

CROWDER COLLEGE

Course Catalog

2023-2024

*Established by the Community College District
of Newton-McDonald Counties, 1963*

Version 1.05

Neosho (Main Campus)

601 Laclede, Neosho MO 64850

Admissions 1-866-238-7788 (toll-free)

(417) 451-3223, Main Campus Switchboard

Cassville Instruction Center

4020 North Main Street, Cassville MO 65625

Phone: (417) 847-1706 Fax: (417) 847-1367

McDonald County Instruction Center

194 College Road, Pineville MO 64856

Phone: (417) 226-6000 Fax: (417) 226-6009

Nevada Instruction Center

600 West Edwards Place, Nevada MO 64772

Phone: (417) 667-0518 Fax: (417) 667-0536

Webb City Instruction Center

600 S. Ellis, Webb City MO 64870

Phone: (417) 673-2345 Fax: (417) 673-2300

Crowder College also offers classes at the following training center:

Joplin

Advanced Training & Technology Center (ATTC)

402 Grand Ave, Joplin MO 64801

(417) 680-3202 or (417) 592-2940

An Equal Opportunity/Affirmative Action Institution

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The information in the catalog was accurate at the time of publication. The College reserves the right to make changes affecting policies, fees, curricula or any other matters cited in the catalog. The College will give reasonable and adequate notice to students to allow time to adhere to any changes in the catalog. Fees, deadlines, academic requirements, courses, degree programs, and other matters described in the catalog may change with reasonable notice. Not all courses are offered each academic year and faculty assignments may change without notice. For most recent information please consult the online version of the catalog:

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AN INTRODUCTION TO CROWDER COLLEGE

Crowder Mission

Crowder College: Building a civil, serving, literate, learning community of responsible citizens.

Vision

Changing lives and strengthening communities—one person at a time.

Values

The Crowder College formally adopted these values as ones that, as a college family, we should continuously be engaged in....

1. We are passionate about making a difference
2. We care about one another
3. We cultivate curiosity and innovation
4. We respect diverse perspectives
5. We learn from our mistakes

Diversity, Equity and Inclusion Vision

To accomplish our mission of building a civil, serving, literate, learning community of responsible citizens, Crowder College is committed to fostering an environment of respect, equity, and inclusion. Crowder College will provide civic engagement opportunities; thus, forging a diverse society and globally connected world.

To reach this vision, Crowder College will:

- encourage curricular, cocurricular, and professional development activities that prepare stakeholders for informed citizenship and workplace success.
- demonstrate inclusive and equitable treatment of diverse populations.
- respect all students, faculty, and staff from a range of diverse backgrounds, ideas and perspectives.
- model inclusive and equitable treatment of diverse populations in the community.
- support and empower faculty, staff, and the community to share ideas, opinions and ways of thinking.

Organizational Structure and Shared Governance

The Board of Trustees of Crowder College is committed to fostering collaboration, communication, and access to information among its faculty, staff, students, and stakeholders. The organizational structure of the College is one based on the principles of shared governance.

Administration of policy and management of day-to-day operations are responsibilities of the administrative team under the direction of the College President. The administration believes that operational responsibility, budget development and control, and authority to manage assigned responsibilities should be delegated to the appropriate level, and strives to make the decision-making process one of broad discussion and participation.

As part of its system of shared governance, the College has developed a committee structure designed to include input from a majority of employees. The structure involves the use of leadership, division, and standing committees as well as the establishment of action teams as needed to work on specific assignments.

Academic Integrity

Crowder College is built on a foundation of academic integrity. The Crowder College Board of Trustees, faculty, and staff have developed nine *Student Abilities* that are advanced across the curriculum. One of these Student Abilities is Ethical Decision Making. Ethical Decision Making is “the selection of courses of action in accordance with principles or standards of right or good conduct.” An academic community assumes the standards of right or good conduct also apply to school work. The most common forms of academic dishonesty are cheating and plagiarism. Examples of cheating and plagiarism are provided in this policy as a means of helping to define expectations. The examples are not exhaustive and should not be viewed as such.

CHEATING

Cheating is defined as obtaining or attempting to obtain, or aiding another to obtain credit for work, or any improvement in evaluation of performance, by any dishonest or deceptive means. Cheating may include:

- obtaining a copy of an examination before it is given.

- using a personal electronic device not allowed by the instructor.
- collaborating with others on assignments without the consent of the instructor.
- collaborating with others to enable cheating.
- having another person take an exam for you.
- fabricating information such as data for a lab report.
- submitting material that is not yours as part of your course performance.
- communicating with anyone other than a proctor or instructor during an exam.
- sharing your assignments or exams with other students.
- writing a paper for another student.

Penalties for cheating are as follows: first offense, a grade of zero on the assignment; second offense, failing grade in the class where the second offense occurred; third offense, suspension from Crowder College.

PLAGIARISM

Plagiarism is the use of another person's words or ideas without giving that person appropriate credit. Academic work is evaluated on the assumption that the work presented is the student's own. Plagiarism may include directly quoting the words of others without proper credit given to them and/or without using quotation marks or other accepted notations to identify the borrowed words. Plagiarism can also be simply using any prior work produced by the student for another course without prior approval from the current instructor.

Types of actions defined as plagiarism:

- Using a direct quote from a source and not using quotation marks, in-text citation, and reference.
- Paraphrasing a source and not using in-text citation and reference.
- Submitting papers, assignments, or exams that were completed by another student, or arranging for another person to complete your assignments for you.
- Selling or purchasing (or copying) papers, assignments, or exams from any website that buys or sells them. This also applies if only partially used in student submission.

- Citing a source with fake bibliographical information.
- Submitting a paper, assignment, quiz or exam that you submitted in a previous and/or concurrent class without requesting and receiving in writing prior permission from your instructor(s). This also applies to "revising" papers, assignments, quizzes or exams that were previously submitted in any course where credit was received or any course which was previously failed or from which you withdrew, even if it is the same course as your current registration.
- Copying an image, audio, video, spreadsheet, PowerPoint presentation, etc., without proper citation and reference.
- Working in a group effort without prior written faculty consent.
- Altering any information on forms or emails after the original has been submitted.
- Using or disseminating materials to third-party websites that buy or sell course work

Penalties for plagiarism are as follows: first offense, a grade of zero on the assignment; second offense, failing grade in the class where the second offense occurred; third offense, suspension from Crowder College.

Academic Philosophy

Crowder College believes all students have the potential to learn, grow, become successful lifelong learners and be productive members of the community. Servant Leadership, the cornerstone principle of the Robert K. Greenleaf Center, is highly valued and routinely modeled. In a climate of intellectual freedom, Crowder College strives to develop each individual's ability to master the content of offerings, make ethical decisions, develop analytical skills, cultivate physical health and well-being, foster self-worth, and learn the value of working together while serving others.

College Philosophy

The Crowder College family lives by the principles of servant leadership. The faculty and staff believe modeling leadership through service creates an environment of academic excellence and encourages our students to lead by serving in their communities.

General Education Philosophy

General Education core requirements will prepare Crowder College students for a life of critical thinking, foundational knowledge, effective communication, and informed action. Students should learn to interact constructively with people from diverse backgrounds, to understand differing viewpoints, and to identify and resolve ethical issues. The General Education core classes help students to become responsible participants in a democratic society and to meet changes and challenges in their personal, social, educational, and professional lives.

The General Education Core is composed of six category areas consisting of Communications, Humanities, Mathematics, Physical Education, Science, and Social and Behavior Sciences. The philosophy statements for those categories are as follows:

Communications

Crowder College recognizes and understands the central role that communication plays in both learning and life. We focus our communication course offerings on teaching the principles of clear and effective oral and written communication and provide opportunities to practice and refine these principles and skills. Our goal is for students to be able to listen effectively and write and speak with clarity, coherence, cogency, and ethical integrity.

Humanities

The humanities study aspects of human culture and how people process and document the experience. Humanistic methods are used to study philosophy, literature, religion, fine arts, history, language, and other humanistic content. These courses are included in Crowder College's core curriculum to expand students' knowledge of human cultures or conditions in relation to behaviors, ideas, and values expressed in works of imagination and thought.

Mathematics

Mathematics is a discipline that seeks to understand the patterns and structures of the world around us through logical thinking and reasoning. The goal of courses under the category of Mathematics is for students develop the ability to think creatively, critically, strategically, and logically. The students learn to structure and to organize, to carry out procedures flexibly and accurately, and to process and communicate information. Students can then use these abilities to effectively problem solve in a variety

of contexts.

Physical Education

Physical Education provides the opportunity to teach students about movement, teamwork, problem solving, and health related fitness. Exposing students to various physical activities builds social, emotional, intellectual, psychomotor, and cognitive skills. Physical Education classes teach the importance of physical activity for the general well-being of students and help instill a positive attitude toward a healthy, physically active lifestyle.

Science

Scientific knowledge, the process of scientific inquiry, and the values of honesty and integrity in science are fundamentally important to the well-being of humanity and the well-being of the greater natural world. The science departments at Crowder College believe an education that teaches these core scientific principles, as well as general knowledge in each specific discipline, is an important tool in helping our students become better citizens. All the many branches of science are unified by these core principles. The goals of our general education courses in the sciences are for our students to comprehend and apply these basic principles and general knowledge in their thoughts and their actions.

Social & Behavioral Sciences

Social and Behavioral Science courses are dedicated to understanding human behavior through an examination of our mind, our society, and our history. Students are prepared for an increasingly interconnected world made up of a diverse and ever-changing population. These courses assist students in obtaining career goals, developing interpersonal relationships, contributing to their community, and functioning as citizens in society. Crowder College seeks to help students develop a deeper understanding of the relationship of self and society through the investigation of cultural, economic, political, religious, and social influences that shape human ideals and behaviors.

Affiliation and Accreditation

Crowder College is accredited by the Missouri Department of Elementary and Secondary Education and the coordinating Board for Higher Education. The College is also fully accredited by the Higher Learning Commission, a member of the North Central Association. *The Higher Learning Commission, 30*

*North LaSalle Street, Suite 2400, Chicago, Illinois 60602
-2504 Phone: (312) 263-0456.*

Graduates of the Associate of Arts programs are admitted without examination to junior standing in all public universities and colleges in Missouri and many outside the state of Missouri. Crowder is an active member of the Missouri Community College Association and the American Association of Community Colleges.

The following degree programs have obtained accreditation, are in the process of receiving accreditation, or participate in approved curriculum:

Computer Networking – Active Participation with Cisco Certified Academy through Cisco Systems since 2001

Nursing – Missouri State Board of Nursing, Accreditation Commission for Education in Nursing (ACEN)

Occupational Therapy Assistant – Accreditation Council for Occupational Therapy Education (ACOTE)

Paramedic – Committee on Accreditation of Educational Programs for Emergency Medical Services Professions (CoAEMSP), Pending Reaccreditation; State of Missouri, Bureau of EMS Division (BEMS)

Veterinary Technology – American Veterinary Medical Association (AVMA), Pending Reaccreditation

Welding – Participation in the American Welding Society's SENSE (Schools Excelling through National Skills Standards Education)

Institutional Learning Outcomes

Four "Institutional Learning Outcomes" have been identified from the Crowder College Mission Statement. Faculty are expected to teach beyond academics and basic skills to ensure that students develop abilities in these areas. The definitions for these ILO's are as follows:

- **COMMUNICATION AND INFORMATION LITERACY SKILLS (C1)**

Students will be able to demonstrate the ability to express ideas and information effectively and disseminate appropriate information.

- **CRITICAL THINKING AND PROBLEM SOLVING SKILLS (C2)**

Students will be able to gather and synthesize relevant information, evaluate alternatives, and implement creative and effective solutions.

- **CIVIC RESPONSIBILITY AND ETHICAL REASONING SKILLS (C3)**

Students will be able to understand and articulate the various perspectives of ethical issues and understand ways they can exercise responsible citizenship in response to their learning.

- **COLLABORATION SKILLS (C4)**

Students will be able to apply leadership principles and strategies to enhance personal and professional growth and demonstrate teamwork skills that enable collaboration.

ADMISSION

General Admission Requirements

Individuals who submit the following documents:

1. Application for admission.
2. All high school and college transcripts (see transcript policy).
3. Certificate of home school completion or certificate of high school equivalency.

A student is not permitted to enroll for or accumulate more than six (6) credit hours until s/he graduates from high school or completes a home school program or a high school equivalency exam (unless eligible for Dual Credit and Dual Enrollment Admission).

Students wishing to enter a program leading to a field that requires a license or certification should be aware that certain criminal convictions may restrict the individual's ability to obtain professional licensure or certification.

Prior criminal convictions or pending criminal charges do not exclude admission to the College, although admission may be deferred or denied to individuals whom the College considers to be a potential danger to the safety, security, and educational environment of the College. In order to fully evaluate applicants, to help foster a safe learning environment, and to comply with applicable law regarding financial aid, the College requires those applicants who have been convicted of certain crimes or who have pending criminal charges, to disclose this information at the time of application or reapplication. Failure to disclose a criminal conviction or pending criminal charge may result in the student being immediately withdrawn from current classes and may result in disciplinary action including

dismissal or expulsion, as outlined in the Student Code of Conduct. Applicants may also be restricted from living in the college residence halls.

College Orientation (COLL 101)

Degree and certificate seeking students must complete COLL 101, in their first semester at Crowder, if required by the degree or certificate they have declared. Non-degree seeking students are not required to take COLL 101. However, if students become degree or certificate seeking and the degree or certificate requires the class, they will be required to successfully complete the course. Transfer students who have successfully completed an equivalent college orientation class at another institution or have a cumulative grade point average of 2.0 on a minimum of 12 credit hours earned after high school graduation are exempt from COLL 101. The course is designed to acclimate new students to the Crowder College environment, provide them with information they will need to function as a Crowder College student, and encourage further evaluation of their character.

Recommend taking course on ground.

Dual Credit/Dual Enrollment Admissions

Admission is granted to high school students, grades 9-12, who are not older than 21. Dual credit and dual enrollment (definitions on page 12) students are eligible to enroll in college courses as long as they meet the following criteria:

- Juniors and seniors with an overall minimum grade point average of 3.0 (on a 4.0 scale) and written permission from the parent/legal guardian are automatically eligible for college courses.
- Juniors and seniors with an overall grade point average between 2.5 – 2.99 (on a 4.0 scale) must provide written permission from a parent or legal guardian, and provide a signed letter of recommendation from their principal or guidance counselor.
- Sophomores with an overall minimum grade point average of 3.0 (on a 4.0 scale) must provide written permission from the parent/legal guardian, and a signed letter of recommendation from their principal or guidance counselor.
- Freshmen with an overall minimum grade point average of 3.0 (on a 4.0 scale) must provide written permission from a parent or legal guardian, and provide a signed letter of recommendation from their principal or guidance

counselor. Freshmen must further demonstrate their competency by scoring at the 90th percentile or above on the ACT or SAT.

(Dual credit student eligibility requirements are mandated by MDHE).

In addition, students must meet the same requirements for placement into individual courses, (e.g., English or mathematics) as those required of all Crowder students. Dual credit and dual enrollment students must also be in compliance with all other college policies and will not be eligible to receive any form of Title IV financial aid. Only students who can provide a valid social security number are permitted to enroll in classes through Crowder College.

Interested students need to submit the following documentation:

1. Dual Credit/Dual Enrollment Application for admission
2. Copy of high school transcript to verify GPA
3. Completed enrollment form
4. Parent/Legal Guardian consent form
5. Letters of recommendation (if applicable)
6. Placement scores (if applicable)

International Student Admissions Required Documentation

To complete the International Admissions Process:

1. Application for Admissions – The application must be completed online, in English, and the application fee of \$50 must be paid.
2. Current Passport – Scanned copy of current passport must be provided.
3. High School Transcript – Copy of the high school transcript, completion certificate, or leaving certificate must be provided. These documents must be officially translated through a translation company. We recommend that you use World Education Services (WES) for this service.
4. College Transcripts – College Transcripts (in which credits were earned) must be provided in English. World Education Services (WES) should be utilized for translation to English is needed.
5. Financial Statement – Completion of the Financial Support Application provided upon successful application submission. Financial support documents (bank statements or letters and a sponsor letter) providing proof that money exists

- to pay for the first year of classes. Proof of adequate funds for the duration of study should also be included.
6. Housing – Housing accommodations, on-campus or off-campus, must be secured prior to student acceptance. Check out our Student Housing options to submit your Housing Application and the deposit if you plan to reside in one of our housing facilities. If you do not plan to live in one of our facilities, please advise the International Program Coordinator as to where you will be living.
 7. Insurance – All international students are required to have health insurance that includes medical evacuation, repatriation, and sport related injuries. Students will be required to purchase insurance through the college OR provide proof of insurance and sign a waiver of the coverage available through the college each semester in the US (including summer).
 8. Placement Test – Each student will complete a placement exam upon arrival. This exam is administered on the Crowder College campus. Results of the exam will be evaluated and supplemental instruction may be required. Student will be placed in classes based on the exam results.
 9. Make sure that you have payment arrangements in order for your financial costs as they will be required within the first week of classes in US Dollars. Payment can be made with credit card, debit card, or cash. All students enrolled in the payment plan are subject to the payment plan rules.
 10. You will need to pay an Emergency Travel Deposit in the amount of \$1,500 or provide proof of purchase for an open-ended, round-trip ticket (copy of ticket may be submitted to the International Office).
 11. If accepted, you will be expected to arrive at least three (3) days prior to the first day of the semester. You will go through placement testing, enrollment of classes, and orientation during this time.
- The form I-20 will be issued after numbers 1-6 are on file and the student has been accepted for study at Crowder College. An Acceptance Letter and a letter for your Embassy will be issued to the student upon acceptance. To check on the status of your application you may contact the International Program Coordinator through email at international@crowder.edu for more information.
- After receipt of your I-20 and acceptance documents you must complete the following: SEVIS FEE payment (prior to your VISA interview) and completion of your VISA interview at your Embassy.
- Please NOTE:** For more student VISA information please visit the United States Citizenship & Immigration Services website.
- ### English Language Requirements
- We require proof of English proficiency for all students from non-native English-speaking countries. Please submit your test scores to the International Coordinator. An official copy of test scores is required. A list of accepted English proficiency tests is listed below. Students transferring from a US College or University will have the requirement waived if they have passed ENGL 101 or equivalent course.
- Minimum Requirements:**
- | | |
|----------------|-----|
| Duolingo | 95 |
| TOEFL iBT | 68 |
| IELTS Academic | 6.0 |
| PTE | 45 |
- ### Transcript Policy
- All students must submit an official transcript prior to or upon submitting application for enrollment. Unofficial transcripts will be accepted for one semester only. Students without an official transcript on file by the end of the fourth week of classes will receive a records hold on their account. Students requesting financial aid will not be eligible to receive aid for the current or subsequent terms without an official transcript on file. Transfer, degree and non-degree seeking students that do not meet the satisfactory progress standards must adhere to the Suspension Appeal policy and procedures. All students on suspension status must submit a petition for readmission to the Records Office.
- ### Transfer Student Admissions
- A student who has attended another college or university before enrollment at Crowder must provide proof that s/he was in "Good Academic and Disciplinary Standing" at the last college attended. Students with a transfer grade point average that does not meet the Crowder guidelines for Satisfactory Academic Progress will be placed on Academic Probation. Students on Academic Suspension from a

previous institution will be required to meet the Crowder standards for Satisfactory Academic Progress before being allowed to enroll for classes (see Student Progress Policies). Students who are not in good disciplinary standing will be required to appeal in order to enroll for classes.

SPECIAL ADMISSION PROGRAMS

Practical Nursing (offered at Nevada Campus Only)

1. Must have a valid high school diploma or equivalent (such as GED or HiSet)
2. Completed the TEAS pre-entrance examination with proficient score.
3. Have a good moral character as evidenced by references
4. Verify a criminal background check free of Class A or B felony
5. Enroll in Family Care Safety Registry and not be on the Employee Disqualification List
6. Have adequate finances to complete the program and reliable transportation
7. Maintain the ability to perform required functional abilities
8. Eligibility to write the Licensure exam as described in Missouri Nursing Practice Act section 335.066 completion of the program does not guarantee eligibility.

Registered Nursing

The Crowder College Registered Nursing program prepares graduates who can demonstrate entry level competencies as registered nurses, and provides a foundation for continued learning. The program provides a multiple entry program where licensed practical nurses can enter with advanced standing or students may enter with no previous nursing education. Further information is available from the Crowder College Nursing Department, (417) 455-5554.

Application requirements for all registered nursing students are as follows:

1. Be approved for admission to Crowder College
2. Be at least 19 years of age by completion of the program

3. Have a high school diploma or high school equivalency certificate
4. Have Certified Nurse Assistant, RMA, CMA, RT, PT, PTA or certification or EMT, licensure prior to start of registered nursing classes.
5. Have a minimum GPA of 2.75 on required general education courses
6. Have a minimum ACT composite score of 19 (or a minimum ACT composite score of 18 will be accepted if GPA on completed general education courses for the degree is equal to or greater than 3.0)
7. Eligibility to write the Licensure exam as described in the Missouri Nursing Practice Act section 335.066; completion of the program does not guarantee eligibility
8. Level I (Traditional) nursing students must have completed Anatomy & Physiology I, Introduction to Nursing, and Medical Terminology with a C or above.
9. LPN Bridge students must have completed Anatomy and Physiology I, II, and Microbiology to be eligible for admission prior to start of registered nursing classes. LPN bridge applicants must be licensed and eligible for Missouri licensure before starting the program and have IV certification.
10. Complete application by deadline.
11. Enroll in Family Care Safety Registry and not be on the Employee Disqualification List.

Occupational Therapy Assistant

The Crowder College Occupational Therapy Assistant Program (OTA) prepares graduates to demonstrate as an entry level practitioner and sit for their board certification exam. Further information is available from the Allied Health Department, (417) 673-2437. Application requirements for all OTA students are as follows:

1. Be approved for admission to Crowder College
2. Complete pre-admission courses with a C or better
3. Have a minimum GPA of 2.5 on required general education courses
4. Complete application requirements
5. Eligibility to sit for the NBCOT (National Board of Certification Occupational Therapy) exam

Veterinary Technology

The Crowder College Veterinary Technology Program is a 78 credit hour program which is fully accredited by the American Veterinary Medical Association (AVMA) and prepares students for careers as veterinary technicians. This is a selective admission program. Applications are accepted until the last Friday in March for the class which begins the following August. An ACT test result must accompany the application. Students must complete a minimum of BIOL 101 or BIOL 110, MATH 50 (or appropriate placement), ENGL 100 (or appropriate placement), and LOC 50 (or appropriate placement), and have worked with or observed a licensed veterinarian in practice for a minimum of 40 clock hours to be eligible for the program. To be licensed as a Registered Veterinary Technician in Missouri, a student must be at least 19 years of age, graduate from an AVMA accredited program, pass the Veterinary Technician National Examination, and pass the Missouri State Veterinary Medical Board Examination. An applicant must be approved by the Missouri State Veterinary Medical Board, or the State Veterinary Medical Board of any other state in which the student wishes to be licensed, before being allowed to sit for these examinations. For more information call 417-455-5772.

ASSESSMENT AND PLACEMENT

College Entrance and Placement Testing

To facilitate student success at Crowder College, the following guidelines have been established for enrollment in Crowder courses. Crowder College will accept the ACT and other standardized test scores for college-level placement. If a student's scores are below the required levels, they must take the placement test for placement purposes.

The placement test is a self-directed, computerized assessment that evaluates a student's reading, writing, and math abilities to ensure proper placement in courses. A student is enrolled in college courses or college prep courses based upon individual test results . The Crowder College application fee covers the cost of the first attempt of the test. A fee will be charged for retakes. The range of scores for placement in other identified courses is available in the Student Success Center (SSC), Testing Center, and college website. Assessment and placement guidelines have been developed, after careful

consideration, to promote the greatest level of individual student success.

Students who are required to enroll in a college preparatory class (a class numbered less than 100) must maintain a grade of C or better in each of the prescribed courses in order to continue with college level coursework. Crowder College placement exams are required of all first time students who are seeking a degree, enrolling for 7 credit hours or more, or enrolling for a course that has a placement requirement. Transfer students who have not completed their freshman requirements in English and/or math will be required to take the Crowder College placement exams or provide adequate scores. Students who have completed 6 hours will be required to take placement exams prior to enrolling in additional coursework.

The placement exam is for "placement" only. To better align Crowder College with testing regulations, a student has the option of one retake per section, per 12-month period of the placement test (Math, Reading, and Writing). Crowder College will honor the highest placement score achieved for placement in prerequisite courses for enrollment of the following semester. If a student wishes to "test out" of a class, the CLEP test is the more appropriate choice (for English or Math). Contact the Testing Center for CLEP and Testing Out opportunities.

A student cannot retake a section on the same day a test was administered. It is the experience of Testing Center that nothing is gained by immediate retakes. This however, can be appealed to the Testing Center or designated personnel at off-campus sites if dire need is demonstrated for an immediate retake.

Students may call the Testing Center at (417) 455-5433 or visit www.crowder.edu for complete placement exam information and instructions. Additional placement exam guidelines are available for review in the Testing Center, or on the Crowder website.

Advanced Placement

High school graduates participating in the College Board Advanced Placement Program and passing the final examinations with a score of 3, 4, or 5 in the following areas will receive credit for these subjects:

Class	Credit for:
Biology.....	BIOL 101
Calculus AB	MATH 150 & 160
Calculus BC	MATH 202
Chemistry	CHEM 111

Computer Science.....	COMP 111
Econ: Macro.....	ECON 201
Econ: Micro.....	ECON 202
English Lang & Comp	ENGL 101
English Lit & Comp.....	ENGL 101& ENGL 109
Human Geography.....	GEOG 101
Political Science	PLSC 103
Psychology	PSYC 101
US History	HIST 106
For the Spanish Language and Culture examination, students will receive credit based on their score:	
Score of 3.....	SPAN 101 & 102
Score of 4.....	SPAN 101, 102, 201
Score of 5.....	SPAN 101, 102, 201, 202

Seal of Biliteracy Credit

Crowder College grants credit for two assessments currently used as the basis for seals of biliteracy:

- ACTFL Assessment of Performance toward Proficiency in Languages (AAPPL)

Spanish, At least Intermediate Mid (score of I-3) on each skill, SPN 101, 102, 201, 202	12
Spanish, At least Novice High (score of N-4) on each skill, SPN 101, 102	6

- Avant Standards-based Measure of Proficiency (STAMP 4S)

Spanish, At least Intermediate Mid on each skill, SPN 101, 102, 201, 202	12
Spanish, At least Novice High on each skill, SPN 101, 102	6

If the ACTFL-referenced standardized assessment of language proficiency you took is not listed here, please contact the Communications Department at 417-455-5495.

In order to receive credit, please submit your official score report to the Communications Department at englishcomm@crowder.edu.

College Level Exam Program (CLEP)

Students who have taken CLEP tests and wish to receive credit must have scores at the 50th percentile or higher on Subject Matter exams. The College does not grant credit for the CLEP General Examinations. Credit is given only in course areas offered as part of the normal college curriculum. Financial aid is not available.

Students wishing to take CLEP exams may obtain

information through the Testing Center (417) 455-5433.

Crowder College is a limited testing center.

Military Service and Training

Students with two years of verifiable active military duty will automatically be granted two (2) hours of Physical Education and two (2) hours of Health and Hygiene. Other military coursework will be evaluated individually through interviews and submission of certificates documenting successful completion. Credit is normally granted for military coursework that has a course equivalent at Crowder College and is appropriate to the student's major. Students interested in having military coursework evaluated should contact the Records Office located in Student Affairs.

Testing Out (Credit by Examination)

Credit may be granted in selected courses to entering freshmen and other students who pass appropriate departmental examinations. Students wanting to TEST OUT of a class and do so before the class begins will be charged a \$50 assessment fee. Students who pass the test at the level designated by the department in which the test is taken will be given credit for the class. Students not passing at the designated level will not receive credit and the \$50 fee is non-refundable. Students who are currently enrolled in a class and attempt to test out during the semester will still be required to pay regular tuition for that class. Scholarships do not cover tuition for credit earned through testing out.

STUDENT CLASSIFICATIONS

Degree Seeking Students

A student who has satisfied all admission requirements and is enrolled as seeking a degree or certificate.

Dual Credit/Dual Enrollment Students

Dual credit refers to college level courses taught by approved, college-qualified, high school instructors to high school students who are earning both high school credit and college credit for these courses simultaneously.

Dual enrollment refers to students concurrently

enrolled in high school and at a post-secondary institution. Dually enrolled students attend classes online or at any Crowder College campus location and earn college credit. However, they may or may not earn high school credit.

International Students

A student that is a non-resident (non-immigrant) alien attending college with the purpose of returning to their homeland once their education is complete. This does not define tuition status.

Lifetime Learner Students

Students who graduated from Crowder College before 2000 with an Associate of Arts, Associate of Applied Science, or Associate of Science degree are granted a tuition waiver for one class (up to five credit hours) per semester. Students who graduated in 2000 or after are granted a tuition waiver for one class (up to three credit hours) per semester. Lifetime Learner students will be responsible for books, institutional support fees, safety and security fees, online course fees, lab fees, flex fees, technology fees and any other fees associated with the class. The Lifetime Learner Waiver applies only to standard in-district or out-of-district tuition rates and is not applicable toward Community Education classes or special programs.

Military Duty Activation

In the event that a student in the Armed Forces, National Guard, or Reserves is called to active duty while enrolled at Crowder College and the student submits a copy of their military orders to the Records Office, the student shall be granted a 100% refund of tuition and fees for all classes from which the student withdraws.

The student should work closely with their faculty to develop strategies to complete any or all courses successfully within the time-line provided. If circumstances are such that it is not possible to complete any of the courses, then the student may withdraw from any or all courses with a full refund of tuition, facilities use fees and lab fees.

Non-Degree Seeking Students

A student who has satisfied enrollment requirements but has not enrolled as one seeking a degree or certificate. A non-degree seeking student must comply with all other college policies, including placement testing for English and math courses. Regardless of semester hours accumulated, the student will not be granted a degree or certificate until

he or she declares a major, files for a graduation check, pays applicable graduation fees and takes the exit exam. Non-degree seeking students are not eligible for financial aid.

Senior Citizen Students

Students age 65 or older before August first of the school year who reside in the state of Missouri and are otherwise eligible to attend will be granted a senior citizen tuition waiver. A student receiving a senior citizen tuition waiver will take all tuition-free courses on a non-credit basis and must satisfy all course prerequisites of the institution. Student will not be eligible for financial aid. Students are responsible for books, institutional support fees, security fees, online course fees, lab fees, and any other applicable fees. The tuition waiver applies only to standard in-district or out-of-district tuition rates and is not applicable toward Community Education classes or special programs. (*Per Missouri Revised Statute Chapter 173.091.1-6.*)

Students who wish to take courses for credit must pay for such courses and are responsible for all tuition and fees. Other forms of financial aid may apply.

DEGREE CLASSIFICATIONS

Associate of Arts Degree (AA)

The degree requirements are listed in the catalog. This degree is usually earned by students who concentrate in liberal arts or business courses on the college transfer level.

Associate of Science Degree (AS)

The degree given to students who have completed the requirements listed in the catalog. Associate of Science degrees have been developed for transfer to specific universities and programs. Crowder College offers AS degrees in Nursing and Pre-Engineering.

Associate of Applied Science Degrees (AAS)

The degree given to students who have completed the requirements listed in the catalog. AAS graduates are prepared for the world of work upon completion of their selected program. While not designed for transfer, selected AAS programs may be transferred to four-year colleges through special articulation agreements.

Certificates of Study

Certificates of Study are given to students who have completed the requirements listed in the catalog. Certificates of Study are designed to prepare students for entry level positions in a variety of fields. The number of units of credit varies with the certificate program selected.

COURSE CLASSIFICATIONS

Auditing a Course

Students may AUDIT a class for personal development. No credit or grade is received for the classes, but fees are the same as for credit enrollment. Audits must be declared by the second week of class. Audits are not counted in calculating financial aid.

Community Education Classes

These classes are offered on a not-for-credit basis and have varying durations and fees. Classes are offered each semester and feature a variety of disciplines, skills, and activities. Interested individuals should contact the Community Education office at (417) 455-5632. No financial aid is available for these classes.

Experiential Credit

Opportunity for credit may be possible through on-the-job experiences, trade or technical skills, etc. Students interested in applying for such credit should do the following:

1. Contact the appropriate Division Chair or Program Director to arrange an appointment.
2. Submit a letter of application that includes documentation of the experience to be evaluated.
3. Attach an Alternative Learning form to be signed by appropriate individuals if credit is to be granted. Alternative Learning forms are available in the Academic Affairs Office.

Experiential credit will be evaluated by a team of professionals based upon the information presented by the student.

Flex Classes

Classes that employ a combination of in-class attendance and on-line course work. Students must meet online course requirements to enroll in flex

classes.

Non-traditional Credit

Requests for college credit acquired through means other than classroom or laboratory experience should be initiated in the Academic Affairs Office. The student should arrange for an appointment with the appropriate Division Chair or Program Director and have appropriate certificates, test scores or other documentation of successful completion of the work for which s/he is requesting credit.

Non-traditional credit will not be transcribed if the student is not enrolled. No financial aid is available for this credit.

Online Course

A course conducted entirely over the internet through the institutional learning management system, Canvas. Students are responsible for maintaining access to a properly equipped computer with reliable access to the internet to complete online coursework. Additional technological requirements may be required based on a program or course-level basis. Online courses do not include scheduled face-to-face meetings, but there may be specific times that require video conferencing or other planned interactions. Students must meet college-level English and Reading requirements (see Assessment and Placement) to enroll in online classes.

Programs of Study

Students consecutively enrolled must adhere to program requirements listed during the first semester enrolled but may elect to use the current catalog program requirements, but not more than one catalog shall be applied to meet graduation requirements.

Students requesting to change to new program requirements under the current catalog should contact their advisor or the Records Office, prior to submitting a Graduation Check form, to receive advisement on graduation requirements. Students not consecutively enrolled must adhere to any new program requirements and policies as listed in the current catalog.

Repeat Course

A course already taken by a student in which credit has been earned may be repeated. When a course is repeated, regardless of the initial grade, the most recent grade earned will be calculated in the GPA. The original course that is repeated cannot be used to fulfill graduation requirements. Only the final attempt

of a course may be used to fulfill graduation requirements. A course may be repeated after graduation; however, the student will not be eligible for honors and recognitions after graduation unless the student is seeking another certificate or degree.

All grades including the original course and repeated course will appear on the transcript. A course may be repeated more than once; however, the most recent grade is always used in GPA calculations. The transcript will note the cumulative GPA which includes all attempted hours for graded course work. Repeated classes may not be funded by Veterans Benefits, Federal Financial Aid awards, or A+.

Self-Directed Learning

On a very limited basis, students may enroll in coursework as self-directed learners. The Instructor, the Division Chair and the Vice President of Academic Affairs must grant approval. Forms are available in the Office of Academic Affairs.

Traditional Course

Traditional courses meet with the instructor in a classroom. Time spent in class weekly corresponds to the number of credit hours earned. Additional time may be necessary for lab work.

PAYMENTS

Students are responsible for the timely payment of tuition, fees, and other applicable charges. Students will not be considered officially enrolled until all financial obligations have been met.

Acceptable Payment Arrangements

1. Payment of account in full
2. Proof of adequate Federal financial aid (Pell, etc.) or third party payment (VA, TRA, A+, etc.)
3. Participation in the college sponsored payment plan (contact the Cashier's Office for more information)

Tuition & Fees

Tuition and fees help fund the operational and instructional needs of the college. They are established annually by the board of trustees and are subject to change without notice. Crowder uses a "tiered tuition" structure which is the base rate plus the tier tuition. Base tuition has categories determined by residency

classification of "in-district" or "out-of-district." Tuition and common fees are charged to each student based on the number of credit hours or course in which a student is enrolled. For a complete listing of base tuition rates, fees and the accompanying tier tuition rates, please see: <http://www.crowder.edu/financialaid/tuition-residency/>

Payment Arrangements

Students may enroll in classes during designated enrollment periods. Payment arrangements must be made at time of enrollment. Acceptable payment arrangements include:

1. Payment in full
2. Current FAFSA completed and all requested documents on file
3. Participation in the college sponsored payment plan

If arrangements have not been made by the end of the month the semester starts, the student's enrollment may be cancelled.

COURSE CHANGES AND ATTENDANCE

Students are responsible for their class enrollment status and may add classes through the registration deadline.

Students are also responsible to officially withdraw, in writing, from their class(es). Discontinuing attendance does not constitute a withdrawal.

Students who are reported as having never attended class(es) by the first four (4) weeks of the semester will constitute an administrative withdrawal and the student will not be guaranteed re-entry to the dropped courses. Students eligible for financial aid are not eligible to receive disbursements for never attended courses.

Withdrawal forms are available at each Crowder College location and may be completed and submitted to the appropriate personnel, or a written notification that clearly indicates the class(es) to be dropped may be mailed directly to: Crowder College, Admissions Office, 601 Laclede, Neosho, MO 64850.

A student may withdraw from a traditional semester (16 week) course without grade penalty during the first twelve weeks of a traditional semester, the first three weeks of a 4 week semester, or the first six

weeks of an 8 week semester. Students wishing to withdraw from any other course must do so prior to mid-term of that course. It is very important that students refer to the Tuition Refund Policy to understand what amount of tuition, if any, will be refunded based upon their withdrawal date. Failure to withdraw from a course will result in a grade of an "F" for the course(s) and the student will be financially responsible for the tuition and fees.

Classification of Residency

In-District: Students whose permanent home is within the main Crowder College district (Neosho, Diamond, Seneca, East Newton and McDonald County school districts). Students (spouses, parents or guardians) owning property in the district are considered in-district residents. Full-time active duty military personnel stationed on a Missouri military base, their spouses and dependents are considered residents of the district. The residency status of recently discharged veterans will be based on legal residency at the time of induction into military service or on residency established during service.

Out of District: Students whose permanent home is located outside of the college district's boundaries.

International: Students whose citizenship is to a foreign country at the time of registration. Students are not eligible to change their residency status while they remain citizens of a foreign country.

Course Cancellations

There are times when classes may be cancelled due to low enrollment. Fees paid for such classes will be refunded.

Hardship Withdrawals

Students experiencing extenuating medical, financial, or family hardships which prevent course completion may submit a request for Hardship Withdrawal to the Vice President of Student Affairs. The student may be required to document unusual circumstances which justify request for a hardship withdrawal. The granting of a hardship withdrawal will also depend upon whether the student is passing the course as of the effective date of the hardship request. A hardship withdrawal does not clear financial aid responsibilities. Refer to the Student Handbook for restrictions.

Residency Status Policy

For tuition purposes, residency status is determined at the time of application for admission to Crowder

College based upon the student's legal permanent address or the domicile where they plan to return or reside. The residence of a minor student under the age of 21 will be the residence parents/legal guardian(s) unless the student has established court declared emancipation.

Tuition and Fees Refunds

Students are eligible for refunds only if s/he has followed official withdrawal procedures in the Records Office. Failure to attend classes does not constitute a withdrawal. If the student has paid college costs and officially withdraws, tuition will be refunded according to the refund policy after all charges have been applied to the account. If college costs have been partially or fully paid by financial aid (scholarships, grants, or loan) the refund may be returned to that financial aid source first. Any remainder will be returned to the student.

Please refer to the published refund schedule.

CHANGE OF RESIDENCY

The burden of proof of establishing permanent residency rests on the student. A request for a change in status must be submitted in writing to the Admissions Office with appropriate evidence or documentation of a permanent residency change. All requests must be received by the Admissions Office no later than the second week of the petitioning semester. Otherwise, residency status does not change during the semester. Change of residency status will only affect future terms and is not retroactive for previous semesters. In accordance with the Due Process policy, students may appeal decisions by submitting a grievance to the Vice President of Student Affairs.

Evidence of Domicile

1. Proof of residence for 12 prior consecutive months within the district or state through lease agreement or deed.
2. Marriage Certificate and proof that new spouse owns property within the district or state.
3. Documentation reflecting in district or state residency and presence within the district or state of Missouri for the purpose of retirement, full time employment due to company relocation or transfer, or professional practice or business

ownership.

4. Military discharge or active duty documents (DD214).
5. Paid personal or property tax receipts within the college district (In-District).

FINANCIAL AID

Federal Direct Loan Program

Eligibility: Students must be enrolled at least half time (6 hours).

Amount: There is an annual base award amount for dependent students of \$3,500 for freshmen students and \$4,500 for sophomore students. Independent students may borrow additional unsubsidized funds up to a maximum of \$6,000 annually and dependent students may borrow additional unsubsidized funds up to a maximum of \$2,000 annually. Students may not be eligible for the maximum amounts due to their cost of attendance and other funding. The college encourages students to borrow no more than s/he reasonably needs. Part of the advantage of a low-cost institution such as Crowder College is that a student may further his or her education without incurring large amounts of debt.

Apply to: Applications are available on the Crowder College website.

Important: Students whose complete and accurate aid applications are submitted by the fall semester priority date (July 1), or the spring semester priority date (November 1), may reasonably expect Pell Grant/ Student Loan payments around the sixth week of the affected semester.

Students completing the aid application process after July, but before the start of the semester may reasonably expect payment by midterm. Students completing the aid application process after mid-October may reasonably expect payment within four weeks after submissions are complete.

More detailed information about the application process for each type of aid and the financial aid policies and procedures at Crowder College can be found in the Financial Aid Handbook available on the college website www.crowder.edu.

Notice to Students/Parents: Any student applying for financial aid (or the parent of a student) who purposely submits misrepresented information and/or altered documentation for the purpose of increasing

his/her student aid eligibility or fraudulently obtaining federal funds will have the suspicions and evidence reported to the Office of the Inspector General, Washington, D.C. or to local law enforcement officials. Students will be liable and will be billed by the Crowder College Business Office for any aid funds which are received resulting from any type of overpayment which is caused by incomplete or inaccurate information submitted to the Financial Aid Office on all aid applications.

Federal Supplemental Educational Opportunity Grants (FSEOG)

Eligibility: FSEOG funds are awarded to the earliest eligible applicants with the greatest need. The student will indirectly be applying for these funds as part of the Pell Grant process and will be notified of any award by Crowder College.

Amount: Awards are generally made from \$200 - \$400 per year depending on the residency status of the eligible student.

Federal Work-Study Program

Eligibility: Students with demonstrated financial need may be eligible for work-study hours. The number of hours a student may work per week is determined by the expected family contribution which comes directly from the Student Aid Report, the "cost of education" as figured by the school, and all other sources of aid.

Amount: Work study jobs pay at least the Federal Minimum Wage. The yearly amount a student may earn is based upon his/her calculated need. The Financial Aid Office will determine the amount of a possible work-study award for each student applying for aid at Crowder College.

Apply to: Interested students must first complete the Free Application for Federal Student Aid.

Jobs: For available on-campus work-study positions, please see the Graduation, Transfer and Career Advisor at the main Neosho campus. Students can also search the online job board through Career Coach <https://crowder.lightcastcc.com>

Honors Program

Students demonstrating high academic standards are invited to become members of the Crowder College Honors Program. The program has been designed to provide an arena for active participation in exploring a variety of in-depth subjects, assessing one's own strengths and weaknesses, and using critical thinking

as a tool for problem solving. The program reinforces the validity of the scholarly approach and prepares participants for greater intellectual challenges. The Honors Program also fosters one-on-one instruction and mentor-based relationships. Honors students receive tuition and book scholarships each semester and the Honors designation is transcribed at the time of graduation. Requirements for participation in the program have been established for high school graduates as well as transfer and non-traditional students. Those interested in the Honors Program should contact the college's Honors Program Coordinator. (417) 455-5570.

Pell Grants

Eligibility: Be a U.S. citizen or eligible non-citizen, have a high school diploma, high school equivalency, home-school certificate.

Amount: Awards vary based upon the need of individual students as determined by the U.S. Department of Education needs analysis formula in combination with the cost of the program involved. Pell Grant award amounts are determined yearly by the U.S. Department of Education. Areas of family information that determine eligibility are: Family size, number in college, income and assets.

Apply To: Interested students must file an application for Federal Student Aid, available online at www.fafsa.gov.

Scholarships

Crowder College offers a variety of college sponsored scholarships. College sponsored scholarship recipients must have acceptance forms signed and on file in the Financial Aid Office by July 1. Some scholarships may require applications, auditions, etc. Students may only receive up to four semesters of college-sponsored scholarships.

A complete list of Crowder College scholarships and the application guidelines are in the Scholarship Handbook which is available on the Crowder College website and in the Financial Aid Office, first floor, Farber Building.

Veteran's Services

The Financial Aid Office acts as the Certifying Official for veterans enrolled at Crowder College. Information about academic assistance and counseling is available to anyone entitled to educational benefits from Veterans Administration (VA). Information about VA benefits may be obtained from the Financial Aid

Office, (417) 455-5434.

All VA beneficiaries shall be charged the in-state rate, or otherwise considered a resident, for tuition purposes:

- A Veteran using educational assistance under either chapter 31 or chapter 33 will not be penalized with late fees, the denial of access to classes, libraries or other institutional facilities, or the requirement to borrow additional funds to cover financial obligations to the institution due to the delayed disbursement of a payment by the U.S. Department of Veterans Affairs. The restriction on penalties would not apply in cases where the student owes additional payment to the school beyond the amount of the tuition and fee payment from VA to the school.

STUDENT PROGRESS AND POLICIES

Satisfactory Academic Progress for Financial Aid

The U.S. Department of Education requires institutions of higher education to define, establish, and enforce minimum standards of satisfactory progress for students receiving financial assistance. These standards must include qualitative and quantitative measures for evaluating the progress of financial aid recipients towards their educational goals. An assessment of these efforts will be performed after each semester. State, non-federal, and institutional programs have differing standards of satisfactory academic progress. Please refer to the Crowder Financial Aid Handbook for full details at https://url.avanan.click/v2/_https://www.crowder.edu/financial-aid/_YXAzOmNyB3dkZXJjb2xsZWdlOmE6bzo0NjdhNzc4MDUzM2Q3NzM2ZGE2MTQ1ZmU2NmM0MWNkNz02OmU0Zjg6YTQxZTMyOTdkY2Y4MDUwYjQzMGE4NjNmMDkwNDcyNzBhY2Q3MWZmNTk4NDZhZmZlMWU3MjI4YjBjYmFhYWJkNzpOIQ.

