencies

Student Learning Outcomes

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.
5. 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 3

Prerequisites: MAT 271

Corequisites: None

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.

Competencies

·Student Learning Outcomes

1. Use analytical and graphical representations to apply vector operations in multiple-dimensions.
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.
3. 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.
7. Demonstrate proficiency in using CAS technology to analyze, solve and interpret the various applications.

College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

MAT 285 Differential Equations

2 2 3

Prerequisites: MAT 272

Corequisites: None

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.

Competencies

·Student Learning Outcomes

1. 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.
3. 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.

College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

Mechanical

MEC 111 Machine Processes I

1 4 3

Prerequisites: None

Corequisites: None

This course introduces shop safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include use and care of tools, safety, measuring tools, and the basic setup and operation of common machine tools. Upon completion, students should be able to safely manufacture simple parts to specified tolerances.

Class/Lab/Credit or Class/Lab/Exp./Credit

MEC 112 Machine Processes II
2 3 3
Prerequisites: MEC 111
Corequisites: None
This course covers advanced use of milling machines and lathes. Emphasis is placed on safety and compound setup of milling machines and lathes for manufacture of projects with a specified fit. Upon completion, students should be able to demonstrate proper procedures for manufacture of assembled parts

MEC 130 Mechanisms
2 3 3
Prerequisites: None
Corequisites: None
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 141 Intro Mfg Processes
2 2 3
Prerequisites: None
Corequisites: None
This course covers the properties and characteristics of manufacturing materials and the processes used to form them. Emphasis is placed on manufacturing materials, heat-treating processes, and manufacturing processes. Upon completion, students should be able to identify physical characteristics of materials and describe processes used to manufacture a part.

MEC 142 Physical Metallurgy
1 2 2
Prerequisites: None
Corequisites: None
This course covers the heat treating of metals. Emphasis is placed on the effects of hardening, tempering, and annealing on the structure and physical properties of metals. Upon completion, students should be able to heat treat materials.

Medical

MED 120 Survey of Med Terminology
2 0 2
Prerequisites: None
Corequisites: None
This course introduces the vocabulary, abbreviations, and symbols used in the language of medicine. Emphasis is placed on building medical terms using prefixes, suffixes, and word roots. Upon completion, students should be able to pronounce, spell, and define accepted medical terms.

MED 121 Medical Terminology I
3 0 3
Prerequisites: None
Corequisites: None
This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. **(*VLC)**

MED 122 Medical Terminology II
3 0 3
Prerequisites: MED 121
Corequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

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. **(*VLC)**

Marketing and Retailing

MKT 120 Principles of Marketing
3 0 3
Prerequisites: None
Corequisites: None
This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making. **(*VLC)**
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 121 Retailing
3 0 3
Prerequisites: None
Corequisites: None
This course examines the role of retailing in the economy. Topics include the development of present retail structure, functions performed, effective operations, and managerial problems resulting from current economic and social trends. Upon completion, students should be able to demonstrate an understanding of the basic principles of retailing.

MKT 122 Visual Merchandising
3 0 3
Prerequisites: None
Corequisites: None
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. *This course is a unique concentration requirement of the Marketing and Retailing concentration in the Business Administration program.*

MKT 123 Fundamentals of Selling
3 0 3
Prerequisites: None
Corequisites: None
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. **(*VLC)**
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 220 Advertising and Sales Promotion
3 0 3
Prerequisites: None
Corequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and sales promotion as a marketing tool, and means of testing effectiveness. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application. **(*VLC)**

MKT 223 Customer Service
3 0 3
Prerequisites: None
Corequisites: None
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.

MKT 224 International Marketing
3 0 3
Prerequisites: None
Corequisites: None
This course covers the basic concepts of international marketing activity and theory. Topics include product promotion, placement, and pricing strategies in the international marketing environment. Upon completion, students should be able to demonstrate a basic understanding of the concepts covered.

MKT 225 Marketing Research
3 0 3
Prerequisites: MKT 120
Corequisites: None
This course provides information for decision making by providing guidance in developing, analyzing, and using data. Emphasis is placed on marketing research as a tool in decision making. Upon completion, students should be able to design and conduct a marketing research project and interpret the results. *This course is a unique concentration requirement of the Marketing and Retailing concentration in the Business Administration program.* **(*VLC)**
Competencies
Student Learning Outcomes
1. Design and conduct a marketing research project.
2. Interpret results of a marketing research project.
3. Apply marketing research as a tool in decision making.
4. Define procedures for developing, analyzing, and using data.

MKT 227 Marketing Applications
3 0 3
Prerequisites: None
Corequisites: None
This course extends the study of diverse marketing strategies. Emphasis is placed on case studies and small-group projects involving research or planning. Upon completion, students should be able to effectively participate in the formulation of a marketing strategy. *This course is a unique concentration requirement of the Marketing and Retailing concentration in the Business Administration program.*
Competencies
Student Learning Outcomes
1. Formulate marketing strategy.
2. Apply diverse marketing strategies case studies and small-group projects.
3. Define diverse marketing strategies.

MKT 230 Public Relations
3 0 3
Prerequisites: None
Corequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

This course introduces public relations as it affects communications, strategic planning, and management of the organization. Topics include basic principles and functions of management that guide public relations activities as applied to businesses, services, institutions, and associations. Upon completion, students should be able to perform the communications, evaluation, planning, and research activities of the public relations professional.

Maintenance

MNT 110 **Intro to Maint Procedures**
1 3 2
Prerequisites: None
Corequisites: None
This course covers basic maintenance fundamentals for power transmission equipment. Topics include equipment inspection, lubrication, alignment, and other scheduled maintenance procedures. Upon completion, students should be able to demonstrate knowledge of accepted maintenance procedures and practices according to current industry standards.
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. Identify and demonstrate use of hand tools.
3. Identify grades of bolts and fasteners and demonstrate proper tightening techniques
4. Describe the operation of and assemble mechanical power transmissions and systems.
5. Identify bearings, seals, gaskets, and packing material and demonstrate appropriate assembly techniques.
6. Perform preventative and predictive maintenance and mechanical troubleshooting.

MNT 111 **Maintenance Practices**
2 2 3
Prerequisites: None
Corequisites: None
This course provides in-depth theory and practical applications relating to predictive and preventive maintenance programs. Emphasis is placed on equipment failure, maintenance management software, and techniques such as vibration and infrared analysis. Upon completion, students should be able to demonstrate an understanding of modern analytical and documentation methods. **(*VLC)**

Music

MUS 110 **Music Appreciation**
3 0 3
Prerequisites: None
Corequisites: None
This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* **(*VLC)**

MUS 112 **Introduction to Jazz**
3 0 3
Prerequisite: None
Corequisites: None
This course introduces the origins and musical components of jazz and the contributions of its major artists.

Class/Lab/Credit or Class/Lab/Exp./Credit

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. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.*

MUS 210 **History of Rock Music**
3 0 3
Prerequisite: None
Corequisites: None
This course is a survey of Rock music from the early 1950's to the present. Emphasis is placed on musical groups, soloists, and styles related to the evolution of this idiom and on related historical and social events. Upon completion, students should be able to identify specific styles and to explain the influence of selected performers within their respective eras.

Nurse Aide

NAS 101 **Nurse Aide I**
3 4 3 6
Prerequisites: DRE 96
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. *This is a certificate-level course.*

NAS 102 **Nurse Aide II**
3 2 6 6
Prerequisites: High school diploma or GED and currently listed as NA I with State of North Carolina; DRE 96
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. *This is a certificate-level course.*

NAS 103 **Home Health Care Nurse Aide**
2 0 0 2
Prerequisites: DRE 96 and 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. *This is a certificate-level course.*

NAS 104 **Home Health Clinical**
0 0 3 1
Prerequisites: None
Corequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

This course provides supervised experience in the home and/or simulated laboratory with emphasis on the application of basic nursing skills. Emphasis is placed on the transfer of knowledge and skills from institutional settings to home environments. Upon completion, students should be able to safely and efficiently provide delegated basic care to clients in the home. *This is a certificate-level course.*

Networking Technology

NET 110 **Networking Concepts**
2 2 3
Prerequisites: None
Corequisites: None

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. *This course is also available through the Virtual Learning Community (VLC).*

NET 125 **Networking Basics**
1 4 3
Prerequisites: None
Corequisites: None

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 4 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 & Switching I**
1 4 3
Prerequisites: None
Corequisites: None

This course focuses on advanced IP addressing techniques, intermediate routing protocols, command-line interface configuration of switches, Ethernet switching, VLANs, STP, and VTP. Emphasis will be placed on application and demonstration of skills acquired in prerequisite courses. Upon completion, students should be able to perform tasks related to VLSM, routing protocols, switching concepts and configuration, STP, VLANs, and VTP.

NET 240 **Network Design**
3 0 3
Prerequisites: None
Corequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

This course covers the principles of the design of LANs and WANs. Topics include network architecture, transmission systems, traffic management, bandwidth requirements, Internet working devices, redundancy, and broad-band versus base-band systems. Upon completion, students should be able to design a network to meet specified business and technical requirements.

NET 260 Internet Dev & Support
3 0 3
Prerequisites: NET 110 or NET 125
Corequisites: None
This course covers issues relating to the development and implementation of Internet related tools and services. Topics include Internet organization, site registration, e-mail servers, Web servers, Web page development, legal issues, firewalls, multimedia, TCP/IP, service providers, FTP, list servers, and gateways. Upon completion, students should be able to develop and support the Internet services needed within an organization.