Federal financial aid regulations provide for assistance up to 150 percent of the length of the academic program. Students receiving financial aid must:

- successfully complete (with a grade of D or better) two-thirds (67%) of their total credit hours attempted, and
- must maintain a 2.0 cumulative grade point average (GPA).

If a student does not meet these requirements, the student will be placed on Financial Aid Warning for one semester. At the end of the Financial Aid Warning semester, the student must meet the cumulative GPA and credit hour completion requirements in order to avoid being placed on Financial Aid Suspension.

Students placed on Financial Aid Suspension due to extenuating circumstances may appeal in writing to the Crowder College Financial Aid Office.

Academic Forgiveness

Extenuating circumstances may justify a student being able to recover from an academic deficiency in ways which do not penalize his/her academic standing. The student's academic transcript; however, will be a full and accurate record of the student's academic career. For students receiving academic forgiveness, the transcript will record the graduation GPA excluding courses for which academic forgiveness has been granted.

Academic forgiveness may be granted for all Crowder College courses taken during one (1) semester and one (1) time during a student's academic career and must be requested prior to graduation.

- For students not continuously enrolled, academic forgiveness will be granted following a one (1) year absence or the most recent twelve (12) credit hours have been completed while achieving a minimum 2.0 semester GPA.
- For students continuously enrolled, academic forgiveness will be granted if the most recent twelve (12) credit hours have been completed while achieving a minimum 2.0 semester GPA.

Academic forgiveness cannot be used to forgive ineligibility for financial aid, athletics, or other department scholarships which may result from academic deficiencies. Academic forgiveness will only apply to the academic records.

Please refer to the Academic Forgiveness form located in the Records Office for restrictions.

Academic Warning

First time college students who earn a GPA below 2.0 will be placed on academic warning.

Continuing students with a semester GPA below 2.0 and a cumulative GPA higher than 2.0 will be placed on Academic Warning.

While College Connections (LOC 103) is not required for students on Academic Warning, an advisor may recommend enrollment in the course with permission of the Division Chair of Learning Opportunities.

Academic Probation

Continuing students on Academic Warning who earn a semester GPA below 2.0 will be placed on Academic Probation, regardless of the cumulative GPA. This also applies to students transferring in with a GPA below 2.0. After being placed on Academic Probation, the student must maintain a 2.0 GPA each semester until their cumulative GPA is above a 2.0 and the student will be in Academic Good Standing.

Students who are on Academic Probation who maintain a semester GPA of 2.0, but a cumulative GPA less than 2.0 will be placed on Academic Probation-Continued.

If the student with an Academic Probation-Continued status earns an additional semester GPA below 2.0, but maintains a cumulative GPA above 2.0, the student will remain on Academic Probation-Continued unless the cumulative GPA falls below 2.0, at which the student will go on Academic Suspension. Continuing students on Academic Warning who earn a semester GPA below 2.0 will be placed on Academic Probation, regardless of the cumulative GPA. This also applies to students transferring in with a GPA below 2.0. After being placed on Academic Probation, the student must maintain a 2.0 GPA each semester until their cumulative GPA is above a 2.0 and the student will be in Academic Good Standing.

Students who are on Academic Probation who maintain a semester GPA of 2.0, but a cumulative GPA less than 2.0 will be placed on Academic Probation-Continued.

If the student with an Academic Probation-Continued status earns an additional semester GPA below 2.0, but maintains a cumulative GPA above 2.0, the student will remain on Academic Probation-Continued unless the cumulative GPA falls below 2.0, at which the student will go on Academic Suspension.

All students who are placed on Academic Probation will be required to enroll in College Connections (LOC 103), unless they have previously taken the course while on Warning. A Student Success Hold will be

placed on the student's account to signify this requirement.

A student who is on Academic Probation and earns a semester GPA above a 2.0, but still has a cumulative GPA below 2.0 will be placed on Academic Probation-Continued. The student will not be in Academic Good Standing until their cumulative GPA is also above 2.0.

A student who is on Academic Probation and earns a semester GPA below 2.0, but still has a cumulative GPA above 2.0 will be placed on Academic Probation-Continued.

A student who is on Academic Probation or Academic Probation-Continued who earns a semester GPA and cumulative GPA less than 2.0 will be placed on Academic Suspension.

The student will not be in Academic Good Standing until they achieve a semester and a cumulative GPA above 2.0.

Academic Suspension

A student with a previous academic standing of Academic Probation or Academic Probation-Continued earning a semester GPA and cumulative GPA below 2.0 will be placed on Academic Suspension. Students may appeal the first Academic Suspension according to the procedures in the Student Handbook. Students who are on Academic Suspension will be required to complete College Connections (LOC 103), unless previously passed with a C or better while on Academic Warning or Academic Probation.

A student currently on Academic Suspension who earns a semester and cumulative GPA below 2.0 will be placed on a second Academic Suspension and will not be allowed to enroll or appeal the Academic Suspension for one year. The student must petition for admission and submit an Academic Suspension appeal in accordance with the policies in the Student Handbook.

A student currently on Academic Suspension who earns a semester GPA above 2.0, but cumulative GPA below 2.0 will be placed on Academic Probation-Continued until they are in Academic Good Standing. If the student has been placed on Academic Suspension two times and is placed on Academic Suspension a third time, the student is not eligible for admission to Crowder College. A student suspended

three times may appeal to the Vice President of Student Affairs.

Attendance

Students are expected to attend all class sessions and report to each session on time. If an absence occurs, students are responsible for all work missed.

Excessive absences may result in a lowered or failing grade in the class.

Administrative Withdrawal

In order to meet federal financial aid and Department of Education guidelines, Crowder College requires faculty to take attendance. To comply, a student does not attend a seated course or fails to participate in an online course for 14 consecutive calendar days will be administratively withdrawn from the course. Attendance at Crowder requires a student to be "academically engaged" in the course. Academic engagement includes:

- physically attending a class where there is an opportunity for indirect communication between the instructor and students;
- submitting an academic assignment;
- attending a student group that is assigned by the institution;
- student-initiated communication regarding college -regulated absences;
- participating in an online discussion about academic matters and;
- initiating contact with a faculty member to ask a question about the academic subject studied in the course.

If a student is administratively withdrawn from the course, the student will receive a letter and an email making them aware of the withdrawal. Within seven (7) calendar days after the withdrawal occurred, a student can request reinstatement by contacting the Academic Affairs Office. The Academic Affairs Office will work with the faculty member to determine if the request for re-instatement should be granted. If reinstated, Academic Affairs will notify the student and the Records Manager, both via email, and the student will be then be reinstated in the course. This request is the one as appeal level and the decision at this level is final.

Credit Hour Policy

Expectation for students: Crowder College's assignment of credit hours shall conform to commonly accepted practices in higher education and the federal

definition of a credit hour. For each credit hour, students should anticipate spending a minimum of 150 minutes per week based on a 16-week semester. The distribution of this time will vary based on the course and delivery method, but could include direct faculty instruction, classroom activities, web-based activities, laboratory work, research, writing papers and reports, reading text and articles, internship hours, clinical hours, studio work, or class and assessment preparation.

Dean's List/Honors

Full-time students with a 3.50 or higher semester grade point average are placed on the Dean's List. (A full-time student is defined as a student taking twelve [12] credit hours or more. The twelve credit hours must consist of credit earning hours of courses numbered 100 or higher.) Students with high academic records are eligible for membership in the Crowder Chapter of Phi Theta Kappa, national scholastic honor society. Associate degrees and certificates are awarded "With Honors" to students earning the following cumulative GPAs the semester before graduation:

- 4.0 – Summa Cum Laude
- 3.85-3.99 – Magna Cum Laude
- 3.5-3.84 – Cum Laude

For a May graduate, the cumulative GPA from the fall semester will be used to determine honors. For a December graduate, the cumulative GPA from the spring or summer semester, whichever is most recent, will be used to determine honors.

Grades

Grades are awarded on the following point system:

<u>Work Quality</u>	<u>Grade</u>	<u>Grade Points</u>
Excellent	A	4
Above Average	B	3
Average	C	2
Passing	D	1
Failure	F	0
Withdrawal	W	0
Repeat	R	0
Audit	Au	0
Credit	Cr	0
No Credit	NC	0
Pass	P	0
Incomplete	I	0

Grade Point Average (GPA)

A student's grade point average is computed at the

end of each semester. The average is used in determining class rank, graduation, honors, academic alert, warning, probation and suspension. Repeated courses cancel the former grade and the most recent grade is used to compute the GPA. The original course that is repeated cannot be used to fulfill graduation requirements. Only the final attempt of a course may be used to fulfill graduation requirements. All grades including the original course and repeated course will appear on the transcript. A course may be repeated more than once; however, the most recent grade is always used in GPA calculations.

The semester grade point average is calculated by:

1. Multiplying the credit hours of a course by the points earned for the course grade.
2. Adding the points earned for each course.
3. Dividing the total points by the number of credit hours attempted.

Example:

ENGL 101 (B):	3 hrs x 3 grade points = 9
MATH 101 (A):	3 hrs x 4 grade points = 12
PSYC 101 (C):	3 hrs x 2 grade points = 6
HIST 106 (F):	3 hrs x 0 grade points = 0
BIOL 101 (D):	5 hrs x 1 grade point = 5
Total = 32 grade points (GP)	

$$32 / 17 \text{ hrs} = 1.882 (\text{GPA})$$

Cumulative grade point average is the total points earned in your college career divided by the total number of credit hours. Classes with course numbers below the 100 level are not figured in the semester and cumulative GPA and are not counted toward graduation. Records of student progress are kept on file in the Records Office.

Grade Reports

Final grade reports are issued at the end of each semester upon request. No final grade report will be issued, or credit granted, if the student has a financial obligation to the college or if the student file is incomplete.

Incomplete Grades

A grade of Incomplete may be assigned and submitted by the instructor when a student has completed and passed eighty-five percent (85%) of the work required for a course but, for reasons beyond the student's control, cannot complete the entire course during the official scheduled dates of the class. Incomplete

grades are contingent upon instructor approval, and instructors are under no obligation to grant them. In cases where an instructor agrees to assign an "I" grade, the instructor/student will fill out an Incomplete Agreement form indicating exactly what is required in order to finish the course and what percentage of the grade will be based on the remaining work. The deadline for final submission of all material to remove the Incomplete will be determined by the instructor, but no longer than one semester. Failure to complete the assigned work within the determined deadline will result in an "I" being converted to the grade indicated on the Incomplete Agreement Form.

Procedures for Implementing Finals due to School Cancellation

If Crowder College is closed during finals week due to inclement weather, the following procedures will be implemented regarding finals.

1. Due to state and national accreditation standards, students in the Crowder Nursing program and the Crowder Veterinary Technology program must participate in Final exams. Students in these programs do not have the option to take the grade they have earned going into the final exam. Students in these two programs should reference his or her program handbook for specific information regarding the procedures for implementing finals due to school cancellation in the Crowder Nursing Program and the Crowder Veterinary Technology.
2. Distance learning or online finals are held as planned. No adjustments in the plans, schedule, or process for online classes. If the online final is a proctored on-ground final, the rules in #3, #4, and #5 apply.
3. Students who miss an on-ground final exam due to school being cancelled on the day of the final at their attendance location may take the grade they have earned going into the final exam.
4. Students who miss an on-ground final as defined in #3 may ask the instructor to take the missed final exam. The student must contact his or her instructor via e-mail DURING FINALS WEEK ONLY (Monday thru Thursday). The instructor will set the time and date to take the exam, which needs to occur prior to the end of business day on Friday of finals week. If a student does not make arrangements during finals week, he or she will be

given the grade he or she had going into the final exam. A student may not ask after finals week for a date to take a missed final. If a student makes arrangements to take the missed final exam, the grade earned including the final exam is the final grade for the class. The student may not return to the grade going into the final exam.

5. If the Crowder College Campus location where the class meets is closed all week, then the current grade will count as the final grade.

Readmission, Suspension and Appeal Process

– Refer to Student Handbook.

GRADUATION

Degree/Program Requirements

Candidates for Associate in Arts, Associate in Science and Associate in Applied Science degrees must earn a minimum of sixty (60) hours with at least a 2.00 cumulative GPA on all coursework. Certificate graduates must also earn a cumulative GPA of 2.0 on all coursework. Crowder College must provide a minimum of fifteen hours of the final thirty (30) hours. Students in A.A.S. programs must complete at least 12 credit hours from the program's core technical classes through Crowder College. For multiple degrees or majors see the Glossary of College Terms.

Graduation Application

Graduation Applications must be initiated by the student and are processed in the Records Office prior to the semester of intended graduation. Students completing their course work in August or December will be invited to participate in the Spring graduation ceremony.

1. Complete a Graduation Application in the Records Office or online via My Crowder per the following dates:
 - DEC graduates - MAR 1
 - MAY graduates - OCT 1
 - JUL graduates - MAR 1
2. Sign up for and take the exit exam. Dates for exit exams will be posted in the SSC and on the Crowder College web site.
3. Have all outstanding accounts cleared in the Cashier's Office, Library, and Bookstore.

4. Students who received Stafford Loan proceeds must complete an exit interview with the Financial Aid Office.

It is ultimately the responsibility of the student to monitor graduation requirements and see that these requirements are met.

Transcripts

The Records Office will send official transcripts to other schools or employers with written permission of the student. In compliance with Public Law 93-380, the Family Educational Rights and Privacy Act of 1974, Crowder College affords all students the right to inspect official records directly relating to them and the right to challenge any statement considered to be inaccurate, misleading or inappropriate. The college requires written student consent before releasing college records. Complete information regarding student records is available by contacting the Records Office. See Student Handbook "Rights to Privacy and Educational Records".

CAMPUS SERVICES AND RESOURCES

College Assistance Migrant Grant Program (CAMP)

CAMP is a federally funded program designed to provide an opportunity for students of migrant families to attend college. Crowder College's program recruits students from Missouri, Oklahoma and Arkansas. CAMP assists students in successfully completing their first year of college. CAMP is located on the 2nd floor of Newton Hall.

Faculty/Academic Advisors

Each student is assigned an academic/faculty advisor who is knowledgeable in his/her field of interest. These advisors assist in developing realistic educational and career goals and selecting coursework that best fits student abilities and needs. Students without clear career goals will receive enrollment forms from assigned general education advisors. The student is expected to contact his/her advisor prior to each registration period for assistance in planning appropriate course work. The advisor's approval may be required for students to register.

Student Success Center (SSC)

The Student Success Center (SSC) is here to help you, offering a wide range of free assistance to all Crowder students. The SSC also serves as a valuable resource to faculty and staff at all Crowder locations. Assistance with the admission process is the initial service offered through academic assessment, advisement, and placement. Academic advisors in the SSC are available for assisting students understand academic degree requirements at Crowder College and enrollment into correct courses. The SSC is comprised of the following services:

- Academic Advising
- Tutoring
- Testing Center
- Graduation, Transfer, and Career Services
- Student Accessibility Office
- Counseling services

Tutoring Services

McDonald Hall, 1st floor, inside the SSC

tutoring@crowder.edu

Crowder College provides free tutoring services to all Crowder College students to support their academic journey. Tutoring is provided in-person by peer tutors through one-to-one and small group tutoring sessions. Online tutoring is also a free service to students through BrainFuse HelpNow in their Canvas account.

Testing Center

318 McDonald Hall

testing@crowder.edu

417.455.5433

The Testing Center provides proctoring services for standardized exams and Crowder College exams. To schedule an appointment for testing with the Neosho campus, they can do so by going to <http://registerblast.com/crowder> to select their appropriate test and make an appointment.

Graduation, Transfer, and Career Services

Student Center

careerservices@crowder.edu

417.455.5618

The Graduation, Transfer, and Career advisor will assist students with preparing for graduation from

Crowder College and working with students to prepare for transferring to continue education or to transfer into the workforce. Free career assessment evaluation is offered for students who are undecided on educational and career pathways. Services also include assisting with resume and cover letter writing, interview preparation, and job search techniques.

Student Accessibility Office

McDonald Hall, 1st Floor, inside the Student Success Center

417.455.5733 phone, 417.455.5619 fax

The Student Accessibility Office is committed to the goal of achieving equal educational opportunity, an accessible community where students are judged on their ability, and provide tools for full participation in the post-secondary environment for student with disabilities. Consistent with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Crowder College ensures that no "qualified individual with a disability" will be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination on the basis of disability under any program or activity offered by the College.

Crowder College in accordance with federal and state laws, prohibits discrimination on the basis of religion. The Student Accessibility Office makes a good-faith effort to provide reasonable religious accommodations to students who have sincerely held religious beliefs and practices that conflict with a scheduled course or program requirement unless such an accommodation would create an undue hardship.

Counseling Center

McDonald Hall, 1st Floor, inside the Student Success Center

417-455-5609 phone

The Counseling Center offers a wide range of supportive services for all Crowder students, at all Crowder locations. The Center's staff is committed to helping students navigate the transitions and challenges of college life, including but not limited to anxiety, depression, alcohol and/or drug use, relationship issues and stress management. The Center also serves as a valuable resource to faculty and staff by providing presentations and prevention information on a variety of mental-health and wellness topics.

Learning Resources Center (LRC)

Found in the Bill and Margot Lee Library the LRC serves students, faculty, and staff at all campuses by providing access to information resources, instruction, technology, and services that support teaching and learning in the mission of the college. Library instruction is provided to classes, small groups and individuals.

The library collections include approximately 38,000 books, 20,354 e-books, 155 current periodical subscriptions, 2500 art prints, over 170,000 units of microforms, approximately 3700 audiovisual programs including recorded books, VHS and DVDs, and online research databases. Library electronic resources expand the periodicals collections to include many online full-text articles in magazines, journals, and newspapers, as well as online encyclopedias, dictionaries and atlases. For students and staff, remote access allows the internet-based full-text databases to be searchable from any campus computer or from home.

Traditional interlibrary loan services are available for resources not found in the LRC. The LRC is affiliated with MOBIUS, a statewide consortium of academic libraries. MOBIUS libraries share a common library platform that allows students and staff to borrow library materials from among the 60 member libraries with access to the books within three days. The SWAN online library catalog is the gateway to sharing resources among the nine libraries in the cluster that includes the Crowder College library.

There are 28 computer workstations available for student research. Many of the stations have application software to support classes. The library is typically open 66 hours per week for research, individual and small group study, leisure reading, viewing audiovisual programs, and computer usage.

The LRC receives support from the Foundation through private gifts and donations and from the Friends of the Library.

Student Support Services (Project Now)

The SSS program is designed to improve retention, graduation, and successful transfer of participants. SSS provides a supportive environment where participants can have their academic, career and personal needs met. SSS offers a wide variety of services including: academic support, study groups and individualized tutoring, personal advisement, cultural opportunities, computer lab, college transfer

weekly workshops on a wide variety of topics, all at no cost to the participant.

Eligibility requirements apply. Enrollment is limited. SSS is located at the Cassville Center, Nevada Center, Neosho main campus, and Webb City Center. Call (417) 451-3223 for contact information. (A federally funded Student Support Services TRIO program)

Student Housing

Information and housing applications for the Brown Residence Complex or Roughrider Village Apartments are available in the Campus Life Office, (417) 455-5644 or by email at CampusLife@crowder.edu.

Student Clubs and Organizations

There are many opportunities for students to become involved in extra-curricular activities and organizations on campus. It is important to find a good balance between academic and non-academic activities, but both are important to maximizing the college experience. Information regarding clubs and organizations can be obtained from the Campus Life Office, (417) 455-5644, or from the Student Services Office at the off-campus sites. Upcoming events will be posted to the campus events calendar at www.crowder.edu.

Career and Salary Information

Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at Crowder College can be found at the following URL: <https://scorecard.mo.gov/scorecard/>.

Search using School / Program "Crowder College" and choose the degree or credential type of interest.

The following limitations to the data apply:

Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

Catalog, Program, Course, and Policy Changes

The information in the catalog was accurate at the time of publication. The College reserves the right to make changes affecting policies, fees, curricula or any other matters cited in the catalog. The College will give reasonable and adequate notice to students to allow time to adhere to any changes in the catalog. Fees, deadlines, academic requirements, courses, degree programs, and other matters described in the catalog may change with reasonable notice. Not all courses are offered each academic year and faculty assignments may change without notice.

For the most current version, please consult the online catalog at www.crowder.edu.

GLOSSARY OF COLLEGE TERMS

Academic Forgiveness – A procedure which permits students with a low semester GPA to request that all grades for all classes for only one semester be excluded from his/her academic record. Credit hours are still used to determine eligibility for financial aid, athletics, and departmental scholarships. The student's academic transcript; however, will be a full and accurate record of the student's academic career. For students receiving academic forgiveness, the transcript will record the graduation GPA excluding courses for which academic forgiveness has been granted.

Academic Probation – A student on Academic Waning who has a semester GPA less than 2.0 will be placed on Academic Probation. Once on Academic Probation, the student must maintain a 2.0 GPA each semester to avoid being placed on Academic Suspension. Must enroll in and pass LOC 103 with a C or better.

Academic Suspension – Students with a semester and cumulative GPA below 2.0 after a semester of Academic Probation will be placed on Academic Suspension. The student will not be able to enroll for one semester. Students are

eligible to appeal the Academic Suspension and will be assigned a Suspension Advisor to determine eligibility for enrollment. Must enroll in and pass LOC 103 with a C or better, if not previously passed while on Academic Probation.

Academic Warning – First semester students with a cumulative GPA below a 2.0; or continuing students with a semester GPA below 2.0 and a cumulative GPA above 2.0.

Associate in Arts Degree (AA) – The degree given to students who have completed requirements as listed in the catalog. Usually given to those who concentrate in liberal arts or business courses on the college transfer level. The degree requires at least 60 units of credit (credit hours).

Associate in Applied Science Degree (AAS) – The degree given to students who have completed the requirements as listed in the catalog. Requires at least 60 units of credit (credit hours).

Associate of Science Degree (AS) – This degree has been developed for transfer to specific universities and programs. Consult with an advisor about pursuing this degree.

Auditing a Class – Attending a course without expectation of credit. People who audit are not required to do the outside assignments or take the examinations. Standard in-district/

out-of-district fees apply. Audits must be declared by the end of the second week of the semester.

Co-requisite – An academic course strongly recommended or in some cases required to be taken in conjunction with the listed course. Student should check with an Academic Advisor as to whether the co-requisite is recommended or required for the student's degree.

Credit – A way of counting how much each course is worth toward graduation. Usually, credit hours are assigned to courses according to how many hours a week the course meets; however, in some fields you are required to attend class for more hours than announced credit. In art, for instance, you may spend four hours a week in class for two hours of credit. Your tuition is based on the number of credit hours for which you register.

Dean's List – A list of the full-time students with a 3.5 or higher semester grade point average for the semester. (A full-time student is defined as a student taking twelve [12] credit hours or more. The twelve credit hours must consist of credit earning hours of courses numbered 100 or higher.)

Double (or Multiple) Degrees – In order to gain multiple degrees at Crowder College a student will need to meet all the requirements of the new degree and have an additional 15 credit hours from the second degree Major Courses (Required Courses or Approved Electives) taken at Crowder College that were not counted toward another Crowder degree.

Dropping a Course – Official process for withdrawing from a course. In order to drop a course, students must fill out the appropriate forms in the Admissions Office, Student Affairs Office. Students who qualify may drop courses through My Crowder during allowed periods of time.

Elective – A course chosen to take but that is not a required part of the regular curriculum. Electives count toward the hours needed for graduation, but cannot replace the courses that are required in your program.

Extracurricular Activities – Opportunities the college offers as a part of its service to students. Usually free with a student ID card. Can include such things as movies, sports, clubs, student government, dances, parties, etc.

Finals – Examinations given at the end of a semester.

Financial Aid – Financial aid may include grants, loans, scholarships, or work study positions.

Freshman – Students who have completed less than 28 hours of credit.

Full-time Student – A student taking twelve (12) credit hours or more. The twelve credit hours must consist of credit earning

hours of courses numbered 100 or higher.

Grade Point Average (GPA) – The average of a student's grades calculated by assigning a value of 4 points for an A; 3 points for a B; 2 for C; 1 for D; and 0 for an F.

Graduate – A student who has finished the required program of study, completed the necessary hours and received a degree.

Grant – Money given to help students attend college. Usually grants do not have to be repaid.

Humanities – Courses dealing with such things as literature, music, art, foreign languages, philosophy, and language.

Intramural Activities – Usually games and sports limited to people attending Crowder College.

Life Sciences – Courses dealing with physical development and health, including biology, nursing, dental hygiene, etc.

Part-time Student – Any student taking less than 12 credit hours in a semester.

Pre-registration – Enrolling in courses before a semester starts. Payment will not be due for these courses until the beginning of the enrolled semester.

Prerequisite – A course that must be completed before taking a more advanced course in the same field. English Composition I is a prerequisite for English Composition II, for instance.

Program of Study – The academic courses required for a student to successfully complete a degree.

Registration – Completing the

forms and paying the fees necessary to enroll in a class.

Scholarship – A sum of money or other aid granted to a student because of merit, need, etc. to pursue his/her studies.

Self-Directed Learning (SDL) – In this format, the student works independently on mastering the competencies for the class. Division Chair approval is required and this format is only utilized in rare and unique situations.

Social Sciences – Courses dealing with how people live, including things such as sociology, economics, political science, history, psychology, etc.

Sophomore – A student who has completed 28 credit hours or more.

Suggested Plan of Study – The suggested sequence of courses, listed by semester, the students could follow to lead to completion of the degree.

Transcript – A permanent record of the courses attempted, the grades received, and the courses from which withdrawn.

Transfer Credit – Courses which four-year colleges will accept as meeting part of their requirements.

Twilight Classes – Any class with a meeting time that begins after 3:00 p.m., i.e., 3:15 or 3:30.

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ACCOUNTING

ACCT 165 *QuickBooks (3-0)* **F** **3 Credits**
This course includes computerized double-entry accounting systems and concepts for service and mercantile business enterprises using current accounting software. Journals, ledgers and basic financial statements are covered. (Prerequisite: ACCT 201)

ACCT 201 *Principles of Accounting I (3-0)* **F,S,SU** **3 Credits**
This course includes double-entry accounting systems and concepts for business enterprises. Journals, ledgers and basic financial statements are covered.

ACCT 202 *Principles of Accounting II (3-0)* **F,S** **3 Credits**
This course is designed to provide an understanding of accounting information and its use for business decision making. The emphasis is on where accounting data is obtained, what kind of information is needed, and how it is used in the management process. (Prerequisites: ACCT 201) (2)

ACCT 217 *Financial Analysis (3-0)* **S** **3 Credits**
This course acquaints students with the concepts and methods of financial statement analysis and budgeting, with an emphasis on interpretation of accounting data for planning, controlling, decision making and budgeting. (ACCT201, Principles of Accounting I, and BSAD 125, Computer Applications)

ACCT 245 *Tax Accounting (3-0)* **F** **3 Credits**
This course acquaints students with the economic and social policy implications of the tax systems by which governments raise revenues. In addition, it familiarizes students with federal income tax as it applies to the individual. Students will learn how to prepare individual federal income tax returns.

ACCT 250 *Certified Bookkeeper Review (3-0)* **S** **3 Credits**
This is a capstone course for the accounting program and will prepare students for the Certified Bookkeeper Exam and leads to a national certification in bookkeeping through the American Institute of Professional Bookkeepers (AIPB). This certification is a practical way to demonstrate a high level of skill and experience to advance an accounting career. If you choose to be a candidate for the Certified Bookkeeper designation, you must pass the exam which consists of two test sittings offered at a third-party testing center plus two workbook exams offered onsite. Taking the Certified Bookkeeper national exam is optional and is not a requirement to pass this course. (Prerequisites: ACCT 202 or permission of instructor)

ACCT 290 *Accounting Clerk Internship (1-2)* **Upon Request** **2 Credits**
Supervised work experience allows the student to apply skills and office procedures in an actual office situation. Students will be required to gain experience in the area in which they are seeking a degree. Students will meet once a week in class and will work 80 hours during the semester in supervised work experience. (Sophomore level)

ADVANCED MANUFACTURING TECHNOLOGY

AMT 102 *Introduction to Industrial Electricity (2-2)* **F,S** **3 Credits**
This course is designed to provide a broad range of basic information and hands-on practice to beginning students in industrial electricity. Topics covered at the introductory level will include basic electrical circuits, electrical measurements, electrical relay control logic, residential and industrial wiring. (Corequisite: AMT 111)

AMT 104 *Electrical Motor Controls (2-2)* **F,S** **3 Credits**
This course is designed to provide a broad understanding of electric motor control operations. The topics covered will include

interpretation of schematics, diagnostic trouble shooting, electronic sensing devices, safety, three phase power, ladder logic and timer controls. (Prerequisites: AMT 102)

AMT 111 *Introduction to Industrial Safety (1-0)* **F,S** **1 Credit**
This course is designed to give the students the basic safety knowledge to obtain an "OSHA 10" card (OSHA = U.S. Occupational Safety and Health Administration). Students will access a selected on-line training site and complete the requirements to obtain OSHA 10 certification.

AMT 112 *Occupational Safety (1-3.5)* **3 Credits**
This course provides information and training to address the hazards found in renewable energy, construction, and industrial jobs. The course is designed to give the students the basic safety knowledge to obtain an "OSHA 10" card (OSHA = U.S. Occupational Safety and Health Administration). Topics include: working at heights, assisted and self-rescue, working around heavy equipment, first aid/CPR, and basic firefighting.

AMT 122 *Basic Machining (Manual) (2-2)* **F,S** **3 Credits**
This course is designed to provide a working knowledge of basic machine tools and their safe operation. Topics covered will include: shop safety, basic mathematics, blueprint reading, precision measurement, metal sawing, drills and drilling, bench grinding, engine lathes, and milling machines.

AMT 123 *Measurement and Print Reading (2-2)* **3 Credits**
This course is designed to provide a working knowledge of basic machine measurements and print reading. Topics covered will include: U.S. customary measurement, measurement conversion, print reading, drawings and dimensions, holes and fasteners, tolerance, control frames and specialized equipment.

AMT 124 *Computer Numeric Control (CNC) Programming (2-2)* **3 Credits**
This course is designed to provide a working knowledge of basic CNC programming. Topics covered will include: Machine tool types, cutting concepts, machinability, saw processes, CNC operator panel, HMI panel, CNC program structure, monitoring and troubleshooting machines.

AMT 125 *Computer Numeric Control (CNC) Milling (2-2)* **3 Credits**
This course is designed to provide a working knowledge of basic operation of CNC milling. Topics covered will include: Milling machines, tooling, work holding, manual control and program execution.

AMT 126 *Computer Numeric Control (CNC) Turning (2-2)* **3 Credits**
This course is designed to provide a working knowledge of basic operation of CNC turning. Topics covered will include: Turning machines, turning operations, linear and circular interpolation. Students will be instructed on the components of and the proper operation of the lathe turning machine.

AMT 132 *Industrial Hydraulics (2-2)* **F,S** **3 Credits**
This course is designed to provide a broad range of basic information and hands-on practice to beginning students in manufacturing hydraulics. Topics covered will include hydraulic power systems, basic hydraulic circuits, principles of hydraulic pressure and flow, hydraulic speed control and pressure control circuits. Students will design, build, test, troubleshoot, and repair a typical hydraulic system. (Prerequisites: AMT 111)

AMT 142 *Manufacturing Mechanics (2-2)* **F,S** **3 Credits**
This course is designed to provide the students with basic knowledge of automated manufacturing power transmission and conveyance devices. Topics covered will include: belt drives, chain drives, bearing types, precision shaft alignment, types of seals, lubricants, product conveyance devices and gear reduction.

AMT 162 *F,S* **Industrial Process Control I (2-2)** **3 Credits**
 This course is designed to provide a broad understanding of Industrial Process Control as it relates to automated manufacturing. A commercially available hands-on trainer coupled with online course content will be used to cover industrial safety, interpretation of schematics, loop controllers, current to pressure converters, instrument calibration, and automatic control methods. (Prerequisites: AMT 102 or permission of instructor)

AMT 182 *F,S* **Introduction to Automated Robotics (2-2)** **3 Credits**
 This course is designed to provide a working knowledge of industrial robotics. Topics covered will include: robotic and industrial safety, applications, manipulators, end effectors and beginning programming examples. (Prerequisites: AMT 102)

AMT 204 *F,S* **Programmable Logic Controllers (2-2)** **3 Credits**
 This course is designed to provide a working knowledge of Programmable Logic Controllers (PLCs) with hands-on practice for students in the various technical programs. Topics covered will include: PLC operation, applications, configuration, programming examples, and troubleshooting. (Corequisites: AMT 102, AMT 104 or Permission of Instructor)

AMT 206 *F,S* **Programmable Logic Controllers II (2-2)** **3 Credits**
 This course is designed to provide advanced training in programmable logic controllers as they are used in industry to manage multiple automated processes. This is the second course covering programmable logic controllers (PLCs) and will provide a working knowledge of current industry applications. (Prerequisites: AMT 204 or Permission of Instructor)

AMT 284 *F,S* **Automated Robotic Programming (2-2)** **3 Credits**
 This course is designed to provide advance level knowledge of industrial robotic programming. Topics covered will include the utilization of special "teach pendant" accessories for remote programming, robotic axis interfacing, and program optimization relative to cycle times and other functions. Students will practice the interchange and calibration of various system components on a robotic trainer and modify "pick and place" programs using override function keys. This specialized training will give the students more advanced experience in the robotic field of study. (Prerequisites: AMT 182)

AMT 290 *F,S* **Manufacturing Internship (0-7.5)** **3 Credits**
 This course provides direct hands-on experience in a structured environment under the direct supervision of experienced tradesmen employed by a hosting organization. The course requires that 120 clock-hours be spent at the hosting location(s) during the term of study. (Prerequisites: Sophomore Standing (i.e. Completed 28 semester hours) or Permission of Instructor.)

INTC 197, 198, 199, 297, 298, 299
Topics in Industrial Technology (0-8 to 3-0) **1-3 Credits**
 This is a variable content course with areas of study that reflect current needs of individual students in the area of Industrial Technology. Topics are identified in the course description. (Prerequisite: Permission of instructor)

AGRICULTURE

For Veterinary Science Courses see Veterinary Technology

Poultry Science courses have a POSC prefix and are listed alphabetically in this section

AGEC 123 *F,S* **Principles of Agriculture Econ (3-0)** **3 Credits**
 This course is an introduction to fundamental principles of microeconomics with emphasis on application to agriculture; adjustment to forces by consumers, farmers and businessmen planning, producing, marketing, and consuming products. (Prerequisites: MATH 50 or placement scores that indicate a for

MATH 100 or higher)

AGEC 213 *F* **Farm Business Management (3-0)** **3 Credits**
 Economics and management principles are applied in this course to planning and operating agricultural farms and businesses. Consideration is given to decisions involved in the organization and operation of the business and the correct use of available information in making decisions. Attention is given to problems of labor management, mechanization, rental arrangements, contract farming and credit financing for different sizes and types of agricultural businesses. (Prerequisite: AGEC 123 or permission of instructor)

AGEC 223 *F,S* **Agriculture Computer Applications (2-2)** **3 Credits**
 This course covers computer use in the workplace with emphasis on agribusiness situations. Computer applications including word processing, spreadsheet, databases, and presentation managers will be covered. Also included will be accessing information through the Internet and World Wide Web, telecommunications, an introduction to web page design and other software appropriate to agribusiness.

AGMC 205 *F* **Agricultural Mechanics (2-2)** **3 Credits**
 This course provides students instruction in basic agricultural skills that are required in various occupational areas related to the production of agricultural commodities. The course will cover basic metal working, carpentry, electricity, plumbing, preventive maintenance, and combustion engine operation. This course is a prerequisite for Supervised Occupational Experience 212.

AGRI 105 *Upon Request* **Problems in Agriculture (1-0)** **1 Credit**
 This course provides an opportunity for students to participate in directed problems and research in an area of special interest from the field of agriculture business, ag engineering, crops, horticulture, soils and livestock.

AGRI 106 *Upon Request* **Problems in Agriculture (2-0)** **2 Credits**
 This course provides an opportunity for the students to participate in directed problems and research in an area of special interest from the field of agriculture business, ag engineering, crops, horticulture, soils and livestock.

AGRI 107 *Upon Request* **Problems in Agriculture (3-0)** **3 Credits**
 This course provides an opportunity for the students to participate in directed problems and research in an area of special interest from the field of agriculture business, ag engineering, crops, horticulture, soils and livestock.

AGRI 108 *Upon Request* **Problems in Agriculture (4-0)** **4 Credits**
 This course provides an opportunity for the students to participate in directed problems and research in an area of special interest from the field of agriculture business, ag engineering, crops, horticulture, soils and livestock.

AGRI 111 *F,S* **Ag Career Orientation (1-0)** **1 Credit**
 This course is required for all agriculture degree-seeking students within their first semester of enrollment at Crowder College. Transfer students that have successfully completed a similar college orientation course elsewhere or have a cumulative grade point average of 2.0 on a minimum of 12 credits are exempt from this course. This course is designed to provide students with information they will need to function as a Crowder College student, as well as career exploration and the identification of personal short and long term goals the student will need to be successful.

AGRI 123 *Upon Request* **Agriculture Chemicals (3-0)** **3 Credits**
 This course will introduce principles of the safe use, handling, and storage of chemicals that are needed in the production and storage of plant and animal products, along with the impact of agricultural chemicals on the environment.

AGRI 190 *World Food and Society (3-0)* **F,S** **3 Credits**
A study of economic issues in international agriculture including the world food problem, agricultural development, agricultural and food trade and policy, food production and distribution and its relationship to societal advancements in developed and developing nations. (Prerequisite: ENGL 101)

AGRI 202 *Agriculture Capstone (2-0)* **S** **2 Credits**
This course is designed for all agricultural majors with emphasis on job placement. Areas of discussion include goal setting, leadership development, human relations, résumé development, interview skills development, making transitions, team dynamics, and exit interviews.

AGRI 204 *Internship in Agriculture (0-0) (180 contact hours)* **4 Credits**
The student will receive on-the-job experience in a designated training site. The student will apply his or her training in an occupational setting, applying previous learned skills and knowledge to the work place. (Prerequisite: AGRI 202 or permission from instructor)

AGRI 212, 222 *Supervised Occupation Experience (SOE) (1-0)* **1 Credit**
Students majoring in Agri-Business or Farm Management must enroll in one credit hour SOE experience per semester. Those without a part-time job in their field of training may get SOE credit on the college farm with 40 clock hours of work experience per semester.

AGRI 223 *Public Relations in Agri-Business (3-0)* **S** **3 Credits**
This course addresses the principles and techniques used to create and maintain public good will and acceptance are analyzed. Emphasis is placed on how business functions in the interests of society, and on the process of creating a favorable image in the public mind.

AGRI 233 *Travel Seminar in Agriculture (0-6)* **3 Credits**
This course is for all agriculture majors with an emphasis in exposing students to a broad spectrum of agricultural production, processing, and marketing outside of the four-state region. The course is comprised of a week of travel to a predetermined region of the U.S. and focuses on the major agricultural activities found in that region. Students are required to keep a daily journal of the seminar and after seminar, complete a written summary based on the journal. Course will be graded as a "pass" or "fail" only.

AGRI 299 *Topics: Travel Credit (0-6)* **3 Credits**
This class provides students the opportunity to see a variety of production, processing and marketing agricultural strategies not found in the Four State area. Students will be travelling from 7 to 12 days. They are required to research and write a paper on assigned topics determined by the region which will be toured. A daily journal is required of the travel time as well as a summary paper to be written after the travel is completed. Travel may include national and/or international destinations. Course will be graded as a "pass" or "fail" only. (Prerequisite: AGRI 233 or permission of the instructor)

AGRN 113 *Crop Science (2-2)* **F,S** **3 Credits**
This course provides students with principles of production and management of various grain and forage crops. The nature, importance and ecology of various crop plants are discussed. The laboratory includes identification and study of plants and plant parts.

AGRN 121 *Crop Evaluation (0-2)* **S** **1 Credit**
Students become proficient in crop, weed, and disease identification, seed analysis, and grain grading through extended lab experience. (Prerequisite: AGRN 113 or **permission of the instructor**)

AGRN 214 *Fundamentals of Soil Science (3-2)* **F,S** **4 Credits**
This course presents basic concepts of all aspects of soil science including: composition and genesis; physical, chemical, and biological properties; soil water; classification and mapping; soil conservation and management practices; soil fertility and productivity (liming, nature and use of fertilizers and manures, and soil testing). It also introduces the relationship of the soil to current concerns such as environmental and water quality in both agriculture and non-agricultural land uses.

AGRN 221 *Soil Evaluation (0-2)* **S** **1 Credit**
Soil Evaluation is a field-laboratory oriented course that focuses on the techniques used to (1) describe soil morphology and site and profile characteristics, (2) make land use interpretations based on soil characteristics, and (3) classify soils. (Prerequisite: AGRN 214 or permission of the instructor)

AGRN 223 *Grain Crops (3-0)* **3 Credits**
This course is a detailed study of the botany, origins of domesticated types, cultivation, adaptation, distribution, production practices and utilization of cereal grain crops. (Prerequisite: AGRN 113)

AGRN 243 *Forage Crops (3-0)* **3 Credits**
This course is a study of the major crops grown for forages and their identification, culture, management, preservation and utilization. (Prerequisite: AGRN 113)

ANSC 101, 121 *Livestock Selection (0-2)* **S** **1 Credit**
Students practice judging: oral and written discussions on beef cattle, dairy cattle, swine, sheep and horses for competition. (Prerequisite: Permission of the Instructor)

ANSC 114 *Animal Science (3-2)* **F,S** **4 Credits**
This course is an introduction to the livestock industry. Fundamental and essential concepts of livestock production, selection and its relation to production, types, market classes, and grades of cattle, swine, sheep and goats.

ANSC 153 *Beef Cattle Production (2-2)* **S** **3 Credits**
Students will learn breeding, feeding, management and marketing of commercial and seed stock beef cattle. (Prerequisite: ANSC 114 or permission of instructor)

ANSC 180 *Introduction to Veterinary Science (2-0)* **F,S** **2 Credits**
This course will begin with a brief study of the professions of veterinary medicine. Basic cell structure, tissue types, and body systems will then be covered, with practical application to common animal diseases. Animal hospital procedures and animal handling will be introduced. This course will serve as preparation for those interested in working in veterinary medicine or having an interest in application to the Veterinary Technology program at Crowder College or to a college of veterinary medicine to pursue a doctorate degree. (Prerequisite: Taking BIOL 101 or 110 prior to or at the same time as taking this course is recommended)

ANSC 203 *Meat Science and Products (1-4)* **F** **3 Credits**
This course covers the processing, grading, inspection, preservation, nutritive value and economical value of meats and meat products.

ANSC 213 *Feeds and Nutrition (3-0)* **S** **3 Credits**
Students will learn the principles of animal nutrition, feed composition and formulation of balanced livestock rations and feeding of farm animals, including the various feed nutrients and their functions, digestion, and metabolism.

ANSC 223	F	Upon Request
Farm Animal Health (3-0)	3 Credits	1 Credit
This course is designed to explain the role of animal scientists, veterinarians and farm managers in the control and prevention of farm animal diseases and parasites. It also provides an understanding of different types of diseases, their causes, identification, diagnosis and treatment of sick animals. (Prerequisite: ANSC 114)		
ANSC 232	F	Upon Request
Artificial Insemination and Reproduction (2-2)	3 Credits	3 Credits
This course provides practical application of artificial insemination in cattle. This covers structure and function of the reproduction system of domestic animals, semen handling, processing and preservation. (Prerequisite: ANSC 114 or permission of instructor)		
ANSC 233	S	S
Horse Science (3-0)	3 Credits	3 Credits
This course is designed to introduce the horse industry and to study fundamental problems and essential concepts of horse production, brood mare management, selection and judging of horses.		
Poultry Science courses have POSC prefix and are listed alphabetically in this section		
HORT 101	Upon Request	S
General Horticulture (3-0)	3 Credits	
This course surveys the general field of horticulture with emphasis on the growth and fruiting habits of horticulture plants. Principles and practices of propagation, fertilization, pest control, pruning and landscaping, turf planting, care and culture of fruit, vegetables, and ornamental crops are included.		
HORT 103	Upon Request	S
Floriculture (2-2)	3 Credits	
This course covers production and management of greenhouse floriculture crops and herbaceous landscape plants with principles and practices of floriculture design and marketing. Basics guidelines and principles of floral design are discussed including; balance, composition, harmony, focal point, proportion, line, rhythm, texture, form, space, and color.		
HORT 113	S	F,S
Greenhouse Management (1-4)	3 Credits	3 Credits
This course focuses on factors involved in site selection, construction and management of greenhouses for the production of horticulture crops.		
HORT 204	Upon Request	F,S
Nursery Management/Landscape and Design (3-2)	4 Credits	3 Credits
General principles and practices involved in the commercial production, management and marketing of landscaped plants and the fundamental principles of landscape design with practical exercises in planning and preparing master planting plans and cost estimates for the home grounds. Field trips will be required.		
POSC 101	Upon Request	F,S
Poultry Judging & Selection I (0-2)	1 Credit	3 Credits
This course is an introductory training of students to judge live chickens and turkeys, ready to cook chickens and turkeys, and interior and exterior quality of eggs.		
POSC 104	Upon Request	Community Health Worker (7-2)
Introduction to Careers in Poultry Science (0-4)	2 Credits	9 Credits
This course allows students to become familiar with career opportunities associated with the poultry industry, the allied poultry industry, as well as regulatory and research entities. This class includes field trips, lectures, guest speakers, interviews, oral presentations, and written reports. (Prerequisite: ANSC 114)		
POSC 105	Upon Request	Upon Request
Avian Biology (2-0)	2 Credits	1 Credit
In this course, students will be introduced to the biological sciences associated with poultry. Topics will include avian origin, types of domestic poultry, basic anatomy/physiology, poultry care/husbandry, and behavior. This course will serve as a foundation for poultry production classes. (Prerequisite: ANSC 114 or Permission of Instructor)		

ALLH 130**Basic Pharmacology (3-0)**

This course discusses current medications being used and the mechanism of action. Discussion of the way medications are absorbed, metabolized, distributed, and excreted will be included. The student will review the physiology of major body systems and explore the interaction of medications with individual systems

3 Credits**ART & DESIGN****ART 101****Art Appreciation (3-0)**

This course is a survey of major concepts in the visual arts and their relation to the societies that produced them. Art Appreciation is an introduction to the history of art, contemporary art, art theory, artworks, media, and creative processes. The student will develop an increased appreciation for the visual arts, the usage of media as a means of communication, and the parallel relation to specific styles, periods and cultures. This course partially fulfills Humanities general education requirements. (Will NOT satisfy core for Art & Design majors)

F,SU**3 Credits****ART 103****Introduction to 2-D Design (2-4)**

This comprehensive visual arts foundation course introduces 2-D design theory. The studio and lecture presents the elements of composition, principles of organization and color theory. Contemporary and historic models of expression are explored with an emphasis on creativity. (Required core for Art & Design majors)

S**3 Credits****ART 104****Introduction to 3-D Design (2-4)**

This comprehensive visual arts foundation course introduces three-dimensional design theory. The studio and lecture course presents the elements of art and principles of design as applicable to three-dimensional forms. The aesthetics of contemporary and historic models of expression are explored with an emphasis on creativity. (Required core course for Art & Design majors)

F**3 Credits****ART 105, 205****Topics in Art (1-3)**

Variable content, appropriate to student needs, is included in this elective course. Lectures and/or studio projects in the fields of art history, computer art, design, drawing, fibers, graphic design, ceramics, sculpture, painting, and current art subjects may be used. (This course may not be used to fulfill a major in art requirement. Consult the registration schedule for specific topics when class is offered) A course fee may apply.

F**3 Credits****ART 106****Drawing I (2-4)**

Drawing I is a beginning level, fundamental art department course investigating a variety of media, techniques and subjects. The course explores perceptual and descriptive possibilities with consideration to drawing as a developmental process as well as an end in itself. (Required core for Art & Design majors)

F,S**3 Credits****ART 107****Painting I (2-4)**

Painting I highlights composition and visual concepts through historical and contemporary applications. Visual elements and design principles are investigated in directed studies, which include the still life, landscape, portrait, abstract, and non-objective concepts. Drawing and design skills are emphasized. (Required core for Art & Design majors)

3 Credits**ART 110****Ceramics I (2-4)**

This course introduces Ceramics through hand-built and wheel-thrown methods of construction. Clay and glaze preparation, construction techniques, and use of the potter's wheel are emphasized. The historic and theoretic applications of clay design and ceramics as a fine art medium are explored through sculptural and functional applications. (Required core for Art & Design majors)

F,S**3 Credits****ART 111****Sculpture I (2-4)**

Sculpture I introduces the fundamental development of three-dimensional design forms. Sculptural and environmental relationships are explored. Expressive concepts are encouraged with various media and techniques. (Required core for Art & Design majors)

S**3 Credits****ART 119****Printmaking I (2-4)**

Printmaking I examines the technical processes, applications, and avenues of creative expression inherent to the methods of monotype, relief, intaglio, and mixed media printmaking. These distinctive procedures revolve around processes of manual printing; in black and white, as well as in color, through directed projects and personal experimentation. The historic, theoretic, and contemporary applications of printmaking as a unique art form are investigated and discussed alongside the physical production of fine art prints. Drawing, design principals, craftsmanship, and conceptual development are strongly emphasized and will be cultivated throughout all stages of the course. (Prerequisite: ART 103 & ART 106 are recommended)

F**3 Credits****ART 206****Drawing II (2-4)**

Drawing II is an intermediate level fundamental art and design course investigating a variety of media, techniques and subjects, exploring perceptual and descriptive possibilities with consideration of drawing as a developmental process as well as an end in itself. (Prerequisite: ART 106 or permission of the instructor)

F,S**3 Credits****ART 207****Painting II (2-4)**

Painting is continued with more advanced theories. Design problems include greater visual and conceptual complexity. Individual styles, personal drawing and painting techniques are emphasized in directed studies. Historical and contemporary aesthetics are explored through lecture, discussion and application. (Prerequisite: ART 107 or permission of the instructor)

S**3 Credits****ART 210****Ceramics II/Pottery (2-4)**

A continuation of Ceramics I, this course is offered to students who wish to continue their studies in ceramics and fine art. An advanced exploration of materials and processes associated with clay, glaze, and firing operations are emphasized. Students will develop their own concepts through advanced studies in aesthetic, historical, functional, and sculptural ceramic applications. (Prerequisite: ART 110 or permission of the instructor)

S**3 Credits****ART 211****Sculpture II (2-4)**

A continuation of sculptural form features more advanced three-dimensional design theories. Aesthetic mass and space relationships utilize a wide range of materials and techniques. (Prerequisite: ART 111 or permission of instructor)

S**3 Credits****ART 219****Printmaking II (2-4)**

This course focuses on the refinement and expansion of printing methods previously studied in Printmaking I. Potential techniques include: intaglio, relief, lithography, monoprint, monotype, digital, and mixed media practices. The historic, theoretic, and contemporary applications of printmaking as a unique art form are further investigated and discussed alongside the manual production of fine art prints. Students will begin to cultivate an individual and distinct approach to printmaking that supports their personal skill set and developed interests. Personal mark-making, design principals, craftsmanship, portfolio building, and conceptual development are strongly emphasized and will be cultivated throughout all stages of the course. (Prerequisite: ART 119)

S**3 Credits**

AUTOMOTIVE TECHNOLOGY

AUTO 114

Auto Fuel Systems (2-4)

F
4 Credits

A course designed for the automotive student or practicing automotive technician. Areas of study will include engine air/fuel requirements, tanks and lines, evaporative controls, fuel pumps and filters, air cleaners, electronic engine management and electronic fuel injection systems. Emphasis is given to emission control and electronic engine management systems. Practice is provided with live service and repair in the automotive laboratory.

AUTO 115

Engine Repair (2-6)

F
5 Credits

Engine Repair is designed to teach the student accepted methods of service and repair of the engine and related systems: engine overhaul, cooling, lubrication, fuel, ignition and exhaust systems. It includes instruction in tool selection, usage, maintenance, and shop safety. Practice is provided with live service and repair in the engine repair laboratory.

AUTO 124

Automotive Brake Systems (2-4)

S
4 Credits

A course designed for the automotive student or the practicing automotive technician. This course is a study of the principles involved in the braking systems of the modern automobile. Instruction is given in the skills needed to diagnose and repair braking systems. Special emphasis is given to hydraulic theory, computerized anti-lock systems and the use and application of modern test equipment in the diagnosis and repair of these systems.

AUTO 125

Automotive Electrical Systems (2-6)

S
5 Credits

This is a concentrated course in automotive electrical systems. Included is a review of basic electrical principles. Systems studied include charging, starting, ignition, lighting and fuel. Emphasis is given to electronic ignition and electronic fuel injection. Practice is provided with live service and repair in the automotive laboratory.

AUTO 197, 198, 199, 297, 298, 299

Topics in Automotive Technology (0-8 to 3-0)

1-3 Credits

This is a variable content course with areas of study that reflect current needs of individual students in the area of Automotive Technology. Topics are identified in the course description. (Prerequisite: Permission of instructor)

AUTO 214

Automotive Air Conditioning (2-4)

F
4 Credits

A course designed for the automotive technology student or the practicing automotive technician. A general introduction to the principles of automotive heating and air conditioning systems. The application of major components and control systems to automobiles is taught. Practical servicing, overhaul and replacement of units are emphasized, as are the recent changes in refrigerant and refrigerant handling.

AUTO 215

Automotive Emission Control Systems (2-6)

F
5 Credits

A course designed for the automotive technology student or the practicing automotive technician. The course is designed to give the student a working knowledge of, and practical experience in, the diagnosis and repair of automotive emission control systems. Emphasis is given to the electronic control systems found on later model vehicles. Practical experience is provided with live service and repair in the automotive laboratory.

AUTO 223

Automotive Power Train Systems (2-2)

S
3 Credits

A course designed for the automotive technology student or the practicing automotive technician. The theory of operation, design construction and malfunction diagnosis of power transmitting units: clutches, standard and automatic transmissions, drivelines, differentials and rear axles.

AUTO 224

Computerized Engine Control (2-4)

S
4 Credits

A course designed for the automotive technology student or the practicing automotive technician. A study in the principles of

computerized engine control, the course will help the student/technician to grasp the operation, diagnosis and repair of these complicated systems. The use and application of modern test equipment are taught in relation to their use in the diagnosis and repair of these systems.

AUTO 225

Automotive Suspension and Steering (2-6)

S
5 Credits

A course designed for the automotive technology student or the practicing automotive technician. This class is a study of the principles involved in the steering and suspension mechanisms of the modern automobile. Instruction is given in the skills needed to diagnose and repair steering and suspension components, replace steering and suspension system components and alignment of the wheels. The application of modern equipment is taught in relation to its use in the repair of these systems.

AUTO 240

Auto Tech Internship (0-3 to 0-13)

F,S
1-5 Credits

This phase of the student's training includes work experience in an automotive business with weekly discussions of various on-the-job problems. (One credit per forty work hours)

AUTO 241, 251

Problems in Automotive Technology (0-2)

1 Credit

This class provides an opportunity for students to participate in independent study and research in their field of special interest within automotive technology. (Prerequisite: permission of instructor) (One credit may be earned in each of two semesters)

BIOLOGY

BIOL 101

General Biology (3-2)

F,S,SSU
4 Credits

This introductory course explores the unifying principles of living organisms at the chemical, cellular, organismal, and population levels of organization, and includes cell structure and function, metabolism, genetics, evolution and ecology. Emphasis will be placed on core biological principles and human interactions with the natural world, as well as the possible outcomes of these interactions. A practical laboratory component emphasizes scientific investigating and supports lecture material. The course satisfies the life science general education requirement for the Associate of Arts degree.

BIOL 102

Biology Concepts (3-0)

F,S
3 Credits

This course is an introduction to the study of biology and covers principles of life science from the chemical basis of life to the interactions between living organisms and their environment. The unifying biological principles of cell structure and function, genetics, development, metabolism, reproduction, and ecology are addressed. This is a general education biology course comparable to BIOL 101, except it does not have a laboratory component. This course fulfills the life science general education requirement.

BIOL 110

General Zoology (3-4)

F
5 Credits

General Zoology introduces Kingdom Animalia, surveying the diversity of the kingdom with an emphasis on the classification and ecology of major animal groups. Animal-like Protists are also discussed. Topics include evolution, natural and sexual selection, symbiotic relationships, and environmental issues relating to members of the animal kingdom. General Zoology is a requirement for the biology degree. (Prerequisite: BIOL 101; or ACT Composite Score 23 or above; or two years high school biology)

BIOL 120

General Botany (3-4)

S
5 Credits

General Botany is an introduction to the discipline of botany and includes the study of plants, algae, fungi, and bacteria. Topics covered include principles of cell biology, fundamentals of metabolism, basic plant anatomy and physiology, plant taxonomy, a systematic survey of the plant kingdom, and ecology. An extensive laboratory section supports and extends the lecture material. General Botany is a requirement for the biology degree. (Prerequisite: BIOL 101; or ACT Composite Score 23 or above; or two years high school biology)

BIOL 152 Human Anatomy & Physiology I (4-2)	F,S,SU	
Human Anatomy and Physiology I is the first course in a two-course sequence, covering the unifying principles of biochemistry, cell structure and function, genetics, development, and metabolism, as well as the structure and function of various organ systems of the human body. A practical laboratory component emphasizes inter-relationships between systems and how the entire body functions as a unit. This course is required for students entering health-related professions but is not recommended for science majors. This course fulfills the life science general education requirements for some majors. (Prerequisite: College level reading, ACT score of 18, or comparable placement score)	5 Credits	
BIOL 220 General Microbiology (3-4)	F,S	F,S,SU
This course addresses topics ranging from the biochemistry and molecular biology of viruses and bacteria to the epidemiology of human disease. General Microbiology presents a wide-ranging examination of the microbial world, with emphasis on the relationship between microorganisms and human health and disease. This course covers principles of microbiology including basic biochemistry, cell structure and metabolism, the cultivation and control of microorganisms, a survey of the microbial world, epidemiology, and host defense. General Microbiology is a requirement for nursing, and pre-professional degrees. (Prerequisite: BIOL 101, BIOL110, BIOL 120, or BIOL 152)	5 Credits	3 Credits
BIOL 252 Human Anatomy and Physiology II (3-4)	F,S	F,S,SU
Human Anatomy and Physiology II is the second course in a two-course sequence, covering the structure and function of various organs systems of the human body not covered in the Human Anatomy and Physiology I. These include the nervous, cardiovascular, lymphatic, respiratory, endocrine, digestive, urinary, and reproductive systems. A practical laboratory component emphasizes inter-relationships between systems and how the entire body functions as a unit. This course is required for students entering health-related professions but is not recommended for science majors. (Prerequisite: BIOL 152)	5 Credits	3 Credits
BIOL 260, 261, 262, 263 Problems in Life and Health Sciences (1-0)	SDL, Upon Request	Upon Request
This course gives interested students an opportunity to work on a special project in Biology, typically beginning research. (Prerequisite: BIOL 220 or Permission of the instructor)	1 Credit	1-3 Credits
BUSINESS ADMINISTRATION		
BSAD 103 Professional Development (2-0)	S	S
This course is centered around the technique and personal qualities students need to find and keep the best possible job. We will also address common employer concerns and provide basic skills for success on the job. Course work centers primarily in the business fields. (Sophomore level)	2 Credits	3 Credits
BSAD 108 Personal Finance (3-0)	F,S,SU	F,S
Consumer finance topics are designed to provide students with guidance in handling such everyday problems as taxes, insurance, buying a home or automobile, borrowing, saving, social security, budgeting and estate planning.	3 Credits	3 Credits
BSAD 110, 111, 210, 211 Leadership Development and Service Learning (1-0)	1 Credit	3 Credits
This course provides leadership experience through participation in a student business organization. Students elect to participate in activities such as the following: individual or group research projects, panel discussion, and promotional projects. (May be taken each of four semesters)		
BSAD 115 Computer Concepts (3-0)	F	F,S
This course provides an introductory study of computer topics. Students completing this course will have a solid understanding of basic computer concepts, networking, using a personal computer, accessing information using the Internet, sending and receiving	3 Credits	3 Credits
email, managing computer files, and utilizing operating system tools. In addition, the student will be introduced to productivity software including word processing, spreadsheets, and presentation software. No prior experience with computers is assumed.		
BSAD 121 Business Mathematics (3-0)		F
This course teaches the application of business math used in accounting, finance, management, consumer economics, and retailing. Fundamental concepts addressed are interest, bank discount, payrolls, and markup. Also, the students will learn the touch system and principles of the electronic calculator.		3 Credits
BSAD 125 Computer Applications (3-0)		F,S,SU
Students are introduced to word processing, spreadsheet, and presentation applications. Learning is enhanced through the use of current business software and hands-on experience with PC-compatible computers. Students must have access to the version of Microsoft Office being used at Crowder College. This includes Word, Excel, and PowerPoint. Software used in this course is best suited within a Windows environment.		3 Credits
BSAD 130 Business Communications (3-0)		F,S
Effective communication techniques as applied in business correspondence and reports are taught in this course. (Prerequisite: ENGL 100 or higher)		3 Credits
BSAD 150 Introduction to Business (3-0)		F,S,SU
This course surveys American business enterprises. Emphasis is on the characteristics, functions and problems of modern business.		3 Credits
BSAD 197, 198, 199, 297, 298, 299 Topics in Business Administration (1-3)		Upon Request
A variable content course with topics that can change from semester to semester. Topics are identified by title in the class schedule. This course may be repeated if the topic is different to a total of six hours.		1-3 Credits
BSAD 218 Advanced Excel (3-0)		S
This course allows students to refine their skills in spreadsheet applications. Microsoft Excel will be used to teach advanced concepts in this software package. The course will include applying concepts to real life situations. (Prerequisites: BSAD 125)		3 Credits
BSAD 230 Business Law (3-0)		F,S
Business Law covers legal principles operative in common business situations, including the law of contracts, agency and business organization.		3 Credits
BSAD 236 Business Statistics (3-0)		F,S
Business Statistics addresses the collection, analysis, interpretation, and presentation of data related to business. Topics include measures of central tendency and dispersion, frequency distribution, hypothesis testing, and sampling distribution. Spreadsheet software will be utilized in analysis of a variety of application problems. (Prerequisites: MATH 135)		3 Credits
OA 215 Medical Terminology (3-0)		F,S
This course introduces and explains basic medical terminology. Roots, combining vowels, prefixes and suffixes are examined. Basic anatomy, spelling and abbreviations are included.		3 Credits

CERTIFIED MEDICAL ASSISTANT

MEDA 111 F,S Introduction to Medical Assisting (3-0) 3 Credits

This is an introductory course that provides a knowledge base for medical assistant's interaction with patients and other healthcare professionals in an ambulatory care setting, including entry level clinical care skills. This course covers basic principles of psychology and human growth and development; focuses on communication in the medical office/ambulatory care setting, and legal and ethical responsibilities in patient care and management. (Corequisites: MEDA 112, MEDA 113, MEDA 114, MEDA 115 & MEDA 116)

MEDA 112 F,S Dosage Calculation & Medication Administration (2-0) 2 Credits

This course focuses on applications of basic mathematical principles in the medical office/ambulatory care setting. This course also provides instruction in the application of basic concepts required for medication administration: choice of equipment, proper techniques, hazards and complications, patient care; performance of intramuscular, subcutaneous, and intradermal injections; preparation and administration of oral medications; immunizations. (Corequisites: MEDA 111, MEDA 113, MEDA 114, MEDA 115 & MEDA 116)

MEDA 113 F,S Medical Assisting Science I (3-0) 3 Credits

This course covers basic concepts of human anatomy and physiology as well as medical terminology related to the body as a whole and to each major body system. It covers basic characteristics of disease and methods of control. The course includes an overview of pharmacology and medications used for disease prevention and treatment. This course also covers the application of basic nutrition principles to personal well and disease prevention. (Corequisites: MEDA 111, MEDA 112, MEDA 114, MEDA 115 & MEDA 116)

MEDA 114 F,S Clinical Medical Assisting (3-0) 3 Credits

This course prepares the student to carry out clinical care procedures as an assistant to a physician in an ambulatory care facility setting. It also provides instructions in preparing for and performing routine and specialty medical office procedures, diagnostic tests, in-office/ambulatory surgical procedures, and follow-up care. (Corequisites: MEDA 111, MEDA 112, MEDA 113, MEDA 115 & MEDA 116)

MEDA 115 F,S Administrative Medical Assisting (2-0) 2 Credits

This course presents basic concepts and applications of computers and computer systems in administrative medical assisting practice. The course provides instruction in administrative medical assisting practice in the front office, including transcription of medical reports and documentation, basic coding, and maintaining patient records and accounts. (Corequisites: MEDA 111, MEDA 112, MEDA 113, MEDA 114 & MEDA 116)

MEDA 116 F,S Medical Assisting Clinicals (3-0) 3 Credits

This course provides an analytical approach to the correlation of theory and learned skills to practical experience in the delivery of quality patient care in the ambulatory healthcare setting. It provides clinical experience for the development of professional characteristics as a practicing Medical Assistant. (Corequisites: MEDA 111, MEDA 112, MEDA 113, MEDA 114 & MEDA 115)

CERTIFIED NURSING ASSISTANT

MUST BE 18 TO START COURSE

CNA 101 F,S CNA Techniques (5-0) 5 Credits

This course is a preparatory course to enable the student to work in a hospital, clinic, nursing home, or home health care setting providing basic nursing care. This course will introduce the student to the health care delivery system, health care team work, medical observation, documentation and reporting techniques, and patient

assessment. Certified nursing assistants (CNA), also known as nurse's aides, orderlies, patient care technicians and home health aides, work under the supervision of a nurse and provide assistance to patients with daily living tasks. (Co-requisite: CNA 105 and must be 18 years old to start course)

CNA 105 F,S CNA Clinical Experience (1-4) 3 Credits

The CNA 105 course is a clinical preparatory course to enable the student to gain experience in a hospital, clinic, nursing home, or home health care setting providing basic nursing care. This course requires 100 hours of clinical experience in the health care delivery system, health care team work, medical observation, documentation and reporting techniques, and patient assessment.

CNA 120 F,S Certified Medication Technician (4-0) 4 Credits

The Certified Medication Technician course is an expanded role of the Certified Nurse Assistant. This course is a preparatory course to prepare the individual for employment as a certified medication technician in an intermediate care or skilled facility. This course teaches skills in administration of non-parenteral medications that will qualify students to perform this procedure to assist licensed practical nurses or registered professional nurses in medication therapy. (Prerequisites: CNA 101; CNA 102 or Active CNA Certification; must be CNA for 6 months and have letter from director of nursing)

CHEMISTRY

CHEM 101 F,S Survey of Chemistry (3-2) 4 Credits

This course for non-science majors satisfies part of the general education science requirement. The scope of the course is quite broad with emphasis on descriptive rather than theoretical chemistry. Topics illustrating the impact of chemistry on society and aspects of chemistry applicable to everyday living are taken from inorganic, organic and biochemistry. Credit may not be earned for both CHEM 101 and CHEM 104.

CHEM 104 F,S Chemistry for Health Sciences (3-2) 4 Credits

This course for students planning to enter certain health fields satisfies part of the general education science requirement. The scope of the course is quite broad with emphasis on descriptive rather than theoretical chemistry. Topics are taken from inorganic, organic and biochemistry with emphasis on those concepts that have application in human health. Credit may not be earned for both Chemistry 101 and 104.

CHEM 106 F,S,SU Survey of Chemistry Essentials (3-0) 3 Credits

This course for non-science majors satisfies part of the general education science requirement. The scope is quite broad with emphasis on descriptive rather than theoretical chemistry. Topics illustrating the impact of chemistry on society and aspects of chemistry applicable to every day living are taken from inorganic, organic and biochemistry. Credit may not be earned for both chemistry 106, 101, and 104.

CHEM 111 F,S General Chemistry I (4-2) 5 Credits

This class emphasizes the fundamental principles of chemistry. It includes a study of atomic and molecular structure, chemical bonding, stoichiometry, gases, liquids, solids, changes of state, solutions, colloids, chemical equilibria and acid-base chemistry. General Chemistry I is required of all science and engineering majors. (Co-requisite: MATH 135 or 150; high school chemistry or its equivalent is recommended)

CHEM 112 F,S General Chemistry II (3-4) 5 Credits

A continuation of Chemistry 111, this course includes a study of oxidation reduction reactions, electrochemistry, thermodynamics, kinetics, nuclear chemistry, and a survey of inorganic chemistry. The laboratory includes qualitative analysis. (Prerequisite: CHEM 111)

CHEM 201 Quantitative Analysis (3-4)	Upon Request 5 Credits	workplace ethics and career readiness certifications and completed a professional resume for employment searches. (Prerequisite: COLL 105 or permission of instructor)
CHEM 221 Survey of Organic and Biochemistry (3-4)	5 Credits	F 2 Credits
This is an introductory course in organic and bio-chemistry. It will not satisfy the organic chemistry requirement for a chemistry major but would serve as a good preparatory course for other organic chemistry courses or for other majors which require only one semester of organic chemistry, such as some of the allied health majors as well as some agriculture majors. The student should have some previous chemistry such as Survey of Chemistry or General Chemistry I. The course consists of three hours of classroom work and four hours of laboratory work which emphasize scientific investigations and supports lecture material. (Prerequisite: CHEM 101, CHEM 104, CHEM 111, or permission of instructor)		This course guides students through employability skills and activities that are closely aligned with competencies outlined by the U.S. Secretary of Labor's Commission on Achieving Necessary Skills (SCANS). Advanced resume, cover letter, and job seeking activities are combined with networking, online connections for job searching, and interviewing skills. Employment paperwork such as initial employment paperwork, pay, benefits, taxes, and budgeting home expenses is addressed. Participation in local job fairs, informational interviews and job shadowing is required. Soft skills associated with advancement within career/technical/vocational employment are developed. (Prerequisite: COLL 105 and COLL 106 or permission of instructor)
CHEM 271, 272, 273 Topics in Chemistry	1-3 Credits	COMPUTER AND NETWORK SUPPORT <i>(offered only at Joplin)</i>
A variable content course with areas of study that reflect current issues. Topics are identified in the course schedule and prerequisites are spelled out in the syllabus. (Prerequisite: Permission of department)		CNS 101 Introduction to Electronics (2-2) 3 Credits
COLLEGE SKILLS		This course introduces the fundamental laws of scientific atomic structure, electricity and electrical safety. It builds upon those fundamentals by the study of Ohm's Law, current, voltage, resistance, power sources, and DC (direct current) measuring instruments. An introduction to complete series, parallel, and series-parallel circuits, the laws, mathematical formulas, and methods used to analyze these circuits. A study of how AC (alternating current) voltages and currents are generated, introducing the science of magnetism, and the effect of AC on electronic components such as inductors and capacitors. AC testing procedures will be emphasized.
COLL 101 College Orientation (1-0)	F,S,SU 1 Credit	CNS 111 PC Basics I (1-3) 3 Credits
Degree and certificate seeking students must complete COLL 101 in their first semester at Crowder, if required by the degree or certificate they have declared. Non-degree seeking students are not required to take COLL 101. However, if students become degree or certificate seeking and the degree or certificate requires the class, they will be required to successfully complete the course. Transfer students who have successfully completed an equivalent college orientation class at another institution or have a cumulative grade point average of 2.0 on a minimum of 12 credit hours earned after high school graduation are exempt from COLL 101. The course is designed to acclimate new students to the Crowder College environment, provide them with information they will need to function as a Crowder College student, and encourage further evaluation of their character. Recommend taking course on ground.		This course covers the fundamentals of computing and peripheral devices, and also provides an introduction to operating system concepts. Through hands-on labs, desktop learning tools, and extensive Internet-based research, students develop critical thinking and complex problem-solving skills.
COLL 104 Practical Communication (3-0)	F 3 Credits	CNS 112 PC Basics II (1-3) 3 Credits
Upon successful completion of this integrated communication class, students will demonstrate mastery of entry-level, workplace knowledge and skills in the areas of reading, writing, listening, and speaking. Credit earned in this course only applies toward the completion of specified certificate and degree programs. The course cannot be used as an elective in an AA or AS degree program.		This course addresses the software side of the computing device by focusing on the operating system, basic networking concepts, and PC security. The course also provides an introduction to selected additional concepts including troubleshooting methods, "help desk" or "call center" procedures, and ethical considerations in computer technology. (Prerequisites: CNS 111 or Permission of Instructor)
COLL 105 Technical Career Development I (1-0)	F,S 1 Credit	CNS 113 Introduction to Networks (2-2) 3 Credits
In this interactive and need-based course, students participate in an introductory series of discussions, simulations, and experiences to develop basic "soft skills" related to vocational/technical/trades programs. The term soft skills encompasses general "people skills," such as communication, teamwork, conflict management, and professionalism. The modules address crucial knowledge and skills for a global workforce that closely align with the competencies outlined by the U.S. Secretary of Labor's Commission on Achieving Necessary Skills (SCANS).		The Introduction to Networks (ITN) course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple local area networks (LAN), perform basic configurations for routers and switches, and implement IP addressing schemes. (Corequisite: CNS 101, CNS 111 or permission of Instructor)
COLL 106 Technical Career Development II (1-0)	F,S 1 Credit	CNS 114 CCNA Network Switching, and Routing Essentials (2-2) 3 Credits
This course extends the soft skills addressed in COLL 105. Course activities closely align with competencies outlined by the U.S. Secretary of Labor's Commission on Achieving Necessary Skills (SCANS). The interactive modules connect the curriculum to the needs of a global workforce in the areas of employee positivity, reliability, professionalism, initiative, integrity, respect, and gratitude. Upon successful completion of the course, students will have earned		The Cisco Certified Network Associate (CCNA) Network Switching and Routing Essentials course will introduce the student to fundamental networking concepts and technologies. These online course materials will assist in developing the skills necessary to plan and implement small networks across a range of applications. The specific skills covered in each module are described at the start of each chapter. The course uses both online and hands-on lab experiences to introduce routing and remote access, addressing, and network services. It will also familiarize students with Virtual Local

Area Networks (VLAN) and Inter-VLAN Routing. (Prerequisite: CNS 113)

CNS 115

Cisco Networking I (1-3)

3 Credits

The Cisco Certified Network Administration (CCNA) Introduction to Networks course will introduce the student to fundamental networking concepts and technologies. These online course materials will assist in developing the skills necessary to plan and implement small networks across a range of applications. The specific skills covered in each chapter are described at the start of each chapter. Online materials coupled with hands-on lab experiences will assist students in developing the skills necessary to plan and implement small networks across a range of applications.

CNS 116

Cisco Networking II (1-3)

3 Credits

The Cisco Certified Network Administration (CCNA) Routing and Switching (R&S) Essentials course will introduce the architecture, components, and operations of routers and switches in a small network. In this course, you will learn how to configure a router and a switch for basic functionality. These online course materials will assist in developing the skills necessary to plan and implement small networks across a range of applications. The specific skills covered in each chapter are described at the start of each chapter. The course uses both online and hands-on lab experiences to provide an introduction to routing and remote access, addressing, and network services. It will also familiarize students with servers providing email services, web space, and Authenticated Access. (Prerequisite: CNS 115)

CNS 122

VMware VSphere: Install, Configure, Manage (1-3) 3 Credits

This course will introduce the students to intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere® 6.5, which includes VMware ESXi™ 6.5 and Vmware vCenter Server® 6.5. This course prepares students to administer a vSphere infrastructure for an organization of any size. It is the foundation for most other VMware technologies in the software-defined data center.

CNS 126

Game Development Through Python (2-2)

3 Credits

This course provides students coding experience in the context of computer games. Students will be trained on the foundations of game design concepts and protocols in order to better understand different types of games and the processes game designers use to create them. The course incorporates fundamentals programming concepts using the Python language. (Prerequisite: MATH 100 or higher is recommended)

CNS 131

Introduction to Gaming Programming (2-2)

3 Credits

This course will introduce the students to basic programming concepts to be applied to gaming development. This course will give the students the fundamentals of C++ from a game programming perspective. Students will start with beginning C++ and work their way through to game programming assuming no previous programming experience. Students will work with different game programs and learn new concepts in each chapter. The course will end with a final game project drawing together a comprehensive collection of the course. (Prerequisite: CNS 121 or permission of Instructor)

CNS 141

Programming for Gaming (2-2)

3 Credits

This course will introduce students to the fascinating world of game programming for Windows using Visual Studio and DirectX. Students will enhance their basic understanding of the C++ language and be exposed to a solid introduction to DirectX programming. Students learn the basics of making sprite-based games. This course will provide step-by-step instruction on game creation. Students will learn how to take game ideas from concept to reality using today's standard professional game-creation tools. (Prerequisites: CNS 131)

CNS 149

Cybersecurity I (2-2)

3 Credits

This course introduces the fundamentals of Network security by examining the current challenges in computer security and why security is so difficult to achieve. This course will also examine fundamental attacks including malware, viruses, Trojans and botnets. The students will be introduced to attacks that target server-side and client-side web applications. Students will explore cryptology and its uses in the security realm. This course includes instructions on understanding common network protocols and employing network design principles. Students will experience securing three popular types of network applications. IP telephony, virtualization, and cloud computing.

CNS 217

Cisco Networking III (1-3)

3 Credits

The Cisco Certified Network Administration (CCNA) Routing & Switching (R&S) Scaling Networks course will introduce the student to the architecture, components, and operations of routers and switches in a larger and more complex network. Students will learn how to configure routers and switches for advanced functionality. These online course materials will assist in developing the skills necessary to plan and implement small networks across a range of applications. The specific skills covered in each chapter are described at the start of each chapter. Online materials coupled with hands-on lab experiences assist the student in developing skills necessary to use protocols and to maximize enterprise Local Area Network (LAN)/Wide Area Network (WAN) performance. (Prerequisite: CNS 116)

CNS 218

Cisco Networking IV (1-3)

3 Credits

The Cisco Certified Network Administration Routing & Switching Connecting Networks course will introduce the students to the Wide Area Network (WAN) technologies and network services required by converged applications in a complex network. In this course, you will learn the selection criteria of network devices and WAN technologies to meet network requirements. These online course materials will assist in developing the skills necessary to plan and implement small networks across a range of applications. (Prerequisite: CNS 217)

CNS 221

Desktop Game Development (2-2)

3 Credits

This course will instruct students to build successful games with the Unity game development platform. Students will use the powerful C# language, Unity's intuitive workflow tools, and a state-of-the-art rendering engine to build and deploy desktop, and console games. This course will provide students the knowledge to develop the skills to go from application coder to game developer. Each sample project illuminates specific Unity features and game development strategies. Students will have hands-on skill based training in settings to create graphically driven 2D and 3D game applications. (Prerequisites: CNS 141 and MATH 100 or higher)

CNS 222

VMware VSphere: Optimize and Scale (1-3)

3 Credits

This course will instruct the students on advanced skills for configuring and maintaining a highly available and scalable virtual infrastructure. Through a mix of lecture and hands-on labs, students will configure and optimize the VMware vSphere® 6.5 features that build a foundation for a truly scalable infrastructure, and students will discuss when and where these features have the greatest effect. This course will deepen your understanding of vSphere and how its advanced features and controls can benefit any organization.

CNS 231

Android Mobile Game Development (2-2)

3 Credits

This course provides a progressive, hands-on guide to developing highly interactive and complex Android games from scratch. Student will learn all the aspects of developing a game using a space shooter game as the example that will evolve with them through the course. This course instructs the students on frame-by-frame animations and resource animations. Students will create responsive menus and dialogs and explore the different options for playing sound effects and music in Android. The course will provide training on the basics of creating a particle system. (Prerequisites: CNS 141)

CNS 241**iOS Development for Gaming (2-2)****3 Credits**

Design games for iOS, Watch OS and TVOS Apple platforms in Swift, using Apple's built-in 2D game framework: SpriteKit. Students will be instructed through a series of mini-games and challenges, to advance their knowledge game development. Students will make complete mini-games, from an action game to a puzzle game to a tower defense game. (Prerequisites: CNS 141 & MATH 104 or higher)

Permission of Instructor)

CNS 249**Cybersecurity II (2-2)****3 Credits**

This course enhances student's security knowledge as a second course in cyber security. This course will introduce the students to attacks on wireless devices and the security procedures. Students will be instructed on different types of mobile devices and the associated security risks. Students will be introduced principles and practices of access control by examining access control terminology, the standard control models, and their best practices. Students will receive instructions on authentication and the secure management of user accounts that enforces authentication. Students will explore disaster recover, environmental controls, incident response procedures, and forensics, security policies and the different types of policies that are used to reduce risk. (Prerequisites: CNS 112 and CNS 115)

CNS 250**Linux Network Administration (1-3)****3 Credits**

This course covers the installation, configuration, and maintenance of a Linux-based operating system in a networked, multi-user environment. Primary focus will be on user/group management, file system utilization, system security, and utilization of various popular Linux server functionalities.

CNS 251**CCNA Enterprise Networking, Security, and Automation (1-3)****3 Credits**

The Enterprise Networking, Security, and Automation (ENSA), will take the skills and knowledge that students learned in ITN and SWRE and apply them to wide area networks (WANs). WANs are large, complex networks that require advanced understanding of network operation and security. ENSA also introduces students to two game-changing areas of networking: virtualization and automation. By the end of this course students will be able to configure, troubleshoot, and secure enterprise network devices. The student will be versed in application programming interfaces (APIs) and configuration management tools that make network automation possible. When students have completed ENSA, they will have gained the practical experience needed to prepare for the certification exam. Students will also have the skills required for associate-level roles in the Information and Communication Technologies (ICT) industry. (Prerequisite: CNS 114)

CNS 259**Intro to PowerShell (2-2)****3 Credits**

Command line has always been the way to manage a Windows computer without interacting with the Graphical User Interface. PowerShell is the modern way of managing Windows (now with limited management of MacOS and Linux) and lives up to its name by introducing hundreds of commandlets and through the ease of use to manage remote systems. This course will provide instruction on being able to use commands and create scripts that can help automate and speed up processes within IT. (Prerequisite: CNS 112)

CNS 271, 272, 273**Topics in Computer and Network Support Technology****(0-8 to 3-0)****1-3 Credits**

This is a variable content course with areas of study that reflect current needs of individual students in the area of Computer and Support Technology. Topics are identified in the course description. (Prerequisite: Permission of instructor)

CNS 275**Advanced Microsoft Server (1-3)****3 Credits**

This course provides advanced instruction in the design, setup, equipping, and maintenance of a network server center. Focus will be on the selection of the various types of network server computers, peripheral devices, and software necessary to provide the services required by both network administrators and users. (Prerequisites:

CNS 285**Computer Network Support Internship (0-10)****4 Credits**

This course provides direct hands-on experience in a structured environment under the direct supervision of experienced business/industry professionals employed by a hosting organization. The course requires that 160 clock-hours be spent at the hosting location(s) during the term of study. (Prerequisites: Permission of Instructor)

COMPUTER PROGRAMMING

Students are expected to schedule additional time outside of class in the computer lab to complete assignments.

COMP 111**Introduction to Computer Science (3-2)****4 Credits**

Instruction is given on the techniques of structured and object-oriented programming. The class assumes no prior programming experience. It is required for Pre-Engineering and Math majors and is recommended for students in any academic or career vocational major who need to have skills on how a computer can be programmed as a problem solving tool. The course topics will include: elementary syntax, functions, classes, objects, control structures, user defined data types, arrays and data structures. (Prerequisite: MATH 134 or MATH 135)

COMP 271, 272, 273**Topics in Computer Science****1-3 Credits**

A variable content course with areas of study that reflect current issues. Topics are identified in the course schedule and prerequisites are spelled out in the syllabus. (Prerequisite: Permission of department)

CONSTRUCTION

CONS 105**Introduction to Construction Technology (2-2)****3 Credits**

This course is built around NCCER's (National Center for Construction Education and Research) introductory "Core" material and is a pre-requisite for obtaining NCCER registration. As such, it is designed to provide a broad range of introductory information and hands-on practice to beginning students in construction technology. Topics covered at the introductory level include safety, shop math, hand tools, power tools, blueprints, rigging, basic communication, and basic employment skills.

CONS 108**Energy Conservation Techniques (2-2)****3 Credits**

Students will learn sensible improvements for new and existing buildings. These improvements are designed to increase the energy efficiency, livability and sustainability of any structure. Students will also be given an understanding of the economics of energy sources such as solar, wind, hydro and nuclear power.

CONS 110**Introduction to Construction Safety (2-2)****3 Credits**

This course offers an introduction into the field of construction safety for commercial job sites, residential job sites, and other construction settings. This class will give students basic safety standards (per OSHA) and hazards encountered on job sites. This class will also introduce students to emergency preparedness and action on the job site. Students will be required to complete OSHA 10 certification as part of the course.

CONS 112**Carpentry Fundamentals (2-2)****3 Credits**

This course is based on the NCCER (National Center for Construction Education and Research) Level 1 Carpentry Fundamentals curriculum. It is designed to provide a broad range of information and hands-on practice to students in the fundamentals of construction. Topics studied include trade orientation, building materials, fasteners/adhesives, hand and power tools, reading plans/ elevations, introduction to concrete, reinforcing materials, floor systems, windows and exterior doors, wall/ceiling framing, roof framing, and basic stair layout. (Prerequisite: CONS 105 or Permission of Instructor)

CONS 116 Framing and Finishing (2-2)	S	3 Credits	
This course is based on the NCCER (National Center for Construction Education and Research) Level 2 Carpentry Fundamentals: Framing and Finishing and is designed to provide a broad range of information and hands-on practice to students in the fundamentals of construction. Topics include roofing applications, thermal/moisture protection, exterior finishing/siding, and cold-formed steel framing, drywall installation/finishing, doors/door hardware, suspended ceilings, trim for windows, doors, floors and ceilings, and cabinet fabrication/ installation. (Prerequisite: CONS 105 or Permission of Instructor)			
CONS 121 Masonry (2-2)	S	3 Credits	
This course is based on the NCCER's (National Center for Construction Education and Research) Level 1 Masonry curriculum. Topics covered in the course include introduction to masonry and masonry units, masonry tools/equipment, measurements, basic installation, drawings/specifications, and mortar.			
CONS 131 Plumbing (2-2)	F	3 Credits	
This course is based on NCCER's (National Center for Construction Education and Research) Level 1 Plumbing curriculum. Topics covered in this portion include an introduction to the plumbing profession, safety practices, plumbing tools/math/drawings, and working with plastic pipe and fittings. Also included are copper/cast-iron/carbon steel/stainless piping/fittings, fixtures/faucets, DWV (Drain, Waste, and Ventilation) systems, and water distribution systems.			
CONS 141 Electrical (2-2)	F	3 Credits	
This course is based on the NCCER's (National Center for Construction Education and Research) Level 1 Electrical curriculum. Topics covered include an introduction to the electrical trade, safety, basic circuits/theory, introduction to the NEC (National Electrical Code), device boxes and conduit bending/installation, raceways/fittings, conductors/cables, electrical drawings, residential and commercial services, test equipment and materials and labor estimating.			
CONS 150 Concrete and Masonry (2-2)	S	3 Credits	
This course is based on the NCCER's (National Center for Construction Education and Research) Level 1 Masonry and Level 3 Carpentry Fundamentals curriculum. Topics covered in the course include introduction to masonry and masonry units, masonry tools/equipment, measurements, basic installation, drawings/specifications, mortar, rigging practices/equipment, concrete properties/reinforcement, handling/placing concrete, trenching, excavating, foundations and slab-on-grade, vertical formwork, horizontal formwork, and tilt-up wall panels. The course is designed to provide a broad range of information and hands-on practice to students in construction technology relative to concrete forms and placement, and masonry work.			
CONS 151 Introduction to National Electrical Code (3-0)	3 Credits		
This course will introduce the students to the National Electric Code (NEC). The students will learn the minimum requirements for safe electrical installations in a single, standardized source. Students will be instructed on the use and layout of the NEC. This course explores Articles of the NEC including definitions and basic initial electrical requirements.			
CONS 174 Carpentry Forms (2-2)	S	3 Credits	
This course is based on the NCCER's (National Center for Construction Education and Research) Level 3 Carpentry Fundamentals and is designed to provide a broad range of information and hands-on practice to students in construction technology relative to concrete forms and placement. Topics covered include rigging practices/ equipment, concrete properties/reinforcement, handling/placing concrete, trenching, excavating, foundations and slab-on-grade, vertical formwork, horizontal formwork, and tilt-up wall panels. (Prerequisite: CONS 105 or Permission of Instructor)			
CONS 210 Print Reading for Construction (2-2)	S	3 Credits	
This course introduces the concepts of navigating, analyzing, and utilizing construction prints. The course will cover civil, architectural, structural, mechanical, plumbing, and electrical prints. Students will analyze a variety of print types seen on job sites and investigate various industry standards within the construction field.			
CONS 232 Site Layout (2-2)	S	3 Credits	
This course is based on the NCCER's (National Center for Construction Education and Research) Level 1 Site Layout materials and is designed to provide extended information beyond the core classes and hands-on experience to students in the fundamentals of site layout. Topics covered include distance measurement and leveling, measurement conversion, proper tool/equipment handling, surveying math/operations, basic data collection/computer entry skills, concrete properties, and means/methods.			
CONS 245 Project Management (2-2)	S	3 Credits	
This course is based on the NCCER's (National Center for Construction Education and Research) project management materials to expand front-line supervision concepts by incorporating topics relating to the broader scope of project management. Topics covered include introduction to project management, safety, interpersonal skills, issues/resolutions, and construction documents/planning, cost estimation/ control, scheduling, resource/quality control, and continuous improvement.			
CONS 251 National Electric Code Wiring Methods (3-0)	3 Credits		
This course continues to introduce of the National Electric Code (NEC). The students will learn the requirements for wiring methods and materials. Students will be instructed on the use and layout of the NEC wiring methods. This course will explore the articles of the NEC including wiring methods, cables, conduit and wireways.			
CONS 290 Construction Internship (0-8)	F,S	3 Credits	
Provides direct hands-on experience in a structured environment under the direct supervision of experienced tradesmen employed by the hosting organization. Students are required to provide regular reports of work tasks attempted/completed as well as the overall time spent at the host's work location. Hosts agree to provide a safe, supervised work environment with students addressing tasks directly related to energy efficient building and the specific option being pursued by the student: General Construction, Construction Management, or Alternative Technologies. At the end of the internship, hosts will complete and submit a written evaluation of the student's performance. This course requires that 160 clock-hours be spent at the hosting location(s) during the term of study. (Prerequisite: Sophomore standing (> 28 Hours) or Permission of Instructor)			
CRIMINAL JUSTICE			
CJ 101 Introduction to the Criminal Justice System (3-0)	F,S	3 Credits	
This course is an introduction to the history, nature, structure, and function of the criminal justice system in the United States. An examination of the various aspects of the administration of justice systems, including law enforcement, courts and correctional agencies, including probation and parole, will be made.			
CJ 102 Crime Scene Processing (2-2)	F	3 Credits	
This Course covers the actions of the initial responding officer at the crime scene. Students will learn the nature of physical evidence, processing methodology, basics in crime scene assessment, photography, sketching, mapping, and proper documentation techniques. Students will be required to demonstrate they can properly collect evidentiary material that can withstand the scrutiny of the legal system. This is the practical portion of criminal investigation that law enforcement officers are required to demonstrate on a daily basis.			