Network Operating Systems

NOS 110 Operating System Concepts
2 3 3
Prerequisites: None
Corequisites: None
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 2 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
2 2 3
Prerequisites: None
Corequisites: None
This course introduces operating system concepts for single-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating systems functions at the support level in a single-user environment.

NOS 230 Windows Admin I
2 2 3
Prerequisites: None
Corequisites: None
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.

Class/Lab/Credit or Class/Lab/Exp./Credit

Nursing

NUR 101 Practical Nursing I
7 6 6 11
Prerequisites: Admission to the P.N.E. Program
Corequisites: BIO 168, ACA 115, PSY 150
This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including assessment, clinical decision making, professional behaviors, caring interventions, biophysical and psychosocial concepts, communication, collaboration, teaching/learning, safety, ethical principles, legal issues, informatics, and evidence-based practice. Upon completion, students should be able to provide safe nursing care across the lifespan incorporating the concepts identified in this course. *This is a diploma-level course.*

NUR 102 Practical Nursing II
7 0 9 10
Prerequisites: NUR 101, BIO 168, PSY 150
Corequisites: ENG 111, BIO 169
This course is designed to further develop the concepts within the three domains of the individual, nursing, and healthcare. Emphasis is placed on the concepts within each domain including clinical decision making, caring interventions, biophysical and psychosocial concepts, communication, collaboration, teaching and learning, accountability, safety, informatics, and evidence-based practice. Upon completion, students should be able to provide safe nursing care across the lifespan incorporating the concepts identified in this course. *This is a diploma-level course.*

NUR 103 Practical Nursing III
6 0 9 9
Prerequisites: NUR 102
Corequisites: None
This course is designed to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on biophysical and psychosocial concepts, professional behaviors, healthcare systems, health policy, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide safe, quality, and individualized entry level nursing care. *This is a diploma-level course.*

NUR 111 Intro to Health Concepts
4 6 6 8
Prerequisites: None
Corequisites: None
This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including medication administration, assessment, nutrition, ethics, interdisciplinary teams, informatics, evidence-based practice, individual-centered care, and quality improvement. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 112 Health Illness Concepts
3 0 6 5
Prerequisites: NUR 111
Corequisites: None
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.

Class/Lab/Credit or Class/Lab/Exp./Credit

NUR 113 Family Health Concepts
3 0 6 5
Prerequisites: NUR 111
Corequisites: None
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of oxygenation, sexuality, reproduction, grief/loss, mood/affect, behaviors, development, family, health-wellness-illness, communication, caring interventions, managing care, safety, and advocacy. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 114 Holistic Health Concepts
3 0 6 5
Prerequisites: NUR 111
Corequisites: None
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.

NUR 211 Health Care Concepts
3 0 6 5
Prerequisites: NUR 111
Corequisites: None
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, infection, immunity, mobility, comfort, behaviors, health-wellness-illness, clinical decision-making, caring interventions, managing care, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 212 Health System Concepts
3 0 6 5
Prerequisites: NUR 111
Corequisites: None
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of grief/loss, violence, health-wellness-illness, collaboration, managing care, safety, advocacy, legal issues, policy, healthcare systems, ethics, accountability, and evidence-based practice. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR 213 Complex Health Concepts
4 3 15 10
Prerequisites: NUR 111, NUR 112, NUR 113, NUR 114, NUR 211, and NUR 212
Corequisites: None
This course is designed to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of fluid/electrolytes, metabolism, perfusion, mobility, stress/coping, violence, health-wellness-illness, professional behaviors, caring interventions, managing care, healthcare systems, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide quality, individualized, entry level nursing care.

NUR 214 Nursing Transition Concepts
3 0 3 4
Prerequisites: None
Corequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

This course is designed to introduce concepts within the three domains of the individual, healthcare, and nursing as the LPN transitions to the ADN role. Emphasis is placed on the concepts within each domain including evidenced-based practice, quality improvement, communication, safety, interdisciplinary team, clinical decision-making, informatics, assessment, caring, and health-wellness-illness. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

Nutrition

NUT 110 Nutrition
3 0 0 3
Prerequisites: None
Corequisites: None
This course covers basic principles of nutrition and their relationship to human health. Topics include meeting nutritional needs of healthy people, menu modification based on special dietary needs, food habits, and contemporary problems associated with nutrition. Upon completion, students should be able to apply basic nutritional concepts as they relate to health and well-being. **(*VLC)**

Operations Management

OMT 112 Materials Management
3 0 3
Prerequisites: None
Corequisites: None
This course covers the basic principles of materials management. Emphasis is placed on the planning, procurement, movement, and storage of materials. Upon completion, students should be able to demonstrate an understanding of the concepts and techniques related to materials management. *This course is a unique concentration requirement of the Operations Management concentration in the Business Administration program.*
Competencies
Student Learning Outcomes
1. Identify appropriate strategies for procurement of materials.
2. Describe appropriate strategies for movement of materials.
3. Describe appropriate strategies for storage of materials.
4. Describe materials management planning.

OMT 143 Just-In-Time
2 0 2
Prerequisites: None
Corequisites: None
This course is a study of the quality philosophy and Just-in-Time techniques designed to improve the ability to economically respond to change. Topics include production to demand with perfect quality, no unnecessary lead times, elimination of waste, developing productivity of people, and the quest for continuous improvement. Upon completion, students should be able to demonstrate an understanding of Just-in-Time methods and be prepared for the APICS CPIM examination.

OMT 260 Issues in Operations Mgt.
3 0 3
Prerequisites: ISC 121, ISC 210, OMT 112, and ISC 130, ISC 131, ISC 132, or ISC 221
Corequisites: None
This course presents a variety of topics that highlight contemporary problems and issues related to operations management. Emphasis is placed on production and operations planning, environmental health and safety, materials management, and quality systems. Upon completion, students should be able to demonstrate the ability to make decisions and resolve problems in an operations management environment. *This course is a unique concentration requirement of the Operations Management concentration in the Business Administration program.*
Competencies
Student Learning Outcomes
1. Identify contemporary problems and issues related to operations management.
2. Apply production and operations planning principles.
3. Identify environmental health and safety issues in operations management.
4. Discuss issues related to materials management.

Office Systems Technology

OST 080 Keyboarding Literacy
1 2 2
Prerequisites: None
Corequisites: None
This course is designed to develop elementary keyboarding skills. Emphasis is placed on mastery of the keyboard. Upon completion, students should be able to demonstrate basic proficiency in keyboarding.

OST 122 Office Computations
2 2 3
Prerequisites: None
Corequisites: None
This course covers the keypad touch method using the electronic calculator (10-key) and mathematical functions used in office applications. Topics may include budgets, discounts, purchasing, inventory, and petty cash. Upon completion, students should be able to solve a wide variety of numerical problems commonly encountered in an office setting.

OST 131 Keyboarding
1 2 2
Prerequisites: None
Corequisites: None
This course covers basic keyboarding skills. Emphasis is placed on the touch system, correct techniques, and development of speed and accuracy. Upon completion, students should be able to key at an acceptable speed and accuracy level using the touch system.

OST 134 Text Entry & Formatting
2 2 3
Prerequisites: OST 131 or test out
Corequisites: None
This course is designed to provide the 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 mailable documents and key timed writings at speeds commensurate with employability. *This course is also available through the Virtual Learning Community (VLC).*

OST 135 Adv Text Entry & Format
3 2 4
Prerequisites: OST 131, OST 134
Corequisites: None
This course is designed to incorporate computer application skills in the generation of office documents. Emphasis is placed on the production of letters, manuscripts, business forms, tabulation, legal documents, and newsletters. Upon completion, students should be able to make independent decisions regarding planning, style, and method of presentation.

OST 136 Word Processing
2 2 3
Prerequisites: None
Corequisites: None
This course introduces word processing concepts and applications. Topics include preparation of a variety of documents and mastery of specialized software functions. Upon completion, students should be able to work effectively in a computerized word processing environment. **(*VLC)**

OST-153 Office Finance Solutions
2 2 3
Prerequisites Take One: CIS-110, CIS-111 or OST-137
Corequisites None
This course introduces basic bookkeeping concepts. Topics include entering data in accounts payable and receivable, keeping petty cash records, maintaining inventory, reconciling bank statements, running payroll, and generating simple financial reports. Upon completion, students should be able to demonstrate competence in the entry and manipulation of data to provide financial solutions for the office.

OST 164 Text Editing Applications
3 0 3
Prerequisites: none
Corequisites: None
This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text. **(*VLC)**

OST 184 Records Management
2 2 3
Prerequisites: None
Corequisites: None
This course includes the creation, maintenance, protection, security, and disposition of records stored in a variety of media forms. Topics include alphabetic, geographic, subject, and numeric filing methods. Upon completion, students should be able to set up and maintain a records management system. **(*VLC)**

OST 223 Admin. Office Transcription I
2 2 3
Prerequisites: OST 164; and OST 134 or OST 136
Corequisites: None
This course covers the use of transcribing machines to produce mailable documents. Emphasis is placed on appropriate formatting, advanced text editing skills, and transcription techniques. Upon completion, students should be able to transcribe documents into mailable copy.