CJ 103	S		
Telecommunications (2-2)	3 Credits		
This course guides students through employability skills and activities that are covered in levels of Emergency Communications. Course includes lessons and activities that closely align with the competencies outlined by the National Academies of Emergency Dispatch (NAED). The Course will cover the roles and responsibilities of the Emergency Telecommunicator, Technologies, Interpersonal Communications, Essentials, Caller management, call Classifications (Law Enforcement, Fire, and Medical), Catastrophic Events, and Radio Broadcast procedures, Legal Aspects, Quality Improvement and Stress management. A commercially available trainer will be used to give the students acquire hands-on training need for the Emergency Dispatcher.			
CJ 190	S		
Patrol Operations (2-2)	3 Credits		
This course is designed to integrate the academic and practical aspects of the basic patrol function for a law enforcement officer. The course examines patrol officer's duties, functions, and responsibilities as well as providing techniques to effectively respond to varied calls-for-service. The course includes lecture and practical applications in the areas of officer safety, traffic stops, contact and arrest, traffic enforcement, natural disasters, and other duties as they relate to the basic patrol function.			
CJ 200	F,S		
Criminal Investigations (3-0)	3 Credits		
This course will cover the concept of criminal investigative work from the early days up to present practices. Areas of emphasis will be the history of criminal investigation, identification, documentation and collection of physical evidence, statutory guidelines, the criminal investigator as a witness, and the different methods of investigation for each type of felony crime.			
CJ 210	F		
Criminal Procedures (3-0)	3 Credits		
This course will examine the U.S. Constitution, cases, statutes, and other sources of regulation in the field of criminal procedure. These regulatory documents will be examined and considered as to how they apply to criminal law and the administration of justice. Specific issues to be covered include search and seizure, interrogations and confessions, grand jury investigations, identification procedures, and the right to counsel.			
CJ 230	F,S,SU		
Criminal Justice Internship (3-0)	3 Credits		
Criminal Justice Internship is a planned program of participant observation in a selected criminal justice agency, private corporation or related field. Students will work with the internship instructor to select an appropriate organization for placement based on the students anticipated career goals and interests. Students will be at their placement organization from 8 to 10 hours per week. Students are required to turn in weekly assignments utilizing the online course companion. (Prerequisite: CJ 101, CJ 280 & Permission of Instructor)			
CJ 250	F,S		
Criminal Law (3-0)	3 Credits		
Criminal Law is an introduction to the purposes and functions of United States Criminal Law. The course highlights the rights and duties of officers and citizens in relation to local, state and federal laws. Students will examine the development, applications and enforcement of the various laws throughout Missouri and the United States.			
CJ 265	S		
Ethics in Criminal Justice (3-0)	3 Credits		
This Criminal Justice course identifies and examines the ethical considerations that face the criminal justice practitioner. Areas of emphasis will include determining moral behavior, developing moral and ethical behavior, ethics and law enforcement, ethics and the courts, ethics and corrections and the ethics of punishment. Other areas of emphasis will be policy and management issues, professionalism, pride and ethics for practitioners.			
CJ 270	S		
Drug Investigation (3-0)	3 Credits		
Drug Investigation is an introduction to the study of the use, abuse, and history of legal and illegal drugs in the United States and abroad and how it has affected communities. Principles of Statutory and Constitutional Law as they pertain to the investigation of drug related crime, and controversial issues concerning criminalization, legalization and taxation will be discussed. Principles of treatment and programs for first-time up to career offenders will be discussed and what the cost-benefit is for both the offender and the community in which they live. Methods of identification, detection, investigation and presentation of legally admissible evidence will be addressed. This course is recommended for law enforcement/ criminal justice majors.			
CJ 280	F,S		
Report Writing (3-0)	3 Credits		
This course will identify the areas of concern in regard to proper documentation of police related activities. It will focus on report writing skills, proper structuring of interviews and chronological documentation of events. Course will incorporate proper sentence structure, the use of correct terminology, and accuracy in written reports.			
CJ 285	F		
Family Violence (3-0)	3 Credits		
This course develops the student's ability to think critically about the dynamics of violence between victims, offenders and other household members in shared relationships. This course focuses on response, recognition, and assessment of violence including signs and symptoms displayed by the parties involved. The overall goals of the course are to deepen the students' skills in the assessment of family violence and in responding legally and ethically where violence has occurred.			
CJ 290			
Police Supervision and Management (3-0)	3 Credits		
This course will focus on police managerial systems; theory and styles as well as operation, leadership skills, and suggestions to create a better understanding of what is required to have an efficient, effective law enforcement agency. Organizational policies and procedures will be presented. Various law enforcement agencies will be examined, analyzed and comparisons made, and contrasts will be evaluated.			
DIESEL TECHNOLOGY			
DIES 124			
Preventive Maintenance (2-4)	4 Credits		
Preventive Maintenance is the key to keeping today's high tech diesel equipment in the field and on the road. This course covers the procedures for a major inspection including the selection of filters, evaluation of lubricants, oil sampling, selection of fuels, inspection of tread wear patterns, and adjustment of the various components.			
DIES 134			
Diesel Hydraulics (2-3)	4 Credits		
This course studies hydraulics commonly used on industrial and agricultural machinery. Topics include basic principles, design, and construction of hydraulic pumps and motors. Cylinders, valves and other control devices are discussed. Troubleshooting and testing procedures complete the course.			
DIES 144			
Diesel Engines I (2-4)	4 Credits		
This course is designed to acquaint the student with diesel engines and the processes that are needed to properly overhaul an engine. Topics include disassembly, parts identification, measurement of parts, parts reusability, rebuilding of various sub-assemblies, and proper re-assembly of the engine.			
DIES 164			
Diesel Brake Systems (2-4)	4 Credits		
This course acquaints the student with the various brake and suspension systems found on today's heavy-duty trucks and equipment. Hydraulic and air brake systems are discussed along with componentry of each system.			

DIES 184 Electrical/Electronics I (2-4)	4 Credits	
Theory, operation and testing of various electrical systems found on industrial and trucking equipment will be covered. Topics covered include: basic electricity, batteries, circuit types, starting motors, generators, alternators and regulators, lighting and auxiliary circuits.		
DIES 204 Diesel Powertrains (2-4)	4 Credits	
To allow the engine to give its best performance, the powertrain must be able to direct the power where it is needed. This course covers the basic powertrains as they are used in industrial applications. Components such as clutches, mechanical transmissions, hydraulic assist transmissions, differentials, final drives and other drives are studied. Adjustments such as end play, backlash and preload are examined as well as the different fluids used for lubrication and fluid drive.		
DIES 224 Diesel Steering and Suspension (2-4)	4 Credits	
This course will cover the basic theories and applications of steering and suspension systems used on today's light and heavy duty trucks. Steering component adjustment and replacement will be discussed along with the various types of suspension systems found on heavy duty trucks. The interaction of these components and how they affect truck alignment will complete the course.		
DIES 234 Air Conditioning (2-4)	4 Credits	
This study of the theory and operation of air conditioning systems as they are used with automotive equipment examines basic system components, controls and air movement devices. Troubleshooting, testing and basic tool use such as pressure gauge sets and refrigerant recovery are also covered.		
DIES 244 Diesel Internship (0-10)	F,S,SU 4 Credits	
The student will receive on-the-job experience in an approved training site. This will allow the student to practice and utilize the skills and knowledge learned in the previous semesters. This work experience will be supervised by the instructor one period per week. (Prerequisite: Permission of Instructor)		
DIES 284 Diesel Electrical/Electronics II (2-4)	4 Credits	
Theory, operation and testing of various electrical systems found on industrial and trucking equipment will be covered. Topics covered include the following: truck and trailer lighting systems, instrumentation and warning systems, electrical accessories, ignition systems, and computer control systems.		
DIES 294 Diesel Engines II (2-4)	4 Credits	
A follow-up course to Diesel Engines I, this course has the student studying operational engines with various problems installed by the instructor. Students disassemble the engine, check for worn or damaged parts, correct these problems and bring the engine back to operational condition. Students are also required to explain the reasoning behind the replacement of parts. (Prerequisite: DIES 144 or Permission of the Instructor)		
DIGITAL MEDIA MARKETING AND PHOTOGRAPHY		
COMM 106 Photo Editing (3-0)	S 3 Credits	
Students are introduced to principles of image editing and manipulation for the purpose of digital marketing content creation. Students will become proficient using Adobe Photoshop to create, alter, manage, and export digital images and creative illustrations while applying those skills toward corporate or small business development and promotional scenarios. Upon successful completion, students will have the opportunity to earn an Industry Recognized Credential (IRC) in Adobe Photoshop. Students can pair this IRC with certifications in Adobe InDesign and Illustrator to earn an Adobe Certified Professional certificate. Additional course lab fee will be applied.		
COMM 108 Internship (3-0)		S 3 Credits
Students enrolled in this course gain first-hand experience on the job working 120 hours during the term in a program designed by the sponsor, student, and instructor as a capstone experience. Internships may be completed in any approved media-related field or relevant work scenario. Prerequisite: Successful completion of at least 9 credits in a related field and instructor permission. (Prerequisite: Successful completion of at least 9 credit hours in a related field and instructor permission. Pass/Fail)		
COMM 171, 172, 173, 271, 272, 273		SDL/Upon Request 1-3 Credits
Topics in Communication (2-0)		
This course involves the study of selected topics in communication, journalism, and media-related fields that require greater emphasis, different methodology or are not covered in regular classes. Topics are identified by title in the class schedule. May be repeated if a different topic is covered.		
COMM 220		F,S 3 Credits
Photocommunication I (3-0)		
An introduction to the essential processes and practices of photography, this course emphasizes digital imaging and manipulation as well as photojournalism principles and skills. Students are expected to provide their own digital single-lens reflex (DSLR) camera. Students should have a basic understanding of computer functions prior to enrolling in the class.		
COMM 231		S 3 Credits
Photocommunication II (3-0)		
This course continues COMM 220 (Photocommunication I) with further emphasis on lighting and shooting procedures as well as digital darkroom techniques, such as editing, enhancing, and manipulation. Emphasis will also be placed on storytelling with newsworthy images. Students are expected to provide their own digital single-lens reflex (DSLR) camera. (Prerequisite: COMM 220)		
DIGM 101		F 3 Credits
Intro to Public Relations and Digital Media Mktg.		
Students are introduced to the theory and principles of public relations as well as best practices of digital marketing strategies in the online environment to target the e-consumer.		
DIGM 102		F 3 Credits
Intro to Digital Media Content Creation		
Students create digital media content, including podcasts, videos, blogs, and social media content for use in a digital marketing campaign. Students will develop, organize, analyze, and measure the effectiveness of content marketing strategies across a variety of online platforms. (Prerequisite: DIGM 101, or instructor permission)		
DIGM 103		F 3 Credits
Intro to Graphics Software		
Introduces the concepts and techniques involved in typography and design. Learners explore the principles of design to create layouts that are organized, attract the intended audience and work in producing the intended results while learning about various graphic design software programs. Upon successful completion, students will have the opportunity to earn an Industry Recognized Credential (IRC). Additional course lab fee will be applied.		
DIGM 104		S 3 Credits
Advanced Digital Media Content Creation		
Students engage in advanced digital media content creation and social media campaigns, including blogs, website development, podcasts, video production, and social media content as well as graphic design and visual communication methods as part of a media marketing campaign. (Prerequisite: DIGM 101 or instructor permission)		
DIGM 105		S 3 Credits
Applied Graphic Design and Media Campaigns		
Students apply graphic design and digital media marketing strategies in the creation and promotion of a real-world project. (Prerequisites: DIGM 103 or instructor permission)		

DIGM 106	S
Advanced Digital Marketing Strategies	3 Credits
Students are provided instruction and practice in digital marketing strategies, including data analytics, productivity, email marketing, search engine marketing/pay per click, conversions, content management, user interface, search engine optimization, and social media management. Upon successful completion, students will have the opportunity to earn Industry Recognized Credentials (IRC) in digital marketing strategies. Additional course lab fee will be applied. (Prerequisite: DIGM 101)	

DRAFTING AND DESIGN TECHNOLOGY (Offered only at Joplin)

DRFT 101	
Introduction to Engineering Drawing and Print Reading (2-2)	3 Credits
This course provides a foundation for all engineering and technical design courses. This study includes basics of freehand sketching and CAD Drafting, and print reading. This study also includes all principles using section, auxiliary and pictorial views to better describe the product.	

DRFT 115	
Basic Computer Aided Drafting (2-2)	3 Credits
This course is an introduction to Computer Aided Drafting. The primary focus is on entry-level AutoCAD Command usage, drawing commands, viewing commands, and modify commands. Topics include drawing layouts, 2-dimensional drawing, editing and viewing commands, drafting practices and standards, file management practices and practical uses of CAD drawings.	

DRFT 141	
Assembly Drawings (1-3)	3 Credits
This course builds a foundation for all engineering and technical design courses. This study builds knowledge and understanding of assembly drawings, the procedures for producing any of the assembly drawings. (Prerequisite: DRFT 101)	

DRFT 153	
Construction Graphics (2-2)	3 Credits
This course provides a foundation for HVAC, Electrical, and Plumbing design. Students will use REVIT software for 2D and 3D designs to develop construction drawings, site plans, elevation drawings, and structural designs. Coursework will be related to residential and commercial construction and includes basic design techniques used for MEP systems. (Prerequisite: DRFT 101)	

DRFT 197,198, 199, 297, 298, 299	
Topics in Drafting and Design Technology (0-8 to 3-0)1-3 Credits	
This is a variable content course with areas of study that reflect current needs of individual students in the area of Drafting and Design Technology. Topics are identified in the course description. A course fee may apply. (Prerequisite: Permission of instructor)	

DRFT 215	
Advanced Computer Aided Drafting (Inventor)(2-2) 3 Credits	
This course is designed to introduce the student to a variety of new activities using Computer Aided Drafting which include: (1) 3D-Drawing (2) 3D-Modeling, (3) Review of Auto CAD's Release 12, (4) Review of new types of CAD software, (5) Creating custom screen menus, (6) A look at Auto LISP, (7) Translating drawings via DXF and IGES. (Prerequisite: DRFT 205)	

ECONOMICS

ECON 201	F,S,SU
Principles of Macroeconomics (3-0) (Macro)	3 Credits
This basic course in aggregate economics emphasizes national income theory, fiscal policy, money and monetary policy, business cycles and economic growth. Students successfully completing this course partially fulfill Social and Behavioral Science general education requirements. (Prerequisite: Reading at least at college level) (MATH 100 or higher is recommended)	

ECON 202	F,S,SU
Principles of Microeconomics (3-0) (Micro)	3 Credits
A continuation of Economics 201, this course emphasizes price, theory, competition models, wage, rent, and profit determination, international trade and balance of payments theory, and special international problems. Students successfully completing this course partially fulfill Social and Behavioral Science general education requirements. (Prerequisite: Reading at least at college level) (MATH 100 or higher is recommended) (Note: ECON 201 is not a prerequisite for ECON 202)	

EDUCATION

NOTE: The state of Missouri may require all teacher education students to complete additional specific general education courses. Students are advised to work closely with their education advisor to select courses to meet current state certification requirements.

Students must register with FCSR and have a clearance letter before completing any observation in schools.

EDUC 125	F,S,SU
Introduction to Education (3-0)	3 Credits
This course familiarizes students with the personal and professional demands of teaching, explores the field of teaching, introduces teacher education programs and certifications, and examines the historical, philosophical, political, and legal foundations of the American public education system. In introducing students to the education field, the course depicts reaching in its realistic intricacies, describes the considerations of professional teaching, and examines traits of effective schools and educators. In introducing students to the foundations of education, the design and organization of school curricula at the local, state, and federal levels, past and present ethical and legal school issues, school/community relations, and critical cultural and social issues in education. This course includes a 5-hour observation in a classroom. A cleared FCSR background check is required before any observation takes places.	

EDUC 205	F,S
Music for Elementary Teachers (3-0)	3 Credits
Students study and use the methods, materials and skills involved in the integration of music into the elementary classroom curriculum. This course is DESE approved for Elementary Education majors. (Prerequisite: Reading at least at college level)	

EDUC 206	F,S,SU
Literature for Children (3-0)	3 Credits
This study of literature for elementary grades is recommended for, but not restricted to, Elementary Education majors. Students evaluate literature as a developmental tool. This course does not fulfill the literature portion of the general education Humanities requirement. This course is DESE approved for Elementary Education majors. (Prerequisite: ENGL 101 or higher and reading at least at college level)	

EDUC 212	F,S,SU
Educational Technology (3-0)	3 Credits
In this course students will learn how to integrate instructional technology into the P-12 classrooms. Students will study a variety of software programs, presentation technology, and telecommunication tools. The focus will also be on social, ethical, legal, and human issues surrounding the use of technology. (Prerequisite: ENGL 101)	

EDUC 231	F,S,SU
Educational Psychology (3-0)	3 Credits
This course is designed to help students relate theories and principles of educational psychology to teaching, learning, and assessment. This course focuses on the diversity of learners and learning processes, as well as teacher characteristics, classroom strategies, and data analysis in P-12 classrooms. Appropriate strategies for increasing motivation, multi-dimensional development, and academic achievement for all learners are introduced. (Prerequisite: PSYC 101)	

EDUC 240 Education of Exceptional Learners (3-0)	F,S,SU 3 Credits	This survey course is an introduction to exceptional learners and their education in grades P-12. Students will attain knowledge, skills, and dispositions that will enable them to work effectively with exceptional learners in general education or special education. The content of this course includes the history of Special Education, legal and ethical issues, state and federal guidelines, characteristics of the exceptional student, methods and techniques for instruction, school/community resources, and assistive/adaptive technology. (Prerequisite: PSYC 101)
EDUC 251 Teaching Profession with Field Experience (3-0)	F,S,SU 3 Credits	This course includes an introductory, minimum thirty (30) hours of school field experience in accredited P-12 classrooms that provide opportunities to observe and contribute to teaching and learning. This course allows preservice teachers to connect firsthand school experience with an emerging professional knowledge base. The course develops professional knowledge of diverse educational settings through observation, instruction, experience, and reflection. This course is designed to assist students in determining if a career in teaching is an appropriate goal. Requirements for teacher preparation and certification are reviewed. (Prerequisite: ENGL 101 & EDUC 125)

The following classes have not been approved by DESE and are not required for degrees in Elementary or Secondary Education. Students should contact representatives at their transfer college to determine how the courses will transfer. The State Board of Education has not approved these classes as core classes for Teacher Education majors.		
EDUC 100, 101, 200, 201 Topics in Teacher Education (1-3)	Upon Request 1-3 Credits	These courses involve the study of selected teacher education topics that require greater emphasis, different methodology, or are not covered in other classes.
EMERGENCY MEDICAL SERVICES		
AEMT 110 AEMT 1 (5-1)	F,S 6 Credits	In this course, the students will be exposed to the roles and responsibilities of an AEMT within an EMS system, apply the basic concepts of development pathophysiology, medical ethics, legal aspects, pharmacology, learn proper documentation/communication methods and apply critical thinking skills to skill lab scenarios. Students will also cover Anatomy and Physiology for the AEMT and develop the skills for assessing patients in the field. (Prerequisite: AHA BLS healthcare provider Level CPR, current EMT certification and/or licensure and reading assessment.)
AEMT 115 AEMT II (5-1)	F,S 6 Credits	AEMT 115 will cover airway management for the Advanced EMT including airway maneuvers, use of basic airways, and the use of supraglottic airways. The AEMT will also be able to list and understand the various types of shock, and treatment plans for each. This section will also cover medical emergencies and the assessment and treatment processes for each. (Prerequisite: Successful completion of AEMT 110)
AEMT 120 AEMT Trauma Emergencies and Patients with Special Challenges (3-1)	S, SU 4 Credits	This section will cover trauma emergencies, signs and symptoms associated with various injuries and the treatment processes for each. It will also cover patients with special challenges including weather emergencies, and animal bites. The AEMT student will cover OB and neonatal care, and the treatment of pediatrics and geriatric patients. The section will conclude with discussion of transport operations, incident management, special rescue, and disaster management. (Prerequisite: Successful completion of AEMT 115)
AEMT 151 Advanced Clinical I (3-0)	S,SU 3 Credits	This course builds on the respective students' fundamental knowledge of patient care in the clinical and field setting, including patients of all ages with a variety of presentations. The purpose of clinical education is to provide students with opportunities to reinforce knowledge, skills, and abilities acquired in the classroom and laboratory settings. When provided with opportunities to practice with actual patients, students transition from a basic understanding to an advanced level of comprehensive data-gathering, application and analysis. (Prerequisite: Successful completion of AEMT 115 or EMTP 230)
EMR 101 Emergency Medical Responder (3-0)	F,S 3 Credits	The emergency medical responder (EMR) course is designed to teach emergency medical responder lifesaving skills as stated in the course competencies. Upon successful completion of the course and subsequent testing with the National Registry of Emergency Medical Technicians (NREMT), the student will gain certification to practice as an EMR. (Prerequisite: Must be 16 years of age and hold an American Heart Association CPR Healthcare Provider Level card)
EMT 101 Emergency Medical Technician (9-0)	F,S 9 Credits	CPR certification is required by the state of Missouri before this course can be taken. The Emergency Medical Technician Program includes a twelve (12) hour hospital observation in the emergency room as well as thirty-six (36) hours in an ambulance. Topics of the course span human anatomy and physiology; vital signs and their interpretations; cardiopulmonary resuscitation; control of bleeding, bandaging and splinting; effects of medical emergencies on the body and their treatments, including heart attack, stroke, communicable diseases, child birth and child patients, diabetes mellitus and chronic obstructive pulmonary disease. This course is approved by the Missouri Department of Health, Bureau of Emergency Medical Services and will allow successful students to sit for the NREMT certification exams. A course fees will apply. (Prerequisites: AHA Healthcare Provider level CPR certification, is recommended prior to taking this course, fingerprint background check at the cost of the student PRIOR to acceptance into program; and college level reading. Acceptance to EMT course required to enroll)
EMTP 225 Emergency Medical Technician-Paramedic (7-2)	F,S 9 Credits	This is the first of five courses which follow the United States Department of Transportation Paramedic National Standard Curriculum. In this course, the students will be exposed to the roles and responsibilities of a paramedic within an EMS system, apply the basic concepts of development pathophysiology, medical ethics, legal aspects, pharmacology, learn proper documentation/communication methods and apply critical thinking skills to skill lab scenarios. (Prerequisites: Current EMT national certification and/or state licensure AHA BLS Healthcare Provider level card required. Acceptance to Paramedic Program required to enroll)
EMTP 230 Emergency Medical Technician-Paramedic (7-2)	F,S 9 Credits	This is the second of five courses which follow the United States Department of Transportation Paramedic National Standard Curriculum. In this course the students will to medical patient assessment, respiratory and cardiovascular emergencies, airway management strategies, capnography, ECG interpretation and pharmacology integration. (Prerequisites: EMTP 225 & AHA BLS Healthcare Provider level card required)
EMTP 236 Emergency Medical Technician-Paramedic (7-2)	S 9 Credits	This is the third of five (5) courses which follow the United States Department of Transportation Paramedic National Standard Curriculum. In this course, the students will be exposed to Medical Emergencies, OB/GYN, neonatal, and pediatric emergencies. (Prerequisites: AHA BLS healthcare provider Level CPR and EMTP 230)

EMTP 241**F,S****Emergency Medical Technician – Paramedic (6-0) 6 Credits**

This is the fourth of five (5) courses which follow the United States Department of Transportation Paramedic National Standard Curriculum. In this course, the students will be exposed to recognizing, assessing and managing patients with acute injuries.

EMTP 245**F,S****Emergency Medical Technician – Paramedic Clinical I 3 Credits (3-0)**

This is the first part of the clinical portion that coincides with the fourth of five (5) courses which follow the United States Department of Transportation Paramedic National Standard Curriculum. The students will be exposed to hospital clinical experiences. The purpose of clinical education is to provide students with opportunities to reinforce knowledge, skills, and abilities acquired in the classroom and laboratory settings. When provided with opportunities to practice with actual patients, students transition from a basic understanding to an advanced level of comprehensive data-gathering, application and analysis.

EMTP 251**F,SU****Emergency Medical Technician-Paramedic (1-5) 6 Credits**

This is the fifth of five (5) courses which follow the United States Department of Transportation Paramedic National Standard Curriculum. In this course, the students will be exposed to recognizing, assessing and managing EMS operations. Also, the students will be exposed to both intrahospital and out-of-hospital (OOH) clinical experiences. The purpose of clinical education is to provide students with opportunities to reinforce knowledge, skills, and abilities acquired in the classroom and laboratory settings. When provided with opportunities to practice with actual patients, students transition from a basic understanding to an advanced level of comprehensive data-gathering, application and analysis. (Prerequisite: Current EMT national certification and/or state licensure, AHA BLS Healthcare Provider level card required and acceptance to Paramedic Program required to enroll.)

EMTP 275**F,S****RN to Paramedic Bridge (6-3)**

This course is designed to prepare registered nurses, in good standing, for the National Registry Paramedic (NRP) psychomotor and cognitive examinations. In this course the student will be exposed to the areas of healthcare and pre-hospital environment that differs from the RN scope of practice. The student will be exposed to the paramedic scope of practice, legal/ethical issues of emergency medical services, pre-hospital treatment and care of acutely ill and injured persons, EMS operations, and the clinical skills performed by a paramedic that are outside of a standard RN scope of practice. (Prerequisites: Current RN license with two or more years of Emergency/Critical Care, ICE, CVICU, CCU or equivalent, one year of emergency and one year of critical care experience OR one year of RN experience, ER/Critical Care with a current EMT license and one year of pre-hospital experience OR one year of RN experience with current CFRN, CCRN, CEN or CTRN certification and is actively working in emergency/critical care, must prove documented RN work experience in emergency/critical care of at least 1000 hours in the last 2 years, Current American Heart Association BLS and ACLS provider certifications, GPA of 2.5 on a 4.0 scale in all college coursework prior to entering program, EMT license, pre-hospital, critical care, or transport experience is preferred, and PALS, PHTLS, TNCC and ENPC certification(s) are preferred)

EMTP 276**F,S****RN to Paramedic – EMS Qualified (6-0)****6 Credits**

This course is designed to prepared registered nurses with EMS experience, for the National Registry Paramedic (NRP) psychomotor and cognitive examinations. In this course the student will be exposed to the areas of healthcare and pre-hospital environment that differs from the RN scope of practice. The student will also be exposed to the paramedic scope of practice, legal/ethical issues of emergency medical services, pre-hospital treatment and care of acutely ill and injured persons, EMS operations, cadaver lab (optional), clinical rotations (if applicable) and NREMT EMT-Basic practice and testing (if required). (Prerequisites: Current RN license, in good standing, with a minimum of 1,000 hours of RN work experience in the last 2 years, AHA BLS and ACLS Provider cards (must be current. American Red Cross is accepted, AHA preferred, must be adept/perform the following skills as part of their job duties: Adult and Pediatric intubation, needle decompression, needle

cricothyrotomy, and provide evidence thereof. Must currently work within or have a minimum of 250 hours of documented worked experience in the pre-hospital setting within the last 5 years. Accepted pre-hospital work experience will be an ALS ambulance with ALS protocols, or tan air ambulance (fixed or rotor wing). EMT certification highly recommended, two or more years of emergency or critical care experience or one year RN experience in ER or Critical care, and one year of prehospital experience (two years total experience) or one year RN experience with a current certification from the Board of Certification for Emergency Nursing (BCEN) that is not expired and applicant is currently working in emergency or critical care nursing. CFRN, CTRN, TCRN, CPEN, CEN or CCRN certifications recommended, but not required.

EMTP 290**Community Paramedic (7-2)****9 Credits**

This course follows the standards established by the Missouri Bureau of Emergency Medical Services (EMS). In this course, students will be introduced to the role of the community paramedic emphasizing home health, chronic disease management and targeted prevention strategies designed to avert patients from the health care system. (Prerequisites: Current paramedic national certification and/or state licensure and a minimum of two years of experience on a paramedic ambulance)

ENGLISH AND LITERATURE

ENGL 99**Composition Support Lab (3-0)****F,S****3 Credits**

This course will focus on assisting students who need extra support in order to successfully complete English 101. This class will work concurrently with English 101 based on the appropriate placement scores and allow students to complete the gateway course with additional instruction in grammar, usage, mechanics, and style.

ENGL 100**Mechanics of Composition (3-0)****3 Credits**

This course focuses on an in-depth study of traditional grammar and mechanics of composition, including an intensive analysis of subjects, verbs, sentence structure, and punctuation. The course may be required of students depending on scores on placement criteria, is recommended for students returning to school from a prolonged absence, and is beneficial for elementary or secondary education majors although it is not an approved education elective. The course does not fulfill communications requirements for the AA degree and may be taken concurrently with ENGL 101 if the student has the appropriate placement score for ENGL 101.

ENGL 101**English Composition (3-0)****F,S,SU****3 Credits**

The primary aim of this freshman writing course is to give students instruction and practice in writing mechanically correct, well organized, and well-developed expository themes on topics of importance and significance. This course fulfills a portion of communications general education requirements. (Prerequisites: Successful completion of COMM 90, ENGL 100, or an appropriate score on the placement exam; keyboarding skill are necessary)

ENGL 102**Advanced English Composition (3-0)****F,S****3 Credits**

This writing course continues the study of clearly effective written expository prose for those who have successfully completed English 101. In addition, students advance to study more complex methods of thesis development, particularly argument. Research and documentation procedures are integral subject matter. This course fulfills a portion of communications general education requirements. (Prerequisite: ENGL 101)

ENGL 109**Introduction to Literature I (3-0)****F,S****3 Credits**

Introduction to Literature emphasizes enjoyment, appreciation, and understanding of various types of literature: poetry, drama, and fiction. This course partially fulfills general education humanities requirements. (Prerequisite: College level reading score on appropriate placement exam)

ENGL 113, 114, 213, 214
Topics in Language and Literature

SDL/Upon Request

1-4 Credits

An opportunity to participate in a variety of topics and/or projects pertaining to language and literature offers specialized, in-depth study. Students design the course in conference with instructor and division chair.

ENGL 203

Technical Report Writing (3-0)

S

3 Credits

Students are introduced to the practical aspects of preparing business and industrial reports in this course. Techniques of collecting and presenting data are emphasized through quality communication: formal and informal reports, demonstration, presentation and discussion. This course fulfills a portion of A.A.S. Communications general education requirements. (Prerequisite: ENGL 101 or permission of instructor) (Keyboarding skills are necessary)

ENGL 222

World Literature I (3-0)

F

3 Credits

Selected reading in Greek and Roman literature emphasizes epics, dramas, and mythology as well as the Divine Comedy, Don Quixote, and others, emphasizing literature not from British or American authors. (Prerequisite: College level reading score on appropriate placement exam or completion of the COMM 90 sequence)

ENGL 225

World Literature II (3-0)

S

3 Credits

A survey of landmarks of world literature from the eighteenth century to the twentieth century, emphasizing literature not from British or American authors. (Prerequisite: College level reading score on appropriate placement exam or completion of the COMM 90 sequence)

ENGL 230

Survey of American Literature I (3-0)

3 Credits

Selected readings in American literature from its native roots through the end of the Civil War, with emphasis on the oral traditions of native peoples, the poetry and essays of the Puritans and early settlers. Rationalism and Enlightenment treatises supporting the founding of the United States and establishment of its government, and the major writings of Emily Dickinson, Ralph Waldo Emerson, Henry David Thoreau, and Walt Whitman from the American Romantic tradition. The course will include multiple genres, including essays, poetry, short stories, and novels and will fulfill three hours of the nine required humanities for an Associate of Arts degree. (Prerequisite: College level reading score on appropriate placement exam or completion of the COMM 90 sequence)

ENGL 235

Survey of American Literature II (3-0)

3 Credits

Selected readings in American literature from 1865 to the present. Periods of American Literature including Realism, Naturalism, Modernism, and Postmodernism will form the structure of the course and will include work by Mark Twain, Kate Chopin, John Steinbeck, Ernest Hemingway, and Arthur Miller among others. from the American Romantic tradition. The course will include multiple genres, including essays, poetry, short stories, and novels and will fulfill three hours of the nine required humanities for an Associate of Arts degree. (Prerequisite: College level reading score on appropriate placement exam or completion of the COMM 90 sequence)

ENGL 240

British Literature I (3-0)

3 Credits

This course will survey the major British authors and works from the Old English period to the eighteenth century, connecting the literature with the historical and cultural influences of the different periods. Readings will include authors such as Chaucer, Marlowe, Shakespeare, Donne, Milton, Swift, Pope, and other major British writers of the Middle Ages to 1790. (Prerequisite: College level reading score on appropriate placement exam or completion of the COMM 90 sequence)

ENGL 245

British Literature II (3-0)

3 Credits

This course will survey the major British authors and works from the Romantic Movement to the present day, connecting the literature with

the historical and cultural influences of the different periods. Readings will include Wordsworth, Keats, Wollstonecraft, Tennyson, Browning, Woolf, Lessing and other influential British writers spanning from the Romantic Movement to the present. This course will include multiple genres, including essays, poetry, short stories, plays, and novels. (Prerequisite: College level reading score on appropriate placement exam or completion of the COMM 90 sequence)

ENGL 250

Creative Writing (3-0)

F,S

3 Credits

This course surveys various forms of creative writing, including fiction, poetry, and drama. Students will read published works and produce their own materials to study and apply effective writing techniques.

ENGL 255

Masterworks of Non-Fiction (3-0)

3 Credits

This course of study of techniques of creative nonfiction writing. Students examine historical and contemporary essay writing in order to develop publishable work. Focus is on invention, execution, and revision of essays through a variety of examples and assignments.

ENGL 260

Women in Literature (3-0)

3 Credits

Women in Literature introduces students to literature by women from various cultures, continents, and historical periods. This course explores how women's writing is shaped by cultural contexts as well as how they wrote to change society's ideas about women and men. (Prerequisite: College-level reading score on appropriate placement exam or completion of LOC 50 or completion of the COMM 90 sequence.)

FIRE SCIENCE

FSCI 111

Firefighter I and II (4-4)

6 Credits

This course places emphasis on those skills and related information necessary to develop a recruit firefighter into a usable member of the firefighting team. The course is divided into 21 subject areas. Recruit firefighters will gain essential knowledge through both lecture and practical skill development. Topics include: fire behavior, building construction, firefighter safety, rescue, extrication, fire control, hazardous materials, and EMS. Successful completion of this course will prepare recruit firefighters for the International Fire Service Accreditation Congress (IFSAC) Certifications for Firefighter I, Firefighter II, Hazardous Materials Awareness, and Hazardous Materials Operations.

GEOGRAPHY

GEOG 111

World Regional Geography (3-0)

3 Credits

Emphasis in this study of regions and nations of the world includes geographical factors such as natural environments and human cultural patterns which affect life on the earth. Students successfully completing this course partially fulfill Social and Behavioral Science general education requirements.

GEOLOGY

GEOL 115

Introduction to Geology (3-2)

F

4 Credits

This class introduces students to the basic concepts of Geology. Students will use these concepts to gain an understanding of: (1) the Earth's dynamic processes of formation and change, (2) how those changes are reflected and identified as its geologic history, and (3) environmental challenges on the planet.

GEOL 210

Earth and Space Science for Teachers (2-4)

4 Credits

A laboratory intensive course designed to give students an understanding of the processes of science and the basic concepts of Earth science (Geology, Oceanography, and Atmospheric Science) and Astronomy. This course is designed primarily for students intending to major in elementary education. One-day field trips and some night-time astronomical observations will be required. (Prerequisite: PHYS 101)

HISTORY

HIST 101 Western Civilization I (3-0)	F,S 3 Credits	In this history of Western Civilization from ancient times to the end of the Renaissance/Reformation era, the culture and institutional developments of the early civilizations and classical Europe are stressed. HIST 101 partially fulfills the Humanities general education requirement. (Prerequisite: Reading at least at college level)
HIST 102 Western Civilization II (3-0)	S 3 Credits	Cultural developments and the growth of social and political institutions of the post-Renaissance/Reformation Western world are stressed. HIST 102 is a foundation course for understanding contemporary world problems. (Prerequisite: Reading at least at college level) (Note: HIST 101 is not a prerequisite for HIST 102)
HIST 106 U.S. History I (3-0)	F,S 3 Credits	This introductory course surveys the development of American culture from the Colonial Period through Reconstruction. The growth of political, social and economic institutions is emphasized. Students successfully completing this course fulfill the Civics requirement in constitutional study within the Social and Behavioral Science general education requirements. (Prerequisite: Reading at least at college level)
HIST 107 U.S. History II (3-0)	F,S 3 Credits	History 107 surveys United States economic, social, political and diplomatic history from Reconstruction to the late twentieth century. Students successfully completing this course fulfill the Civics requirement in constitutional study within the Social and Behavioral Science general education requirements. (Prerequisite: Reading at least at college level) (Note: HIST 106 is not a prerequisite for HIST 107)
HIST 111, 112, 113 Topics in History (1-3)	Upon Request 1-3 Credits	These courses provide an opportunity to study selected History topics not covered in the History curriculum or to study in greater depth topics addressed in introductory History courses. The content of these courses may vary from semester to semester and some may require a prerequisite. Check with the Division Chair, instructor or advisor regarding prerequisites for a specific topic course. These courses will transfer but may or may not meet specific degree or program requirements at other institutions. (Prerequisite: Reading at least at college level)
HIST 224 Research and Writing in History (3-0)	S (Odd years) 3 Credits	This course introduces students to the methods and the discipline of history as a field of scholarly inquiry. It trains students in historical research and writing, the evaluation and use of sources, the formation and support of arguments, the use of historical context, and schools of historical thought. (Prerequisite: HIST 101, HIST 102, HIST 106, or HIST 107; Reading at least at college level)

HONORS

HONR 102 Honors English Composition (1-0)	S 1 Credits	This honors English course taken in conjunction with a traditional English 102 course continues the study of clearly effective written expository essays for those who have successfully completed English 101 and are participants in the Crowder College Honors Program. In addition, students advance to study more complex methods of thesis development, particularly argument. Research and documentation procedures are integral subject matter. This course fulfills a portion of communications general education requirements and requires students to complete an additional research component. (Prerequisite: Limited to Honors Program Participants and completion of ENGL 101)
HONR 151, 152, 251, 252 Honors Seminar	F,S 1-4 Credits	Students who are participants in the honors program are required to participate in the Honors Seminar course. The class will utilize both a weekly online and traditional class format of instruction as students complete an in-depth examination of the current issues that follow the Phi Theta Kappa International honors topic for the year. For the participants in 252, students will also complete a capstone project that requires research project in their major. (Prerequisite: Must be a participant in the Honors program or a member of Phi Theta Kappa)

HONR 103, 104, 203, 204 Special Topics in Honors	F,S 1-4 Credits
Various topics and modes will be used to explore and research contemporary issues which are of interest and importance to society and the student. (Prerequisite: Meet criteria for Honors Seminar and permission of instructor)	

HVAC

HVAC 105 Introduction to HVAC/R (2-2)	F,S 3 Credits
This course covers HVAC/R history along with introducing heat transfer and thermodynamics, pressure and temperature theory, and basic refrigeration cycle and components. Students will gain a working knowledge of floor and hand tools used in the trade and relevant safety issues.	
HVAC 115 Heating Fundamentals (2-2)	F 3 Credits
This course introduces the student to different types of heating systems and controls. Study includes an overview of basic furnace design and principle of combustion. Emphasis is placed on safe operations of furnace equipment and combustible materials. Students will learn the basic elements of heating systems, heat laws, psychometrics, heating load estimating, design, and distribution.	
HVAC 116 Heating Service (2-2)	F 3 Credits
This course builds upon heating equipment concepts presented in HVAC 115 and focuses on servicing furnaces. Students will learn to maintain and troubleshoot various types of heating equipment systems. (Prerequisite: HVAC 115)	
HVAC 120 Refrigeration Systems I (2-2)	S 3 Credits
This course focuses on basic refrigeration principles and the basic refrigeration cycle that is contained in all coding systems, heat pumps and refrigeration equipment. Students will study the control systems for cooling systems and will gain knowledge in psychometrics and airflow. Students will also learn about the different types of air purification systems, ventilation and dehumidification. The course allows students to develop basic skills required for installation, maintenance and servicing HVAC/R equipment.	
HVAC 121 Refrigeration Systems II (2-2)	S 3 Credits
This course builds upon cooling equipment concepts presented in HVAC 120 and focuses on servicing cooling systems. Concepts also consist of load estimating, design, and distribution. Students learn air-conditioning theory including airflow and filtering principles, ventilation and dehumidification; installation practices for common AC systems and ductwork; troubleshooting and maintenance practices. This course provides an overview of various light commercial applications. This course will prepare students for the EPA section 608 exam. (Prerequisite: HVAC 120)	
HVAC 125 Equipment Design (2-2)	F 3 Credits
Students will gain knowledge in duct design, testing and balancing of airflow, fans and air handling equipment. They will learn about the different types of air purification systems used to achieve a high level of air quality. Students will learn how to perform load calculations to insure proper equipment sizing for optimum system efficiency. In addition, students have hands-on projects covering sheet metal ductwork sizing, layout and fabrication. Students will study design, installation, balancing, and selection of components for air distribution systems.	

HVAC 130 S
HVAC Controls and Troubleshooting (2-2) 3 Credits
This course covers advanced control circuits for commercial and residential heating, ventilation, air conditioning and refrigeration equipment. Diagnostic procedures involve advanced HVAC and R schematics, temperature controls, timing controls, modulating motors, heat pump controls, and other various HVAC and R electrical components will also be covered. Advanced troubleshooting techniques will be addressed. (Prerequisites: HVAC 116 and HVAC 121)

HVAC 135 F
Commercial Equipment and Applications (2-2) 3 Credits
This course builds upon the knowledge and skills developed in HBAC 121 and focuses on refrigeration systems used in commercial and institutional applications. Topics that are covered include system controls, installation standards, piping design, operational procedures, and troubleshooting techniques for refrigeration equipment used in restaurants, convenience stores, supermarkets, hospitals, and cold-storage shipping. (Prerequisites: HVAC 116 and HVAC 121)

HVAC 140 S
Refrigerant Management & EPA Certification (2-2) 3 Credits
This course will cover proper refrigerant handling techniques. Lecture/labs will also include topics including characteristics of refrigerants, recovering, recycling, and reclamation, recovery cylinders, leak detection, and dehydration processes pertaining to small appliances, high pressure systems, and low pressure systems. The course will prepare students to take the Environmental Protection Agency's Section 608 Refrigerant Certification Exam.

HVAC 145 S
Air Distribution Systems and Fabrication (2-2) 3 Credits
This course offers an in-depth study of residential air distribution and air flow balancing and the skill necessary to design, size and fabricate duct systems. Topics covered include: duct design, static pressures, sizing practices and applications. This course provides students with the theory and hands-on application of sheet metal fabrication for use in the field of residential and light commercial HVAC installation.

HVAC 290 F,S
HVAC Internship (0-10) 3 Credits
This course provides direct hands-on experience in a structured environment under the direct supervision of experienced tradesmen employed by the hosting organization. Students are required to provide regular reports of work tasks attempted/completed as well as the overall time spent at the host's work location. Hosts agree to provide a safe, supervised work environment with students addressing tasks directly related to HVAC/R and the specific option being pursued by the student. At the end of the internship, hosts will complete and submit a written evaluation of the student's performance. This course requires that 160 clock-hours be spent at the hosting location(s) during the term of study.

LANGUAGES

ASL 101 F,S
Beginning American Sign Language I (3-0) 3 Credits
Beginning American Sign Language (ASL) I will focus on developing conversational skills between deaf and hearing individuals using both fingerspelling and ASL manual signs. Comprehension skills and linguistic features of the ASL language will be emphasized. This class may apply toward the Humanities General Education requirement, or may apply toward a foreign language requirement for a bachelor of arts, but may NOT apply toward both.

ASL 102 S
Beginning American Sign Language II (3-0) 3 Credits
Beginning American Sign Language (ASL) II will continue the development of ASL skills. Expressive and ASL receptive communication will be enhanced. Additional ASL vocabulary will be learned. (Prerequisite: ASL 101) This class may apply toward the Humanities General Education requirement, or may apply toward a foreign language requirement for a bachelor of arts, but may NOT apply toward both.

FREN 101 3 Credits
Beginning French (3-0) 3 Credits
This is a multimedia course that combines video, audio and print to teach French language and culture. It immerses the student in current, living French in everyday situations, spoken by natives. Its focus is on communication and proficiency. This class may apply toward the Humanities General Education requirement, or may apply toward a foreign language requirement for a bachelor of arts, but may NOT apply toward both.

SPAN 101 F,S
Beginning Spanish (3-0) 3 Credits
This is a multimedia course that combines video, audio, interactive software, and print to teach Spanish language and culture. It immerses the student in current, living Spanish in everyday situations, spoken by natives. Its focus is on communication proficiency. This class may apply toward the Humanities General Education requirement, or may apply toward a foreign language requirement for a bachelor of arts, but may NOT apply toward both.

SPAN 102 F,S
Beginning Spanish II (3-0) 3 Credits
This course continues the study of Spanish language and culture. It immerses the student in current, living Spanish in everyday situations. Its focus is on communication proficiency. This class may apply toward the Humanities General Education requirement, or may apply toward a foreign language requirement for a bachelor of arts, but may NOT apply toward both. (Prerequisite: SPAN 101 or permission of the instructor)

SPAN 105 F,S
Conversational Spanish (3-0) 3 Credits
This course is geared to those who have knowledge of the Spanish language. This course emphasizes idiomatic usage, vocabulary, grammar, and syntax. There is a focus on acquisition and development of skills necessary for effective oral and written communication. Hispanic culture, history, art, and literature will be highlighted in course materials, student presentations, and writing assignments. The material covered in this course is designed not only to meet the educational needs of traditional students of the language, but also the needs of the heritage language speakers who enter the Spanish program with some or all of the four language skills developed to varying degrees. Students will be required to log conversation hours with the instructor and classmates. Students will be required to pay for and take the computerized Oral Proficiency Interview (OPIC). This assessment costs \$115, and scholarships are available through the Spanish department. (Prerequisites: SPAN 102 or equivalent)

SPAN 107, 108, 109, 207, 208, 209 SDL/Upon Request
Topics in Spanish 1-3 Credits
This course covers topics not normally included in another class. Prerequisites are determined by the department and stipulated in the syllabus for each specific offering. May be repeated. These classes may apply toward major requirements for an A.A. in Spanish.

SPAN 201 F,S
Intermediate Spanish (3-0) 3 Credits
This course continues the study of Spanish language and culture. It immerses the student in current, living Spanish in everyday situations. Its focus is on communication proficiency. This class may apply toward a major requirement for an A.A. in Spanish or may apply toward a foreign language requirement for a bachelor of arts. (Prerequisite: SPAN 102 or permission of instructor)

SPAN 202 F,S
Intermediate Spanish II (3-0) 3 Credits
This course continues the study of Spanish language and culture. It immerses the student in current, living Spanish in everyday situations. Its focus is on communication proficiency. This class may apply toward a major requirement for the A.A. in Spanish or may apply toward a foreign language requirement for a bachelor of arts. (Prerequisite: SPAN 201 or permission of instructor)

LEARNING OPPORTUNITIES

COMM 91, 92, 93, 94

**F,S
Developmental Communication Arts (0-4) 2 Credits**

This course provides integrated reading and writing and college success instruction. The course includes success strategies for disciplines across the curriculum, advanced critical reading skills to facilitate comprehension of academic text, discipline specific vocabulary, and utilization of the writing process to compose paragraphs utilizing the standards of conventional writing for academic purposes. College success knowledge, skills, and dispositions are integrated throughout the course. The course is offered on a credit / no credit basis. Mastery of at least twenty-five percent of the course competencies is required to earn the two hours credit. These credits cannot be applied to requirements for graduation. A letter grade will not be given, and there will be no impact on the student's grade point average.