OST 236 Adv Word/Inform. Processing
2 2 3
Prerequisites: OST 135 or OST 136
Corequisites: None
This course develops proficiency in the utilization of advanced word/information processing functions. Topics include tables, graphics, macros, sorting, document assembly, merging, and newspaper and brochure columns. Upon completion, students should be able to produce a variety of complex business documents. *This course is also available through the Virtual Learning Community (VLC).*

Class/Lab/Credit or Class/Lab/Exp./Credit

OST 241 Med Ofc Transcription I
1 2 2
Prerequisite: Either MED 1221 or OST 141
Corequisites: None
This course introduces machine transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription, proofreading, and use of reference materials as well as vocabulary building. Upon completion, students should be able to prepare accurate and usable transcripts of voice recordings in the covered specialties.

OST 242 Med Ofc Transcription II
1 2 2
Prerequisite: OST 241
Corequisites: None
This course continues building transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription and text editing , efficient use of reference materials, increasing transcription speed and accuracy, and improving understanding of medical terminology. Upon completion, students should be able to display competency in accurately transcribing medical documents.

OST 244 Med. Document Production
1 2 2
Prerequisites: OST 134
Corequisites: None
This course provides production-level skill development in processing medical documents. Emphasis is placed on producing mallable documents through the use of medical-related materials. Upon completion, students should be able to perform competently in preparing accurate, correctly formatted, and usable documents.

OST 247 Procedure Coding
2 2 3
Prerequisites: MED 121 or OST 141
Corequisites: None
This course provides in-depth coverage of procedural coding. Emphasis is placed on CPT and HCPCS coding systems. Upon completion, students should be able to properly code procedures and services performed in a medical facility.

OST 248 Diagnostic Coding
2 2 3
Prerequisites: MED 121 or OST 141
Corequisites: None
This course provides an in-depth study of diagnostic coding. Emphasis is placed on ICD coding system. Upon completion, students should be able to properly code diagnoses in a medical facility.

OST-249 Med Coding Certification Prep
2 3 3
Prerequisites Take All: OST-247 and OST-248
Corequisites None
This course provides instruction that will prepare students to sit for a national coding certification exam. Topics include diagnostic and procedural coding. Upon completion, students should be able to sit for various medical coding certification exams.

OST 286 Professional Development
3 0 3
Prerequisites: None
Corequisites: None
This course covers the personal competencies and qualities needed to project a professional image in the office. Topics include interpersonal skills, health lifestyles, appearance, attitude, personal and professional growth, multicultural awareness, and professional

Class/Lab/Credit or Class/Lab/Exp./Credit

etiquette. Upon completion, students should be able to demonstrate these attributes in the classroom, office, and society.

OST 289 Office Systems Management
2 2 3
Prerequisites: OST 164 and either OST 134 or OST 136
Corequisites: None
This course provides a capstone course for the office professional. Topics include administrative office procedures, imaging, communication techniques, ergonomics, and equipment utilization. Upon completion, students should be able to function proficiently in a changing office environment.

Process Control Instrumentation

PCI 264 Process Control with PLC's
3 3 4
Prerequisites: None
Corequisites: None
This course introduces automatic process control implemented with PLC technology. Topics include interfacing and controlling advanced control loops and devices using various PLC-based systems. Upon completion, students should be able to demonstrate an understanding of advanced applications of process control and instrumentation systems with PLC-based devices.

Professional Crafts: Wood

PCW 132 Composite Materials Construction
1 3 2
Prerequisites: None
Corequisites: None
This course covers the design and methods of using composite materials in woodworking. Topics include the use of composite materials such as plywood, m.d.f., particle board, and plastic laminate and their design and construction methods. Upon completion, students should be able to demonstrate a series of technical exercises and designs and make an object utilizing composite materials. *This class is designed for inmates at Marion Correctional Facility and may not be taken by individuals outside the prison system.*

Physical Education

PED 110 Fit and Well for Life
1 2 2
Prerequisites: None
Corequisites: None
This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

PED 111 Physical Fitness
0 3 1
Prerequisites: None
Corequisites: None
This course provides an individualized approach to physical fitness utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness programs.

Class/Lab/Credit or Class/Lab/Exp./Credit

Upon completion, students should be able to set up and implement an individualized physical fitness program. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

PED 113 Aerobics I
0 3 1
Prerequisites: None
Corequisites: None
This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

PED 117 Weight Training I
0 3 1
Prerequisites: None
Corequisites: None
This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight traning program. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

PED 120 Walking For Fitness
0 3 1
Prerequisites: None
Corequisites: None
This course introduces fitness through walking. Emphasis is placed on stretching, conditioning exercises, proper clothing, fluid needs, and injury prevention. Upon completion, students should be able to participate in a recreational walking program. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

PED 128 Golf-Beginning
0 2 1
Prerequisites: None
Corequisites: None
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 shoud be albe to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

PED 130 Tennis-Beginning
0 2 1
Prerequisites: None
Corequisites: None
This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

PED 139 Bowling-Beginning
0 2 1
Prerequisites: None
Corequisites: None
This course introduces the fundamentals of bowling. Emphasis is placed on ball selection, grips, stance and delivery along with rules and etiquette. Upon completion, students should be able to participate in

recreational bowling. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

PED 152 Swimming-Beginning
0 2 1
Prerequisites: None
Corequisites: None
This course is designed for non-swimmers and beginners. Emphasis is placed on developing confidence in the water, learning water safety, acquiring skills in floating, and learning 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 to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

PED 155 Water Aerobics
0 3 1
Prerequisites: None
Corequisites: None
This course introduces rhythmic aerobic activities performed in water. Emphasis is placed on increasing cardiovascular fitness levels, muscular strength, muscular endurance, and flexibility. Upon completion, students should be able to participate in an individually-paced exercise program. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

PED 174 Wilderness Pursuits
0 2 1
Prerequisites: None
Corequisites: None
This course covers the skills necessary to prepare for and participate in a wilderness trip. Emphasis is placed on planning, preparing, and participating in a wilderness pack trip. Upon completion, students should be able to safely participate in overnight wilderness pack trips. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

PED 219 Disc Golf
0 2 1
Prerequisites: None
Corequisites: None
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. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

Philosophy

PHI 210 History of Philosophy
3 0 3
Prerequisites: ENG 111
Corequisites: None
This course introduces fundamental philosophical issues through an historical perspective. Emphasis is placed on such figures as Plato, Aristotle, Lao-Tzu, Confucius, Augustine, Aquinas, Descartes, Locke, Kant, Wollstonecraft, Nietzsche, and Sartre. Upon completion, students should be able to identify and distinguish among the key positions of the philosophers studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

Class/Lab/Credit or Class/Lab/Exp./Credit

PHI 215 Philosophical Issues
3 0 3
Prerequisites: ENG 111
Corequisites: None
This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critically evaluate the philosophical components of an issue.
Competencies
1. Engage in critical thinking.
2. Identify, reconstruct, and evaluate philosophical arguments.
3. Analyze key philosophical concepts within epistemology, metaphysics, and ethics.
4. Demonstrate an understanding of major philosophical views, and how they relate to contemporary issues..
This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/ Fine Arts.
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.

PHI 240 Introduction to Ethics
3 0 3
Prerequisites: ENG 111
Corequisites: None
This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on utilitarianism, rule-based ethics, existentialism, relativism versus objectivism, and egoism. Upon completion, students should be able to apply various ethical theories to individual moral issues such as euthanasia, abortion, crime and punishment, and justice. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/ fine arts.* **(*VLC)**
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.

Photography

PHO 110 Fund of Photography
3 6 5
Prerequisites: None
Corequisites: None
This course covers the basic technical aspects of photography, including camera controls, light and optics, flash,exposure, and processing. Emphasis is placed on principles of camera design and the relationship between subject and photographic image, with hands-on experience Upon completion, students should be able to consistently produce technically excellent images.

PHO 113 History of Photography
3 0 3
Prerequisites: None
Corequisites: None
This course introduces the history of photography from its inception through contemporary times. Emphasis

Class/Lab/Credit or Class/Lab/Exp./Credit

is placed on technical and aesthetical developments in artistic and commercial photography. Upon completion, students should be able to identify significant photographers and procedures, trace the development of the medium, and discuss current trends in photography.

PHO 115 Basic Studio Lighting
2 6 4
Prerequisites: PHO 110
Corequisites: None
This course covers the basic principles of studio lighting. Topics include basic lighting techniques and application of lighting ratios to product illustration/portraiture using tungsten/electronic strobe sources, with emphasis on equipment maintenance and safety. Upon completion, students should be able to select and set up the best lights and lighting applications for a wide variety of photographic subjects.

PHO 120 Intermediate Photography
2 4 4
Prerequisites: PHO 110
Corequisites: None
This course expands the coverage of photographic materials and provides an opportunity to experiment. Emphasis is placed on additional techniques and processes, including solarization, multiple-imaging, infrared toning,and other non-traditional uses of photography. Upon completion, students should be able to demonstrate how the choice of technique enhances the photographic subject and influences content.

PHO 132 Small-Format Photography
2 6 4
Prerequisite: PHO 110
Corequisites: None
This course introduces small-format cameras and their application in location portraiture, industrial photography, photojournalism, and multimedia photography and portable lighting equipment and techniques. Topics include rapid camera operation, location photography, exposure techniques, portable flash, process modification, filtration, and simple multimedia production. Upon completion, students should be able to produce professional quality images under a variety of adverse shooting conditions using the equipment and techniques studied.

PHO 139 Intro to Digital Imaging
1 3 2
Prerequisites: None
Corequisites: None
This course introduces the conversion of photographs into digital images by exploring the effect hardware and software have on the reproduction process. Topics include basic imaging tools and vocabulary, calibration, density, contrast, and color. Upon completion, students should be able to demonstrate a basic understanding of the digital imaging process and be able to capture and output images.

PHO 140 Digital Photo Imaging I
2 4 4
Prerequisites: PHO 110
Corequisites: None
This course introduces digital photo imaging exploring the use of hardware/software, image capture, input/ output devices, ethics, and imaging aesthetics. Emphasis is placed on basic imaging tools and vocabulary of current digital imaging software, including selection tools, color correction, cloning, copy/paste, and filters. Upon completion, students should be able to capture images with a digital camera or scanner, manipulate and retouch the image, and select final image output.

Class/Lab/Credit or Class/Lab/Exp./Credit

PHO 150 Portfolio Development I
3 3 4
Prerequisites: PHO 120 or PHO 130
Corequisites: None
This course provides an opportunity to develop a thematically related portfolio of photographic images that are consistent in print quality. Emphasis is placed on subject/content development, choice of materials, and archival processing controls; organizing and sequencing images; editing; print finishing; and portfolio presentation. Upon completion, students should be able to edit and exhibit a consistent body of photographic prints in a portfolio presentation.

PHO 180 Creative Problem Solving
1 4 3
Prerequisites: PHO 110
Corequisites: None
This course encourages the development of innovative photographic solutions to instructor-assigned tasks. Emphasis is placed on identifying components necessary to complete the task and applying creative solutions. Upon completion, students should be able to solve problems in a variety of photographic areas, combining media where needed to achieve the desired results.

PHO 216 Documentary Photography
2 4 4
Prerequisites: PHO 110
Corequisites: None
This course introduces the practical, historical, and contemporary applications of documentary photography. Emphasis is placed on understanding the various approaches to creating a photographic documentary and how a documentary project can affect society. Upon completion, students should be able to produce a documentary project on a topic of interest to them.

PHO 217 Photojournalism I
1 6 4
Prerequisites: PHO 110
Corequisites: None
This course covers logistics and techniques used in current professional newspaper photography. Topics include detailed study of spot and general news, sports, and feature photography along with basic newspaper layout, advanced photographic techniques, and legal issues. Upon completion, students should be able to demonstrate an understanding of basic aspects of news, sports, and feature photography.

PHO 220 Business of Photography
3 0 3
Prerequisite: None
Corequisites: None
This course covers the business practices of photography with emphasis on freelance photography. Topics include copyright, payment fees, client relations, licenses, insurance, assignments, stock sales, and usage rates. Upon completion, students should be able to demonstrate an understanding of the photographic business, including billing, clients, copyright protection, and obtaining assignments.

PHO 224 Multimedia Production
2 3 3
Prerequisite: None
Corequisites: None
This course covers various aspects of computer based multimedia production. Topics include sound recording and editing techniques and software, multimedia software, control of image and continuity and pacing, script writing, copyright laws and ethics. Upon completion, students should be able to use computer hardware and software for multimedia production.

Class/Lab/Credit or Class/Lab/Exp./Credit

PHO 226 Portraiture
3 3 4
Prerequisites: PHO 115
Corequisites: None
This course covers the techniques of contemporary studio and location portraiture. Topics include lighting techniques, lighting ratios, available light to multiple light setups, posing techniques, and styles of glamour, fashion, corporate, and public relations portraiture. Upon completion, students should be able to choose the appropriate lighting, accessories, and posing style to produce a successful portrait.

PHO 235 Commercial Photography
2 4 4
Prerequisites: PHO 115
Corequisites: None
This course covers the techniques of advertising photography used in the print media. Emphasis is placed on the conception, lighting, and creation of photographic illustration used for food, fashion, and product photography. Upon completion, students should be able to produce advertising photographs for professional photographic illustration.

Physics

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by that college's placement test.

PHY 110 Conceptual Physics
3 0 3
Prerequisites: None
Corequisites: None
This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.*

PHY 110A Conceptual Physics Lab
0 2 1
Prerequisites: None
Corequisites: PHY 110
This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.*

PHY 131 Physics-Mechanics
3 2 4
Prerequisites: MAT 121 or 171
Corequisites: None
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.

Class/Lab/Credit or Class/Lab/Exp./Credit

PHY 151 College Physics I
3 2 4
Prerequisites: MAT 171
Corequisites: None
This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.*

PHY 152 College Physics II
3 2 4
Prerequisites: PHY 151
Corequisites: None
This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.*

PHY 251 General Physics I
3 3 4
Prerequisites: MAT 271
Corequisites: MAT 272
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.*

PHY 252 General Physics II
3 3 4
Prerequisites: MAT 272 and PHY 251
Corequisites: None
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.*

Plastics

PLA-110 Introduction to Plastics
2 0 2
Prerequisites None
Corequisites None

Class/Lab/Credit or Class/Lab/Exp./Credit

This course introduces the plastics processing industry, including thermoplastics and thermosets. Emphasis is placed on the description, classification, and properties of common plastics and processes and current trends in the industry. Upon completion, students should be able to describe the differences between thermoplastics and thermosets and recognize the basics of the different plastic processes.

Plumbing

PLU 111 Intro to Basic Plumbing
1 3 2
Prerequisites: None
Corequisites: None
This course introduces basic plumbing tools, materials, and fixtures. Topics include standard tools, materials, and fixtures used in basic plumbing systems and other related topics. Upon completion, students should be able to demonstrate an understanding of a basic plumbing system.

Political Science

POL 120 American Government
3 0 3
Prerequisites: None
Corequisites: None
This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

POL 130 State & Local Government
3 0 3
Prerequisites: None
Corequisites: None
This course includes state and local political institutions and practices in the context of American federalism. Emphasis is placed on procedural and policy differences as well as political issues in state, regional, and local governments of North Carolina. Upon completion, students should be able to identify and discuss various problems associated with intergovernmental politics and their effect on the community and the individual. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

POL 210 Comparative Government
3 0 3
Prerequisites: None
Corequisites: None
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 to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

Class/Lab/Credit or Class/Lab/Exp./Credit

Psychology

PSY 118 Interpersonal Psychology
3 0 3
Prerequisites: None
Corequisites: None
This course introduces the basic principles of psychology as they relate to personal and professional development. Emphasis is placed on personality traits, communication/leadership styles, effective problem solving, and cultural diversity as they apply to personal and work environments. Upon completion, students should be able to demonstrate an understanding of these principles of psychology as they apply to personal and professional development.

PSY 150 General Psychology
3 0 3
Prerequisites: None
Corequisites: None
This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.* **(*VLC)**

PSY 239 Psychology of Personality
3 0 3
Prerequisites: PSY 150
Corequisites: None
This course covers major personality theories and personality research methods. Topics include psychoanalytic, behavioristic, social learning, cognitive, humanistic, and trait theories including supporting research. Upon completion, students should be able to compare and contrast traditional and contemporary approaches to the understanding of individual differences in human behavior. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

PSY 241 Developmental Psych
3 0 3
Prerequisites: PSY 150
Corequisites: None
This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.* **(*VLC)**

PSY 244 Child Development I
3 0 3
Prerequisites: None
Corequisites: None
This course provides an introduction to the study of child development and examines the growth and development of children from conception through early childhood. Topics include historical and theoretical perspectives, terminology, research and observation techniques as well as physical, cognitive, and psychosocial growth and change. Upon completion, students should be able to demonstrate an understanding of the early stages of child development.

Class/Lab/Credit or Class/Lab/Exp./Credit

PSY 245 Child Development II
3 0 3
Prerequisites: None
Corequisites: None
This course examines the growth and development of children during early and middle childhood. Emphasis is placed on factors influencing physical, cognitive, and psychosocial growth and change. Upon completion, students should be able to demonstrate an understanding of early and middle child development.

PSY 281 Abnormal Psychology
3 0 3
Prerequisites: PSY 150
Corequisites: None
This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

Reading

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by that college's placement test.

RED 090 Improved College Reading
3 2 4
Prerequisites: RED 080 or ENG 085
Corequisites: None
This course is designed to improve reading and critical thinking skills. Topics include vocabulary enhancement; extracting implied meaning; analyzing author's purpose, tone, and style; and drawing conclusions and responding to written material. Upon completion, students should be able to comprehend and analyze college-level reading material. *This course satisfies the developmental reading prerequisite for ENG 111 or ENG 111A.*

RED 091 Fast Track Imprv Coll Rdg
1 0 1
Prerequisites: RED 080 or ENG 085
Corequisites: None
This course provides an intensive review of selected RED 090-level reading strategies. Topics include the following reading strategies at the RED 090 level: critical thinking, major question types, main idea, patterns of organization, vocabulary, and inference. Upon completion, students should be able to apply selected RED 090 reading strategies to various texts.

Refrigeration

REF 116 Commercial Systems I
2 6 4
Prerequisites: AHR 115
Corequisites: None
This course introduces and compares various commercial refrigeration systems. Topics include service, repair, and diagnostic procedures for commercial systems and components, as well as evacuation, charging, startup, and evaluation. Upon completion, students should be able to use appropriate tools, instruments, and procedures to service and install basic refrigeration systems or components.

Class/Lab/Credit or Class/Lab/Exp./Credit

REF 117 Refrigeration Controls
2 6 4
Prerequisites: AHR 111 or ELC 111
Corequisites: None
This course covers the design, operation, function, and schematics of basic control systems used in the refrigeration industry. Topics include proper control application, selection, and use of test instruments; simple control wiring; and the use of schematics as a troubleshooting tool. Upon completion, students should be able to identify, diagnose, and repair electrical and mechanical malfunctioning components.