ELI 30

**F,S
ELI Basic 1 (6-0) 6 Credits**

This course provides non-native speakers with intensive training in basic English skills to acquire vocabulary and apply knowledge of the English language structure and mechanics to understand basic spoken English, participate in oral communication at the beginning level, comprehend brief, simplified printed material, and produce short, clear and logical written text. (Placement by Assessment)

ELI 32

**F,S
ELI Basic 2 (6-0) 6 Credits**

This course provides non-native speakers with intensive training in basic, moving towards more complex and intermediate, English skills to acquire vocabulary and apply knowledge of the English language structure and mechanics to understand basic spoken English, participate in oral communication at the beginning level, read simplified printed material, and produce clear and logical written text. (Placement by Assessment)

ELI 33

**F,S
ELI Intermediate (6-0) 6 Credits**

This course provides non-native speakers with intensive training in intermediate English skills to acquire vocabulary and apply knowledge of the English language structure and mechanics to understand spoken English, participate in oral communication at the intermediate level, comprehend simplified printed material, and produce clear and logical written text. (Prerequisites: ELI 30 and ELI 32 and/or placement by assessment)

ELI 35

**F,S
ELI Advanced (3-0) 3 Credits**

This course provides non-native speakers with intensive training in advanced English skills to acquire vocabulary and apply knowledge of the English language structure and mechanics to understand spoken English, participate in oral communication at the advanced level, comprehend printed material, and produce clear and logical written text. (Prerequisites: ELI 33 and/or placement by assessment)

ELI 37, 38, 39, 40

**F,S
ELI Special Topics (3-0) 3 Credits**

This course provides non-native speakers with specialized training in a focused set of English language skills. The special topics covered will be determined by the student's current language proficiency and expressed language acquisition goals in cooperation with the ELI instructor. (Prerequisites: ELI 30 and ELI 32 and/or placement by assessment)

LOC 100

**F,S
College Success (3-0) 3 Credits**

This course is designed to increase success in college by assisting students in the acquisition and mastery of skills necessary for students to reach their personal and educational goals. Course topics include time and stress management, test taking, communication skills, study techniques, question-asking skills, community resources, college transfer issues, career planning, budget planning, and personal issues that they may face as a college student.

LOC 103

College Connections (3-0)

F,S,SU

3 Credits

College Connections is designed as an academic intervention and application course. The course is required for students on academic probation. This course will assist students in the acquisition and mastery of implementing many proven strategies to create greater academic, professional, and personal success. Individual and group discussions, activities, and assignments, guided journal writing, as well as personal one-on-one meetings are part of the course. A grade of "C" or higher is required to meet academic status requirements. (Prerequisite: Only students on academic probation or returning from suspension may enroll in this course)

LOC 105

Career Directions (1-0)

1 Credit

This course is designed to help students discover what their personal interests, values, and talents are, and to learn how to use this knowledge to help them in choosing a career. Taking this course can shape their educational experiences at Crowder College and help them understand how career choices can impact their lifestyle. (Course location varies)

LOC 206

Career Exploration (0.5-1.25)

1 Credit

This course provides students with the opportunity to refine their career plan, to practice job search skills such as interviewing and professional communication, and to evaluate their career goals. Students will complete a combination of an eight hour equivalent of class meetings and twenty hours of on-site field experience. (Course location varies)

MANAGEMENT

BMGT 115

Customer Service (3-0)

F,S

3 Credits

This course covers the critical workplace skills necessary for providing effective customer service in today's professional environment. Areas covered include identifying customers, problem solving, listening, communicating with customers, etiquette, time management, teamwork, and telephone skills.

BMGT 175

Management (3-0)

F,S

3 Credits

This course is an introduction to the management of organizations of various sizes. The focus is on the four management functions: planning, organizing, leading, and controlling, and how to deal with the constant state of change in the workplace and in the competitive environment.

BMGT 200

Marketing (3-0)

F,S

3 Credits

This course is an introduction to the marketing process and organization of different types of businesses. The focus is on the identification of the marketing techniques and attitudes necessary to make a marketing plan successful. This course provides a detailed examination of the strategies necessary for businesses to compete in today's environment. This class will also examine various marketing tactics including pricing, promotion, advertising, and salesmanship.

BMGT 223

Business Ethics (3-0)

F

3 Credits

The focus of this course will be the ethical dilemmas faced by businesses. The methods used to evaluate ethical alternatives can be applied by the students to their individual situations as well as in preparation to direct companies in ethical decision-making.

BMGT 285

Human Resource Management (3-0)

S

3 Credits

This course emphasizes various uses of a firm's human resources. Personnel Management evaluates and compares personnel policies in recruiting, selecting, transferring, promoting, classifying, motivating and training. (Prerequisite: BSAD 150)

BMGT 290

Business Management Internship (1-2)

Upon Request

2 Credits

Supervised work experience allows the student to apply skills in an actual business or office situation. Students will be required to gain experience in the area in which they are seeking a degree. Students

will meet once a week in class and will work 80 hours during the semester in supervised work experience. This course should be taken during the student's final semester.

BMGT 197, 198, 199, 297, 298, 299 **Upon Request**
Topics in Business Management (1-3) **1-3 Credits**
Instruction will be provided as the need arises on topics in Business Management. Topics are identified by title in the class schedule. This course may be repeated if the topic is different.

MATHEMATICS

MATH 80 **F,S**
Support for Quantitative Reasoning (2-0) **2 Credits**
This course is a co-requisite to Quantitative Reasoning (MATH 125). It is designed to provide additional support and just-in-time instruction on skills needed for students to succeed in MATH 125. This course will not count towards degree requirements.

MATH 85 **F,S**
Support for Elementary Statistics (2-0) **2 Credits**
This course is a co-requisite to Elementary Statistics (MATH 130). It is designed to provide additional support and just-in-time instruction on skills needed for students to succeed in MATH 130. This course will not count towards degree requirements.

MATH 104 **F**
Technical Mathematics (3-0) **3 Credits**
Technical Mathematics applies practical concepts of mathematics to a variety of real world problems. This class is specifically designed to meet the needs of students in the college's AAS Technology programs. This class will not satisfy the general education requirement for an Associate of Arts degree. (Prerequisite: An appropriate math placement score)

MATH 108 **F,S**
Basic and Intermediate Algebra (5-0) **5 Credits**
This course provides students with the algebraic skills with additional review and practice of elementary algebraic skills. Topics include: introduction to exponents and polynomials, equations, inequalities, applications, graphing, functions, and systems of equations. This course will not satisfy most degree requirements for mathematics. It will count as an elective on your transcript. (Prerequisite: An appropriate math placement score)

MATH 112 **F**
Trigonometry (3-0) **3 Credits**
Trigonometry involves the study of the six trigonometric functions and their applications. (Prerequisite: MATH 108 or an appropriate placement score)

MATH 125 **F,S**
Quantitative Reasoning (3-0) **3 Credits**
This course studies the skills necessary to process and communicate quantitative information found in daily life. Specific topics include: probability, statistics, proportional reasoning, modeling data, financial mathematics, and problem solving. (Prerequisite: An appropriate math placement score)

MATH 130 **F,S**
Elementary Statistics (3-0) **3 Credits**
This is a first course in statistics for any student whose college and career paths require knowledge of the fundamentals of the collection, analysis, and interpretation of data. Topics include the presentation and interpretation of univariate data using graphical and numerical methods, probability, discrete and continuous probability distributions, linear regression, an understanding of good practice in study design, statistical inference, confidence intervals, and hypothesis testing. Emphasis is placed on the development of statistical thinking. (Prerequisite: Placement by appropriate placement score)

MATH 134 **F,S**
Algebra for Calculus With Support (5-0) **5 Credits**
This course is the same course as Algebra with Calculus with corequisite material added. It studies the foundations of functions, analysis of functions, algebraic reasoning, and conic sections. This

course is designed for students who intend to pursue a degree in the fields of Science, Technology, Engineering or Mathematics, as well as other fields that required a high level of algebraic reasoning. This course is intended to prepare students for higher level mathematics courses, but will satisfy most degree requirements in mathematics and should transfer to any four-year institution. (Prerequisite: Placement by an appropriate placement score)

MATH 135 **F,S**
Algebra for Calculus (3-0) **3 Credits**
This course studies the foundations of functions, analysis of functions, algebraic reasoning, and conic sections. It is designed for students who intend to pursue a degree in the fields of Science, Technology, Engineering, or Mathematics, as well as other fields that require a high level of algebraic reasoning. This course is intended to prepare students for higher level mathematics courses. (Prerequisite: Placement by an appropriate placement score)

MATH 150 **F,S**
Calculus I, Part I (2-0) **2 Credits**
This course begins a sequence of calculus and analytical geometry courses. Topics include the derivative and its applications. (Prerequisite: MATH 134 (not concurrently) or MATH 135 (may be taken concurrently) or an appropriate placement exam score; MATH 112 (may be taken concurrently) or an appropriate placement score.)

MATH 160 **S**
Calculus I, Part II (3-0) **3 Credits**
This course continues the study of Calculus, including applications of the derivative, L'Hopital's Rule, and the integral. (Prerequisite: MATH 150)

MATH 201 **F**
Calculus II (5-0) **5 Credits**
This course continues the calculus/analytic geometry sequence. Topics include various methods and applications of integration, sequences and series, parametric curves and the polar coordinate system. (Prerequisite: MATH 160)

MATH 202 **S**
Calculus III (5-0) **5 Credits**
This course completes the calculus/analytic geometry sequence. Topics include vectors, vector-valued functions, graphing in three dimensions, calculus of multiple variables, line and surface integrals. (Prerequisite: MATH 201)

MATH 210 **S**
Differential Equations (3-0) **3 Credits**
Differential Equations provides methods for the solution of standard types of ordinary first and second order differential equations. The use of numerical techniques, the Laplace transform, power series and linear methods of solution are examined. (Prerequisite or co-requisite: MATH 202)

Math 271, 272, 273 **1-3 Credits**
Topics in Mathematics
A variable content course with areas of study that reflect current issues. Topics are identified in the course schedule and prerequisites are spelled out in the syllabus. (Prerequisite: Permission of department)

MISSOURI HIGHER ED CIVICS EXAMINATION

CVCS 101 **F,S,SU**
Missouri Higher Ed Civics Examination **0 Credit**
Missouri Higher Education Civics Examination In compliance with Missouri State Senate Bills 807 & 577 (2018) Section 170.013, "Any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution." The examination will consist of fifty questions and will be similar to those administered to applicants for the United States citizenship. Subject matter will include the United States Constitution, Bill of Rights, other amendments, and governmental institutions.

MUSIC

MUSC 101

Music Appreciation (3-0)

This survey of the development of music from the Middle-Ages to the present includes an examination of the cultural forces which shaped the musical expressions of each era. The course is designed to provide the students with the musical vocabulary and listening techniques for a meaningful and enriching understanding and appreciation of music literature.

MUSC 195, 196, 295, 296

Community Mixed Chorus (0-4)

This course welcomes all students and community residents. Weekly rehearsals are scheduled in preparation for public performance on off-schedule basis.

MUSIC, APPLIED

Private Lessons (Open to All Students)

F,S

1 Credit

This course will provide individual instruction in vocal technique (i.e. breathing, breath support, tone production), while also covering the stylistic elements of performance, stage presence, vocal diction and other aspects of singing. Private voice lessons are open to all students. One half-hour lesson per week = 1 credit hour.

NURSING

PRACTICAL NURSING

*Selection into the Practical Nursing program is required
(offered only at Nevada Campus)*

PN 150

Personal & Vocational Concepts I (3-0)

3 Credits

Concepts emphasized are those relating to stress, time management, study skills, nursing history, nursing process, personal & social wellness, therapeutic communications, cultural & spiritual differences.

PN 152

Fundamentals in Nursing I (3-1)

4 Credits

Introduction of skills & concepts that allows performance of basic patient care. Included are theories of wellness, physical & emotional support of patients, safety issues, medical vocabulary, growth & development principles, and skill check-offs.

PN 153

Fundamentals in Nursing II (3-2)

5 Credits

Building on the skills of Fundamentals I, this course presents more complex nursing skills in classroom and laboratory. Skill competency, CPR, time management, scenarios, therapeutic relationships, and direct patient care are performed in a patient care setting with direct supervision. The IV therapy major emphasis is to prepare the LPN to participate in IV fluid therapy. Student must pass IV therapy final examination with a minimum grade of 80% or better on a written final exam of no fewer than 50 multiple choice items in order to graduate from the PN program as required by MO rule 4 CSR 200-3.100. (Prerequisite: PN 152)

PN 156

Gerontology (3-0)

3 Credits

Modification of nursing skills to maintain & optimize the quality of life of the aging client is stressed.

PN 157

PN Human Structure & Function (1-2)

3 Credits

This course is designed to provide the beginning student with a basic understanding of how the parts of the body are structured and how they perform the complex functions necessary to maintain life. Emphasis is placed on normal structure and function. Medical terminology is combined with the anatomy lessons. Medical terminology lessons are designed to introduce students to key word parts, which will enable students to take a medical term apart to determine its meaning. This course provides the basis for all other nursing courses.

PN 158

Course Descriptions

Medical Surgical Nursing I (6-0)

6 Credits

Instruction involves scientific principles associated with illness, effects on body systems & current trends in patient care. Course will include both nutritional and pharmacological aspects that apply to each disease/disorder. (Prerequisite: PN 151)

PN 250

Fundamentals in Nursing III (0-8)

8 credits

Continuing the progression from most basic to more complex, this course extends into the realm of clinical nursing practice. Previously learned skills, care mapping, and problem-solving methods are transferred to patient care in a variety of clinical settings and under direct supervision. Leadership skills are enhanced by using the knowledge gained and the supervision of preceptors and instructors. Students participate in scheduled activities such as preschool screening, case study, and simulation scenarios. Prerequisite is successful completion of Fundamentals of Nursing I and II. (Prerequisite: PN 153)

PN 254

Personal & Vocational Concepts II (2-0)

2 Credits

This course places a primary emphasis on professional accountability, leadership roles and responsibilities, legal and ethical issues, and the concept of productive team functioning. Interactive opportunities are provided for students to develop a resume and participate in a mock job interview. (Prerequisite: PN 150)

PN 255

Mental Health & Mental Illness (3-0)

3 Credits

This course is designed to enable students to recognize maladaptive behaviors and ineffective coping mechanisms. The significance of therapeutic use of self in developing trusting relationships/rapport with patients is emphasized; as well as the necessity for professional boundaries.

PN 256

Maternal-Child Nursing (5-0)

5 Credits

This course is designed to provide students with the skills and scientific knowledge base to perform basic patient care for the maternal-child population in a variety of settings. Basic maternity concepts and special needs of the child during illness, along with these effects on the progress of normal growth and development are explored. Critical thinking and ethical decision-making are stressed.

PN 258

Medical Surgical Nursing II (9-2)

11 Credits

Building on the skills of Medical/Surgical Nursing I, instruction involves scientific principles associated with illness, effects on body systems & current trends in patient care. Course will include both nutritional and pharmacological aspects that apply to each disease/disorder. (Prerequisite: PN 158)

PRE-NURSING

PNUR 101

Introduction to Nursing: Success in the Profession of Nursing

2 Credits

This course introduces students to the profession of nursing and policies and procedures of Crowder College Nursing Division for Professional Nursing. The course will present soft skills to aid student success in the nursing program upon acceptance. Pre-requisite nursing skills will be evaluated along with basic math needed for dosage calculation.

PNUR 111

Medical Terminology (3-0)

3 Credits

This course introduces and explains basic medical terminology. Roots, combining vowels, prefixes, and suffixes are examined. Basic anatomy, spelling, and abbreviations are included.

REGISTERED NURSING

Selection into the Nursing program is required

NURS 111

Health Concepts IA (2.5-0.5)

This course introduces students to beginning nursing concepts for health promotion. Emphasis is placed on basic assessment skills and the ability to safely perform foundational psychomotor skills. (Prerequisite: BIOL 152)

3 Credits

NURS 112

Health Concepts IB (2.5-0.5)

This course introduces students to therapeutic communication, normal growth and development, and safe, evidence-based interventions through application of the nursing process. Students will also have the opportunity to continue developing psychomotor nursing skills needed to assist individuals in meeting basic human needs. (Prerequisites: NURS 111)

3 Credits

NURS 120

Health Concepts IIA (3-2)

5 Credits

This course focuses on beginning prioritization skills when caring for the patient throughout the lifespan experiencing commonly occurring acute and chronic illnesses, including common medical-surgical and mental health problems. Students will have the opportunity to apply this knowledge in a variety of health care experiences. This course will also focus on the nurse's role in medication safety, administration, and calculations for drugs given to patients experiencing acute and chronic illnesses across the lifespan. (Prerequisite: Health Concepts IA, Health Concepts 1B, Professional Concepts I, & Pharmacology I)

NURS 122

Health Concepts IIB (2-2)

4 Credits

This course will provide focus on perinatal care with normal variances. Assessment and care of the newborn will be a primary focus on this course. Students will have the opportunity to apply this knowledge in a variety of health care experiences. (Prerequisites: NURS 120)

NURS 141

Pharmacology I (1.5—0.5)

2 Credits

This course introduces students to safe administration practices using a variety of routes and basic dosage calculations. (Prerequisite: NURS 171)

NURS 171

Professional Concepts I (1-0)

1 Credit

This course introduces students to the role of the professional nurse, focusing on QSEN and core curricular concepts.

NURS 175

Professional Concepts II (2-0)

2 Credits

This course builds on concepts learned in Professional Concepts I and further explores professional nursing including concepts of legal issues, ethics in nursing care, healthcare organizations, and clinical judgement. (Prerequisite: NURS 111, NURS 141, NURS 171)

NURS 201

LPN to RN Transition (2-0)

2 Credits

This course is designed for the licensed practical nurse entering into professional nursing. The course provides essential concepts and skills to facilitate the assimilation of knowledge and incorporation of the professional nursing role for currently licensed practical nurses that have been selected for admission to the Associate Degree of nursing program. (Prerequisites: BIOL 152, Co-requisite: BIOL 220 & 252)

NURS 205

Paramedic to RN Role Transition (2.5-0.5)

3 Credits

This course is designed for the licensed paramedic entering into professional nursing. The course provides essential concepts and skills to facilitate the assimilation of knowledge and incorporation of the professional nursing role for currently licensed paramedics that have been selected for admission to the Associate Degree of nursing program. Students will attend didactic hours in the classroom for 5

hours weekly during an 8-week session. Students will attend lab/clinical/sim hours for 1.5 hours weekly during an 8-week session.

NURS 210

Health Concepts IIIA (3-2)

5 Credits

This course builds on concepts learned in earlier courses by focusing on prioritizing and collaborating nursing care if patients with acute and chronic complex health problems across the life span. This course will also focus on current pharmacological drug classes utilized in the care of the course concepts and exemplars. Pharmacological focus will center around indications for use, contraindications, adverse effects, patient education, and dosage calculations. Students will have the opportunity to apply this knowledge in a variety of health-care experiences. (Prerequisites: NURS 122 & NURS 172)

NURS 212

Health Concepts IIIB (2-2)

4 Credits

This course focuses on inter-professional collaborative care of patients with multi-system health problems, including patients who are acutely and critically ill across the lifespan. In this course, the student applies previously learned concepts and theories related to the care of individuals, families or groups experiencing a critical disruption in one or more needs. Students will have the opportunity to prioritize and translate this knowledge in a variety of health care experiences. (Prerequisite: NURS 210)

NURS 220

Health Concepts IV (3-1)

4 Credits

This course focuses on inter-professional collaborative care of patients with multi-system health problems, including patients who are acutely and critically ill across the lifespan. Medications and dosage calculations related to course concepts and exemplars will be emphasized. In this course, the student applies previously learned concepts and theories related to the care of individuals, families or groups experiencing a critical disruption in one or more needs. Students will have the opportunity to prioritize and translate this knowledge in a variety of health care experiences. (Prerequisite: NURS 210, NURS 212, NURS 271)

NURS 271

Professional Concepts III (2-0)

2 Credits

This course expands the student's appreciation for the role of the nurse leader and manager of care in a variety of health care organizations. (Prerequisite: NURS 175)

NURS 290

Nursing Capstone (1.5-0.5)

2 Credits

This course will examine State Licensure and NCLEX testing processes. Clinical simulation will be utilized to assess individual clinical reasoning and judgment. (Prerequisites: NURS 220)

OCCUPATIONAL THERAPY ASSISTANT

(Offered only at Webb City)

OTA 101

Principles of Occupational Therapy (2-0)

2 Credits

This course will examine the role of occupational therapy in health care, community-based and educational systems. Topics include: history, philosophical principles, the *Occupational Therapy Framework: Domain and Process, Standards of Practice, Code of Ethics*, current and emerging practice areas. This course will also address the roles of the registered occupational therapist, certified occupational therapy assistant, national and state credentialing requirements, and occupational therapy association functions at all levels. (Co-requisites: OTA 111 & OTA 116)

OTA 116

Principles of Therapeutic Intervention (2-2)

3 Credits

This course covers basic understanding of relevant occupations and purposeful activities used in occupational therapy programs. Lab work performed relates to children and adult occupations and activities. These include, but are not limited to: leather craft, beading, basic woodworking and rehabilitation technology with an emphasis on meaningfulness to the client to encourage participation and

independence. These activities are related to the domains of occupational therapy. Activity analysis, group activities, activity adaptation, application of the Practice Framework, maintenance of the Occupational Therapy (OT) service environment, and teaching/lifelong learning are incorporated. (Co-requisites: OTA 101 and OTA 111)

OTA 125 S
2 Credits
Occupational Therapy Documentation (2-0)

This course will examine documentation of occupational therapy services. This course will include use of professional language and proper documentation for Occupational Therapy Services. This course will address understanding and writing of documentation, electronic documentation, and goal writing in diverse Occupational Therapy settings. (Co-requisites: OTA 101 & OTA 116)

OTA 131 F,S
2 Credits
Functional Movement: Occupation and Adaption (2-2)

This course will present the basic principles of biomechanics and kinesiology related to human movement and occupational performance. To analyze functional movement required for work, self-care, and play this course will study the interrelationship among the central nervous system, peripheral nervous system, musculoskeletal system, anatomical landmarks, joints, posture, balance, and locomotion. (Prerequisite: BIOL 252 and MATH 125, 130 or 135; Co-requisites: OTA 140 and OTA 201)

OTA 199 F,S
1 Credits
Occupational Therapy: An Overview (1-0)

This course will introduce the profession of Occupational Therapy. This course provides an overview of the history, philosophy, and role of Occupational Therapy in the health care environment as well as describing the educational requirements of Occupational Therapy practitioners.

OTA 201 F
5 Credits
Principles of Occupational Therapy Practice: Children and Adolescents (4-2)

This course will provide a review of human development from birth through adolescence, with emphasis on occupational performance of typical and atypical individuals. Topics include: theory and application, frames of reference, observation skills, assessment, adapting, intervention, documentation, the occupational therapy process, evidence-based practice, ethics and roles of the Occupational Therapist and Occupational Therapy Assistant in service delivery and in various practice settings. (Prerequisite: OTA 116; Co-requisites: OTA 131 and OTA 140)

OTA 211 S
5 Credits
Principles of Occupational Therapy Practice: Mental Health (3-4)

This course will examine the occupational therapy process in relation to individuals with psychosocial challenges across the lifespan and focus on observation skills, assessment, documentation, teaching, adapting, and grading self-care, work, play/leisure occupations for individuals and groups with psychosocial challenges. Topics include: clinical features, group dynamics, therapeutic use of self, interventions, evidence-based practice, ethics, and issues impacting psychosocial Occupational Therapy practice. This course includes Level I fieldwork component consisting of eight hours a week for 6 weeks in a practice setting. (Prerequisite: OTA 116; Co-requisites: OTA 236 and OTA 221)

OTA 218 S
1 Credit
Occupational Therapy Fieldwork Preparation (1-0)

This course is designed to prepare individuals for their national certification test and Level II fieldwork experiences. This course will include examination of the steps needed to register for the national certification test and the use of problem solving skills to improve performance on the test. This course will address the guidelines required for Level II fieldwork experiences and reinforcement of professional behavior. (Prerequisite: OTA 201; Co-Requisite: OTA 236 and OTA 221)

OTA 221 S
5 Credits
Principles of Occupational Therapy Practice: Physical Rehabilitation (3-4)

This course will focus on the occupational therapy (OT) process in relation to persons with physical disabilities, development of observation skills, assessment, treatment, teaching, adapting, grading self-care, work, and play/leisure occupations for individuals with physical challenges. Topics include techniques and equipment to maximize participation in meaningful occupations, improve independence, ensure safety, prevent deformity and other issues impacting physical rehabilitation OT practice. (Prerequisite: OTA 131; Co-Requisites: OTA 211 and OTA 236)

OTA 228 S
3 Credits
Occupational Performance Across the Lifespan(3-0)

This course will focus on the observations, analysis, and performance of human occupations in work, self-care, and play/leisure throughout the life span. The teaching and learning process and the language of occupational therapy will be incorporated. (Co-requisites: OTA 101 and OTA 116)

OTA 236 F,S
4 Credits
Occupational Performance Issues in Later Adulthood (3-2)

This course will cover Occupational Therapy (OT) related geriatric issues. Topics include: study of the normal aging process, physical, psychosocial and cognitive dysfunctions common to the elderly, OT practice framework domain, process and therapeutic intervention with the geriatric population. This course will emphasize the importance of patient, family and caregiver education. (Prerequisite: OTA 140; Co-requisites: OTA 211 and OTA 221)

OTA 240 F
5 Credits
Fieldwork Level II—A (0-12.5)

Students will complete level II fieldwork for 35-40 hours a week for eight weeks. This is required in a supervised fieldwork experience applying occupational theory, skills, and concepts at an off-campus designated site. Students will use the occupational therapy process while developing and practicing the skills of an entry-level Occupational Therapy Assistant. Students are assigned to a particular setting working with individuals with developmental, physical, or emotional challenges. Students are responsible for their own transportation, room and board. (Prerequisite: OTA 221)

OTA 245 F
2 Credits
Occupational Therapy Management (2-0)

This course will cover the roles and responsibilities in the administration of occupational therapy services. Topics include assistance with the management of departmental operations; the role of the Occupational Therapy Assistant (OTA) in OT, program evaluation; supervisory requirements; reimbursement issues; personnel training and supervision; continued learning; and job search skills. (Prerequisite: OTA 221, Co-requisite: OTA 240 and OTA 250)

OTA 250 F
5 Credits
Fieldwork Level II – B (0-12.5)

Students will complete level II fieldwork for 35-40 hours a week for eight weeks. This is required in a supervised fieldwork experience applying occupational theory, skills, and concepts at an off-campus designated site. Students will use the occupational therapy process while developing and practicing the skills of an entry-level Occupational Therapy Assistant. Students are assigned to a particular setting working with individuals with developmental, physical, or emotional challenges. This course is designed to provide the student the opportunity to apply learned theory, skills, and knowledge in a second setting, therefore, gaining a deeper and broader perspective of the field of Occupational Therapy. (Prerequisite: OTA 240)

PHARMACY TECHNICIAN

PHAR 101 F
Pharmacy Techniques I (3-0) 3 Credits
Upon completion of this course the student will possess the minimum knowledge base or competency to assist pharmacists in the preparation of prescriptions. (Prerequisites: HS Diploma or high school equivalency. Eligible to register to take a National certification exam)

PHAR 102 F
Pharmacy Techniques II (3-0) 3 Credits
Upon completion of this course the student will possess the knowledge base or competency to assist pharmacists in the preparation of prescriptions. The student will meet all the requirements to take a National certification exam. (Prerequisites: PHAR 101)

PHAR 110 F
Pharmacology Concepts (3-0) 3 Credits
Upon completion of this course the student will possess the knowledge base of competency to dispense medications. Ethical and legal concepts will be introduced.

PHAR 150 F
Pharmacy Tech Internship (1-4) 3 Credits
Supervised work experience allows the student to apply skills in an actual pharmacy situation. Students will be required to gain experience in the area in which they are seeking a certificate. Students will complete coursework and 56 hours of supervised work experiences during the semester. (Co-requisite: PHAR 102)

PHILOSOPHY

PHIL 101 F,S
Introduction to Western Philosophy (3-0) 3 Credits
A reading prerequisite is in recognition that good reading skills are necessary for this course. The course introduces students to the philosophical questions posed by western thinkers and the impact of these ideas on the wider culture and history, and will include readings taken from ancient Greeks to modern philosophers. The course partially fulfills requirements for humanities general education. (Prerequisite: Reading at least college level)

PHIL 121 F,S
World Religions (3-0) 3 Credits
Students survey and compare the great world religions emphasizing concepts of God, creation, humanity, scripture, ethics and salvation. Emphasis is placed on the relationship between religious beliefs and other elements of society and culture. This rational and historical analysis concentrates on Hinduism, Buddhism, Jainism, Sikhism, Confucianism, Taoism, Shinto, Zoroastrianism, Judaism, Christianity, Islam, and Baha'i. It also includes an introduction to some basic indigenous religions of Native America and Africa. This course partially fulfills requirements for humanities in general education.

PHIL 201 F,S
Logic (3-0) 3 Credits
The methods and principles used in distinguishing sound from faulty reasoning, both deductive and inductive, are examined. Students successfully completing this course practically fulfill Humanities general education requirements.

PHIL 202 F,S
Ethics (3-0) 3 Credits
PHIL 202 surveys various ethical systems and explores personal moral attitudes and the ethical struggles in modern society. Students successfully completing this course partially fulfill Humanities general education requirements. (Prerequisite: Reading at least at college level)

PHYSICAL EDUCATION

The following are physical education activity courses.

PE 103 Upon Request
Bowling (0-2) 1 Credit
A brief history of bowling is followed by fundamentals of scoring. Instruction will be given in correct grips, stance, footwork and basic approach and release. (Additional bowling alley fee assessed)

PE 105 F,S
Weight Training (0-2) 1 Credit
This course is designed to assist participating students in maintaining and improving their general physical conditioning. The class emphasizes cardiovascular and muscular endurance, strength and flexibility through conditioning exercises and body mechanics. Daily activities include jogging and weight lifting to present a well-rounded program to students.

PE 110 Upon Request
Golf (0-2) 1 Credit
A brief history is followed by practice in the fundamental skills of golf. Scoring, strategy and rules are also taught. College facilities and the local golf course are utilized. (Additional golf fee may be assessed)

PE 111 Upon Request
Lifetime Activities (0-2) 1 Credit
This course acquaints students with a wide variety of activities that can be enjoyed throughout their lifetime. The following individual and group lifetime activities are covered: walking, bowling, badminton, volleyball, whiffle ball, table tennis, pickle ball and Frisbee. A course fee may apply.

PE 113 F,S
Lifetime Fitness and Wellness (1-1) 2 Credits
This course provides contemporary information about the beneficial effects of a positive healthy lifestyle and how to implement and live such a lifestyle through lecture, lab work, and weight workouts. General topics covered include cardiovascular fitness, posture, flexibility, agility, muscle tone, strength, endurance, diet and exercise. A course fee may apply.

PE 114 Upon Request
Badminton and Table Tennis (0-2) 1 Credit
A brief history of each activity is followed by practice in the fundamental skills of badminton and table tennis. Scoring, strategy and rules are also taught.

PE 117 Upon Request
Walking for Fitness (0-2) 1 Credit
Walking for Fitness is a low impact, outdoor activity class. It is designed to guide students toward better physical fitness through structured walking activities. The course will cover health-related topics such as heart rate (resting and target), weight management, pedometer usage, flexibility, caloric requirements and expenditures, body composition, stretching, and basic nutrition. (Course location varies)

PE 121/122 F,S
Strength Training for Athletes (0-2) 1 Credit
This course is designed to assist participating varsity athletes in maintaining and improving their general physical conditioning. The class emphasizes muscular strength and endurance training through conditioning exercises and body mechanics. (Prerequisite: Must be a freshman varsity athlete at Crowder)

PE 144 Upon Request
Introduction to Tae Kwon Do (0-2) 1 Credit
This course is the introduction to the history, discipline, skills and training involved in the study and practice of Tae Kwon Do.

PE 145 Upon Request
Beginning Tae Kwon Do (0-2) 1 Credit
This course is the continuation of the series of courses in Tae Kwon Do and provides the opportunity for continued growth and advancement in the art. (Prerequisite: PE 144)

PE 205	F,S	
Advanced Weight Training (0-2)	1 Credit	
This course is designed to assist participating students in maintaining and improving their general physical conditioning. The class emphasizes cardiovascular and muscular endurance, strength and flexibility through conditioning exercises and body mechanics. Daily activities include jogging and weight lifting to present a well-rounded program to students. (Prerequisite: PE 105)		
 PE 221/222	Upon Request	
Strength Training for Athletes (1-0)	1 Credit	
This course is designed to assist participating varsity athletes in maintaining and improving their general physical conditioning. The class emphasizes muscular strength and endurance training through conditioning exercises and body mechanics. (Prerequisite: Must be a sophomore varsity athlete at Crowder)		
 PE 244	Upon Request	
Intermediate Tae Kwon Do (0-2)	1 Credit	
This course is the continuation of the series of courses in Tae Kwon Do and provides the opportunity for continued growth and advancement in the art. (Prerequisite: PE 145)		
 PE 245	Upon Request	
Advanced Tae Kwon Do (0-2)	1 Credit	
This course is the continuation of the series of courses in Tae Kwon Do and provides the opportunity for continued growth and advancement in the art. (Prerequisite: PE 244)		

<i>The following are physical education lecture courses.</i>		
 PE 115	F	
First Aid (2-0)	2 Credits	
This course will teach students how to give immediate care to a person who has been injured or suddenly taken ill. The course includes self-help and home care if medical assistance is unavailable or is delayed.		
 PE 120	F	
Introduction to Health, Physical Education & Recreation (2-0)	2 Credits	
This course is to acquaint students with the principles, objectives, methods, subject matter and career materials in Physical Education.		
 PE 125	F,S	
Athletic Training (2-0)	2 Credits	
Instruction is given in the prevention and care of athletic injuries, including taping, exercise and other training techniques.		
 PE 142	F,S	
Personal and Community Health (3-0)	3 Credits	
This course acquaints students with a variety of topics including emotional health, drugs and drug abuse, human sexuality, the care and prevention of common diseases, body systems, analysis of health problems and proper nutrition.		
 PE 150	F	
Psychological Aspects of Physical Activity and Sports (2-0)	2 Credits	
This course will teach students the value of physical activities and sports in society through the development of the following personal characteristics: learning how to participate in sports anxiety-free, learning how to reach peak performance, learning how to maintain consistent quality performance, and learning how to win and lose.		
 PE 160	Upon Request	
Coaching Methods I (Basketball) (2-0)	2 Credits	
The various facets of organizing and managing a school basketball program are taught. Areas of concentration involve systems of offense and defense, special game situations, organizing practices and teaching fundamental skills of the game.		
 PE 206, 207	F,S	
Physical Education for Athletes (Men)	1 Credit	
This class is designed for varsity participation and preparation in soccer. This class is for <i>sophomores only</i> . PE 206 must be taken in		

the fall semester followed by PE 207 in the spring semester.

PE 260	S
Coaching Methods II (Baseball/Softball) (2-0)	2 Credits
The study of school baseball/softball program organization and management through basic concepts of individual and team offense and defense are taught. Game situations, organization, practices, and fundamental skills are covered.	

PE 197	Upon Request
Topics in Physical Education	1 Credit
This is a variable content course with topics that can change from semester to semester. Topics will be chosen each semester depending upon student requests and needs, and will be published in the schedule of classes. Topics may include but are not limited to: modern dance, swimming, outdoor education, basketball, tennis, racquetball, soccer, soft aerobics, etc. The course may be repeated if the topic is different.	

PHYSICS AND PHYSICAL SCIENCE

PHYS 101	F,S
Survey of Physical Science (3-2)	4 Credits
The basic principles and interrelations between physics, chemistry, earth science and astronomy are examined in this class. The course satisfies part of the general education science requirement for the Associate in Arts degree. This course includes a lab.	

PHYS 102	F,S
Physical Science Essentials (3-0)	3 Credits
The basic principles and interrelations between physics, chemistry, earth science and astronomy are examined in this class. The course satisfies part of the general education science requirement for the Associate in Arts degree. This course does not include a lab.	

PHYS 105	F,S
Descriptive Astronomy (3-0)	3 Credits
This is an introductory lecture course in astronomy. Topics include the history of Astronomy, the Moon, the Sun, the Solar System, Gravity and planetary motion, stellar evolution, neutron stars, black holes, galaxies and the evolution of the Universe. The course satisfies part of the general education science requirements for the Associate in Arts degree.	

PHYS 190	S
General Physics I (4-2)	5 Credits
General Physics I is a calculus level course that examines the principles and applications of classical mechanics and thermodynamics. This class is intended for students majoring in engineering, the physical sciences, mathematics and computer science. (Prerequisites: MATH 150) (Co-requisite: MATH 160 or one-semester MATH 150/160 sequence concurrently with PHYS 190)	

PHYS 210	F
General Physics II (4-2)	5 Credits
General Physics II continues study initiated in Physics 190. The topics covered are electricity and magnetism and optics. This course is intended for students majoring in engineering, the physical sciences, mathematics and computer science. (Prerequisite: PHYS 190, MATH 150 AND MATH 160)	

PHYS 250	S
Statics (3-0)	3 Credits
Statics is a course for engineering majors that examines two and three-dimensional mechanical systems under equilibrium conditions. (Prerequisites: PHYS 190, MATH 150, and MATH 160)	

PHYS 271, 272, 273	1-3 Credits
Topics in Physics	
A variable content course with areas of study that reflects current issues. Topics are identified in the course schedule and prerequisites are spelled out in the syllabus. (Prerequisite: Permission of department)	

POLITICAL SCIENCE

PLSC 103 *National, State, Local Government (3-0)* **F,S** **3 Credits**
PLSC 103 introduces the basic principles and structures of the American national government, and state and local government organizations and functions. Emphasis is placed on constitutional development and interpretation; the place of government in the social process; and the function of the executive, legislative, and judicial branches. Students successfully completing this course fulfill the Civics requirement in constitutional study within the Social and Behavioral Science general education requirements. (Prerequisite: Reading at least at college level)

PLSC 111, 112, 113 *Upon Request* **1-3 Credits**
Topics in Political Science (1-3)

These courses provide an opportunity to study selected Political Science topics not covered in the Political Science curriculum or to study in greater depth, topics addressed in introductory Political Science courses. The content of these courses may vary from semester to semester and some may require a prerequisite. Check with the Division Chair, instructor or advisor regarding prerequisites for a specific topics course. These courses will transfer but may or may not meet specific degree or program requirements at other institutions (Prerequisite: Reading at least at college level)

PRESCHOOL TEACHER/ PARAPROFESSIONAL

ECD 101 *Foundations and Theories in Early Childhood Education* **F,S**

(3-0) **3 Credits**

This course is an introduction to early childhood education including a historical perspective of early childhood education, relating to parents and other professionals in the community, and advocating or children and families.

ECD 103 *Health, Safety, & Nutrition of Young Children (3-0)* **F,S** **3 Credits**

This course covers a review of health/safety practices recommended for childcare and includes information on common diseases and health problems. Guidelines and information nutrition and developmentally appropriate activities are also studied in the course. (Prerequisite: Successfully complete first aid and CPR certification for adult, child and infant by the end of the semester)

ECD 201 *S* **Curriculum for Early Childhood Programs (3-0)** **3 Credits**

The goals of this course are to introduce students to the appreciation and assessment of young children's thinking, to provide opportunities to develop competencies in promoting the learning and overall development of young children individually as well as in groups, and to increase levels of professionalism as educators. (Prerequisite: Reading at least at college level; ECD 101 and ECD 103 or current CDA)

ECD 203 *S* **2 Credits**
Early Childhood Practicum (2-0)

By actively participating in the care and education of young children in an early childhood program, students will become more proficient in administrative skills, increase their awareness of contemporary issues in early childhood, and will demonstrate a high level of competence as a head teacher. Students will serve a total of 45 hours in field experience and 16 hours in seminar during the semester. (Prerequisite: Reading at least at college level and provide a current copy of the criminal background check. Concurrent enrollment in ECD 201 is expected)

PSYCHOLOGY

PSYC 101 *F,S,SU* **General Psychology (3-0)** **3 Credits**

An introduction to the scientific study of human behavior including motivation, perception, learning, emotions, intelligence and the physiological basis of behavior is presented. Successful completion of this course partially fulfills Social and Behavioral Science general education requirements.

PSYC 110 *F* **Psychology of Personal Adjustment (3-0)** **3 Credits**
This study of the development of the self and problems of adjustment emphasizes effective methods of coping with stress and improving interpersonal relationships through discussion, research and group dynamics. Successful completion of this course partially fulfills Social and Behavioral Science general education requirements. (Prerequisite: PSYC 101, Reading at least at college level)

PSYC 203 *F,S* **Autism Spectrum Disorders (3-0)** **3 Credits**

This course focuses on a broad overview of autism, Asperger's syndrome and related autism spectrum disorders with particular emphasis on characteristics, definition, educational aspects, and contemporary issues in the field of special education. It is designed to provide students with a firm grounding in the foundations of teaching persons with autism and expose them to recent developments in the field. Content also includes methods to enhance classroom functioning and skill acquisition.

PSYC 204 *F* **Applied Behavior Analysis for Educators (3-0)** **3 Credits**

This course focuses on identifying, recording, evaluating, and changing social and academic behaviors of special and diverse populations. Theories of classroom management will be explored and various approaches to management including use of technological advances will be addressed. Developing classroom and individual behavior management plans will be emphasized.

PSYC 211 *F,S,SU* **3 Credits**
Lifespan Development (3-0)

This is a study of human development across the lifespan. From conception to death, this course will examine physical, cognitive, and socioemotional changes along developmental milestones. Successful completion of this course partially fulfills Social and Behavioral Science general education requirements. (Prerequisite: PSYC 101)

PSYC 213 *F,S* **3 Credits**
Abnormal Psychology (3-0)

This course is an introduction to psychopathology, the scientific study of mental disorders. This course surveys the number of disorders including anxiety disorders, mood disorders, eating disorders, substance use disorders, schizophrenia, and personality disorders. It will cover basic concepts, definitions, historical perspectives, and theories. (Prerequisite: PSYC 101)

PSYC 290 *S* **3 Credits**
Clinical I-Supervised Field Experience (3-0)

This course will provide students the experience of practicing applied behavior analysis methodologies. Students will learn discrete trial teaching, natural environment teaching, incidental teaching, and how to conduct functional behavior assessments. Students will develop and implement behavior intervention plans, monitoring behavior intervention plans and make informed decisions when working with a child with autism or has behavioral issues. This course requires 80 hours of on-site work and a portfolio is required to successfully complete this course.

Educational Psychology (See EDUC 231)

SOCIAL WORK

SWK 200 *F,S* **3 Credits**
Introduction to Social Work (3-0)

Social work methods and processes, case work, group work, community organization, research and social action are examined. Theory and application of social work as a way of understanding and helping people are also discussed. (Prerequisite: Reading at least at college level)

SWK 221 *S* **3 Credits**
Basic Helping Skills (3-0)

This course combines the theories of social work practice with social work practice skills using common models and theoretical frameworks. It presents and provides structured practice of fundamental interpersonal skills required for effective social work practice. This class teaches interviewing skills and critical thinking about the interview processes beginning with intake and ending with

termination and evaluation. The models, theories, and processes learned in this course serve as the foundation for generalist practice with individuals, families, groups, and communities. Students will also be required to volunteer at different service agencies for a specific amount of service hours to complete the course.

SWK 230 **F**
Substance Abuse Interventions (3-0) **3 Credits**

The objective of the Substance Abuse Interventions class is to introduce students to the general field and study of chemical abuse and dependency. Areas of study broadly include definitions, prevalence, etiology, policies, effects on family and society, and prevention and treatment approaches. SWK 230 will examine each of the major topic areas, theories and major findings that comprise this area of human behavior.

SOCIOLOGY

SOC 101 **F,S**
General Sociology (3-0) **3 Credits**

This introduction analyzes groups, institutions and individual behavior in group environments. Successful completion of this course partially fulfills Social and Behavioral Science general ed. requirements.

SPEECH

COMM 104 **F,S,SU**
Fundamentals of Speech (3-0) **3 Credits**

Fundamentals of Speech is an introduction to the fundamentals of effective public speaking and listening. The course is designed to develop confidence in self-expression and interpersonal communications. Communications 104 includes preparing, organizing and delivering oral messages within a variety of real life situations of communication. Audience analysis, the listening process and clarity of expression are emphasized. (Prerequisite: ELI 35, if required by Crowder College's standard Admission testing procedures)

COMM 105 **F,S**
Introduction to Human Communication (3-0) **3 Credits**

This course introduces students to the study and practice of communication. Areas covered include interpersonal, nonverbal, intercultural, mass media, group, and organizational communication. Students must demonstrate competency in research, an interview, group communication, and oral presentations as well as written and visual communication.

SPCH 121, 122, 123, 124 **1 Credit**
Competitive Speech

Designed for students interested in improving communicative and public speaking skills through the practical application of competitive speech and debate. This class covers speech research, preparation, outlining, and delivery. Provides students with practical experience in both practice rounds and intercollegiate competitions.

SPCH 193 **3 Credits**
Topics (3-0)

Variable content, appropriate to student needs, is included in this elective course. Lectures and/or studio projects in the fields of speech and debate may be used. (Consult the registration schedule for specific topics when class is offered)

SURGICAL TECHNOLOGY (offered only at Joplin)

SURG 111 **F**
Surgical Tech I (6-0) **6 Credits**

This course includes lecture covering aspects for surgical techniques including those performed in the scrub and circulating role, building skills needed for team collaboration as well as independent work performance. This course will explain the job role of the Surgical Technologist. An over of the history of surgery will be discussed, which will provide an understanding of the OR and how it is related to the perioperative field. Lecture will include task integration and perioperative responsibilities. A review of hospital organizations will include how these institutions are governed by law as well as individual policies. The student will learn specific patient care by recognizing physical, social, cultural and diagnostic history needs.

Microbiology will be introduced, providing the historical background, learning basic equipment, as well as the cellular structure. Instruction and skill development to OR technique will provide the student with an understanding of aseptic technique and environmental hazards.