REF 123 Electrical Devices
2 6 4
Prerequisites: AHR 111 or ELC 111
Corequisites: None
This course introduces the electrical and electronic components and test instruments commonly found in commercial refrigeration. Emphasis is placed on troubleshooting electrical and electronic devices, including motors, starting devices, switches, transformers, programmable controls, defrost controls, thermostats, and wiring systems. Upon completion, students should be able to use test equipment appropriately and safely to troubleshoot, test, and repair electrical devices.

Religion

REL 110 World Religions
3 0 3
Prerequisites: None
Corequisites: None
This course introduces the world's major religious traditions. Topics include Primal religions, Hinduism, Buddhism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

REL 211 Intro to Old Testament
3 0 3
Prerequisites: None
Corequisites: None
This course is a survey of the literature of the Hebrews with readings from the law, prophets, and other writings. Emphasis is placed on the use of literary, historical, archeological, and cultural analysis. Upon completion, students should be able to use the tools of critical analysis to read and understand Old Testament literature. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

REL 212 Intro to New Testament
3 0 3
Prerequisites: None
Corequisites: None
This course is a survey of the literature of first-century Christianity with readings from the gospels, Acts, and the Pauline and pastoral letters. Topics include the literary structure, audience, and religious perspective of the writings, as well as the historical and cultural context of the early Christian community. Upon completion, students should be able to use the tools of critical analysis to read and understand New Testament literature. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

Class/Lab/Credit or Class/Lab/Exp./Credit

Information Systems Security

SEC 110 Security Concepts
2 2 3
Prerequisites: None
Corequisites: None
This course introduces the concepts and issues related to securing information systems and the development of policies to implement information security controls. Topics include the historical view of networking and security, security issues, trends, security resources, and the role of policy, people, and processes in information security. Upon completion, students should be able to identify information security risks, create an information security policy, and identify processes to implement and enforce policy.

Sociology

SOC 210 Introduction to Sociology
3 0 3
Prerequisites: None
Corequisites: None
This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.* **(*VLC)**

SOC 213 Sociology of the Family
3 0 3
Prerequisites: None
Corequisites: None
This course covers the institution of the family and other intimate relationships. Emphasis is placed on mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.* **(*VLC)**

SOC 220 Social Problems
3 0 3
Prerequisites: None
Corequisites: None
This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

SOC 242 Sociology of Deviance
3 0 3
Prerequisites: None
Corequisites: None
This course provides an overview of deviant behavior and the processes involved in its definition, causation, prevention, control, and treatment. Topics include theories of causation, social control, delinquency, victimization, criminality, the criminal justice system, punishment, rehabilitation, and restitution. Upon

Class/Lab/Credit or Class/Lab/Exp./Credit

completion, students should be able to identify and analyze issues surrounding the nature and development of social responses to deviance. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

Spanish

SPA 110 Introduction to Spanish
2 0 2
Prerequisites: None
Corequisites: None
This course provides an introduction to understanding, speaking, reading, and writing Spanish. Emphasis is placed on pronunciation, parts of speech, communicative phrases, culture, and skills for language acquisition. Upon completion, students should be able to identify and apply basic grammar concepts, display cultural awareness, and communicate in simple phrases in Spanish.

SPA 111 Elementary Spanish I
3 0 3
Prerequisites: None
Corequisites: None
This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

SPA 112 Elementary Spanish II
3 0 3
Prerequisites: SPA 111
Corequisites: None
This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

SPA 181 Spanish Lab 1
0 2 1
Prerequisites: None
Corequisites: None
This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

SPA 182 Spanish Lab 2
0 2 1
Prerequisites: Take SPA-111
Corequisites: None
This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and

Class/Lab/Credit or Class/Lab/Exp./Credit

writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate cultural awareness. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

SPA 211 Intermediate Spanish I
3 0 3
Prerequisites: SPA 112
Corequisites: None
This course provides a review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present and future. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

SPA 212 Intermediate Spanish II
3 0 3
Prerequisites: SPA 211
Corequisites: None
This course provides a continuation of SPA 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine/Arts.*

SPA 281 Spanish Lab 3
0 2 1
Prerequisites: Take SPA 182
Corequisites: None
This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts through the use of various supplementary learning media and materials. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

SPA 282 Spanish Lab 4
0 2 1
Prerequisites: Take SPA 281
Corequisites: None
This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts through the use of various supplementary learning media and materials. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

Class/Lab/Credit or Class/Lab/Exp./Credit

Surgical Technology

SUR 110 Intro to Surg Tech
3 0 0 3
Prerequisites: Admission to the Surgical Technology Program
Corequisites: SUR 111
This course provides a comprehensive study of perioperative care, patient care concepts, and professional practice concepts within the profession of surgical technology. Topics include: introductory concepts, organizational structure and relationships, legal, ethical and moral issues, medical terminology, pharmacology, anesthesia, wound healing management concepts, and the technological sciences. Upon completion, students should be able to apply theoretical knowledge of the course topics to the practice of surgical technology.

SUR 111 Periop Patient Care
5 6 0 7
Prerequisites: Admission to the Surgical Technology Program
Corequisites: SUR 110
This course provides the surgical technology student the theoretical knowledge required to function in the pre-operative, intra-operative, and post-operative role. Topics include asepsis, disinfection and sterilization, physical environment, instrumentation, equipment, peri-operative patient care, and peri-operative case management. Upon completion, students should be able to apply the principles and practice of the perioperative team member to the operative environment.

SUR 122 Surgical Procedures I
5 3 0 6
Prerequisites: SUR 110 and SUR 111
Corequisites: SUR 123 or STP 101

This course provides an introduction to selected basic and intermediate surgical specialties that students are exposed to in the first clinical rotation. Emphasis is placed on related surgical anatomy, pathology, and procedures that enhance theoretical knowledge of patient care, instrumentation, supplies, and equipment. Upon completion, students should be able to correlate, integrate, and apply theoretical knowledge of the course topics to the clinical operative environment.

SUR 123 SUR Clinical Practice I
0 0 21 7
Prerequisites: SUR 110 and SUR 111
Corequisites: SUR 122

This course provides clinical experience with a variety of perioperative assignments to build upon skills learned in SUR 111. Emphasis is placed on the scrub and circulating roles of the surgical technologist including aseptic technique and basic case preparation for selected surgical procedures. Upon completion, students should be able to prepare, assist with, and dismantle basic surgical cases in both the scrub and circulating roles.

SUR 134 Surgical Procedures II
5 0 0 5
Prerequisites: SUR 123 or STP 101
Corequisites: None
This course provides a comprehensive study of intermediate and advanced surgical specialties that students are exposed to in the second clinical rotation. Emphasis is placed on related surgical anatomy, pathology, and procedures that enhance theoretical knowledge of patient care, instrumentation, supplies, and equipment. Upon completion, students should be able to correlate, integrate, and apply theoretical knowledge of the course topics to the clinical operative environment.

Class/Lab/Credit or Class/Lab/Exp./Credit

SUR 135 SUR Clinical Practice II
0 0 12 4
Prerequisites: SUR 123
Corequisites: SUR 134 and SUR 137

This course provides clinical experience with a variety of perioperative assignments to build skills required for complex perioperative patient care. Emphasis is placed on greater technical skills, critical thinking, speed, efficiency, and autonomy in the operative setting. Upon completion, students should be able to function in the role of an entry-level surgical technologist.

SUR 137 Prof Success Prep
1 0 0 1
Prerequisites: SUR 123
Corequisites: SUR 134 and SUR 135

This course provides employability skills and an overview of theoretical knowledge in preparation for certification. Topics include test-taking strategies, resume preparation, interviewing strategies, communication skills, and teamwork concepts. Upon completion, students should be able to prepare a resume, demonstrate appropriate interview techniques, and identify strengths and weaknesses in preparation for certification.

Turfgrass Management

TRF 110 Intro Turfgrass Culture & ID
3 2 4
Prerequisite: None
Corequisites: None
This course covers the principles of reproduction, growth development, species characteristics, establishment and maintenance of golf courses and sports fields, and lawns. Topics include principles of reproduction, growth development, species characteristics, establishment and maintenance of golf courses and sports fields, and lawn applications. Upon completion, students should be able to identify turfgrass species and develop an establishment and maintenance plan for high quality turf areas in accordance with sustainable practices.

Competencies
Student Learning Outcomes
1. Identify turfgrass species through morphological and reproductive stages and identify the sustainable means of chemical, biological and physical control of pests.
2. Demonstrate sustainable turfgrass cultural practices including mowing, fertilization and irrigation.
3. Develop establishment and maintenance plans for high quality turf areas.

Transportation

TRN 170 PC Skills for Transp
1 2 2
Prerequisite: None
Corequisites: None
This course introduces students to personal computer literacy and Internet literacy with an emphasis on the transportation service industry. Topics include service information systems, management systems, computer-based systems, and PC-based diagnostic equipment. Upon completion, students should be able to access information pertaining to transportation technology and perform word processing.

Competencies
•1. Given a transportation vehicle or equipment, identify it and locate relevant service information from one

Class/Lab/Credit or Class/Lab/Exp./Credit

or more industry-standard databases.
•2. Given a transportation vehicle or equipment, analyze and diagnose transportation on board diagnostic management systems using handheld and/or PC based diagnostic equipment.
•3. Describe and perform basic PC skills used by transportation technicians.
•4. Demonstrate the proper use of application software such as MS Word.

TRN 180 Basic Welding for Transp
1 4 3
Prerequisite: None
Corequisites: None
This course covers the terms and procedures for welding various metals used in the transportation industry with an emphasis on personal safety and environmental health. Topics include safety and precautionary measures, setup/operation of MIG equipment, metal identification methods, types of welds/joints, techniques, inspection methods, cutting processes and other related issues. Upon completion, students should be able to demonstrate a basic knowledge of welding operations and safety procedures according to industry standard

Competencies
Student Learning Outcomes
•1. Describe and list the proper fundamentals, processes and equipment, materials and metallurgy associated with welding of similar and dissimilar metals in transportation systems and equipment.
•2. Identify and describe safety and health practices associated with the welding of similar and dissimilar metals in transportation systems and equipment.
•3. In a lab setting, demonstrate the ability to successfully weld similar and dissimilar metals in transportation systems and equipment.
•4. Select and list the proper inspection methods associated with the welding of similar and dissimilar metals in transportation systems and equipment.
•5. In a lab setting, demonstrate proper setup and operational procedures associated with the welding of similar and dissimilar metals in transportation systems and equipment.
•6. Describe and list the cutting techniques used with the various tools and methods associated with transportation systems and equipment.

Web Technologies

WEB 110 Internet/Web Fundamentals
2 2 3
Prerequisites: None
Corequisites: None
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 111 Intro to Web Graphics
2 2 3
Prerequisites: None
Corequisites: None
This course introduces the creation of web graphics, and addressing problems peculiar to WWW display using appropriate software. Topics include web graphics file types, optimization, RGB color, web typography, elementary special effects, transparency, animation, slicing, basic photo manipulation, and other related topics. Upon completion, students should be able to create graphics, such as animated banners, buttons, backgrounds, logos, and manipulate photographic images for Web delivery.

Class/Lab/Credit or Class/Lab/Exp./Credit

WEB 115 Web Markup and Scripting
2 2 3
Prerequisites: None
Corequisites: None

This course introduces Worldwide Web Consortium (W3C) standard client-side Internet programming using industry-established practices. Topics include JavaScript, markup elements, stylesheets, validation, accessibility, standards, and browsers. Upon completion, students should be able to develop hand-coded web pages using current markup standards.

WEB 120 Intro Internet Multimedia
2 2 3
Prerequisites: None
Corequisites: None

This is the first of two courses covering the creation of internet multimedia. Topics include internet multimedia file types, file type conversion, acquisition of digital audio/video, streaming audio/video and graphics animation plug-in programs and other related topics. Upon completion, students should be able to create internet multimedia presentations utilizing a variety of methods and applications.

WEB 140 Web Development Tools
2 2 3
Prerequisites: None
Corequisites: None

This course provides an introduction to web development software suites. Topics include the creation of web sites and applets using web development software. Upon completion, students should be able to create entire web sites and supporting applets.

WEB 179 JAVA Web Programming
2 3 3
Prerequisite: None
Corequisites: None
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 182 PHP Programming
2 2 3
Prerequisite: None
Corequisites: None
This course introduces students to the server-side, HTML-embedded scripting language PHP. Emphasis is placed on programming techniques required to create dynamic web pages using PHP scripting language features. Upon completion, students should be able to design, code, test, debug, and create a dynamic web site using the PHP scripting language.

WEB 210 Web Design
2 2 3
Prerequisites: None
Corequisites: None

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. (*VLC)

Class/Lab/Credit or Class/Lab/Exp./Credit

WEB 225 Content Management Sys
2 2 3
Prerequisite: None
Corequisites: None
This course introduces students to Content Management Systems (CMS) designed for the publication of Web content to Web sites. Topics include individual user accounts, administration menus, RSS-feeds, customizable layout, flexible account privileges, logging, blogging systems, creating online forums, and modules. Upon completion, students should be able to register and maintain individual user accounts and create a business website and/or an interactive community website.

WEB 230 Implementing Web Serv
2 2 3
Prerequisites: NET 110 or NET 125
Corequisites: None

This course covers website and web server architecture. Topics include installation, configuration, administration, and security of web servers, services and sites. Upon completion, students should be able to effectively manage the web services deployment lifecycle according to industry standards. (*VLC)

WEB 250 Database Driven Websites
2 2 3
Prerequisites: None
Corequisites: None
This course introduces dynamic (database-driven) website development. Topics include the use of basic database CRUD statements (create, read, update and delete) incorporated into web applications, as well as in software architecture principles. Upon completion, students should be able to design and develop database driven web applications according to industry standards.

WEB 287 Web E-Portfolio
1 2 2
Prerequisites: None
Corequisites: None

This course covers the creation and organization of a web-based e-portfolio that includes a resume, references, and comprehensive academic and work samples. Emphasis is placed on creating an e-portfolio with solid design and demonstrable content, the production of a resume and self-promotional materials, and interview techniques. Upon completion, students should be able to present their own domain with included professional e-portfolio elements of resume, sample work, and related self-promotional materials.

Welding

WLD 110 Cutting Processes
1 3 2
Prerequisite: None
Corequisites: None
This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thickness.

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 112 Basic Welding Processes
1 3 2
Prerequisites: None
Corequisites: None
This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers, and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes. Students will be given the opportunity to construct metal sculpture, or jewelry and other art metal objects using basic wellding processes.

WLD 115 SMAW (Stick) Plate
2 9 5
Prerequisite: None
Corequisites: None
This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes.

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 4
Prerequisites: WLD 115
Corequisites: None
This course is designed to enhance skills with the shielded metal arc (stick) welding process. Emphasis is placed on advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be able to perform groove welds on carbon steel with prescribed electrodes in the flat, horizontal, vertical, and overhead positions.

WLD 121 GMAW (MIG) FCAW/Plate
2 6 4
Prerequisite: None
Corequisites: None
This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions
Competencies
Student Learning Outcomes
1.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 131 GTAW (TIG) Plate
2 6 4
Prerequisite: None
Corequisites: None
This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials.

Competencies
•Student Learning Outcomes
•1.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.
•4.Demonstrate safe equipment setup, operation, and shut-down practices according to manufacturer's recommendations.

WLD 141 Symbols & Specifications
2 2 3
Prerequisite: None
Corequisites: None
This course introduces the basic symbols and specifications used in welding. Emphasis is placed on interpretation of lines, notes, welding symbols, and specifications. Upon completion, students should be able to read and interpret symbols and specifications commonly used in welding.

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 4
Prerequisites: None
Corequisites: None
This course introduces the basic principles of fabrication. Emphasis is placed on safety, measurement, layout techniques, and the use of fabrication tools and equipment. Upon completion, students should be able to perform layout activities and operate various fabrication and material handling equipment.

WLD 261 Certification Practices
1 3 2
Prerequisites: WLD 115, WLD 121, and WLD 131
Corequisites: None
This course covers certification requirements for industrial welding processes. Topics include techniques and certification requirements for prequalified joint geometry. Upon completion, students should be able to perform welds on carbon steel plate and/or pipe according to applicable codes.Students will be given an opportunity to qualify for at least one of our MTCC welder certifications.

Work-Based Learning

WBL 111 Work-Based Learning I
0 10 1
Prerequisite: None
Corequisites: None
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 2
Prerequisite: None
Corequisites: None
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 113 Work-Based Learning I
0 30 2
Prerequisite: None
Corequisites: None
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 121 Work-Based Learning II
0 10 1
Prerequisite: None
Corequisites: None
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 211 Work-Based Learning IV
0 10 1
Prerequisite: None
Corequisites: None
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.

College Personnel

Dr. John Gossett
President
828-652-0630
johngossett@mcdowelltech.edu
Building 11(Cedar) Room 205

Aprille Bailey
Administrative Assistant to Dean of Curriculum Programs
828-652-0698
aprillebailey@mcdowelltech.edu
Building 19 (Harold Smith) Room 218

Dr. Penny Cross
VP for Learning & Student Services
828-652-0645
pennycr@mcdowelltech.edu
Building 11 (Cedar) Room 201

Lora Bartlett, RN
Faculty Practical Nursing
828-652-0605
lorab@mcdowelltech.edu
Building 17 (Dogwood) Room 204

Ryan Garrison
VP for Finance & Administration
828-652-0627
ryang@mcdowelltech.edu
Building 11 (Cedar) Room 206

Susan Benfield, RN
Faculty ADN, Foothills Nursing Consortium
828-652-0641
susanbenfield@mcdowelltech.edu
Building 17 (Dogwood) Room 108

Dr. Jim Benton
Dean of Curriculum Programs
828-659-0444
jimbenton@mcdowelltech.edu
Building 19 (Harold Smith) Room 219

Chuck Bowling
Faculty Biology
828-659-0459
chuckbowling@mcdowelltech.edu
Building 4 (Azalea) Room 10

Judy Melton, RN
Dean of Health Science
828-652-0647
judym@mcdowelltech.edu
Building 17 (Dogwood) Room 103A

Jerry Broome
Regional Business Services Representative
828-659-6001ext.136
jerryb@mcdowelltech.edu
Building Ford Miller

Madalyn Gaito
Executive Assistant to the President
828-652-0630
madalyngaito@mcdowelltech.edu
Building 11 (Cedar) Room 205

Paula Bruce
Faculty Psychology, Sociology
828-652-0661
paulab@mcdowelltech.edu
Building 4 (Azalea) Room 37