SURG 115 **F**
Surgical Tech I Lab (3-0) **3 Credits**

The laboratory experience is designed to reinforce lecture objectives and assist the surgical technology student in the development of skills and knowledge needed to perform tasks and function as a team member in the OR in a safe manner. The student will be given on going competencies though additional outside information may be utilized to assist the student with their learning. Students will experience progressive learning with microbiology for asepsis, anatomy for surgical procedures and basic pharmacology for receiving and dispensing medications from the surgical field. Instrumentation, draping, surgical prepping and wound dressing will be continually emphasized the duration of lab. Other lab skills will include but not limited to: suture, dressing, positioning, prepping, body mechanics for patient transfer, learning the surgical OR bed and other OR furniture. The completion of each lab competency is required, the student must be able to appropriately perform these tasks for demonstrations of safe patient care in order to qualify for surgical rotation.

SURG 121 **F**
Surgical Tech II (6-0) **6 Credits**

This course assists the student with the fundamentals for functioning in the sterile role. The student will obtain knowledge through lecture about the surgical conscience and learning aseptic technique. The discussion of various pathogens through microbiology will provide an understanding of asepsis. This will provide an understanding the methods of decontamination for instrumentation. Students will also be taught the various hazardous chemicals and safety precautions. Body systems are reviewed including anatomy, physiology, diagnostic terms, and surgical and therapeutic procedures. This will serve as an introduction to Anatomy and Physiology for the beginning Surgical Technologist. This course also assists the student with medical word building and the development of extensive medical vocabulary. (Corequisite: SURG 125)

SURG 125 **F**
Surgical Tech II Lab (3-0) **3 Credits**

This lab assists the student with the fundamentals for functioning in the sterile role. Aseptic technique training will be accomplished by hand washing and surgical scrubbing, as well as performing task within the OR suite. Students will also be taught the various hazardous chemicals and safety precautions. Body systems are reviewed including anatomy, physiology, diagnostic terms, and surgical and therapeutic procedures with hands-on practice on manikins in an OR suite simulation. (Prerequisite: SURG 111) (Corequisite: SURG 121)

SURG 131 **S**
Surgical Tech III (6-0) **6 Credits**

This course includes lecture covering basic concepts of Pharmacology, while utilizing case studies designed to promote critical thinking. Lecture will include discussions as to how outcomes of surgical procedures and overall patient safety are directly related to knowledge of pharmacology. Implications for the Surgical Technologists will be presented placing emphasis on patient safety and safe handling of medications. Concepts of anesthesia are discussed and the necessity of each component related to the anesthetic preparation. The comparison of hemostatic agents and techniques will also be discussed. Lecture will also cover the recovery of the patient and discharge plans. (Prerequisite: SURG 121) (Corequisite: SURG 135)

SURG 135 **S**
Surgical Tech III Lab (3-0) **3 Credits**

While in the lab setting, the basic concepts of Microbiology will be reinforced from the classroom by utilizing case studies designed to promote critical thinking. Discussions as to how outcomes of surgical procedures and overall patient safety are directly related to knowledge of basic microbiology will be put into practical sense through the use of scenarios, and will help to instill the concepts of safety in hands-on practice. Students will also be applying this knowledge in the clinical setting, performing skills as surgical tech students in the OR setting. (Prerequisite: SURG 121) (Corequisite: SURG 131)

SURG 141	S			
Surgical Tech IV (6-0)	6 Credits			
Introduction to patient care principles, wound healing, wound classification, the body's immune defense, healing and recovery as well as patient demise. The student will have knowledge of basic computer concepts and given informative resume building skills. (Prerequisites: SURG 131 & Eligible to register to take a National Certification Exam) (Corequisite: SURG 145)				
SURG 145	S			
Surgical Tech IV Lab (3-0)	3 Credits			
Introduction to patient care principles wound healing, wound classification, the body's immune defense, healing and recovery as well as patient demise. The student will have knowledge of basic computer concepts and given informative resume building skills. These skills and knowledge will be reinforced through hands-on practical assessment and scenario-based processes in the lab setting and clinical setting. (Prerequisites: SURG 131 & Eligible to register to take a National Certificate Exam) Corequisite: SURG 141)				
THEATRE				
<i>Note: Only four hours of Theatre Practicum (Performance or Technical, not four hours of each) may be applied toward graduation.</i>				
TA 105	F			
Acting I (3-0)	3 Credits			
This course is designed to free the body and voice as well as the imagination and creativity of the student. This course's purpose is to allow the student to become free from inhibitions when performing on stage. A series of exercises will be utilized to accomplish these goals as well as monologue and scene work to polish the skills of the actor.				
TA 106, 107, 206, 207	F,S,SU			
Theatre Practicum, Performance (1-0)	1 Credit			
Students cast in departmental production(s) may receive credit for their participation as actors. A minimum of 30 hours in rehearsal, performance and strike is required. This course may be repeated for credit with four hours to be applied toward graduation. (Prerequisite: permission of instructor)				
TA 108	F			
Playwriting (3-0)	3 Credits			
This course is designed to introduce students to the fundamentals of script writing for stage and screen. Participants in this class will learn to properly compose and format scripts, while also exploring the freedom of creative expression through writing. Throughout the semester we will explore the three act structure, read various literary works and apply technique through various written and performance projects.				
TA 112	S			
Directing I (3-0)	3 Credits			
This course is designed to introduce students to the fundamentals of directing. Participants in this class will learn how to execute the art and responsibilities of directing; from casting to strike. This course will provide students with a hands-on approach to directing, while also encouraging them to engage in play analysis, critical thinking and creative application.				
TA 115	S			
Stagecraft (3-0)	3 Credits			
Students study backstage work through an examination of the materials, techniques and conventions of stage construction and show production. The course will introduce the practical aspects of properties, scenery, painting, lighting, sound, electronics, and drafting. Thirty (30) hours of practical experience are required during the semester.				
TA 116, 117, 216, 217	F,S,SU			
Theatre Practicum, Technical (0-3)	1 Credit			
Students may receive credit for their participation in technical aspects of departmental productions when not currently participating for credit in another theatre course. A minimum of thirty (30) hours of theatre participation is required in lighting/sound, scenery construction, costumes, props, stage management, or any combination. This course may be repeated for credit for a maximum of four hours applied toward graduation. (Prerequisite: permission of instructor)				
TRUCK DRIVING				
TRDR 101, 102	S			
Transport Training (13-0)	3 Credits			
This course offers the student entry-level knowledge and skills necessary to operate a tractor-trailer vehicle safely, efficiently and economically. The students' training will consist of various techniques of instruction including classroom training, driving on a controlled paved range, backing range, as well as highway and city driving. The tractor-trailers used in training students are comparable to what is used by the trucking industry today.				
VETERINARY TECHNOLOGY				
ANSC 180	F,S			
Introduction to Veterinary Science (2-0)	2 Credits			
This course will begin with a brief study of the professions of veterinary medicine. Basic cell structure, tissue types, and body systems will then be covered, with practical application to common animal diseases. Animal hospital procedures and animal handling will be introduced. This course will serve as preparation for those interested in working in veterinary medicine or having an interest in application to the Veterinary Technology program at Crowder College or to a college of veterinary medicine to pursue a doctorate degree. (Taking BIOL 101 or BIOL 110 prior to or at the same time as taking this course is recommended.)				
VETC 110	F			
Sanitation and Animal Care (2-0)	2 Credits			
As an introduction to sanitation, disinfectants, sterilization, and zoonotic diseases and how they relate to public health, this course includes parasitology, cleaning and sterilization sanitation of equipment and facilities, and procedures in patient care. Anti-infective drugs are introduced. Material Safety Data Sheets and OSHA regulations are also discussed. (Prerequisite: Admittance to the Veterinary Technology program)				
VETC 120	S			
Veterinary Hospital Technology I (1.5-3)	3 Credits			
As an introduction to anesthetics and surgical assisting, the course includes surgical preparations, monitoring, and post-operative				

procedures, parenteral fluid administration and intravenous hookups. Drugs affecting the nervous and cardiovascular systems are discussed, along with the basics of pharmacology. (Prerequisite: Admittance to the Veterinary Technology program)

VETC 130 S
3 Credits
Clinical Pathology Techniques I (1.5-3)

This course is an introduction to laboratory procedures including clinical chemistries, hematocrits, complete blood counts, differentials, and urinalysis. (Prerequisite: Admittance to the Veterinary Technology program)

VETC 140 F
3 Credits
Companion Animal Technology (2-2)

In addition to instruction in restraint and handling of dogs, cats, this course also includes the study of common canine and feline diseases, small animal parasites, medical terminology, identification of breeds, discussion of commonly used medications, bathing and basic grooming techniques, blood collection, specimen collection, and common laboratory techniques. (Prerequisite: Admittance to the Veterinary Technology program)

VETC 180 F
4 Credits
Anatomy and Physiology of Animals (2-4)

This course includes basic principles of anatomy using a systemic and comparative approach, as well as instruction in physiology as it relates to anatomy and applicable pathology. Instruction in anatomic landmarks, interrelationships, and terminology is essential to this course. (Prerequisite: Admittance to the Veterinary Technology program)

VETC 220 F
3 Credits
Veterinary Hospital Technology II (1.5-3)

This course includes administration of anesthetics, surgical assisting and patient monitoring, bandaging, casting, blood transfusions, variations in surgical preparations, and postoperative care. Emergency treatments will be discussed in greater detail. Pharmacology of various classes of drugs will also be included. (Prerequisite: Admittance to the Veterinary Technology program)

VETC 230 S
2 Credits
Laboratory Animal and Avian Technology (1-2)

Students will study basic anatomy and diseases of laboratory animals and birds, as well as develop skills in handling, performing laboratory testing, and treatment of these species. Handling and diseases of some exotic/other species will be discussed. (Prerequisite: Admittance to the Veterinary Technology program)

VETC 250 S
3 Credits
Clinical Pathology Techniques II (1.5-3)

This course includes the theory and performance in hematology, urinalysis, and cytology with the introduction to simple immunologic tests, blood coagulation tests and bone marrow evaluation. Collection and identification of fungal pathogens are performed. (Prerequisite: Admittance to the Veterinary Technology program)

VETC 263 S
3 Credits
Large Animal Med/Surg (1.5-3)

This course emphasizes techniques necessary to assist the veterinarian in a large animal or mixed practice and in research facilities. Bovine, equine, porcine, ovine, and caprine medicine and management including restraint, blood collection, medicating, and nursing techniques are included. (Prerequisite: Admittance to the Veterinary Technology program)

VETC 270 S
1 Credit
Board Examination Review (1-0)

Students will systematically review all course material covered in previous semesters to aid in preparation for the national and state board examinations, improving the understanding of all program materials. (Prerequisite: Admittance to the Veterinary Technology program)

VETC 280 F
2 Credits
Radiology and Electronic Procedures (1-2)

This course is a study and practice in radiological techniques, radiographic exposure techniques, film processing, contrast

radiography, as well as ultra sound technology. (Prerequisite: Admittance to the Veterinary Technology program)

VETC 284 SU
4 Credits
Veterinary Technician Internship (0-4)

This course consists of 240 hours in which the student works for a professional veterinary institution. The student will apply his or her training in an occupational setting, applying previously learned skills and knowledge to the work place. Evaluation forms are completed by the cooperating establishment. This course is offered for P/F grade only. (Prerequisite: Admittance to the Veterinary Technology program)

VETC 285 S
1 Credit
Vet Tech Clinical Experience I (0-2.5)

This course consists of 40 hours in which the student works with a veterinarian in a clinical setting as a first or second year vet tech student. The student will apply previously learned skills and knowledge to the work place. At the end of the experience, the student will write a paper discussing the pros and cons of this experience. Evaluation forms will also be completed by the supervising veterinarian. This course is offered for a pass/fail grade only.

VETC 286 F,S
1 Credit
Vet Tech Clinical Experience II (0-2.5)

This course consists of 40 hours in which the student works with a veterinarian in a clinical setting as a second year vet tech student. The student will apply previously learned skills and knowledge to the work place. At the end of the experience, the student will write a paper discussing the pros and cons of this experience. Evaluation forms will also be completed by the supervising veterinarian. This course is offered for a pass/fail grade only.

WELDING **(offered only at Joplin)**

WELD 113 3 Credits
Introduction to Welding (2-2)

This course is designed to introduce the student to the basic operation of Shielded Metal Arc Welding ("Stick" Welding), Gas Metal Arc Welding (formerly M.I.G. Welding), Gas Tungsten Arc Welding (formerly T.I.G. Welding) and Thermal Cutting. Fee for materials and supplies.

WELD 117 2 Credits
Welding Blueprint Reading (2-1)

This course is the basic blue printing interpretation including the principles of reading, engineering drawings, and symbol used to understand prints in sufficient detail to give students the working knowledge of the subject. Instruction is based on a combination of traditional lecture/classroom exercises coupled with hands-on shop activities.

WELD 136 2 Credits
Metallurgy Concepts (2-1)

This course will study the basic fundamentals of metallurgy. We will discuss the behavior of metals and how they relate to the field of welding. Topics include identification, classification and properties of ferrous metals, nonferrous metals, alloys, heat treatment, destructive and non-destructive tests, cast iron and plastics.

WELD 160 7 Credits
Plate Methods (2-11)

This course emphasizes occupational safety training and includes OSHA 10 certification. The course has a strong focus on workplace safety, use of Personal Protective Equipment (PPE) and an emphasis on the safe handling of welding and cutting equipment. This course gives basic hands-on instruction in the processes of Shielded Metal Arc Welding (SMAW), Gas Metal Art Welding (GMAC), and Thermal Cutting. Students will learn to identify and use welding-related hand tools. Students will weld on various thicknesses of metal and use a variety of techniques. Topics covered also include how to manage welding supplies, welding consumables, and maintain equipment.

WELD 165**Plate Methods I (2-11)****7 Credits**

This course focuses on advanced lessons in Shield Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux Core Arc Welding (FCAW), Gas Tungsten Arc Welding (GTAW), and Thermal Cutting. Instruction will consist of perfecting skilled welding on plate steel in all positions using a variety of common industry recognized welding processes. Welds will be performed on fillet and groove joint design. Students will also study welding symbols, drawings, welding codes, specifications and tests with special emphasis on the American Welding Society (AWS) welder qualifications. Students will practice performing welds in accordance to the American Welding Society (AWS) certification guidelines. At the end of this course, students have the opportunity to certify to one of five specific AWS certifications. (Prerequisite: WELD 160)

WELD 197, 198, 199, 297, 298, 299**Topics in Welding Technology (0-8 to 3-0)****1-3 Credits**

This is a variable content course with areas of study that reflect current needs of individual students in the area of Welding Technology. Topics are identified in the course description. Fee for materials and supplies. A course fee may apply. (Prerequisite: Permission of instructor)

WELD 270**Pipe Methods I (2-14)****8 Credits**

This course will provide the student with technical understanding in pipe welding, which includes the study of electrical theory for the different welding and cutting processes. Students will be welding various thicknesses of pipe on the 1GR, 2G, 5G and 6G positions. Students will increase technical understanding of tacking and welding techniques required by industry standards. Students will continue to utilize welding applications which include Shielded Metal Arc Welding (SHAW), Gas Tungsten Arc Welding (GTAW), and Flux Core Arc Welding (FCAW). (Prerequisites: WELD 165)

WELD 275**Pipe Methods II (2-14)****8 Credits**

This course provides the student with an opportunity to learn various advanced welding applications for pipe welding which includes the SMAW, GTAW and FCAW processes. The course provides students the opportunity to further develop their welding skills necessary to make certified welds in accordance with the American Welding Society (AWS) D1.1 and American Society of Mechanical Engineers (ASME) Section 1X. Per AWS D1.1 and ASME Section IX, nondestructive and destructive testing methods will be reviewed and implemented. This course will also provide the student with a technical understanding of a WPS (Welder Performance Specification) and a PQR (Performance Qualification Record). This course will also provide the student with a technical understanding of proper procedures for the completion of pipe weldments. (Prerequisite: WELD 270)

WELD 280**Fabrication Methods I (2-5)****5 Credits**

This course instructs students on fabrication techniques as they relate to manufacturing, maintenance, and repair. Fabrication processes may include thermal cutting, Gas Metal Arc Welding-Pulse (GMAW-P), Flux Cored Arc Welding (FCAW), Gas Tungsten Arc Welding (GTAW) and Shielded Metal Arc Welding (SMAW). Students will learn how to use basic shop tools and shop equipment efficiently and safely. Students will interpret and use the type of engineering drawings and prints found in the welding trade and calculate material needs based on those drawings. (Prerequisite: WELD 165)

WELD 285**Fabrication Methods II (2-5)****5 Credits**

This course provides the students an opportunity to learn various advanced welding applications which include thermal cutting, Gas Metal Arc Welding-Pulse (GMAW-), Flux Cored Arc Welding (FCAW), Gas Tungsten Arc Welding (GTAW) and Shielded Metal Arc Welding (SMAW). The student will also learn a technical understanding of advanced cutting operations including Computer Numerical Control (CNC) programming. The student will also learn advanced CNC to correctly operate fabrication equipment. This course will also provide the student with a technical understanding of calculating material and use of proper procedures for the completion of projects manufactured in the lab. (Prerequisite: WELD 280)

Advanced Manufacturing Technology: Programmable Logic Controller (PLC) Technician Certificate

Advanced Manufacturing Technology: Automation/Robotics Technician Certificate

Advanced Manufacturing Technology: Automation/Robotics Option AAS

The Advanced Manufacturing Technology program prepares students for employment in industries with automated manufacturing processes. The program is built around a set of core courses designed to give students the basic skill set required for this industry coupled with specialty courses allowing students to focus on various related options. This Program of Study addresses the Automation/Robotics Option.

The Automation/Robotics Technician certificate prepares students for employment in industries with automated robotic processes. Successful graduates will possess the ability to perform entry level maintenance and repairs to industrial automated equipment and robots.

This certificate prepares students to enter a career in industrial technology with a basic skill set that will provide entry level knowledge of basic electricity, motor controls, and programmable logic controllers (PLC). The PLC classes will provide general and advanced training in programmable logic controllers as they are used in industry to manage multiple automated processes.

Program of Study

PLC Certificate Courses			16 hours
AMT	102	Introduction to Industrial Electricity (3)	
AMT	104*	Electrical Motor Controls (3)	
AMT	111	Introduction to Industrial Safety (1)	
AMT	142*	Manufacturing Mechanics (3)	
AMT	204*	Programmable Logic Controllers I (3)	
AMT	206*	Programmable Logic Controllers II (3)	
Auto/Robotics Certificate Courses			11 hours
AMT	132	Industrial Hydraulics (3)	
AMT	182*	Introduction to Automated Robotics (3)	
AMT	284*	Automated Robotic Programming (3)	
COLL	105	Technical Career Development I (1)	
COLL	106	Technical Career Development II (1)	
Auto/Robotics Mathematics			3 hours
MATH	104*	(3)	
MATH	134*	(5)	
MATH	135*	(3)	
Communications			9 hours
<i>Written Communications (6 hours)</i>			
ENGL	101*	(3)	
ENGL	102*	(3)	
ENGL	203*	(3)	
<i>Oral Communications (3 hours)</i>			
COMM	104*	(3)	
Civics			3 hours
HIST	106*, 107*	(3)	
PLSC	103*	(3)	
Support Courses			9 hours
BSAD	115	(3) – OR – BSAD 125	
DRFT	101	(3)	
WELD	113	(3)	
Advanced Manufacturing Courses			3 hours
AMT	290*	Manufacturing Internship (3)	
Automation/Robotics Courses			6 hours
AMT	162*	Industrial Process Control I (3)	
CNS	113	Intro to Networks (3)	
Required Online Course			0 hour
CVCS	101	Missouri Higher Ed Civics Examination	

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
AMT 102 Intro to Industrial Electricity		3
AMT 104 Electrical Motor Control		3
AMT 111 Introduction to Industrial Safety		1
AMT 142 Manufacturing Mechanics		3
AMT 204 Programmable Logic Controllers I		3
AMT 206 Programmable Logic Controllers II		3
	TOTAL	16
Graduate with PLC Certificate		
Spring Semester		Hours
AMT 132 Industrial Hydraulics		3
AMT 182 Intro to Automated Robotics		3
AMT 284 Automated Robotic Programming		3
COLL 105 Technical Career Dev. I		1
COLL 106 Technical Career Dev. II		1
Approved Mathematics Course		3
	TOTAL	14
Graduate with Automation/Robotics Certificate		
SECOND YEAR		
Fall Semester		Hours
AMT 162 Industrial Process Control		3
COMM 104 Fundamentals of Speech		3
DRFT 101 Intro to Engineering Drawing		3
WELD 113 Introduction to Welding		3
Approved Written Communications Course		3
	TOTAL	15
Spring Semester		Hours
AMT 290 AMT Internship		3
CNS 113 Intro to Networks		3
BSAD 125 -OR- BSAD 115		3
Approved Civics Course		3
Approved Written Communications Course		3
	TOTAL	15
Graduate with AAS		
Total PLC CERTIFICATE Hours Required		16
Additional Hours Needed for AAS		14
Total A/R CERTIFICATE Hours Required		26
Additional Hours Needed for AAS		30
Total AAS Hours Required		60

Courses for Certificate	
Additional Courses for AAS Degree	



CERTIFICATE
Programmable Logic Controller (PLC) Technician

Students must earn 16 hours for this certificate.		Done	Curr	To do	
Major Courses		16 hours			
	AMT	102 Introduction to Industrial Electricity (3)			
	AMT	104 Electrical Motor Controls* (3)			
	AMT	111 Introduction to Industrial Safety (1)			
	AMT	142 Manufacturing Mechanics (3)			
	AMT	204 Programmable Controllers I* (3)			
	AMT	206 Programmable Controllers II* (3)			



CERTIFICATE

Automation/Robotics Technician

		Automation/Robotics Technician		
		Students must complete 27 hours for the Automation/Robotics Technician certificate.		
		Done	Curr	To do
Orientation		2 hours		
COLL	105 Technical Career Dev. I (1)	_____	_____	_____
COLL	106 Technical Career Dev. II (1)	_____	_____	_____
Mathematics		3 hours		
MATH	104 Technical Mathematics* (3)	_____	_____	_____
MATH	134 Algebra for Calculus with Support (5)	_____	_____	_____
MATH	135 Algebra for Calculus* (3)	_____	_____	_____
Major courses		21 hours		
AMT	102 Intro to Industrial Electricity (3)	_____	_____	_____
AMT	104 Electrical Motor Controls* (3)	_____	_____	_____
AMT	132 Industrial Hydraulics (3)	_____	_____	_____
AMT	182 Intro to Automated Robotics* (3)	_____	_____	_____
AMT	204 Programmable Controllers* (3)	_____	_____	_____
AMT	206 Programmable Controllers II* (3)	_____	_____	_____
AMT	284 Automated Robotic Programming* (3)	_____	_____	_____



ASSOCIATE OF APPLIED SCIENCE DEGREE

Advanced Manufacturing Technology:

Automation/Robotics Option

			Done	Curr	To do		Done	Curr	To do
Orientation		2 hours				60 hours total			
COLL	105 Technical Career Dev I (1)								
COLL	106 Technical Career Dev II (1)								
Communications		9 hours							
	Written Communications (6 hours)								
ENGL	101*					ENGL	203*		
ENGL	102*								
	Oral Communications (3 hours)								
COMM	104*								
Mathematics		3 hours							
MATH	135*								
MATH	134*					MATH	104*		
Civics		3 hours							
HIST	106*					PLSC	103*		
HIST	107*								
Advanced Manufacturing Core		19 hours							
AMT	102 Intro to Industrial Electricity* (3)								
AMT	104 Electrical Motor Controls* (3)					AMT	142 Mech Power Transmition (3)		
AMT	111 Intro to Industrial Safety (1)					AMT	204 Programmable Controllers* (3)		
AMT	132 Industrial Hydraulics* (3)					AMT	290 Manufacturing Internship* (3)		
Support Courses		9 hours							
BSAD	115 Computer Concepts (3)					OR	BSAD 125 Computer Apps (3)		
DRFT	101 Intro to Engineering Drw g (3)								
WELD	113 Intro to Welding* (3)								
Automation/Robotics		15 hours							
AMT	162 Industrial Process Control I* (3)								
AMT	182 Intro to Automated Robotics* (3)								
AMT	206 Programmable Controllers II* (3)								
AMT	284 Auto Robotic Programming* (3)								
CNS	113 Intro to Networks (3)								
*Prerequisite course(s) or minimum test scores required. See catalog course descriptions for details.									
Required Online Course		0 hour							
CVCS	Missouri Higher Ed Civics Examina								

Advanced Manufacturing Technology: Industrial Maintenance Technician Certificate

Advanced Manufacturing Technology: Manufacturing Maintenance Option AAS

The Advanced Manufacturing Technology program prepares students for employment in industries with automated manufacturing processes. The program is built around a set of core courses designed to give students the basic skill set required for this industry coupled with specialty courses allowing students to focus on various related options. This Program of Study addresses the Manufacturing Maintenance Option.

This certificate prepares students to enter a career in industrial maintenance with a skill set that will provide entry level knowledge of basic construction, welding, print reading, and industrial electricity. The electrical courses will include the use of electrical testing devices, troubleshooting techniques, and programmable logic controllers.

Program of Study

Certificate Technical Courses	12 hours
AMT 102 Introduction to Industrial Electricity (3)	
AMT 104* Electrical Motor Control (3)	
AMT 111 Introduction to Industrial Safety (1)	
AMT 204* Programmable Logic Controllers I (3)	
COLL 105 Technical Career Development I (1)	
COLL 106 Technical Career Development II (1)	
Certificate Support Courses	9 hours
BSAD 125 Computer Applications (3) -OR- BSAD 115	
DRFT 101 Introduction to Engineering Drawing (3)	
WELD 113# Intro to Welding (3) – OR – WELD 160* (7)	
Approved Certificate Electives	6 hours
Certificate Electives Required for AAS	(15 for AAS)
AMT 122 Basic Machining (Manual) (3) [Required for AAS]	
AMT 132* Industrial Hydraulics (3) [Required for AAS]	
AMT 142* Mech Power Trans (3) [Required for AAS]	
CONS 131 Plumbing (3) [Required for AAS]	
HVAC 105 Introduction to HVAC/R (3) [Required for AAS]	
Certificate Electives that are AAS Electives	
AMT 206#*Programmable Logic Controllers II (3)	
WELD 165* Plate Methods I (7) - OR - WELD 280* (5)	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101* (3) ENGL 102* (3)	
ENGL 203* (3)	
Oral Communications (3 hours)	
COMM 104* (3)	
Mathematics	3 hours
MATH 104* (3)	
MATH 134* (5) MATH 135* (3)	
Civics	3 hours
PLSC 103* (3) HIST 106*, 107* (3)	
Advanced Manufacturing Courses	3 hours
AMT 290* Manufacturing Internship (3)	
Manufacturing Maintenance Courses	6 hours
<i>See additional elective options in certificate electives</i>	
AMT 162* Industrial Process Control I (3)	
DEPT XXX Any Technology or Business Div Course (3)	
Required Online Course	0 hour
CVCCS 101 Missouri Higher Ed Civics Examination	

Suggested Plan of Study

Fall Semester	Hours
AMT 102 Intro to Industrial Electricity	3
AMT 104 Electrical Motor Control	3
AMT 111 Intro to Industrial Safety	1
AMT 142 Manufacturing Mechanics	3
AMT 204 Programmable Logic Controllers	3
AMT 206 Programmable Logic Controllers II	3
TOTAL	16
Graduate with PLC Certificate	
Spring Semester	Hours
AMT 122 Basic Machining (Manual)	3
BSAD 125 Computer Applications	3
COLL 105 Technical Career Development I	1
COLL 106 Technical Career Development II	1
DRFT 101 Intro to Engineering Drawing	3
WELD 113 Intro to Welding	3
TOTAL	14
Graduate with Industrial Maintenance Tech Certificate	
SECOND YEAR	
Fall Semester	Hours
AMT 162 Industrial Process Control	3
COMM 104 Fundamentals of Speech	3
CONS 131 Plumbing (Fall only)	3
ENGL 101 English Composition	3
HIST 106 American History or PLSC 103	3
TOTAL	15
Spring Semester	Hours
AMT 132 Industrial Hydraulics	3
AMT 290 Internship	3
ENGL 102 English Composition II	3
HVAC 105 Introduction to HVAC/R	3
MATH 135 Algebra for Calculus	3
TOTAL	15
Graduate with AMT: Manufacturing Maintenance AAS	

Total CERTIFICATE Hours Required	27
Additional Hours Needed for AAS	33
Total AAS Hours Required	60

Courses for Certificate	
Additional Courses for AAS Degree	



CERTIFICATE

Industrial Maintenance Technician

Students must complete 27 hours for this certificate.

		2 hours	Done	Curr	To do		Done	Curr	To do
Orientation		2 hours							
COLL	105 Technical Career Development I (1)								
COLL	106 Technical Career Development II (1)								
Major Courses		10 hours							
AMT	102 Introduction to Industrial Electricity (3)					AMT	111 Intro to Indust Safety (1)		
AMT	104 Electrical Motor Controls* (3)					AMT	204 Prgrmble Controllers I* (3)		
Support Courses		9 hours							
BSAD	115 Computer Concepts (3) - OR -					BSAD	125 Computer Apps (3)		
DRFT	101 Introduction to Engineering Drawing (3)								
WELD	113 Introduction to Welding# (3)					OR	WELD 160* (7)		
Approved Electives		6 hours							
AMT	122 Basic Machining (Manual) (3)								
AMT	132 Industrial Hydraulics* (3)								
AMT	142 Mechanical Power Transmission* (3)								
AMT	206 Programmable Controllers II#* (3)								
CONS	131 Plumbing (3)								
HVAC	105 Introduction to HVAC/R (3)					OR	WELD 280* (5)		
WELD	165* Plate Methods I(7)								



ASSOCIATE OF APPLIED SCIENCE DEGREE

Advanced Manufacturing: Manufacturing Maintenance Option

		Done	Curr	To do		Done	Curr	To do
Orientation		2 hours				60 hours total		
COLL	105 Technical Career Dev I							
COLL	106 Technical Career Dev II							
Communications		9 hours						
	Written Communications (6 hours)					Oral Communications (3 hours)		
ENGL	101*					COMM 104*		
ENGL	102*							
ENGL	203*							
Mathematics		3 hours						
MATH	104*							
MATH	134*					MATH 135*		
Civics		3 hours						
HIST	106*					PLSC 103*		
HIST	107*							
Advanced Manufacturing Core		19 hours						
AMT	102 Intro to Industrial Electricity* (3)					AMT 142 Manufacturing Mechanics* (3)		
AMT	104 Electrical Motor Controls* (3)					AMT 204 Programmable Controllers* (3)		
AMT	111 Intro to Industrial Safety (1)					AMT 290 Manufacturing Internship* (3)		
AMT	132 Industrial Hydraulics* (3)							
Support Courses		9 hours						
BSAD	115 Computer Concepts (3)					OR BSAD 125		
DRFT	101 Intro to Engineering Drwg (3)							
WELD	113 Intro to Welding* (3)					OR WELD 160* (7)		
Maintenance Manufacturing Courses		15 hours						
Required Courses (9 hours)								
AMT	122 Basic Machining* (3)					HVAC 105 Introduction to HVAC/R (3)		
CONS	131 Plumbing (3)							

Advanced Manufacturing Technology: Machining Certificate

This certificate prepares students to enter a career in industrial maintenance with a skill set that will provide entry level knowledge of basic Machining including Manual and Computer Numeric Control (CNC) Programming. This program will cover the CNC process including operator panel, HMI panel, program structure, Milling, and Turning. Students will receive hands-on training on all related tools and equipment.

Program of Study

Suggested Plan of Study

Certificate Courses		17 hours	FIRST YEAR	
			Fall Semester	Hours
AMT	122 Basic Machining (Manual) (3)		AMT 122 Basic Machining (Manual)	3
AMT	123 Measurement and Print Reading (3)		AMT 123 Measurement and Print Reading	3
AMT	124 CNC Programming (3)		AMT 124 CNC Programming	3
AMT	125 CNC Milling (3)		AMT 125 CNC Milling	3
AMT	126 CNC Turning (3)		AMT 126 CNC Turning	3
COLL	105 Technical Career Development I (1)		COLL 105 Technical Career Development I	1
COLL	106 Technical Career Development II (1)		COLL 106 Technical Career Development II	1
			TOTAL	17
			Total Hours Required	17



CERTIFICATE AMT: Machining

General Education Core		Done	Curr	To do		Done	Curr	To do
Required Courses	17 hours							
AMT	122 Basic Machining (Manual) (3)	_____	_____	_____				
AMT	123 Measurement & Print Read (3)	_____	_____	_____				
AMT	124 CNC Programming (3)	_____	_____	_____				
AMT	125 CNC Milling (3)	_____	_____	_____				
AMT	126 CNC Turning (3)	_____	_____	_____				
COLL	105 Technical and Career Dev. I (1)	_____	_____	_____				
COLL	106 Technical and Career Dev. II (1)	_____	_____	_____				

Agri-Business Technology: Agronomy Option AAS

This program offers the graduate an Associate of Applied Science degree (AAS) which provides education for specific careers in agricultural business, agronomy. Graduates are prepared for the world of work upon successful completion of the program. While an AAS is not designed to transfer, it is possible to transfer to a four-year college if planned accordingly. Students planning to transfer should consult their faculty advisor before registering for classes to assure appropriate classes are selected.

Program of Study			Suggested Plan of Study																							
Orientation			FIRST YEAR																							
AGRI 111			Fall Semester <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">AGEC 223 Ag Computer App</td><td style="width: 10%; text-align: right;">Hours</td><td style="width: 60%;">3</td></tr> <tr> <td>AGRI 111 Ag Career Orientation</td><td style="text-align: right;">1</td><td></td></tr> <tr> <td>AGRN 113 Crop Science</td><td style="text-align: right;">3</td><td></td></tr> <tr> <td>MATH 125 Quantitative Reasoning</td><td style="text-align: right;">3</td><td></td></tr> <tr> <td>Approved Written Communications Course</td><td style="text-align: right;">3</td><td></td></tr> <tr> <td style="font-weight: bold; text-align: right;">TOTAL</td><td style="text-align: right;">13</td><td></td></tr> </table>			AGEC 223 Ag Computer App	Hours	3	AGRI 111 Ag Career Orientation	1		AGRN 113 Crop Science	3		MATH 125 Quantitative Reasoning	3		Approved Written Communications Course	3		TOTAL	13				
AGEC 223 Ag Computer App	Hours	3																								
AGRI 111 Ag Career Orientation	1																									
AGRN 113 Crop Science	3																									
MATH 125 Quantitative Reasoning	3																									
Approved Written Communications Course	3																									
TOTAL	13																									
Communications			Spring Semester <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">AGRI 123 Ag Chemicals</td><td style="width: 10%; text-align: right;">Hours</td><td style="width: 60%;">3</td></tr> <tr> <td>AGEC 123 Principles of Ag Econ</td><td style="text-align: right;">3</td><td></td></tr> <tr> <td>ANSC 114 Animal Science</td><td style="text-align: right;">4</td><td></td></tr> <tr> <td>COMM 104 Fundamentals of Speech</td><td style="text-align: right;">3</td><td></td></tr> <tr> <td>Approved Written Communications Course</td><td style="text-align: right;">3</td><td></td></tr> <tr> <td style="font-weight: bold; text-align: right;">TOTAL</td><td style="text-align: right;">16</td><td></td></tr> </table>			AGRI 123 Ag Chemicals	Hours	3	AGEC 123 Principles of Ag Econ	3		ANSC 114 Animal Science	4		COMM 104 Fundamentals of Speech	3		Approved Written Communications Course	3		TOTAL	16				
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AGEC 123 Principles of Ag Econ	3																									
ANSC 114 Animal Science	4																									
COMM 104 Fundamentals of Speech	3																									
Approved Written Communications Course	3																									
TOTAL	16																									
Written Communications (6 hours) <ul style="list-style-type: none"> ENGL 101* ENGL 102* ENGL 203* 			SECOND YEAR																							
Oral Communications (3 hours) <ul style="list-style-type: none"> COMM 104* 			Fall Semester <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">AGEC 213 Farm Business Mgmt (Fall Only)</td><td style="width: 10%; text-align: right;">Hours</td><td style="width: 60%;">3</td></tr> <tr> <td>AGMC 205 Ag Mechanics</td><td style="text-align: right;">3</td><td></td></tr> <tr> <td>AGRN 214 Fundamentals of Soil Science</td><td style="text-align: right;">4</td><td></td></tr> <tr> <td>AGRN 223 Grain Crops</td><td style="text-align: right;">3</td><td></td></tr> <tr> <td>Approved Civics Course</td><td style="text-align: right;">3</td><td></td></tr> <tr> <td style="font-weight: bold; text-align: right;">TOTAL</td><td style="text-align: right;">16</td><td></td></tr> </table>			AGEC 213 Farm Business Mgmt (Fall Only)	Hours	3	AGMC 205 Ag Mechanics	3		AGRN 214 Fundamentals of Soil Science	4		AGRN 223 Grain Crops	3		Approved Civics Course	3		TOTAL	16				
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ANSC 213 – OR – AGRI 190	3																									
HORT 113 Greenhouse Management	3																									
TOTAL	18																									
Civics			TOTAL HOURS REQUIRED																							
<ul style="list-style-type: none"> HIST 106*, 107* PLSC 103* 			61-63																							
Agri-Business Core																										
<ul style="list-style-type: none"> AGEC 123*# AGEC 213* AGEC 223 AGMC 205 AGRI 202 AGRI 212 & 222 OR AGRI 204 AGRN 113 AGRN 214* ANSC 114 																										
Agri-Business Agronomy																										
<ul style="list-style-type: none"> AGRI 123 ANSC 213 OR AGRI 223 AGRI 190* AGRN 223* HORT 113 AGRN 243* 																										
Required Online Course																										
CVCS 101 Missouri Higher Ed Civics Examination																										

*Prerequisite requirement

- Preferred class for this degree option

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.



ASSOCIATE OF APPLIED SCIENCE DEGREE AGRI-BUSINESS TECHNOLOGY: Agronomy Option

		Done	Curr	To do		Done	Curr	To do
Orientation		1 hour				61-63 hours		
AGRI	111				COLL	101		
Communications		9 hours						
	Written Communications (6 hours)				Oral Communications (3 hours)			
ENGL	101*				COMM	104*		
ENGL	102*							
ENGL	203*							
Mathematics		3 hours						
MATH	125* (3)							
Civics		3 hours						
HIST	106*(3)				PLSC	103*		
HIST	107* (3)							
Agri-Business Core		27 - 29 hours						
AGEC	123 Prin of Ag Econ* (3) (Recommended)				AGRN	113 Crop Science (3)		
AGEC	213 Farm Business Mgmt* (3)				AGRN	214* Soil Science (4)		
AGEC	223 Ag Comp Apps (3)				ANSC	114 Animal Science (4)		
AGMC	205 Ag Mechanics (3)							
AGRI	202 Ag Capstone (2)							
AGRI	212 & 222 SOE (2)				OR	AGRI 204 Internship (4)		
Agri-Business Agronomy Option		18 hours						
AGRI	123 Ag Chemicals (3)							
AGRI	223 Public Relations in Agri-Bs (3)							
AGRN	223 Grain Crops* (3)							
AGRN	243 Forage Crops* (3)							
ANSC	213 Feeds & Nutrition (3)				OR	AGRI 190* World Foods (3)		
HORT	113 Greenhouse Management (3)							
Required Online Courses		0 hour						
CVCS	101 Missouri Higher Ed Civics Examination							

Agri-Business Technology: Livestock Production Option AAS

This program offers the graduate an Associate of Applied Science degree (AAS) which provides education for specific careers in agricultural business, livestock production. Graduates are prepared for the world of work upon successful completion of the program. While an AAS is not designed to transfer, it is possible to transfer to a four-year college if planned accordingly. Students planning to transfer should consult their faculty advisor before registering for classes to assure appropriate classes are selected.

Program of Study			Suggested Plan of Study																							
Orientation			FIRST YEAR																							
AGRI 111			Fall Semester <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">AGMC 205 Ag Mechanics</td><td style="width: 10%; text-align: right;">Hours</td><td style="width: 30%; text-align: right;">3</td></tr> <tr> <td>AGRI 111 Ag Career Orientation</td><td style="text-align: right;">1</td><td></td></tr> <tr> <td>ANSC 114 Animal Science</td><td style="text-align: right;">4</td><td></td></tr> <tr> <td>MATH 125 Quantitative Reasoning</td><td style="text-align: right;">3</td><td></td></tr> <tr> <td>Approved Written Communications Course</td><td style="text-align: right;">3</td><td></td></tr> <tr> <td style="font-weight: bold; text-align: right;">TOTAL</td><td style="text-align: right;">14</td><td></td></tr> </table>			AGMC 205 Ag Mechanics	Hours	3	AGRI 111 Ag Career Orientation	1		ANSC 114 Animal Science	4		MATH 125 Quantitative Reasoning	3		Approved Written Communications Course	3		TOTAL	14				
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<i>Oral Communications (3 hours)</i> COMM 104*			SECOND YEAR																							
Mathematics			Fall Semester <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">AGEC 213 Farm Business Management</td><td style="width: 10%; text-align: right;">Hours</td><td style="width: 30%; text-align: right;">3</td></tr> <tr> <td>AGRN 214 Fundamentals of Soil Science</td><td style="text-align: right;">4</td><td></td></tr> <tr> <td>ANSC 203 Meat Science</td><td style="text-align: right;">3</td><td></td></tr> <tr> <td>ANSC 232 Artificial Insemination</td><td style="text-align: right;">3</td><td></td></tr> <tr> <td>COMM 104 Fundamentals of Speech</td><td style="text-align: right;">3</td><td></td></tr> <tr> <td style="font-weight: bold; text-align: right;">TOTAL</td><td style="text-align: right;">16</td><td></td></tr> </table>			AGEC 213 Farm Business Management	Hours	3	AGRN 214 Fundamentals of Soil Science	4		ANSC 203 Meat Science	3		ANSC 232 Artificial Insemination	3		COMM 104 Fundamentals of Speech	3		TOTAL	16				
AGEC 213 Farm Business Management	Hours	3																								
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AGRI 202 Ag Capstone	Hours	2																								
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ANSC 153 Beef Cattle Production	3																									
ANSC 213 Feeds & Nutrition	3																									
Approved Civics Course	3																									
TOTAL	16-18																									
Civics			TOTAL HOURS REQUIRED																							
HIST 106*, 107* PLSC 103*			61-63																							
Agri-Business Core																										
AGEC 123*# AGEC 213* AGEC 223 AGMC 205 AGRI 202 AGRI 212 & 222 OR AGRI 204 AGRN 113 AGRN 214* ANSC 114																										
Livestock Option																										
AGRN 243* ANSC 213 AGMC 205 ANSC 232* ANSC 153* ANSC 233 ANSC 203																										
Required Online Course																										
CVCS 101 Missouri Higher Ed Civics Examination																										

*Prerequisite requirement

- Preferred class for this degree option

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ASSOCIATE OF APPLIED SCIENCE DEGREE

AGRI-BUSINESS TECHNOLOGY: Livestock Production Option

		Done	Curr	To do			Done	Curr
Orientation		1 hour					61 hours	
AGRI	111 (Recommended)				COLL	101		
Communications		9 hours						
	Written Communications (6 hours)						Oral Communications (3 hours)	
ENGL	101*				COMM	104*		
ENGL	102*							
ENGL	203*							
Mathematics		3 hours						
MATH	125*							
Civics		3 hours						
HIST	106*				PLSC	103*		
HIST	107*							
Agri-Business Core		27-29 hours						
AGEC	123 Prin of Ag Econ*# (3) (Recommended)				AGRN	113 Crop Science (3)		
AGEC	213 Farm Business Mgmt* (3)				AGRN	214 Soil Science* (4)		
AGEC	223 Ag Comp Apps (3)				ANSC	114 Animal Science (4)		
AGMC	205 Ag Mechanics (3)							
AGRI	202 Ag Capstone (2)							
AGRI	212 & 222 SOE (2)				OR	AGRI 204 Internship* (4)		
Agri-Business Livestock Option		18 hours						
AGRN	243 Forage Crops* (3)							
ANSC	153 Beef Production* (3)							
ANSC	203 Meat Science (3)							
ANSC	213 Feeds & Nutrition (3)							
ANSC	232 Artificial Insemination* (3)							
ANSC	233 Horse Science (3)							
Required Online Course		0 hour						
CVCS	101 Missouri Higher Ed Civics Examination							

Agri-Business Technology: Marketing and Management Option AAS

This program offers the graduate an Associate of Applied Science degree (AAS) which provides education for specific careers in agricultural business marketing and management. Graduates are prepared for the world of work upon successful completion of the program. While an AAS is not designed to transfer, it is possible to transfer to a four-year college if planned accordingly. Students planning to transfer should consult their faculty advisor before registering for classes to assure appropriate classes are selected.

Program of Study

Orientation	1 hour	
AGRI 111		
Communications	9 hours	
<i>Written Communications (6 hours)</i>		
ENGL 101*		
ENGL 102*		
ENGL 203*		
<i>Oral Communications (3 hours)</i>		
COMM 104*		
Mathematics	3 hours	
MATH 125*		
Civics	3 hours	
HIST 106*, 107*		
PLSC 103*		
Agri-Business Core	27 – 29 hours	
AGEC 123*#		
AGEC 213*		
AGEC 223		
AGMC 205		
AGRI 202		
AGRI 212 & 222* OR AGRI 204*		
AGRN 113		
AGRN 214*		
ANSC 114		
Marketing & Management	Select 18 hours	
AGRI 190*	BMGT 223	
AGRI 223	BMGT 285*	
BMGT 175	BSAD 230	
BMGT 200		
Required Online Course	0 hour	
CVCS 101 Missouri Higher Ed Civics Examination		

*Prerequisite requirement

- Preferred class for this degree option

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
AGMC 205 Ag Mechanics	3
AGRI 111 Ag Career Orientation	1
ANSC 114 Animal Science	4
MATH 125 Quantitative Reasoning	3
Approved Written Communications	3
TOTAL	14
Spring Semester	Hours
AGEC 123 Principles of Ag Economics	3
AGEC 223 Agriculture Computer App	3
AGRN 113 Crop Science	3
COMM 104 Fundamentals of Speech	3
Approved Written Communications	3
TOTAL	15
SECOND YEAR	
Fall Semester	Hours
AGEC 213 Farm Business Management	3
AGRN 214 Fundamentals of Soil Science	4
BMGT 175 Management	3
BMGT 223 Business Ethics	3
Approved Civics Course	3
TOTAL	16
Spring Semester	Hours
AGRI 190 World Foods	3
AGRI 202 Ag Capstone	2
AGRI 212 & AGRI 222 – OR – AGRI 204	2-4
AGRI 223 Public Relations in Agri-Business	3
BMGT 285 Human Resource Mgmt	3
BSAD 230 Business Law	3
TOTAL	16-18
TOTAL HOURS REQUIRED	
61-63	

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.