Tab Adcock
Webmaster/IT
828-659-0492
tabadcock@mcdowelltech.edu
Building 14 (Hemlock) Room 5

Darian Buchanan
Faculty Developmental Studies
828-652-0688
darianb@mcdowelltech.edu
Building 4(Azalea) Room 20

Karen Buchanan
Faculty Developmental Studies
828-652-0685
karenbuchanan@mcdowelltech.edu
Building 4 (Azalea) Room 14

Stacy Buff
Director of Law Enforcement Training
828-652-0663
stacybuff@mcdowelltech.edu
Building 18 (Magnolia) Room114

Dr. Michele Burleson
Faculty Accounting
828-652-0660
mburleson@go.mcdowelltech.edu
Building 19 (Harold Smith)
Room 212

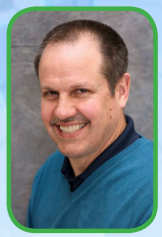
Bridget Burnette
Faculty College & Career Readiness
828-659-6001 ext. 153
bridgetb@mcdowelltech.edu
Building Ford Miller

Judy Butner
Faculty Health Information Technology
828-652-0620
judyb@mcdowelltech.edu
Building 17 (Dogwood) Room 102B

Lisa Byrd
Financial Aid Officer
828-652-0624
lisab@mcdowelltech.edu
Building 11 (Cedar) Room 209

Wingate Cain
Director of Student Enrichment Center
828-652-0632
wingatecain@mcdowelltech.edu
Building 11 (Cedar) Room 214A

Crystal Cole
Accountant
828-659-0421
crystalcole@mcdowelltech.edu
Building 11 (Cedar)



Chip Cross
Director of MTCC Foundation
Faculty Business Administration
828 652-0672
ccross@mcdowelltech.edu
Building 19 (Harold Smith) Room216

Jennifer Culp
Faculty Mathematics
828-652-0650
jenniferc@mcdowelltech.edu
Building 4 ((Azalea) Room39

Janine Dalton
Adjunct Faculty English
janined@mcdowelltech.edu

Vonda Davis
Faculty College & Career Readiness
Adult Education
828-659-6001 x 155
vondadavis@mcdowelltech.edu
Foothills Industries

Ramona DeAngelus
Continuing Education Registrar
828-652-0684
rgibson@mcdowelltech.edu
Building 14(Hemlock) Room 10

Susan Dietrich
Faculty Psychology
828-652-0659
susandietrich@mcdowelltech.edu
Building 4 (Azalea) Room16

John Dillard
Faculty History, Sociology
828-652-0606
jdillard@mcdowelltech.edu
Building 4 (Azalea) Room 3E

Belinda Foster
Health Sciences Advisor
828-652-0611
bfoster@mcdowelltech.edu
Building 11 (Cedar) Room 204

Valerie Dobson
Department Chair Health Sciences
Health Information Technology
Director
828-652-0699
valeried@mcdowelltech.edu
Building 17(Dogwood) Room 102A

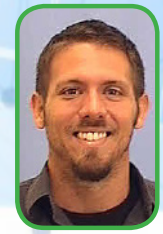
Carolyn Foster, RN
Adjunct Faculty Nurse Aide
828-652-0639
cfoster@mcdowelltech.edu
Building 17 (Dogwood) Room 103

Julia Duncan
Adjunct Faculty English
jduncan@go.mcdowelltech.edu

Richard Fowler
Faculty Networking Technology
828-652-0608
richardf@mcdowelltech.edu
Building 19 (Harold Smith) Room 217

Tim Earle
Faculty Air Conditioning/Heating
and Refrigeration
828-659-0484
timearle@mcdowelltech.edu
Universal

Sarah Gaines
Adjunct Faculty Cosmetology
828-652-0610
sarahg@mcdowelltech.edu
Building 11 (Cedar) Room 125



Adrian Early
Adjunct Faculty Religion
aearly@mcdowelltech.edu

Rita Gallion
Day Receptionist/Secretary
828-652-0619
ritag@mcdowelltech.edu
Lobby (Universal)

Eugene Edwards
EMS Program Director
828-659-0422
eedwards@mcdowelltech.edu
Building 19 (Harold Smith) Room 115

Richard Getty
Faculty Biology
828-652-0694
richardg@mcdowelltech.edu
Building 17(Dogwood) Room 210

Wanda Edwards
Child Development Center
Lead Teacher
828-652-0600
wandae@mcdowelltech.edu
Building 4 (Azalea) Room 11

Anna Goble-Talley, RN
Adjunct Nurse Aide Instructor
828-652-0639
agoble@mcdowelltech.edu
Building 17(Dogwood)

Shanna Gorecki
HRD Instructor
828-659-6001 ext.139
shannag@mcdowelltech.edu
Building Ford Miller

Cassondra Hill
Assistant Teacher Child Dev. Center
828-652-0600
Building 4 (Azalea) Room 11

Jane Gouge, RN
Lead Nurse Aide Instructor
828-652-0639
janegouge@mcdowelltech.edu
Building 17(Dogwood) Room 103

Randy Hollifield
Adjunct Faculty Information Systems
828-659-0426
randyhollifield@mcdowelltech.edu

Kelly Hamlin
Registrar
828-652-0629
khamlin@mcdowelltech.edu
Building 17 (Dogwood) Room 102

Marc Hyatt
Faculty Information Systems
828-659-0425
march@mcdowelltech.edu
Building 19 (Harold Smith) Room 226

Ladelle (Bo) Harmon
Director of Institutional Effectiveness
828-652-0626
ladelleh@mcdowelltech.edu
Building 4 (Azalea) Room 38

Debra Jacobs
Faculty College & Career Readiness
Adult Education
828-659-6001 ext. 138
Debraj@mcdowelltech.edu
Building Ford Miller

Sherry Helton
Academic Resource Center
Lab Technician
828-652-0653
sherryh@mcdowelltech.edu
Building 11 (Cedar) Room 213

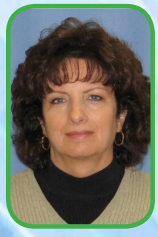
Howard Jamison Jr.
Faculty Cosmetology
828-652-0610
howardj@mcdowelltech.edu
Building 11 (Cedar) Room 125

Jill Hensley
AccountingTechnician/Accounts Payable
828-652-0616
jhensley@mcdowelltech.edu
Building 11 (Cedar) Business Office

Shane Jarvis
Maintenance Assistant
828-659-0494
Building 22 (Oak)

Jimmy D Hensley
HRD Recruiter/GED Examiner
WIOA Youth Case Manager
828-659-6001 ext.140
jimmyh@mcdowelltech.edu
Building Ford Miller Room 140

Brooke Johnson
Adjunct Faculty Cosmetology
828-652-0610
brookehensley@mcdowelltech.edu
Building 11 (Cedar) Room 125



Roxie Johnson
Adjunct Instructor, Health Information Technology
828-659-0499
roxiej@mcdowelltech.edu
Building 17 (Dogwood) Room 102

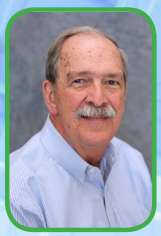
Kim Ledbetter
Director of Financial Aid, Disability Services and Veteran Affairs
828-652-0602
kims@mcdowelltech.edu
Building 11 (Cedar) Room 210

Dr. Kelly Jones
Foothills Nursing Consortium Director
828-395-1741
kejones@isothermal.edu

Mary Beth Ledbetter
HRD Director/WIOA Youth Director/ CRC Administrator
828-659-6001 ext.137
maryl@mcdowelltech.edu
Building Ford Miller Room 138

Marilyn Jordan
Adjunct Faculty Biology
828-652-0648
marilyn.jordan@mcdowell.k12.nc.us
Building 14 (Hemlock) Room 4

Katie Lindsay
Adjunct Faculty Chemistry
klindsay@mcdowelltech.edu



Dean Kanipe
Director of Small Business and Industry Development Center
828-652-0634
deank@mcdowelltech.edu
Building 18 (Magnolia) Room 113

Susan Long
Assistant to Student Enrichment Center
828-659-0418
susanl@mcdowelltech.edu
Building 11(Cedar) Room 214

Edwin King
Coordinator College & Career Readiness Adult Education
828-659-6001ext.160
edking@mcdowelltech.edu
Building Ford Miller

Ann Mabry
Assistant Teacher Child Dev. Center
828-652-0612
Building 4 (Azalea) Room 13

Michael Lavender
Director of External Relations
828-652-0681
michaell@mcdowelltech.edu
Building 11 (Cedar) Print shop

Elmer Macopson
Director of Technology
828-652-0603
elmerm@mcdowelltech.edu
Building 14 (Hemlock) Room 5

Brad Ledbetter
Director of Continuing Education
828-652-0674
bradl@mcdowelltech.edu
Building 19 (Harold Smith) Room 108

Blake Madden
Faculty Photography
828-652-0682
blakemadden@mcdowelltech.edu
Building 11 (Cedar) Room 105A

Dick Mauney
Business Office Manager
828-652-0696
dickmauney@mcdowelltech.edu
Building 11 (Cedar) Room 207A

Terri McClelland
Faculty Chemistry
828-652-0691
terrim@mcdowelltech.edu
Building 17 (Dogwood) Room 208

Donnie McCraw
Faculty Automotive Systems Technology
828-652-0671
dmccraw@mcdowelltech.edu
Building 5 (Maple) Room 2A

Kelly Giles McFarland
Department Chair - CollegeTransfer
Faculty - English
828-652-0667
kellyg@mcdowelltech.edu
Building 4 (Azalea) Room 3B

Lindsey Michaels, RN
Faculty Practical Nurse Education
828-652-0644
lindseym@mcdowelltech.edu
Building 17 (Dogwood) Room 205

Rachael Mills
Child Development Center
Lead Teacher
828-652-0612
rachelm@mcdowelltech.edu
Building 4 (Azalea) Room 13

Wesley Minish
Adjunct Faculty Photography
Graphic Design
wesleyminish@mcdowelltech.edu
Building 4 (Azalea) Room 34

Deborah Monosso
Accounting Technician/Cashier
828-652-0617
deborahm@mcdowelltech.edu
Building 11 (Cedar) Business Office

Alan Moore
Assistant in Law Enforcement Training
828-652-0677
AlanMoore@mcdowelltech.edu
Building 18 (Magnolia) Room 114

Debbie Moore
Assistant to Student Services
828-652-0607
debbiem@mcdowelltech.eduu
Building (Cedar) Admissions

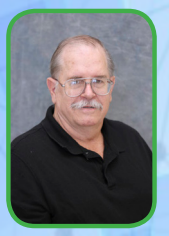
lori Moran
Adjunct Faculty Cosmetology
828-652-0610
lorimoran@mcdowelltech.edu
Building 11 (Cedar) Room 125

Andy Morgan
Coordinator Apprenticeship &New Century Scholars, Faculty Physical Education
828-652-0655
andym@mcdowelltech.edu
Building 4 (Azalea) Room 36

Gale Oliver
CRC Testing
828-659-6001ext.154
goliver@mcdowelltech.edu
Building Ford Miller

James Ollis
Maintenance Technician
828-652-0638
jamesollis@mcdowelltech.edu
Building 22 (Oak)

Julie Padgett
Director of Enrollment Management
828-652-0631
jpadgett@mcdowelltech.edu
Building 11 (Cedar) Room 203



Steve Robertson
Faculty Electronics, Electrical
828-659-0402
stever@mcdowelltech.edu
Universal

Rachel Pearson
Faculty Office Administration/
Operations Management
828-652-0658
RachelPearson@mcdowelltech.edu
Building 19 (Harold Smith)
Room 213

Lisa Robinson
Early College Principal
828-659-0415
lisarobinson@mcdowelltech.edu
Building 4 (Azalea) Room 22

Summer Perkins
PC Technician
828-659-0493
summerperkins@mcdowelltech.edu
Building 14 (Hemlock) Room 5

Breanna Rose
HR Coordinator/Payroll
828-652-0618
breannad@mcdowelltech.edu
Building 11(Cedar) Room 207

Jay Perry
Faculty Advertising & Graphic Design
828-652-0670
jayperry@mcdowelltech.edu
Building 19 (Harold Smith) Room
227

Betsy Ruiz
NC Works Career Coach
828-652-7920 ext. 313
betsyruiz@mcdowelltech.edu
McDowell High School

Pam Price
Assessment/Retention Career Advisor
College and Career Readiness Adult
Education
828-659-6001ext.131
pamp@mcdowelltech.edu
Building Ford Miller Room131

Pamela Sain, RN
Faculty Practical Nursing
828-659-0451
pamsain@mcdowelltech.edu
Building 17 (Dogwood) Room 202

Deborah Putnam
Administrative Assistant to
Continuing
Education/Data Technician
828-652-0675
deborahput@mcdowelltech.edu
Building 19 (Harold Smith) Room 115

Keith Scoles
Adjunct Faculty
Computer Integrated
Machining
kscoles@mcdowelltech.edu
Universal

Gwen Reeves
Bookstore Manager
828-652-0678
gwenr@mcdowelltech.edu
Building 14 (Hemlock) Room 17
Bookstore

Lisa Shelton
Lead Teacher Child Dev. Center
828-652-0612
lisas@mcdowelltech.edu
Building 4 (Azalea) Room 15

Eddie Shuford
Customized Training Coordinator
828-652-0652
eddieshuford@mcdowelltech.edu
Universal

Nicole Smith
Faculty Developmental Studies
828-659-0428
nicolesmith@mcdowelltech.edu
Building 4 (Azalea) Room 6

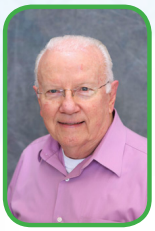
Pam Silkwood
Faculty Esthetics Technology
828-659-0439
pams@mcdowelltech.edu
Building 11 (Cedar) Room103

Sharon Smith
Director of Library Services
828-652-0697
sharons@mcdowelltech.edu
Building 11 (Cedar) Room 212

Becky Silver
Coordinator of Cosmetology, Faculty Cosmetology
828-652-0610
bsilver@mcdowelltech.edu
Building 11 (Cedar) Room 125

Tony Smith
Adjunct Faculty Industrial Maintenance
tonys@mcdowelltech.edu
Universal

Frank Silver
Director of Prison Education
828-659-7810 ext. 5140
franksil@mcdowelltech.edu
Prison



Clarence Snart
Faculty Information Systems
828-652-0642
clarences@mcdowelltech.edu
Building 19 (Harold Smith)
Room 214

Sharon Silver
Associate Systems Administrator
828-652-0609
snypess@mcdowelltech.edu
Building 14 (Hemlock) Room 5

Mike Sprinkle
Faculty Residential Construction
828-652-0695
mikes@mcdowelltech.edu
Building 14 (Hemlock) Room 6

Tom Sloop
Faculty Horticulture
828-659-0405
toms@mcdowelltech.edu
Prision

Rhonda Steele
Department Chair Human Services, Coordinator/Faculty Early Childhood, School-Age Education
828-652-0654
rhondas@mcdowelltech.edu
Building 4 (Azalea) Room 2A

Melisa Smith
Child Development Center Director
828-652-0637
melisas@mcdowelltech.edu
Building 4 (Azalea) Room 13

Cecilia Stewart, RN
Adjunct Nurse Aide Faculty
828-652-0639
ceciliastewart@mcdowelltech.edu
Building 17 (Dogwood) Room 103

Wayne Stines
Faculty Computer Integrated Machining
828-652-0693
waynes@mcdowelltech.edu
Universal

Sandra Tucci
Faculty College & Career Readiness-Adult Education
828-652-4088
sandratucci@mcdowelltech.edu
Foothills Industries

Elizabeth Summerfield
Adjunct Faculty Art
elizabeths@mcdowelltech.edu

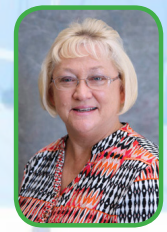
Richard Tuttell
Faculty College & Career Readiness-Adult Education
828-659-7810
richardt@mcdowelltech.edu
Prison

Pat Tallent
Library Assistant
828-659-0401
ptallent@mcdowelltech.edu
Building 11 (Cedar) Room 212

Jorge T Valentino
Graphic Designer
828-659-0404
jvalentino@mcdowelltech.edu
Building 11 (Cedar) Print Shop

Stephanie Throneburg
Health Sciences Secretary
828-652-0646
sthroneburg@mcdowelltech.edu
Building 17 (Dogwood) Room 201

Terry Valentino
Director of College & Career Readiness-Adult Education/Chief GED Examiner
828-652-0657
teresavalentino@mcdowelltech.edu
Building 4 (Azalea) Room 3C



Sharon Tipton
Purchasing Agent
828-652-0625
sharont@mcdowelltech.edu
Building 11 (Cedar) Business Office

Terrance E. Walsh
Faculty Computer Information Technology / Web Tecnologies
828-652-0643
terrancew@mcdowelltech.edu
Building 19 (Harold Smith) Room 215

David Toney
Faculty Collision Repair & Refinishing Technology
828-652-0690
toneyd@mcdowelltech.edu
Building 14 (Hemlock) Room 15

Claudia Ward
Faculty Communications & Drama
828-652-0664
cward@mcdowelltech.edu
Building 4 (Azalea) Room 8

Lorrie Truett
Receptionist/ Secretary
828-652-0623
lorriet@mcdowelltech.edu
Lobby

Jamie Ward
Faculty Welding
828-652-0689
jamiew@mcdowelltech.edu
Universal

Paul Wardzinski
Adjunct Faculty English
paulw@mcdowelltech.edu

William Warren
Adjunct Faculty Religion
bwarren@go.mcdowelltech.edu

Dr. Beverly Watts
Director of Developmental Studies
& Quality Enhancement
828-652-0669
beverlywat@mcdowelltech.edu
Building 4 (Azalea) Room 2B

Brooke Waycaster, RN
Health Liaison /
Practical Nurse Education
828-659-0499
brookew@mcdowelltech.edu
Building 17 (Dogwood) Room205

Joan Weiler
Distance Education Coordinator
828-652-0651
jweiler@mcdowelltech.edu
Building 4 (Azalea) Room 3D

Scott Wilson
Coordinator of Maintenace &
Custodial Services
828-659-0494
scottwilson@mcdowelltech.edu
Building 22 (Oak)

Sherry Wimsatt
ARC Lab assistant
828-659-0408
sherrywimsatt@mcdowelltech.edu
Building 11 (Cedar) Room 213

Diane Wright
Adjunct Faculty Accounting
828-659-0427
dianew@mcdowelltech.edu
Building 19 (Harold Smith) Room222

McDowell Tech
community college
Learning for Life

Index