ASSOCIATE OF APPLIED SCIENCE DEGREE

AGRI-BUSINESS TECHNOLOGY: Marketing & Management Option

		Done	Curr	To do	Done	Curr	To do
Orientation		1 hour		61 hours			
AGRI 111							
Communications		9 hours					
<i>Written Communications (6 hours)</i>				<i>Oral Communications (3 hours)</i>			
ENGL	101*			COMM	104*		
ENGL	102*						
ENGL	203*						
Mathematics		3 hours					
MATH 125*							
Civics		3 hours					
HIST 106*				PLSC	103*		
HIST 107*							
Agri-Business Core		27-29 hours					
AGEC	123 Prin of Ag Econ*# (3) (Recommended)						
AGEC	213 Farm Business Mgmt* (3)						
AGEC	223 Ag Comp Apps (3)						
AGMC	205 Ag Mechanics (3)						
AGRI	202 Ag Capstone (2)						
AGRI	212 & 222 SOE (2)						
AGRN	113 Crop Science (3)						
AGRN	214 Soil Science* (4)						
ANSC	114 Animal Science (4)						
Agri-Business Marketing & Management		18 hours					
AGRI	190 World Food and Society* (3)						
AGRI	223 Public Relations in Agri-Business (3)						
BMGT	175 Management (3)						
BMGT	200 Marketing (3)						
BMGT	223 Business Ethics (3)						
BMGT	285 Human Resource Management* (3)						
BSAD	230 Business Law (3)						
Required Online Course		0 hour					
CVCS	101 Missouri Higher Ed Civics Examination						

Agriculture – Ag Business Option AA

For students pursuing a four-year degree in all areas of agriculture, pre-veterinary medicine, and wildlife conservation, the following curriculum is suggested. For best transfer, students should contact the college to which they plan to transfer prior to graduation.

Program of Study

Orientation	1 hour
AGRI 111#	COLL 101
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101, 106	HIST 101*, 102*
ASL 101, 102*	MUSC 101
BMGT 223 or PHIL 202	PHIL 101*, 121, 201*, 202*
ENGL 109*, 222*, 225*	SPAN 101, 102*
ENGL 230*, 235*, 240*, 245*	TA 205
FREN 101	
Mathematics	3 hours
MATH 125*, 130*, 134*, 135*#	
Science	7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab	
Lab	Non-Lab
BIOL 101#, 110, 120	BIOL 102
BIOL 152*	PHYS 102
CHEM 101, 111*#	PHYS 105
GEOL 115, 210*	CHEM 106
PHYS 101, 190*	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
Civics (3 hours)	
HIST 106*, 107*	AGEC 123*#
PLSC 103*	ECON 201*, 202*
	GEOG 111
	PSYC 101, 211*
	SOC 101
GE CORE Electives	5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College . Courses cannot be used as Core electives if counted under another section.	
Major Courses	17 hours
Required Courses (14 Hours)	
AGEC 223	AGRN 214
AGRN 113	ANSC 114
Approved Electives (3 Hours)	
AGEC 213	AGRI 223
AGRI 190	AGRI 233
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

*Prerequisite required

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
AGRI 111 Ag Career Development	1
AGRN 113 Crop Science	3
COMM 104 Fundamentals of Speech	3
ENGL 101 English Composition I	3
Approved Science Course	5
TOTAL	15
Spring Semester	Hours
AGEC 223 Ag Computer Applications	3
ANSC 114 Animal Science	4
ENGL 102 English Composition II	3
MATH 135 Algebra for Calculus	3
Approved Humanities Course	3
TOTAL	16
SECOND YEAR	
Fall Semester	Hours
AGRN 214 Fundamentals of Soil Science	4
Approved Humanities Course – OR – Ag Elective	3
Approved Science Course	5
Approved Soc & Behavioral Science Course	3
TOTAL	15
Spring Semester	Hours
AGEC 123 Principles of Ag Economics	3
Approved Ag Elective – OR – Humanities Course	3
Approved Civics Course	3
Approved GE Core Elective	2-5
Approved Humanities Course	3
TOTAL	14-17
TOTAL HOURS REQUIRED	
60-63	

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.



ASSOCIATE OF ARTS DEGREE Agriculture - Ag Business Option

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation		1 hour		60 hours			
AGRI 111 (Recommended)				OR COLL 101			
Communications		9 hours					
<i>Written Communications (6 hours)</i>				<i>Oral Communications (3 hours)</i>			
ENGL 101*				COMM 104*			
ENGL 102*				COMM 105			
Humanities		9 hours					
ART 101, 106				HIST 101*, 102*			
ASL 101, 102*				MUSC 101			
BMGT 223 or PHIL 202*				PHIL 101*, 121, 201*			
ENGL 109*, 222*, 225*				SPAN 101, 102*			
ENGL 230*, 235*, 240*, 245*				TA 205			
FREN 101							
Mathematics		3 hours					
MATH 125*				MATH 134*			
MATH 130*				MATH 135* (Recommended)			
Science		7 hours					
<i>Lab</i>				<i>Non-Lab</i>			
BIOL 101, 110, 120				PHYS 105			
BIOL 152*				CHEM 106			
CHEM 101, 111*							
GEOL 115, 210*							
PHYS 101 , 190*							
Social and Behavioral Science		9 hours					
<i>Civics</i>		<i>3 hours</i>					
HIST 106*				AGEC 123* (Recommended)			
HIST 107*				ECON 201*, 202*			
PLSC 103*				GEOG 111			
				PSYC 101, 211*			
				SOC 101			
GE Core Electives		5 hours					
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.							
Major Courses		17 hours					
<i>Required (14 hours)</i>				<i>Approved Electives (3 hours)</i>			
AGEC 223 Ag Computer Apps (3)				AGEC 213 Farm Business Mgmt (3)			
AGRN 113 Crop Science (3)				AGRI 190 World Food and Society (3)			
AGRN 214 Fund Soil Science (4)				AGRI 223 Public Relations in Agri-Bs (3)			
ANSC 114 Intro to Animal Sci (4)				AGRI 233 Travel Seminar in Agriculture (3)			
				Courses determined by transferring institution's requirements and consultation with the Agriculture faculty.			
Required Online Course		0 hour					
CVCS 101 MO Higher Ed Civics Exam							

Agriculture – Ag Education Option AA

For students pursuing a four-year degree in all areas of agriculture, pre-veterinary medicine, and wildlife conservation, the following curriculum is suggested. For best transfer, students should contact the college to which they plan to transfer prior to graduation. The AAT degree requires a minimum GPA of 2.75 and a passing score approved by DESE on each section of the MoGEA. Because GPA and MoGEA entrance score requirements vary by institution, it is important to work closely with your Ag education advisor at Crowder and the institution to which you plan to transfer. Students must register with FCSR and have a clearance letter before completing any observation in schools.

Program of Study

Orientation	AGRI 111#	COLL 101	1 hour
Communications			9 hours
Written Communications (6 hours)			
ENGL 101*			
ENGL 102*			
Oral Communications (3 hours)			
COMM 104*		COMM 105	
Humanities			9 hours
Students should select classes from two different disciplines (prefixes)			
ART 101, 106	HIST 101*, 102*		
ASL 101, 102*	MUSC 101		
BMGT 223 or PHIL 202*	PHIL 101*, 121, 201*		
ENGL 109*, 222*, 225*	SPAN 101, 102*		
ENGL 230*, 235*, 240*, 245*	TA 205		
FREN 101			
Mathematics			3 hours
MATH 125*, 130*, 134*, 135#			
Science			7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab			
Lab		Non-Lab	
BIOL 101#, 110, 120	BIOL 102		
BIOL 152*	CHEM 106		
CHEM 111#	PHYS 102		
GEOL 115, 210*	PHYS 105		
PHYS 101, 190*			
Social and Behavioral Science			9 hours
Students should select classes from two different disciplines (prefixes)			
Required (9 hours)		Additional Elective Courses	
HIST 106*, 107*	AGEC 123#		
PLSC 103*	ECON 201*, 202*		
PSYC 101	GEOG 111		
	PSYC 211*		
	SOC 101		
GE CORE Electives			5 hours
AGEC 123—Approved Elective—Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College . Courses cannot be used as Core electives if counted under another section.			
Major Courses			20 hours
AGRN 113	EDUC 231		
AGRN 214*	EDUC 251		
ANSC 114	HORT 113		
Required Online Course			0 hour
CVCS 101 Missouri Higher Ed Civics Examination			

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
AGR1 111 Ag Career Development	1
ANSC 114 – OR – AGRN 113 (3hrs)	4
ENGL 101 English Composition I	3
PSYC 101 General Psychology	3
Approved Science Course	3-5
	TOTAL
	14-16
Spring Semester	Hours
AGR1 113 – OR – ANSC 114 (4hrs)	3
COMM 104 Fundamentals of Speech	3
ENGL 102 English Composition II	3
HIST 106 – OR – HIST 107	3
MATH 135 Algebra for Calculus	3
	TOTAL
	15
SECOND YEAR	
Fall Semester	Hours
AGR1 214 Fundamentals of Soil Science	4
EDUC 231 Educational Psychology	3
PLSC 103	3
Approved GE Core Elective	3
Approved Science Course	3-5
	TOTAL
	16-18
Spring Semester	Hours
EDUC 251 Teaching Prof w/Field Exp.	3
HORT 113 Greenhouse Management	3
Approved GE Core Elective	2-3
Approved Humanities Course	3
Approved Humanities Elective	3
Approved Humanities Course	3
	TOTAL
	17-18
TOTAL HOURS REQUIRED	
62-67	

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.

*Prerequisite required

- Preferred class for this degree option



ASSOCIATE OF ARTS DEGREE Agriculture - Ag Education Option

General Education Core			Done	Curr	To do				Done	Curr	To do
Orientation			1 hour						63 hours		
AGRI 111 (Recommended)			Or			COLL 101					
Communications			9 hours						Oral Communications (3 hours)		
ENGL 101*			COMM 104*								
ENGL 102*			COMM 105								
Humanities			9 hours								
ART 101, 106			HIST 101*, 102*								
ASL 101, 102*			MUSC 101								
BMGT 223 or PHIL 202*			PHIL 101*, 121, 201*								
ENGL 109*, 222*, 225*			SPAN 101, 102*								
ENGL 230*, 235*, 240*, 245*			TA 205								
FREN 101											
Mathematics			3 hours								
MATH 125*											
MATH 130*											
MATH 134*											
MATH 135* (Recommended)											
Science			7 hours								
Lab						Non-Lab					
BIOL 101, 110, 120			BIOL 102								
BIOL 152*			CHEM 106								
CHEM 101			PHYS 102								
CHEM 111* (Recommended)			PHYS 105								
GEOL 115, 210*											
PHYS 101, 190*											
Social and Behavioral Science			9 hours								
Civics			6 hours						Additional 3 hours		
HIST 106*			AGEC 123* (Recommended)								
HIST 107			ECON 201*, 202*								
PLSC 103*			GEOG 111								
			PSYC 101 (Required)								
			PSYC 211*								
			SOC 101								
GE Core Electives			5 hours								
AGEC 123 - Approved Elective. Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.											
Major Courses			20 hours								
AGRN 113 Crop Science (3)									## Ag Education majors need to take PLSC 103 or PLSC 104 and HIST 106 to meet DESE certification guidelines.		
AGRN 214 Fund Soil Science* (4)											
ANSC 114 Intro to Animal Sci (4)											
EDUC 231 Educational Psych (3)											
EDUC 251 Teaching Pro w/Field Exp (3)											
HORT 113 Greenhouse Mgmt (3)											
Required Online Course			0 hour								
CVCS 101 MO Higher Ed Civics Exam											

Agriculture - Agronomy Option AA

For students pursuing a four-year degree in all areas of agriculture, pre-veterinary medicine, and wildlife conservation, the following curriculum is suggested. For best transfer, students should contact the college to which they plan to transfer prior to graduation.

Program of Study

Orientation	1 hour			
AGRI 111#	COLL	101		
Communications	9 hours			
Written Communications (6 hours)				
ENGL 101*				
ENGL 102*				
Oral Communications (3 hours)				
COMM 104*	COMM	105		
Humanities	9 hours			
Students should select classes from two different disciplines (prefixes)				
ART 101, 106	HIST	101*, 102*		
ASL 101, 102*	MUSC	101		
BMGT 223 or PHIL 202*	PHIL	101*, 121, 201*		
ENGL 109*, 222*, 225*	SPAN	101, 102*		
ENGL 230*, 235*, 240*, 245*	TA	205		
FREN 101				
Mathematics	3 hours			
MATH 125*, 130*, 134*, 135*#				
Science	7 hours			
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab				
Lab		Non-Lab		
BIOL 101#, 110, 120	CHEM	106		
BIOL 152*	PHYS	102		
CHEM 111*#	PHYS	105		
GEOL 115, 210*				
PHYS 101, 190*				
Social and Behavioral Science	9 hours			
Students should select classes from two different disciplines (prefixes)				
Civics (3 hours)				
HIST 106*, 107*	AGEC	123*#		
PLSC 103*	ECON	201*, 202*		
	GEOG	111		
	PSYC	101, 211*		
	SOC	101		
GE CORE Electives	5 hours			
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.				
Major Courses	17 hours			
Required Courses (14 Hours)				
AGEC 223	AGRN	214*		
AGRN 113	ANSC	114		
Approved Electives (3 Hours)				
AGRI 123	ANSC	213		
AGRI 233	HORT	101		
AGRN 121	HORT	103		
AGRN 221	HORT	113		
AGRN 223	HORT	204		
AGRN 243				
Required Online Course	0 hour			
CVCS 101	Missouri Higher Ed Civics Examination			

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
AGR1 111 Ag Career Development	1
AGR1 113 Crop Science	3
COMM 104 Fundamentals of Speech	3
ENGL 101 English Composition I	3
MATH 135 Algebra for Calculus	3
Approved GE Core Elective	3
TOTAL	16
Spring Semester	Hours
AGEC 223 Ag Computer Applications	3
ANSC 114 Animal Science	4
ENGL 102 English Composition II	3
Approved Science Course	3-5
TOTAL	13-15
SECOND YEAR	
Fall Semester	Hours
AGR1 214 Fundamentals of Soil Science	4
Approved Civics Course	3
Approved Humanities Course or Ag Elective	3
Approved Science Course	3-5
TOTAL	13-15
Spring Semester	Hours
AGEC 123 Principles of Ag Economics	3
Approved Ag Elective or Humanities Course	3
Approved GE Core Elective	2
Approved Humanities Course	3
Approved Humanities Course or Ag Elective	3
TOTAL	14
TOTAL HOURS REQUIRED	
60	

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.

*Prerequisite required

#Preferred class for this degree option



ASSOCIATE OF ARTS DEGREE

Agriculture - Agronomy Option

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation	1 hour				60 hours		
AGRI 111 (Recommended)				OR	COLL 101		
Communications	9 hours						
	Written Communications (6 hours)				Oral Communications (3 hours)		
ENGL	101*				COMM 104*		
ENGL	102*				COMM 105		
Humanities	9 hours						
ART	101, 106				HIST 101*, 102*		
ASL	101, 102*				MUSC 101		
BMGT	223 or PHIL 202*				PHIL 101*, 121, 201*		
ENGL	109*, 222*, 225*				SPAN 101, 102*		
ENGL	230*, 235*, 240*, 245*				TA 205		
FREN	101						
Mathematics	3 hours						
MATH	125*				MATH 134*		
MATH	130*				MATH 135* (Recommended)		
Science	7 hours						
Lab					Non-Lab		
BIOL	101, 110, 120				CHEM 106		
BIOL	152*				PHYS 102		
CHEM	111* (Recommended)				PHYS 105		
GEOL	115, 210*						
PHYS	101, 190*						
Social and Behavioral Science	9 hours						
	Civics (3 hours)						
HIST	106*				AGEC 123* (Recommended)		
HIST	107*				ECON 201*, 202*		
PLSC	103*				GEOG 111		
					PSYC 101, 211*		
					SOC 101		
GE Core Electives	5 hours						
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.							
Major Courses	17 hours						
	Required (14 hours)				Approved Electives (3 hours)		
AGEC	223 Ag Computer Apps (3)				AGRI 123 Agriculture Chemicals (3)		
AGRN	113 Crop Science (3)				AGRI 233 Travel Seminar in Agriculture (3)		
AGRN	214 Fund Soil Science* (4)				AGRN 121 Crop Evaluation (1)		
ANSC	114 Intro to Animal Sci (4)				AGRN 221 Soil Evaluation (1)		
					AGRN 223 Grain Crops (3)		
					AGRN 243 Forage Crops (3)		
					ANSC 213 Feeds and Nutrition (3)		
					HORT 101 General Horticulture (3)		
					HORT 103 Floriculture (3)		
					HORT 113 Greenhouse Management (3)		
					HORT 204 Nursery Mgmt/Landscape (4)		
					Courses determined by transferring institution's requirements and consultation with the Agriculture faculty.		
Required Online Course	0 hour						
CVCS	101 MO Higher Ed Civics Exam						

Agriculture - Animal Science Option AA

For students pursuing a four-year degree in all areas of agriculture, pre-veterinary medicine, and wildlife conservation, the following curriculum is suggested. For best transfer, students should contact the college to which they plan to transfer prior to graduation.

Program of Study

Orientation	1 hour	
AGRI 111#	COLL	101
Communications		9 hours
<i>Written Communications (6 hours)</i>		
ENGL 101*		
ENGL 102*		
<i>Oral Communications (3 hours)</i>		
COMM 104*	COMM	105
Humanities		9 hours
Students should select classes from two different disciplines (prefixes)		
ART 101, 106	HIST	101*, 102*
ASL 101, 102*	MUSC	101
BMGT 223 or PHIL 202*	PHIL	101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN	101, 102*
ENGL 230*, 235*, 240*, 245*	TA	205
FREN 101		
Mathematics		3 hours
MATH 125*, 130*, 134*, 135*#		
Science		7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab		
Lab		Non-Lab
BIOL 101, 110, 120	CHEM	106
BIOL 152*	PHYS	102
CHEM 111* #	PHYS	105
GEOL 115, 210*		
PHYS 101, 190*		
Social and Behavioral Science		9 hours
Students should select classes from two different disciplines (prefixes)		
Civics (3 hours)		
HIST 106*, 107*	AGEC	123*#
PLSC 103*	ECON	201*, 202*
	GEOG	111
	PSYC	101, 211*
	SOC	101
GE CORE Electives		5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.		
Major Courses		17 hours
Required Courses (13 Hours)		
AGEC 223	ANSC	114*
AGRN 113	ANSC	213
Approved Electives (4 Hours)		
AGRI 233	ANSC	180
AGRN 214	ANSC	223
AGRN 243	ANSC	232
ANSC 101	ANSC	233
ANSC 153		
Required Online Course		0 hour
CVCS 101 Missouri Higher Ed Civics Examination		

Suggested Plan of Study**FIRST YEAR**

Fall Semester	Hours
AGRI 111 Ag Career Development	1
ANSC 114 Animal Science	4
COMM 104 Fundamentals of Speech	3
ENGL 101 English Composition I	3
MATH 135 Algebra for Calculus	3
Approved GE Core Elective	3
	TOTAL
	17

Spring Semester	Hours
AGEC 223 Ag Computer Applications	3
AGRN 113 Crop Science	3
ENGL 102 English Composition II	3
Approved GE Core Elective	2
Approved Science Course	3-5
	TOTAL
	14-16

SECOND YEAR

Fall Semester	Hours
AGEC 123 Principles of Ag Economics	3
CHEM 111 General Chemistry	5
Approved Civics Course	3
Approved Humanities Course/or Ag Elective	3-4
	TOTAL
	14-15

Spring Semester	Hours
ANSC 213 Feeds & Nutrition	3
Approved Ag Elective/or Humanities Course	3-4
Approved Humanities Course	3
Approved Humanities Course	3
Approved Soc & Behavioral Science Course	3
	TOTAL
	15-16

TOTAL HOURS REQUIRED **60-64**

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.

*Prerequisite required
- Preferred class for this degree option



ASSOCIATE OF ARTS DEGREE

Agriculture - Animal Science Option

General Education Core		Done	Curr	To do	60 hours	Done	Curr	To do
Orientation	1 hour							
AGRI	111 (Recommended)				OR	COLL 101		
Communications	9 hours							
	Written Communications (6 hours)				Oral Communications (3 hours)			
ENGL	101*				COMM 104*			
ENGL	102*				COMM 105			
Humanities	9 hours							
ART	101, 106				HIST 101*, 102*			
ASL	101, 102*				MUSC 101			
BMGT	223 or PHIL 202*				PHIL 101*, 121, 201*			
ENGL	109*, 222*, 225*				SPAN 101, 102*			
ENGL	230*, 235*, 240*, 245*				TA 205			
FREN	101							
Mathematics	3 hours				MATH 134*			
MATH	125*, 130*				MATH 135* (Recommended)			
Science	7 hours							
Lab					Non-Lab			
BIOL	101, 110, 120				CHEM 106			
BIOL	152*				PHYS 102			
CHEM	111* (Recommended)				PHYS 105			
GEOL	115, 210*							
PHYS	101, 190*							
Social and Behavioral Science	9 hours							
	Civics (3 hours)							
HIST	106*				AGEC 123* (Recommended)			
HIST	107*				ECON 201*, 202*			
PLSC	103*				GEOG 111			
					PSYC 101, 211*			
					SOC 101			
GE Core Electives	5 hours							
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crow der College. Courses cannot be used as Core electives if counted under another section.								
Major Courses	17 hours							
	Required (13 hours)				Approved Electives (4 hours)			
AGEC	223 Ag Computer Apps (3)				AGRI 233 Travel Seminar in Agriculture (3)			
AGRN	113 Crop Science (3)				AGRN 214 Fundamentals of Soil Science (4)			
ANSC	114* Intro to Animal Sci (4)				AGRN 243 Forage Crops (3)			
ANSC	213 Feeds & Nutrition (3)				ANSC 101 Livestock Selection (1)			
					ANSC 153 Beef Cattle Production (3)			
					ANSC 180 Intro to Veterinary Science (2)			
					ANSC 223 Farm Animal Health (3)			
					ANSC 232 Artificial Insem & Reprod (3)			
					ANSC 233 Horse Science (3)			
					Courses determined by transferring institution's requirements and consultation w ith the Agriculture faculty.			
Required Online Course	0 hour							
CVCS	101 MO Higher Ed Civics Exam							

Agriculture - Poultry Science Option AA

For students pursuing a four-year degree in all areas of agriculture, pre-veterinary medicine, and wildlife conservation, the following curriculum is suggested. For best transfer, students should contact the college to which they plan to transfer prior to graduation.

Program of Study

Orientation	1 hour	
AGRI 111#	COLL	101
Communications		9 hours
Written Communications (6 hours)		
ENGL 101*		
ENGL 102*		
Oral Communications (3 hours)		
COMM 104*	COMM	105
Humanities		9 hours
Students should select classes from two different disciplines (prefixes)		
ART 101, 106	HIST	101*, 102*
ASL 101, 102*	MUSC	101
BMGT 223 or PHIL 202	PHIL	101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN	101, 102*
ENGL 230*, 235*, 240*, 245*	TA	205
FREN 101		
Mathematics		3 hours
MATH 125*, 130*, 134*, 135*#		
Science		7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab		
Lab		Non-Lab
BIOL 101, 110, 120	CHEM	106
BIOL 152*	PHYS	102
CHEM 104 or 111*#	PHYS	105
GEOL 115, 210*		
PHYS 101, 190*		
Social and Behavioral Science		9 hours
Students should select classes from two different disciplines (prefixes)		
Civics (3 hours)		
HIST 106*, 107*	AGEC	123*#
PLSC 103*	ECON	201*, 202*
	GEOG	111
	PSYC	101, 211*
	SOC	101
GE CORE Electives		5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.		
Major Courses		17 hours
AGEC 223	ANSC	213
AGRN 113	POSC	104
ANSC 114*	POSC	105
Required Online Course		0 hour
CVCS 101 Missouri Higher Ed Civics Examination		

*Prerequisite required

- Preferred class for this degree option

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
AGRI 111 Ag Career Development	1
ANSC 114 Animal Science	4
COMM 104 Fundamentals of Speech	3
ENGL 101 English Composition I	3
MATH 135 Algebra for Calculus	3
Approved GE Core Elective	3
TOTAL	17
Spring Semester	Hours
AGEC 223 Ag Computer Applications	3
AGRN 113 Crop Science	3
ENGL 102 English Composition II	3
POSC 104 Intro to Careers in Poultry	2
Approved Science Course	3-5
TOTAL	14-16
 SECOND YEAR	
Fall Semester	Hours
AGEC 123 Principles of Ag Economics	3
CHEM 104 -OR- CHEM 111	4-5
POSC 105 Avian Biology	2
Approved GE Core Elective	2
Approved Humanities Course	3
TOTAL	14-15
 Spring Semester	
ANSC 213 Feeds & Nutrition	3
Approved Civics Course	3
Approved Humanities Course	3
Approved Humanities Course	3
Approved Soc & Behavioral Science Course	3
TOTAL	15
 TOTAL HOURS REQUIRED	
61-63	

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.



ASSOCIATE OF ARTS DEGREE

Agriculture - Poultry Science Option

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation	1 hour				61 hours		
AGRI	111 (Recommended)				OR	COLL 101	
Communications	9 hours				Oral Communications (3 hours)		
ENGL	101*				COMM	104*	
ENGL	102*				COMM	105	
Humanities	9 hours						
ART	101, 106				HIST	101*, 102*	
ASL	101, 102*				MUSC	101	
BMGT	223 or PHIL 202*				PHIL	101*, 121, 201*	
ENGL	109*, 222*, 225*				SPAN	101, 102*	
ENGL	230*, 235*, 240*, 245*				TA	205	
FREN	101						
Mathematics	3 hours				MATH	134*	
MATH	125*, 130*				MATH	135* (Recommended)	
Science	7 hours				Non-Lab		
Lab					CHEM	106	
BIOL	101, 110, 120				PHYS	102	
BIOL	152*				PHYS	105	
CHEM	101, 104						
CHEM	111* (Recommended)						
GEOL	115, 210*						
PHYS	101, 190*						
Social and Behavioral Science	9 hours						
Civics (3 hours)					AGEC	123* (Recommended)	
HIST	106*				ECON	201*, 202*	
HIST	107*				GEOG	111	
PLSC	103*				PSYC	101, 211*	
					SOC	101	
GE Core Electives	5 hours						
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crow der College. Courses cannot be used as Core electives if counted under another section.							
Major Courses	17 hours						
AGEC	223 Ag Computer Apps (3)						
AGRN	113 Crop Science (3)						
ANSC	114 Intro to Animal Sci (4)						
ANSC	213 Feeds & Nutrition (3)						
POSC	104 Careers in Poultry Sci (2)						
POSC	105 Avian Biology (2)						
Required Online Course	0 hour						
CVCS	101 MO Higher Ed Civics Exam						

ASSOCIATE OF ARTS DEGREE

A

Art and Design AA

The Associate in Arts Degree in Art and Design provides the career student with the basic and comprehensive tools of art and design foundations. With a solid academic structure from Crowder College, students can transfer to four-year institutions where bachelor degrees are offered in graphic design, painting, sculpture, fibers, ceramics, drawing, jewelry, art history, art education, media and computer arts. Elective courses should be determined by contacting the college and department to which students wish to transfer. The following program is suggested if students have not yet chosen the institution to which they plan to transfer following graduation.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101	HIST 101*, 102*
ASL 101, 102*	MUSC 101
BMGT 223 or PHIL 202*	PHIL 101*, 121, 201*
ENGL 109, 222, 225	SPAN 101, 102*
ENGL 230, 235, 240, 245	TA 205
FREN 101	
Mathematics	3 hours
MATH 125* #, 130*, 134*, 135*	
Science	7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab	
Lab Non-Lab	
BIOL 101, 110, 120	BIOL 102
BIOL 152*	CHEM 106
CHEM 101, 104, 111*	PHYS 102
GEOL 115, 210*	PHYS 105
PHYS 101, 190*	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
Civics (3 hours)	
HIST 106*, 107*	ECON 201*, 202*
PLSC 103*	GEOG 111
	PSYC 101, 211*
	SOC 101
GE CORE Electives	5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.	
Major Courses	18 hours
ART 103	ART 107 – OR – ART 119
ART 104	ART 110
ART 106	ART 111
Other Enhancement Course Options	
ART 105	ART 207*
ART 189	ART 210*
ART 205	ART 211*
ART 206*	ART 219*
Required Online Course	0 hour
CVCS 101	Missouri Higher Ed Civics Examination

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
ART 104 Intro to 3-D Design	3
COLL 101 College Orientation	1
ENGL 101 English Composition I	3
MATH 125 Quantitative Reasoning	3
MUSC 101 – OR – TA 205	3
Approved GE Core Elective	3
TOTAL	16
Spring Semester	Hours
ART 103 Intro to 2-D Design	3
ART 106 Drawing I	3
COMM 104 Fundamentals of Speech	3
ENGL 102 English Composition II	3
Approved Science Course	3-5
TOTAL	17
SECOND YEAR	
Fall Semester	Hours
ART 110 Ceramics I	3
Approved GE Core Elective	2
Approved Humanities Course	3
Approved Science Course	3-5
Approved Soc & Behavioral Science Course	3
TOTAL	14-16
Spring Semester	Hours
ART 107 Painting I-OR– ART 119	3
ART 111 Sculpture I	3
Approved Civics Course	3
Approved Humanities Course	3
Approved Soc & Behavioral Science Course	3
TOTAL	15
TOTAL HOURS REQUIRED	
62-64	

*Prerequisite required

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.

- Preferred class for this degree option



ASSOCIATE OF ARTS DEGREE

Art and Design

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation		1 hour		62 hours			
COLL 101							
Communications		9 hours					
<i>Written Communications (6 hours)</i>				<i>Oral Communications (3 hours)</i>			
ENGL 101*				COMM 104*			
ENGL 102*				COMM 105			
Humanities		9 hours					
ART 101, 106				HIST 101*, 102*			
ASL 101, 102*				MUSC 101			
BMGT 223 or PHIL 202*				PHIL 101*, 121, 201*			
ENGL 109*, 222*, 225*				SPAN 101, 102*			
ENGL 230*, 235*, 240*, 245*				TA 205			
FREN 101							
Mathematics		3 hours					
MATH 125* (Recommended)				MATH 130*, 134*, 135*			
Science		7 hours					
<i>Lab</i>				<i>Non-Lab</i>			
BIOL 101, 110, 120				BIOL 102			
BIOL 152*				CHEM 106			
CHEM 101, 104, 111*				PHYS 102			
GEOL 115, 210*				PHYS 105			
PHYS 101, 190*							
Social and Behavioral Science		9 hours					
<i>Civics (3 hours)</i>							
HIST 106*				ECON 201*, 202*			
HIST 107*				GEOG 111			
PLSC 103*				PSYC 101, 211*			
				SOC 101			
GE Core Electives		5 hours					
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crow der College. Courses cannot be used as Core electives if counted under another section.							
Major Courses		18 hours					
ART 103 Intro to 2D Design (3)							
ART 104 Intro to 3D Design (3)				ART 105 Topics in Art (1-3)			
ART 106 Drawing I (3)				ART 189 Photography (3)			
ART 107 Painting I (3)				ART 205 Topics in Art (1-3)			
OR		ART 119 Printmaking I (3)		ART 206 Drawing II* (3)			
ART 110 Ceramics I (3)				ART 207 Painting II* (3)			
ART 111 Sculpture I (3)				ART 210 Ceramics II* (3)			
				ART 211 Sculpture II* (3)			
				ART 219 Printmaking II* (3)			
Required Online Course		0 hour					
CVCS 101 MO Higher Ed Civics Exam							

Automotive Technology: Basic Engines Certificate
Automotive Technology: Basic Auto Mechanic Certificate
Automotive Technology AAS

The Automotive Technology program is aimed at training students in the maintenance and repair of today's modern, complex vehicles. Successful automotive graduates can expect to find employment in the automotive service industry as technicians, parts managers, service managers, or in sales positions.

The Basic Engines certificate prepares students to enter a career in Automotive Technology with a basic skill set that will provide entry level knowledge of automotive engine systems. The students will be introduced to Engine air/fuel requirements, electronic engine management, and electronic fuel injection. This program will cover the accepted methods of service and repair of the engine and related systems, and the emission control systems. Automotive heating and air conditioning principles will be covered during this course of study.

The Basic Auto Mechanic certificate prepares students to enter a career in Automotive Technology with entry level skill set as a basic auto mechanic. The students will be introduced to the basic principles of automotive electrical systems, braking systems, power transmitting units, computerized engine control systems, and diagnostics and repairs of the automotive suspension and steering systems.

Program of Study

Basic Engines Certificate Courses	18 hours
AUTO 114 Auto Fuel Systems (4)	
AUTO 115 Engine Repair (5)	
AUTO 214 Auto Air Conditioning (4)	
AUTO 215 Auto Emission Cont Sys (5)	
Basic Auto Mechanic Certificate Courses	21 hours
AUTO 124 Auto Brake Systems (4)	
AUTO 125 Auto Electrical Systems (5)	
AUTO 223 Auto Power Train Sys (3)	
AUTO 224 Computer Engine Control (4)	
AUTO 225 Auto Suspension and Steering (5)	
Orientation	2 hours
COLL 105 Technical Career Development I (1)	
COLL 106 Technical Career Development II (1)	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
ENGL 203*	
Oral Communications (3 hours)	
COMM 104*	
Mathematics	3 hours
BSAD 121*	
MATH 104*	
Civics	3 hours
HIST 106*, 107*	
PLSC 103*	
AAS Technical Courses	6 hours
BSAD 115 Computer Concepts (3) – OR – BSAD 125	
BSAD 150 Intro to Business (3)	
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

Suggested Plan of Study

FIRST YEAR		
Fall Semester	Hours	
AUTO 114 Fuel Systems	4	
AUTO 115 Engine Repair	5	
AUTO 214 Air Conditioning	4	
AUTO 215 Emission Control Systems	5	
TOTAL	18	
Graduate with Basic Engines Certificate		
Spring Semester	Hours	
AUTO 124 Brakes	4	
AUTO 125 Electrical Systems	5	
AUTO 223 Power Trains	3	
AUTO 224 Computer Engine Control	4	
AUTO 225 Suspension and Steering	5	
TOTAL	21	
Graduate with Basic Auto Mechanic Certificate		
SECOND YEAR		
Fall Semester	Hours	
BSAD 115 Comp Concepts – OR – BSAD 125	3	
COMM 104 Fundamentals of Speech	3	
Approved Mathematics Course	3	
Approved Written Communications Course	3	
TOTAL	12	
Spring Semester	Hours	
BSAD 150 Intro to Business	3	
Approved Civics Course	3	
Approved Written Communications Course	3	
COLL 105 Technical Career Development I	1	
COLL 106 Technical Career Development II	1	
TOTAL	11	
Graduate with Auto Technology AAS		
Total Engines CERTIFICATE Hours Required	18	
Additional Hours Needed for Mechanic Cert	21	
Additional Hrs Needed for Auto Tech AAS	23	
Total Auto Tech AAS Hours Required	62	

* Prerequisite requirement

Courses for Certificate	
Additional Courses for AAS Degree	



CERTIFICATE
Automotive Technology: Basic Engines

Done Curr To do

Done Curr To do

Major Courses		18 hours									
AUTO	114 Auto Fuel Systems (4)										
AUTO	115 Engine Repair (5)										
AUTO	214 Auto Air Conditioning (4)										
AUTO	215 Auto Emission Cont Sys (5)										



CERTIFICATE
Automotive Technology: Basic Auto Mechanic

Done Curr To do

Done Curr To do

Major Courses		39 hours									
AUTO	114 Auto Fuel Systems (4)										
AUTO	115 Engine Repair (5)										
AUTO	124 Auto Brake Systems (4)										
AUTO	125 Auto Electrical Systems (5)										
AUTO	214 Auto Air Conditioning (4)										
AUTO	215 Auto Emission Cont Sys (5)										
AUTO	223 Auto Power Train Sys (3)										
AUTO	224 Computer Engine Cont (4)										
AUTO	225 Auto Suspen and Steer (5)										



ASSOCIATE OF APPLIED SCIENCE DEGREE
Auto Technology

Done Curr To do

Done Curr To do

Orientation		2 hours									
COLL	105 Technical Career Dev I (1)										
COLL	106 Technical Career Dev II (1)										
Communications		9 hours									
<i>Written Communications (6 hours)</i>											
ENGL	101*										
ENGL	102*										
ENGL	203*										
Mathematics		3 hours									
BSAD	121*						MATH	104*			
Civics		3 hours									
HIST	106*						PLSC	103*			
HIST	107*										
Technical Core		45 hours									
AUTO	114 Auto Fuel Systems (4)						AUTO	223 Auto Pow er Train Sys (3)			
AUTO	115 Engine Repair (5)						AUTO	224 Computer Engine Cont (4)			
AUTO	124 Auto Brake Systems (4)						AUTO	225 Auto Suspen and Steer (5)			
AUTO	125 Auto Electrical Systems (5)						BSAD	115 Computer Concepts (3)			
AUTO	214 Auto Air Conditioning (4)						OR	BSAD 125 Computer Apps (3)			
AUTO	215 Auto Emission Cont Sys (5)						BSAD	150 Intro to Business (3)			
Required Online Course		0 hour									
CVCS	101 Missouri Higher Ed Civics Exam										
Comments: _____											

CERTIFICATE TO ASSOCIATE OF ARTS DEGREE

BTC/ PAO

Behavior Technician Certificate Psychology: Autism Option AA

Emphasis in this certificate program will be placed on Applied Behavior Analysis (ABA) theories and techniques to work with individuals diagnosed with Autism and/or developmental disabilities. Students may pursue an AA in Preschool/Paraprofessional, Psychology, General Studies or an AAT. Students are required to successfully complete a portfolio in PSYC 290 to complete this certificate program. Career opportunities for Psychology-Autism Option majors include social work, education and counseling. After completion of a baccalaureate degree, graduates often find themselves working one-on-one with children with autism in the academic or health care setting. An Associate of Arts of Psychology-Autism Option requires completion of the general education core, fifteen hours in psychology, and EDUC 204.

Program of Study

Certificate Courses		19 hours
COLL	101	College Orientation
EDUC	231*	Educational Psychology (3) ±
PSYC	101	General Psychology (3)
PSYC	203	Autism Spectrum Disorders (3)
PSYC	204	Applied Behavior Analysis for Educators (3)
PSYC	211*	Lifespan Development (3)
PSYC	290*	Clinical I – Supervised Field Experience (3)
Communications		9 hours
Written Communications (6 hours)		
ENGL	101*	
ENGL	102*	
Oral Communications (3 hours)		
COMM	104*	COMM 105
Humanities		9 hours
Students should select classes from two different disciplines (prefixes)		
ART	101, 106	HIST 101*, 102*
ASL	101, 102*	MUSC 101
BMGT	223 or PHIL 202*	PHIL 101*, 121, 201*, 202*
ENGL	109*, 222*, 225*	SPAN 101, 102*
ENGL	230*, 235*, 240*, 245*	TA 205
FREN	101	
Mathematics		3 hours
MATH	125*, 130*, 134*, 135*#	
Science		7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab		
Lab		Non-Lab
BIOL	101, 110, 120	BIOL 102
BIOL	152*	CHEM 106
CHEM	101, 104, 111*	PHYS 102
GEOL	115, 210*#	PHYS 105
PHYS	101, 190*	
Social and Behavioral Science		9 hours
Students should select classes from two different disciplines (prefixes)		
Civics (3 hrs)		Additional 6 Hours
HIST	106*, 107*	ECON 201*, 202*
PLSC	103*	GEOG 111
		SOC 101
GE CORE Electives		5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.		
Major Courses		3 hours
EDUC	125	
Required Online Course		0 hour
CVCS	101	Missouri Higher Ed Civics Examination

Suggested Plan of Study

FIRST YEAR

Fall Semester	Hours
COLL 101 College Orientation	1
EDUC 125 Introduction to Education	3
ENGL 101 English Composition I (for AA)	3
PSYC 101 General Psychology	3
PSYC 203 Autism Spec. Disorders	3
PSYC 204 Applied Behavior Analysis	3
TOTAL	16

Spring Semester	Hours
EDUC 231 Educational Psychology	3
ENGL 102 English Composition II (for AA)	3
PSYC 211 Lifespan Development	3
PSYC 290 Clinical I	3
Approved GE Core Elective	2
Approved Humanities Course (for AA)	3
TOTAL	17

Graduate with Behavior Technician Certificate

SECOND YEAR

Fall Semester	Hours
MATH 135 Algebra for Calculus	3
Approved Civics Course	3
Approved GE Core Elective	3
Approved Science Course	3-5
Approved Social & Behavioral Science Course	3
TOTAL	15-17

Spring Semester	Hours
COMM 104 Fundamentals of Speech	3
Approved Humanities Course	3
Approved Humanities Course	3
Approved Science Course	3-5
Approved Social & Behavioral Science Course	3
TOTAL	15-17

TOTAL HOURS REQUIRED

63-67

*Prerequisite required

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- Preferred class for this degree option

± - Not required for AA degree

Courses for Certificate	
Additional Courses for AA Degree	



CERTIFICATE
Behavior Technician Certificate

		1 hour	Done	Curr	To do	Done	Curr	To do
Orientation	COLL 101	College Orientation						
Major Courses		18 hours						
EDUC	231 Educational Psychology* (3)							
PSYC	101 General Psychology (3)							
PSYC	203 Autism Spectrum Disorders (3)							
PSYC	204 ABA for Educators (3)							
PSYC	211 Lifespan Development* (3)							
PSYC	290 Clinical I - Supervised Field Exp* (3)							

ASSOCIATE OF ARTS DEGREE

Psychology: Autism Option

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation		1 hour			61 hours		
COLL 101							
Communications		9 hours					
		<i>Written Communications (6 hours)</i>			<i>Oral Communications (3 hours)</i>		
ENGL	101*				COMM 104*		
ENGL	102*				COMM 105		
Humanities		9 hours					
ART	101, 106				HIST 101*, 102*		
ASL	101, 102*				MUSC 101		
BMGT	223 or PHIL 202*				PHIL 101*, 121, 201*		
ENGL	109*, 222*, 225*				SPAN 101, 102*		
ENGL	230*, 235*, 240*, 245*				TA 205		
FREN	101						
Mathematics		3 hours					
MATH	135* (Recommended)				MATH 125*, 130*, 134*		
Science		7 hours					
Lab					Non-Lab		
BIOL	101, 110, 120				BIOL 102		
BIOL	152*				CHEM 106		
CHEM	101, 104, 111*				PHYS 102		
GEOL	115, 210*				PHYS 105		
PHYS	101, 190*						
Social and Behavioral Science		9 hours					
		<i>Civics (3 hours)</i>					
HIST	106*				ECON 201*, 202*		
HIST	107*				GEOG 111		
PLSC	103*				SOC 101		
GE Core Electives		5 hours					
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crow der College. Courses cannot be used as Core electives if counted under another section.							
Major Courses		18 hours					
EDUC	125 Introduction to Education (3)				PSYC 204 Applied Behavior Anal (3)		
PSYC	101 General Psych (3)				PSYC 211 Lifespan Development* (3)		
PSYC	203 Autism Spectrum Disorders (3)				PSYC 290 Clinical I* (3)		
Required Online Course		0 hour					
CVCS	101 MO Higher Ed Civics Exam						

Biology AA

Biologists are teachers in high schools, colleges, and universities. They also work as conservationists, nutritionists, laboratory technicians, foresters, rangers, sanitarians, marine biologists, and geneticists. Their working environment has as much variation as any career field: classrooms, laboratories, forests, national or state parks, state or municipal offices, agricultural research stations, oceanographic vessels, museums, zoos, greenhouses, medical laboratories, hospitals, deserts, tropical rain forests, or even the cold of the arctic regions. Biologically related jobs are predicted to increase much faster than most of the job market in the future. With recent advances in genetic research, many new doors are opening for biologists in such areas as medicine, synthesizing scarce biological molecules, and finding new food and energy sources.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101, 106, 110	HIST 101*, 102*
ASL 101, 102*	MUSC 101
BMGT 223 or PHIL 202*	PHIL 101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN 101, 102*
ENGL 230*, 235*, 240*, 245*	TA 205
FREN 101	
Mathematics	3 hours
MATH 134*, 135#	
Science	9 hours
Lab	Non Lab
BIOL 101 or 110*	CHEM 106
CHEM 111*	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
Civics (3 hours)	
HIST 106*, 107*	ECON 201*, 202*
PLSC 103*	GEOG 111
	PSYC 101, 211*
	SOC 101
GE CORE Electives	5 hours
<i>BIOL 110 should be used to satisfy the additional 5 credit hours elective requirement. Courses cannot be used as Core electives if counted under another section of this Program of Study.</i>	
Major Courses	10 hours
BIOL 120*	CHEM 112*
Approved Electives	5 hours
BIOL 220*	MATH 150*
CHEM 201*	MATH 160*
CHEM 221*	
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
BIOL 101 Biology		4
COLL 101 College Orientation		1
ENGL 101 English Composition		3
MATH 135 Algebra for Calculus		3
Approved Soc & Behavioral Science Course		3
TOTAL		14
Spring Semester		Hours
BIOL 120 – OR – Approved Elective		5
ENGL 102 Advanced English Comp		3
Approved Civics Course		3
Approved Humanities Course		3
TOTAL		14
SECOND YEAR		
Fall Semester		Hours
BIOL 110 General Zoology		5
CHEM 111 General Chemistry I		5
Approved Humanities Course		3
Approved Soc & Behavioral Science Course		3
TOTAL		16
Spring Semester		Hours
BIOL 120 – OR – Approved Elective		5
CHEM 112 General Chemistry II		5
COMM 104 Fundamentals of Speech		3
Approved Humanities Course		3
TOTAL		16
TOTAL HOURS REQUIRED		60

*Prerequisite required

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.



ASSOCIATE OF ARTS DEGREE

Biology

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation		1 hour			60 hours		
COLL 101							
Communications		9 hours					
Written Communications (6 hours)					Oral Communications (3 hours)		
ENGL 101*					COMM 104*		
ENGL 102*					COMM 105		
Humanities		9 hours					
ART 101, 106					HIST 101*, 102*		
ASL 101, 102*					MUSC 101		
BMGT 223 or PHIL 202*					PHIL 101*, 121, 201*		
ENGL 109*, 222*, 225*					SPAN 101, 102*		
ENGL 230*, 235*, 240*, 245*					TA 205		
FREN 101							
Mathematics		3 hours					
MATH 134*							
MATH 135* (Recommended)							
Science		9 hours					
Lab					Non Lab		
BIOL 101 or 110*					CHEM 106		
CHEM 111*							
Social and Behavioral Science		9 hours					
Civics (3 hours)							
HIST 106*					ECON 201*, 202*		
HIST 107*					GEOG 111		
PLSC 103*					PSYC 101, 211*		
					SOC 101		
GE Core Electives		5 hours					
					BIOL 110 General Zoology (5)		
Major Courses		10 hours			Approved Electives 5 hours		
BIOL 120 Gen Botany* (5)					BIOL 220 Gen Microbiology* (5)		
CHEM 112 General Chem II* (5)					CHEM 201 Quant. Analysis* (5)		
					CHEM 221 Organic & Biochemistry* (5)		
					MATH 150 Calculus 1 Part I* (2)		
					MATH 160 Calculus I Part II* (3)		
Required Online Course		0 hour					
CVCS 101 MO Higher Ed Civics Exam							

Business Administration AA

Business Administration at Crowder prepares the business-oriented student for transfer to a four-year business, marketing, accounting, economics or finance program. Business Administration provides a core of general education courses plus specific business courses equivalent to those found in any first and second year business program. The following program is suggested for students intending to transfer following graduation. For best transfer, contact with the senior institution should be made as early in the program as possible.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101, 106, 107, 110, 111	HIST 101*, 102*
ASL 101, 102*	MUSC 101
BMGT 223* or PHIL 202*	PHIL 101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN 101, 102*
ENGL 230*, 235*, 240*, 245*	TA 205
FREN 101	
Mathematics	3 hours
MATH 125*#, 130*, 134*, 135#	
Science	7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab	
Lab	Non-Lab
BIOL 101, 110, 120	BIOL 102
BIOL 152*	CHEM 106
CHEM 101, 104, 111*	PHYS 102
GEOL 115, 210*	PHYS 105
PHYS 101, 190*	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
Civics (3 hours)	
HIST 106*, 107*	ECON 201* (Required)
PLSC 103*	PSYC 101#
GE CORE Electives	5 hours
ECON 202—Required	
Students should meet the five-hour requirement by selecting from ECON 202 and any other courses listed above or from GEOG 111, PSYC 211, or SOC 101; however courses can only be counted on one category and not be counted under two categories.	
Major Courses	12 hours
ACCT 201	BSAD 125
ACCT 202*	BSAD 150
Approved Electives	6 hours
Courses must be approved from the Business Department. Prefixes will be ACCT, BMGT, or BSAD.	
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
BSAD 150 Introduction to Business	3	
BSAD 125 Computer Applications	3	
COLL 101 College Orientation	1	
COMM 104 Fundamentals of Speech	3	
ENGL 101 English Composition I	3	
Approved Mathematics Course	3	
	TOTAL	16
Spring Semester		Hours
ENGL 102 English Composition II	3	
PSYC 101 General Psychology	3	
Approved Business Elective	3	
Approved Civics Course	3	
Approved Science Course	3-5	
	TOTAL	15-17
SECOND YEAR		
Fall Semester		Hours
ACCT 201 Principles of Accounting I	3	
ECON 201 Principles of Macroeconomics*	3	
Approved GE Core Elective	2-3	
Approved Humanities Course	3	
Approved Science Course	3-5	
	TOTAL	14-15
Spring Semester		Hours
ACCT 202 Principles of Accounting II	3	
ECON 202 Principles of Microeconomics*	3	
Approved Business Elective	3	
Approved Humanities Course	3	
Approved Humanities Course	3	
	TOTAL	15
TOTAL HOURS REQUIRED		61-63

*Prerequisite required

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.



ASSOCIATE OF ARTS DEGREE

Business Administration

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation		1 hour			61-63 hours		
COLL	101						
Communications		9 hours					
Written Communications (6 hours)					Oral Communications (3 hours)		
ENGL	101*				COMM 104*		
ENGL	102*				COMM 105		
Humanities		9 hours					
ART	101, 106, 107, 110, 111				HIST 101*, 102*		
ASL	101, 102*				MUSC 101		
BMGT	223* or PHIL 202*				PHIL 101*, 121, 201*		
ENGL	109*, 222*, 225*				SPAN 101, 102*		
ENGL	230*, 235*, 240*, 245*				TA 205		
FREN	101						
Mathematics		3 hours					
MATH	125* or 135* (Recommended)				MATH 130*		
MATH	134*						
Science		7 hours					
Lab					Non-Lab		
BIOL	101, 110, 120				BIOL 102		
BIOL	152*				CHEM 106		
CHEM	101, 104, 111*				PHYS 102		
GEOL	115, 210*				PHYS 105		
PHYS	101, 190*						
Social and Behavioral Science		9 hours					
Civics (3 hours)							
HIST	106*				ECON 201* (Required)		
HIST	107*				PSYC 101 (Recommended)		
PLSC	103*						
GE Core Electives		5 hours					
Students should meet the 5 hour requirement by selecting from ECON 202 and any other courses listed above or from GEOG 111, PSYC 211, or SOC 101; however, courses cannot be used as Core electives if counted under another section of this Program of Study.					ECON 202* (Required)		
Major Courses		12 hours			Business Electives 6 hours		
ACCT	201 Prin of Account I (3)						
ACCT	202 Prin of Account II* (3)				Courses must be approved and from the Business Department. Prefixes will be ACCT, BMGT, or BSAD.		
BSAD	125 Computer Apps (3)						
BSAD	150 Intro to Business (3)						
Required Online Course		0 hour					
CVCS	101 MO Higher Ed Civics Exam						

Business: Accounting Option AAS

This program is designed for students who seek immediate employment in the field of accounting and for those presently employed in accounting careers and desiring advancement. Crowder's Associate of Applied Science in Accounting degree gives students an advantage in the business world by training them in the latest accounting and computer techniques. Students learn how to solve problems using today's technology. This program focuses on the principles, procedures, and theories of managing and preparing financial records.

*All students pursing this degree must take the approved Technical Skills Assessment (TSA) prior to graduating. A fee will be charged.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	
Mathematics	3 hours
MATH 125*	
MATH 134*	MATH 135*
Civics	3 hours
HIST 106*, 107*	
PLSC 103*	
Business Core	23 hours
ACCT 201 (3)	BSAD 130* (3)
ACCT 202* (3)	BSAD 218* (3)
BSAD 103 (2)	BSAD 230 (3)
BSAD 125 (3)	ECON 201* (3)
Accounting Core	18 hours
	BSAD 150 (3) OR
ACCT 165* (3)	BMGT 175 (3)
ACCT 245 (3)	ECON 202* (3)
ACCT 250* (3) (spring only)	
Electives	3 hours
Electives can be taken from ACCT, BSAD, or BMGT	
Required Online Course	0 hours
CVCS 101 Missouri Higher Ed Civics Examination	

* Prerequisite requirement

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
ACCT 201 Principles of Accounting I	3	
BSAD 125 Computer Applications	3	
COLL 101 College Orientation	1	
COMM 104 Fundamentals of Speech	3	
ENGL 101 English Composition I	3	
Approved Mathematics Course	3	
	TOTAL	16
Spring Semester		Hours
ACCT 202 Principles of Accounting II	3	
BSAD 130 Business Communications	3	
BSAD 150 – OR – BMGT 175	3	
BSAD 218 Advanced Excel (Spring only)	3	
ENGL 102 English Composition II	3	
	TOTAL	15
SECOND YEAR		
Fall Semester		Hours
ACCT 165 QuickBooks (Fall only)	3	
ACCT 245 Tax Accounting (Fall only)	3	
ECON 201 Principles of Macroeconomics	3	
Approved Business Elective	3	
Approved Civics Course	3	
	TOTAL	15
Spring Semester		Hours
ACCT 160 Payroll Accounting (Spring only)	3	
ACCT 250 Certified Bookkeeper Rev	3	
BSAD 103 Professional Development	2	
BSAD 230 Business Law	3	
ECON 202 Principles of Microeconomics	3	
	TOTAL	14
TOTAL HOURS REQUIRED		60

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ASSOCIATE OF APPLIED SCIENCE DEGREE

Business: Accounting Option

		Done	Curr	To Do			Done	Curr	To Do
Orientation		1 hour				60 hours			
COLL	101								
Communications		9 hours							
		<i>Written Communications (6 hours)</i>				<i>Oral Communications (3 hours)</i>			
ENGL	101*, 102*					COMM 104*			
Mathematics		3 hours			MATH	134*			
MATH	125*				MATH	135*			
Civics		3 hours			PLSC	103*			
HIST	106*								
HIST	107*								
Business Core		23 Hours			Accounting Core	18 Hours			
ACCT	201 Principles of Accounting I (3)				+ Electives	3 hours			
ACCT	202 Principles of Acctg II* (3)				ACCT	165 Quickbooks* (3)			
BSAD	103 Professional Dev (2)				ACCT	245 Tax Accounting (3)			
BSAD	125 Computer Applications (3)				ACCT	250 Certified Bookkeeper Rev* (3)			
BSAD	130 Bus Communications* (3)				BSAD	150 Intro to Business (3) or BMGT 175 (3)			
BSAD	218 Spreadsheets* (3)				ECON	202 Principles of Micro* (3)			
BSAD	230 Business Law (3)								
ECON	201 Prin of Macroeconomics (3)								
<i>BSAD 103 should be taken in the last semester</i>					Electives 3 hours				
					Electives can be taken from ACCT, BSAD or BMGT				
					*Prerequisites/co-requisite requirement				
Required Online Course		0 hour							
CVCS	101 Missouri Higher Ed Civics Exam								

Business: Management Option AAS

This program is designed to help students develop the business prowess and managerial "know-how" to become valuable assets to any company. Crowder's Associate of Applied Science in Management degree offers specialized instruction in accounting and finance, business law & economics, management, marketing and human resources. Students learn how to develop vital skills for administration and management including problem-solving, strategy & planning, communication & marketing, interpersonal relations and technology. Special emphasis is placed on preparing students for the challenges of management positions through active learning techniques, practical application of research methods, team projects, presentations and real-world internships.

*All students pursing this degree must take the approved Technical Skills Assessment (TSA) prior to graduating. A fee will be charged.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102* or 203*	
Oral Communications (3 hours)	
COMM 104*	
Mathematics	3 hours
BSAD 121	
MATH 125*, 134*, 135*	
Civics	3 hours
HIST 106*, 107*	
PLSC 103*	
Business Core	23 hours
ACCT 201 (3)	
ACCT 202* (3)	
BSAD 103 (2)	
BSAD 125 (3)	
BSAD 130* (3)	
BSAD 218* (3)	
BSAD 230 (3)	
ECON 201* (3)	
Management Core	21 hours
BMGT 115 (3)	BSAD 108 (3)
BMGT 175 (3)	BSAD 150 (3)
BMGT 200 (3)	
BMGT 223 (3)	
BMGT 285* (3)	
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

*Prerequisite requirement

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
BMGT 115	Customer Service	3
BSAD 125	Computer Applications	3
BSAD 150	Introduction to Business	3
COLL 101	College Orientation	1
ENGL 101	English Composition I	3
Approved Mathematics Course		3
	TOTAL	16
Spring Semester		Hours
BMGT 175	Management	3
BSAD 218	Advanced Excel (Spring only)	3
BSAD 230	Business Law	3
COMM 104	Fundamentals of Speech	3
ENGL 203	Technical Report Writing OR ENGL 102	3
	TOTAL	15
SECOND YEAR		
Fall Semester		Hours
ACCT 201	Principles of Accounting I	3
BMGT 200	Marketing	3
BMGT 223	Business Ethics (Fall Only)	3
BSAD 108	Personal Finance	3
Approved Civics Course		3
	TOTAL	15
Spring Semester		Hours
ACCT 202	Principles of Accounting II	3
BMGT 285	Human Res Mgmt (Spring only)	3
BSAD 103	Professional Development	2
BSAD 130	Business Communications	3
ECON 201	Principles of Macroeconomics	3
	TOTAL	14
TOTAL HOURS REQUIRED		60

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.



ASSOCIATE OF APPLIED SCIENCE DEGREE Business: Management Option

			Done	Curr	To Do	
Orientation		1 hour				60 hours
COLL	101					
Communications		9 hours				
		Written Communications (6 hours)				Oral Communications (3 hours)
ENGL	101*					
ENGL	102* or 203*					COMM 104*
Mathematics		3 hours				
BSAD	121					
MATH	125*, 134*, 135*					
Civics		3 hours				
HIST	106*					PLSC 103*
HIST	107*					
Business Core		23 Hours				Management Core 21 Hours
ACCT	201 Principles of Accounting I (3)					
ACCT	202 Principles of Acctg II (3)					BMGT 115 Customer Service (3)
BSAD	103 Professional Dev (2)					BMGT 175 Management (3)
BSAD	125 Computer Apps (3)					BMGT 200 Marketing (3)
BSAD	130 Bus Communications* (3)					BMGT 223 Business Ethics (3)
BSAD	218 Spreadsheets* (3)					BMGT 285 Human Resource Mgmt* (3)
BSAD	230 Business Law (3)					BSAD 108 Personal Finance (3)
ECON	201 Prin of Macroeconomics (3)					BSAD 150 Intro to Business (3)

Certified Medical Assistant Certificate

This certification program prepares students for employment as a Certified Medical Assistant with the skills needed for placement in health care setting such as a hospital, clinic, or doctor office.

Program of Study

Certificate Courses		16 hours
MEDA	111	Introduction to Medical Assisting (3)
MEDA	112	Mathematical App & Med Administration (2)
MEDA	113*	Medical Assisting Science (3)
MEDA	114*	Clinical Medical Assisting (3)
MEDA	115*	Administrative Medical Assisting I (2)
MEDA	116	Medical Assisting Internship (3)

*Prerequisite requirement

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
MEDA 111 Intro to Medical Assisting	3
MEDA 112 Math Application & Med Administration	2
MEDA 113 Medical Assisting Science	3
MEDA 114 Clinical Medical Assisting	3
MEDA 115 Administrative Medical Assisting	2
MEDA 116 Medical Assisting Internship	3
TOTAL	16

Graduate with Certified Medical Assistance Certificate

Total CERTIFICATE Hours Required **16**



CERTIFICATE

Certified Medical Assistant

Students must earn 16 hours for this certificate.

Certificate Courses	16 hours	Done	Curr	To do				
MEDA	111 Intro to Medical Assisting (3)							
MEDA	112 Mathematical App & Med Administration (2)							
MEDA	113 Medical Assisting Science* (3)							
MEDA	114 Clinical Medical Assisting* (3)							
MEDA	115 Administrative Medical Assisting* (2)							
MEDA	116 Medical Assisting Internship (3)							

Chemistry AA

Instruction in the Physical Sciences is offered in the areas of chemistry, physics, geology and astronomy as the foundation for baccalaureate and graduate studies in these and related sciences at a university or four-year college. Physical Science students find employment in industrial research and development, government regulatory agencies, or secondary and post-secondary education. The suggested curriculum that follows assumes a mathematics background that will permit an enrollment in the calculus series as a freshman. If pre-calculus classes are needed, more than four semesters are necessary to complete this program.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101, 106, 107, 110	HIST 101*, 102*
ASL 101, 102*	MUSC 101
BMGT 223 or PHIL 202*	PHIL 101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN 101, 102*
ENGL 230*, 235*, 240*, 245*	TA 205
FREN 101	
Mathematics	5 hours
MATH 150* & 160*	
Science	9-10 hours
Students must meet the credit hour requirement by selecting two courses from different disciplines (prefixes).	
Lab	Non-Lab
BIOL 101#, 110, 120	CHEM 106
CHEM 111* (Required)	
PHYS 190* (Required)	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
Civics (3 hours)	
HIST 106*, 107*	ECON 201*, 202*
PLSC 103*	GEOG 111
	PSYC 101, 211*
	SOC 101
GE CORE Electives	3-5 hours
PHYS 190 or BIOL 101 should be used to satisfy the credit hours elective requirement. Courses cannot be used as Core electives if counted under another section of this Program of Study.	
Major Courses	15 hours
CHEM 112*	PHYS 210*
MATH 201*	
Other Recommended Courses	
CHEM 201*	COMP 111*
CHEM 221*	MATH 202*
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

- Preferred class for this degree option

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
CHEM 111 General Chemistry I	5
COLL 101 College Orientation	1
COMM 104 Fundamentals of Speech	3
ENGL 101 English Composition I	3
MATH 150 Calculus I, Part 1	2
Approved Civics Course	3
	TOTAL
	17
Spring Semester	Hours
CHEM 112 General Chemistry II	5
ENGL 102 English Composition II	3
MATH 160 Calculus I, Part 2	3
PHYS 190 General Physics I	5
	TOTAL
	16
SECOND YEAR	
Fall Semester	Hours
MATH 201 Calculus II	5
PHYS 210 General Physics II	5
Approved Humanities Course	3
Approved Soc & Behavioral Science Course	3
	TOTAL
	16
Spring Semester	Hours
BIOL 101 General Biology	4
Approved Humanities Course	3
Approved Humanities Course	3
Approved Soc & Behavioral Science Course	3
	TOTAL
	13
	TOTAL HOURS REQUIRED
	62

*Prerequisite required

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ASSOCIATE OF ARTS DEGREE

Chemistry

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation		1 hour			62 hours		
COLL 101							
Communications		9 hours					
<i>Written Communications (6 hours)</i>					<i>Oral Communications (3 hours)</i>		
ENGL 101*					COMM 104*		
ENGL 102*					COMM 105		
Humanities		9 hours					
ART 101, 106					HIST 101*, 102*		
ASL 101, 102*					MUSC 101		
BMGT 223 or PHIL 202*					PHIL 101*, 121, 201*		
ENGL 109*, 222*, 225*					SPAN 101, 102*		
ENGL 230*, 235*, 240*, 245*					TA 205		
FREN 101							
Mathematics		5 hours					
MATH 150*					MATH 160*		
Science		9-10 hours					
<i>Lab</i>					<i>Non-Lab</i>		
BIOL 101#, 110, 120					CHEM 106		
CHEM 111* (Required)							
PHYS 190* (Required)							
Social and Behavioral Science		9 hours					
<i>Civics (3 hours)</i>							
HIST 106*					ECON 201*, 202*		
HIST 107*					GEOG 111		
PLSC 103*					PSYC 101, 211*		
					SOC 101		
GE Core Electives		3-5 hours					
PHYS 190 or BIOL 101 should be used to satisfy the credit hours elective requirement. Courses cannot be used as Core electives if counted under another section of the Program of Study.					PHYS 190 Gen Physics I* (5)		
					BIOL 101 General Biology (4)		
Major Courses		15 hours			Other Recommended Courses		
CHEM 112 General Chem II* (5)					CHEM 201 Quant Analysis* (5)		
MATH 201 Calculus II* (5)					CHEM 221 Organic Chem (5)		
PHYS 210 Gen Physics II* (5)					COMP 111 Intro to Comp Science* (4)		
					MATH 202 Calculus III* (5)		
Required Online Course		0 hour					
CVCS 101 MO Higher Ed Civics Exam							

CERTIFICATE TO AAS

PCR/ CN/ ITCT/CNS

CNS: PC Repair Certificate

CNS: Cisco Networking Certificate

CNS: Information Technology Certificate

CNS: Computer and Network Support Technology AAS

The Computer and Network Support Technology program (CNS) prepares students for employment as support personnel in the areas of computer and information services. Students successfully completing this program will be able to setup and maintain microcomputer systems as well as perform basic administrative/ maintenance tasks in a networked computing environment. **The PC Repair Certificate** provides an opportunity for students to acquire the basic computer assembly/maintenance/setup skills required for entry-level employment in the information technology/services area. Successful graduates will be able to utilize industry terminology, assemble, setup, and maintain Intel-based ("IBM compatible") personal computers, and perform basic computer networking tasks. The program is based around two PC basics courses taught in a strong "hands-on" environment in the classroom. Students successfully completing the program will be qualified to complete and pass CompTIA's A+ PC repair exams; although passing the exam is not a formal requirement for obtaining the certificate. The **IT Certificate** prepares students to enter a career in Information Technology with a basic skill set that will provide entry level knowledge of basic network administration using the Microsoft Windows family of server operating systems. The Computer Network classes will provide general and advanced training in Microsoft servers, security and administration as they are used in the current industry. **The Cisco certificate** provides an opportunity for students acquire the basic computer networking infrastructure skills required for entry-level employment in the information technology/services area. Successful graduates will be able to utilize industry terminology, setup/maintain infrastructure components of both local and wide-area computer networks, and recognize/mitigate common network security threats. The program is built around three basic internetworking courses provided online by Cisco Services and taught in Crowder's classroom by a Cisco-certified instructor. Students successfully completing the program will be qualified to complete and pass Cisco's CCNA (Certified Cisco Network Administrator) exam, although passing the CCNA exam is not a requirement for obtaining the certificate.

Program of Study

PC Repair Technical Courses			15 hours
CNS	101	Introduction to Electronics (3)	
CNS	111	PC Basics I (3)	
CNS	112*	PC Basics II (3)	
CNS	113*	Introduction to Networks (3)	
CNS	149*	Cybersecurity I (3)	
Information Technology Courses			12 hours
CNS	122	VMWare: Install, Configure, Man (3)	
CNS	275	Advanced MS Server* (3) [Elective for AAS]	
CNS		Approved Electives (6)	
Cisco Networking Certificate			6 hours
CNS	114*	Network Switching and Routing Ess. (3)	
CNS	251*	CCNA Ent Net., Security & Automation (3)	
Orientation			2 hours
COLL	105	Technical Career Development I (1)	
COLL	106	Technical Career Development II (1)	
Communications			9 hours
<i>Written Communications (6 hours)</i>			
ENGL	101*	ENGL 203*	
ENGL	102*		
<i>Oral Communications (3 hours)</i>			
COMM	104*		
Mathematics			3 hours
MATH	104*		MATH 134*
MATH	135*		
Civics			3 hours
HIST	106*, 107*		PLSC 103*
Required Courses			7 hours
BSAD	125	Computer App	
CNS	285*	CNS Internship (4)	
CNS Electives			6 hours
CNS	122	VMWare: Install, Configure, Manage (3)	
CNS	149*	Cybersecurity I (3)	
CNS	222	VmWare: Optimize & Scale (3)	
CNS	249*	Cybersecurity II (3)	
CNS	250	Linux Network Admin (3)	
CNS	259*	Intro to PowerShell* (3)	
CNS	275*	Advanced MS Server (3)	
Required Online Course			0 hour
CVCS	101	Missouri Higher Ed Civics Examination	

Suggested Plan of Study FIRST YEAR

Fall Semester	Hours
CNS 101 Introduction to Electronics	3
CNS 111 PC Basics I	3
CNS 112 PC Basics II	3
CNS 113 Introduction to Networks	3
CNS 149 Cybersecurity I	3
COLL 105 Technical Career Development I	1
COLL 106 Technical Career Development II	1
TOTAL	17

Graduate with PC Repair Certificate

Spring Semester	Hours
CNS 114 Network Switching and Routing Essen	3
CNS 122 VmWare VSphere: Install, Config, Man	3
CNS 222 VmWare VSphere: Optimize and Scale	3
CNS 249 Cybersecurity II	3
CNS 275 Advanced Microsoft Server	3
TOTAL	15

Graduate with Information Technology Certificate

SECOND YEAR	Hours
BSAD 125 Computer Applications	3
COMM 104 Fundamentals of Speech	3
CNS 251 CCNA Ent Net, Sec & Auto	3
Approved Mathematics Course	3
Approved Written Communications Course	3
TOTAL	15

Graduate with Cisco Certificate

Spring Semester	Hours
CNS 285 CNS Internship	4
Approved Elective	3
Approved Civics Course	3
Approved Written Communications Course	3
TOTAL	13

Graduate with CNS Technology AAS

Total PC Repair Certificate Hours Required	17
Additional Hours Needed for IT Certificate	9
Additional Hours Needed for Cisco Certificate	6
Additional Hours Needed for AAS	28
Total AAS Hours Required	60

* Prerequisite requirement



CERTIFICATE

PC Repair

	17 hours	Done	Curr	To do		Done	Curr	To do
Orientation	2 hours							
COLL	105 Technical Career Dev I (1)							
COLL	106 Technical Career Dev II (1)							
Major Courses	15 hours							
	Required Courses (12 hours)							
CNS	101 Introduction to Electronics (3)							
CNS	111 PC Basics I (3)							
CNS	112 PC Basics II* (3)							
CNS	113 Introduction to Networks* (3)							
	Approved Electives (3 hours)							
CNS	149 Cybersecurity* (3)							
	Other CNS courses as approved by division chair							



CERTIFICATE

Information Technology

	23 hours	Done	Curr	To do		Done	Curr	To do
Orientation	2 hours							
COLL	105 Technical Career Development I (1)							
COLL	106 Technical Career Development II (1)							
Major Courses	21 hours							
	Required (15 hours)							
CNS	111 PC Basics (3)							
CNS	112 PC Basics II* (3)							
CNS	113 Introduction to Networks* (3)							
CNS	122 VMware: Install, Config, Manage (3)							
CNS	275 Advanced MS Server* (3)							
	Approved Electives (6 hours)							
CNS	149 Cybersecurity I* (3)							
CNS	222 VMware: Optimize & Scale (3)							
CNS	259 Intro to PowerShell* (3)							



CERTIFICATE

Cisco Networking

	17 hours	Done	Curr	To do		Done	Curr	To do
Orientation	2 hours							
COLL	105 Technical Career Dev. I (1)							
COLL	106 Technical Career Dev. II (1)							
Major Courses	15 hours							
	CNS 101 Intro to Electronics (3)							
	CNS 111 PC Basics* (3)							
	CNS 113 Intro to Networks* (3)							
	CNS 114 CCNA Net Switc, Route Ess* (3)							
	CNS 251 CCNA Ent Net, Sec, Auto* (3)							



ASSOCIATE OF APPLIED SCIENCE DEGREE

Computer & Network Support Technology

		Done	Curr	To do		Done	Curr	To do
Orientation		2 hours				60 hours		
COLL	105 Technical Career Dev I (1)							
COLL	106 Technical Career Dev II (1)							
Communication		9 hours						
		Written Communications (6 hours)				Oral Communications (3 hours)		
ENGL	101*					COMM	104*	
ENGL	102*							
ENGL	203*							
Mathematics		3 hours				MATH	134*	
MATH	104*					MATH	135*	
Civics		3 hours				PLSC	103*	
HIST	106*							
HIST	107*							
Required Technical Courses		22 hours				Approved Electives	18 hours	
CNS	101 Intro to Electronics (3)					CNS	122 VmWare: Install (3)	
CNS	111 PC Basics I* (3)					CNS	149 Cybersecurity I (3)	
CNS	112 PC Basics II* (3)					CNS	222 VmWare: Optimize (3)	
CNS	113 Introduction to Networks (3)					CNS	249 Cybersecurity II (3)	
CNS	114 Network Switch/Routing Ess* (3)					CNS	250 Linux Network Admin* (3)	
CNS	251 CCNA Ent Net., Sec. & Auto.* (3)					CNS	259 Intro to PowerShell* (3)	
CNS	285 CNS Internship* (4)					CNS	275 Advanced MS Server* (3)	
Required Support Course		3 hours						
BSAD	125 Computer Applications (3)							
(*) - These courses have pre-requisite requirements. See catalog description for details.								
Required Online Course		0 hour						
CVCS	101 Missouri Higher Ed Civics Exam							

CNS: Coding Certificate

The Coding Certificate is for students interested in learning coding languages. Courses focus on coding in the context of gaming and app development. Computer languages include Python, C++, and DirectX programming.

Program of Study

Orientation	2 hours
COLL 105 Technical Career Dev I (1)	
COLL 106 Technical Career Dev II (1)	
Major Courses/Requirements	15 hours
CNS 111 PC Basics I (3)	
CNS 112 PC Basics II (3)	
CNS 126 Game Development/Python (3)	
CNS 131* Intro to Gaming/Programming (3)	
CNS 141* Programming for Gaming (3)	
Approved Electives	6 hours
CNS 221* Desktop Game Development (3)	
CNS 231* Android Mobile Game Development (3)	
CNS 241* IOS Development for Gaming (3)	

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
CNS 111 PC Basics I	3
CNS 112 PC Basics II	3
CNS 126 Gaming Development/Python	3
CNS 131 Intro to Gaming Programming	3
COLL 105 Technical Career Development I	1
COLL 106 Technical Career Development II	1
TOTAL	14
Spring Semester	Hours
CNS 141 Programming for Gaming	3
CNS 221 Desktop Game Development	3
CNS 231 Android Mobile Game Development	3
TOTAL	9
Total Hours Required	23



CERTIFICATE

Coding

23 hours

Done Curr To do

Orientation		2 hours									
COLL		105 Technical Career Development I (1)	_____	_____	_____						
COLL		106 Technical Career Development II (1)	_____	_____	_____						
Major Courses		15 hours									
Required (15 hours)											
CNS	111 PC Basics (3)	_____	_____	_____							
CNS	112 PC Basics II* (3)	_____	_____	_____							
CNS	126 Game Development Through Python (3)	_____	_____	_____							
CNS	131* Intro to Gaming Programming (3)	_____	_____	_____							
CNS	141* Programming for Gaming (3)	_____	_____	_____							
Approved Electives (6 hours)											
CNS	221* Desktop Game Development (3)	_____	_____	_____							
CNS	231* Android Mobile Game Development (3)	_____	_____	_____							
CNS	241* IOS Development for Gaming (3)	_____	_____	_____							

Construction Technology Certificate
Advanced Construction Technology Certificate
Construction Management AAS

The Construction Management program prepares students for employment in the construction industry or in related occupations. The program is built around National Center for Construction Education and Research (NCCER) standards and is comprised of a core component covering basic employability skills, introductory carpentry, and construction management.

The Construction Technology and Advanced Construction Technology certificates prepare students for entry-level employment in the construction industry with a skill set that includes construction safety, common hand/power tools, basic carpentry fundamentals, framing and finishing, masonry, plumbing, and residential wiring. In the Advanced certificate, students will be introduced to site layout and project management and supervision. All courses are based on the NCCER (National Council for Construction Education and Research) curriculum.

Program of Study

Construction Technology Certificate Courses 12 hours		
CONS 105	Introduction to Construction Technology (3)	
CONS 110	Introduction to Construction Safety (3)	
CONS 112	Carpentry Fundamentals (3)	
CONS 116*	Framing & Finishing (3)	
Electives (All Required for Adv Cert & AAS) 9 hours		
CONS 121	Masonry (3)	
CONS 131	Plumbing (3)	
CONS 141*	Electrical (3)	
Orientation 2 hours		
COLL 105	Technical Career Dev I (1)	
COLL 106	Technical Career Dev II (1)	
Advanced Certificate Courses 9 hours		
CONS 174*	Carpentry Forms (3)	
CONS 232	Site Layout (3)	
CONS 245*	Project Management (3)	
Communications 9 hours		
Written Communications (6 hours)		
ENGL 101*		
ENGL 102*		
ENGL 203*		
Oral Communications (3 hours)		
COMM 104*		
Mathematics 3 hours		
MATH 104*	MATH 135*	
MATH 134*		
Civics 3 hours		
HIST 106*, 107*		
PLSC 103*		
Common Support Courses 6 hours		
BSAD 115 (3)	– OR – BSAD 125 (3)	
DRFT 153 (3)		
Common Construction Courses 9 hours		
CONS 108	Energy Conservation Techniques (3)	
HVAC 105	Intro to HVAC/R (3)	
CONS 290*	Construction Internship (3)	
Required Online Course 0 hour		
CVCS 101	Missouri Higher Ed Civics Examination	

Suggested Plan of Study

FIRST YEAR

Fall Semester	Hours
COLL 105 Technical Career Dev I	1
COLL 106 Technical Career Dev II	1
CONS 105 Intro to Construction Technology	3
CONS 110 Intro to Construction Safety	3
CONS 131 Plumbing	3
CONS 141 Electrical	3
CONS 232 Site Layout	3
TOTAL	17

Spring Semester	Hours
CONS 112 Carpentry Fundamentals	3
CONS 116 Framing and Finishing	3
CONS 150 Concrete & Masonry	3
CONS 210 Print Reading for Construction	3
CONS 245 Project Management	3
TOTAL	15

Graduate with Construction Technology Certificate
Graduate with Advanced Construction Tech Certificate

SECOND YEAR

Fall Semester	Hours
COMM 104 Fundamentals of Speech	3
DRFT 153 Construction Graphics	3
CONS 108 Energy Conservation Techniques	3
Approved Mathematics Course	3
Approved Written Communications Course	3
TOTAL	15

Spring Semester	Hours
BSAD 115 Computer Concepts – OR – BSAD 125	3
HVAC 105 Intro to HVAC/R	3
CONS 290 Construction Internship	3
Approved Civics Course	3
Approved Written Communication	3
TOTAL	15

Graduate with Construction Management AAS

Total Basic CERTIFICATE Hours Required	17
Additional Hours for Advanced Certificate	15
Additional Hours Needed for AAS	30
Total AAS Hours Required	62

* Prerequisite requirement

Courses for Certificate	
Additional Courses for AAS Degree	



CERTIFICATE Construction Technology

Students must earn 17 hours for this certificate.

		Done	Curr	To do	Done	Curr	To do
Professional Development	2 hours						
COLL	105 Technical Career Development I (1)						
COLL	106 Technical Career Development (1)						
Construction Courses	12 hours						
CONS	105 Intro to Construction Technology (3)				CONS	112 Carpentry Fundamentals (3)	
CONS	110 Intro to Construction Safety (3)						
CONS	116 Framing and Finishing* (3)						
Approved Electives	3 hours						
CONS	131 Plumbing (3)						
CONS	141 Electrical* (3)						
CONS	150 Concrete and Masonry (3)						



CERTIFICATE Advanced Construction Technology

Professional Development	2 hours	Done	Curr	To do	32 hours	Done	Curr	To do
COLL	105 Technical Career Development I (1)							
COLL	106 Technical Career Development II (1)							
Construction Courses	30 hours							
CONS	105 Intro to Construction Technology (3)				CONS	141 Electrical* (3)		
CONS	110 Intro to Construction Safety (3)				CONS	150 Concrete and Masonry (3)		
CONS	112 Carpentry Fundamentals (3)				CONS	210 Print Reading for Construction (3)		
CONS	116 Framing and Finishing* (3)				CONS	232 Site Layout (3)		
CONS	131 Plumbing (3)				CONS	245 Project Management (3)		



ASSOCIATE OF APPLIED SCIENCE DEGREE Construction Management

		Done	Curr	To do	Done	Curr	To do
Professional Development	2 hours				62 hours		
COLL	105 Technical Career Dev. I						
COLL	106 Technical Career Dev. II						
Communications	9 hours						
	Written Communications (6 hours)				Oral Communications (3 hours)		
ENGL	101*				COMM	104*	
ENGL	102*						
ENGL	203*						
Mathematics	3 hours						
MATH	104				MATH	135*	
MATH	134*						
Civics	3 hours						
HIST	106*				PLSC	103*	
HIST	107*						
Common Support Courses	6 hours						
BSAD	115 Computer Concepts (3)				OR	BSAD 125	
DRFT	153 Construction Graphics (3)						
Common Construction Courses	36-39 hours						
CONS	105 Intro to Const Tech (3)				CONS	141 Electrical* (3)	
HVAC	105 Introduction to HVAC/R (3)				CONS	150 Concrete & Masonry (3)	
CONS	108 Energy Con Techniques (3)				CONS	210 Print Reading for Construction (3)	
CONS	110 Intro to Construction Safety (3)				CONS	232 Site Layout (3)	
CONS	112 Carpentry Fundamentals* (3)				CONS	245 Project Management* (3)	
CONS	116 Framing and Finishing* (3)				CONS	290 Construction Intern* (3)	
CONS	131 Plumbing (3)						
Required Online Courses	0 hour						
CVCS	101 Missouri Higher Ed Civics Exam						

Construction: Electrical Certificate

This certificate prepares students to enter a career in construction or industrial with a skill set that will provide entry level knowledge of basic Electricity including industrial and residential electrical wiring. This program will cover an introduction to the National Electrical Code (NEC), fundamental electrical theory, and on-hands skills. Students will gain knowledge that can provide a platform into the world of employment opportunities in Electricity.

Program of Study

Certificate Courses	16 hours
CNS 101 Introduction to Electronics (3)	
AMT 111 Introduction to Ind Safety (1)	
AMT 102 Introduction to Ind Electricity (3)	
CONS 141 Electrical (3)	
CONS 151 Introduction to NEC (3)	
CONS 251 NEC Wiring Methods (3)	

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
AMT 102 Introduction to Industrial Electricity		3
AMT 111 Introduction to Industrial Safety		1
CNS 101 Introduction to Electronics		3
CONS 141 Electrical		3
CONS 151 Introduction to NEC		3
CONS 251 NEC Wiring Methods		3
	TOTAL	16
	Total Hours Required	16



CERTIFICATE Construction: Electrical

General Education Core		Done	Curr	To do	Done	Curr	To do
Required Courses	16 hours						
CNS	101 Introduction to Electronics (3)	_____	_____	_____	_____	_____	_____
ATM	111 Introduction to Ind Safety (1)	_____	_____	_____	_____	_____	_____
AMT	102 Introduction to Ind Electricity (3)	_____	_____	_____	_____	_____	_____
CONS	141 Electrical (3)	_____	_____	_____	_____	_____	_____
CONS	151 Introduction to NEC (3)	_____	_____	_____	_____	_____	_____
CONS	251 NEC Wiring Methods (3)	_____	_____	_____	_____	_____	_____

Criminal Justice AA

The Criminal Justice Associate Degree Program is designed to provide the student with the legal, technical, and practical aspects of justice system. This degree will provide the student with opportunities for careers or continued education in criminal justice, corrections, juvenile justice, and government or private security operations.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101, 106, 110	HIST 101*, 102*
ASL 101, 102*	MUSC 101
BMGT 223 or PHIL 202*	PHIL 101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN 101, 102*
ENGL 230*, 235*, 240*, 245*	TA 205
FREN 101	
Mathematics	3 hours
MATH 125*, 130*, 134*, 135*#	
Science	7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab	
Lab	Non-Lab
BIOL 101, 110, 120	BIOL 102
BIOL 152*	CHEM 106
CHEM 101, 104, 111*	PHYS 102
GEOL 115, 210*	PHYS 105
PHYS 101, 190*	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
Civics (3 hours)	
HIST 106*, 107*	ECON 201*, 202*
PLSC 103*	GEOG 111
	PSYC 101, 211*
	SOC 101
GE CORE Electives	5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College.	
Courses cannot be used as Core electives if counted under another section.	
Major Courses	18 hours
Required Courses (15 hours)	Electives (3 hours)
CJ 101	CJ 102**#
CJ 210	CJ 190
CJ 250	CJ 270**, 285**#, 290
CJ 265	PSYC 101
CJ 280	SOC 101
	SWK 200*, 230
Required Online Course	0 hour
CVCS 101	Missouri Higher Ed Civics Examination

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
CJ 101 Intro to Criminal Justice Sys		3
COLL 101 College Orientation		1
ENGL 101 English Composition I		3
MATH 135 Algebra for Calculus		3
Approved GE Core Elective		2
Approved Humanities Course		3
	TOTAL	15
Spring Semester		Hours
CJ 280 Report Writing		3
ENGL 102		3
Approved Civics Course		3
Approved Science Course		3-5
	TOTAL	12-14
SECOND YEAR		
Fall Semester		Hours
CJ 210 Criminal Procedures		3
CJ 250 Criminal Law		3
COMM 104 Fundamentals of Speech		3
Approved Science Course		3-5
Approved Soc & Behavioral Science Course		3
	TOTAL	15-17
Spring Semester		Hours
CJ 265 Ethics in Criminal Justice		3
Approved Criminal Justice Course		3
Approved GE Core Elective		3
Approved Humanities Course		3
Approved Humanities Course		3
Approved Soc & Behavioral Science Course		3
	TOTAL	18
TOTAL HOURS REQUIRED		60-64

**Highly recommended for Police Academy at MSSU

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.

*Prerequisite required
- Preferred class for this degree option



ASSOCIATE OF ARTS DEGREE

Criminal Justice

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation		1 hour			64 hours		
COLL	101						
Communications		9 hours					
	Written Communications (6 hours)				Oral Communications (3 hours)		
ENGL	101*				COMM 104*		
ENGL	102*				COMM 105		
Humanities		9 hours					
ART	101, 106, 110				HIST 101*, 102*		
ASL	101, 102*				MUSC 101		
BMGT	223 or PHIL 202*				PHIL 101*, 121, 201*		
ENGL	109*, 222*, 225*				SPAN 101, 102*		
ENGL	230*, 235*, 240*, 245*				TA 205		
FREN	101						
Mathematics		3 hours					
MATH	125*				MATH 135* (Recommended)		
MATH	130*						
MATH	134*						
Science		7 hours					
Lab					Non-Lab		
BIOL	101, 110, 120				BIOL 102		
BIOL	152*				CHEM 106		
CHEM	101, 104, 111*				PHYS 102		
GEOL	115, 210*				PHYS 105		
PHYS	101, 190*						
Social and Behavioral Science		9 hours					
	Civics (3 hours)						
HIST	106*				ECON 201*, 202*		
HIST	107*				GEOG 111		
PLSC	103*				PSYC 101, 211*		
					SOC 101		
GE Core Electives		5 hours					
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.							
Criminal Justice Courses		18 hours					
	Required Courses (15 hours)				Electives (3 hours)		
CJ	101 Intro to the Criminal Justice Sys (3)				CJ 102 Crime Scene Processing (3)		
CJ	210 Criminal Procedures (3)				CJ 190 Patrol Operations (3)		
CJ	250 Criminal Law (3)				CJ 270 Drug Investigation** (3)		
CJ	265 Ethics in Criminal Justice (3)				CJ 285 Family Violence** (3)		
CJ	280 Report Writing (3)				CJ 290 Police Super & Mgmt** (3)		
					PSYC 101 General Psychology (3)		
					SOC 101 General Sociology (3)		
					SWK 200* Intro to Social Work (3)		
					SWK 230 Substance Abuse Inter (3)		
Required Online Course		0 hour					
CVCS	101 MO Higher Ed Civics Exam						

Criminal Justice Certificate**Criminal Justice AAS**

The Criminal Justice Associate Degree Program is designed to provide the student with the legal, technical, and practical aspects of justice system. This degree will provide the student with opportunities for careers or continued education in criminal justice, corrections, juvenile justice, and government or private security operations.

Criminal Justice is increasingly becoming a multi-disciplinary vocation involving law enforcement, the courts, corrections, security professionals, victim advocates and juvenile services. The certificate is designed for professionals who want to increase their knowledge to meet their career objectives in these growing fields.

Program of Study

Certificate Courses	17 hours
CJ 101 Introduction to Criminal Justice (3)	
CJ 210 Criminal Procedures (3)	
CJ 250 Criminal Law (3)	
CJ 265 Ethics in Criminal Justice (3)	
CJ 280 Report Writing (3)	
COLL 105 Technical Career Development I (1)	
COLL 106 Technical Career Development II (1)	
Certificate Electives	9 hours
All required for AAS unless otherwise noted	
CJ 102 Crime Scene Processing (3)	
CJ 103 Telecommunications (3)	
CJ 190 Patrol Operations (3)	
CJ 200 Criminal Investigations± (3)	
CJ 230 Criminal Justice Internship* (3)	
CJ 270 Drug Investigation (3)	
CJ 285 Family Violence# (3)	
CJ 290 Police Supervision and Management (3)	
EMT 101 Emergency Medical Technician (9)	
FSCI 111 Firefighter I and II (6)	
PSYC 101 General Psychology (3)	
SOC 101 General Sociology (3)	
SWK 200 Introduction to Social Work* (3)	
SWK 230 Substance Abuse Interventions (3)	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	
Mathematics	3 hours
MATH 104*, 125*	
MATH 134*, 135*	
Civics	3 hours
HIST 106*, 107*	
PLSC 103*	
Required Support Courses	3 hours
BSAD 115 – OR – BSAD 125	
Required CJ Courses	18 hours
CJ 285 Family Violence (3)	
Plus 15 hours of required courses from Certificate Electives section	
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
CJ 101 Introduction to Criminal Justice	3
CJ 210 Criminal Procedures	3
CJ 250 Criminal Law	3
CJ 280 Report Writing	3
Approved Certificate Elective	3
TOTAL	15
Spring Semester	Hours
CJ 265 Ethics in Criminal Justice	3
COLL 105 Technical Career Development I	1
COLL 106 Technical Career Development II	1
Approved Certificate Elective	3
Approved Certificate Elective	3
Approved Criminal Justice elective	3
Approved Criminal Justice elective	3
TOTAL	17
Graduate with Criminal Justice Certificate	
SECOND YEAR	
Fall Semester	Hours
CJ 285 Family Violence	3
COMM 104 Fundamentals of Speech	3
Approved Criminal Justice elective	3
Approved Mathematics Course	3
Approved Written Communications Course	3
TOTAL	15
Spring Semester	Hours
BSAD 115 – OR – BSAD 125	3
CJ 103 Telecommunications	3
CJ 230 Internship	3
Approved Civics Course	3
Approved Written Communication	3
TOTAL	15
Graduate with Criminal Justice AAS	
Total CERTIFICATE Hours Required	26
Additional Hours Needed for AAS	36
Total AAS Hours Required	62

*Prerequisite requirement
#Preferred class
±NOT required for AAS

Courses for Certificate	
Additional Courses for AAS Degree	



CERTIFICATE

Criminal Justice

			Done	Curr	To do				
Orientation		2 hours					26 hours		
	COLL	105 Technical Career Development (1)							
	COLL	106 Technical Career Development (1)							
Major Courses		15 hours							
	CJ	101 Intro to Criminal Justice (3)							
	CJ	210 Criminal Procedures (3)							
	CJ	250 Criminal Law (3)							
	CJ	265 Ethics in Criminal Justice (3)							
	CJ	280 Report Writing (3)							
Specialty Electives		9 hours							
	CJ	102 Crime Scene Processing (3)							
	CJ	103 Telecommunications (3)							
	CJ	190 Patrol Operations (3)							
	CJ	200 Criminal Investigations (3)							
	CJ	230 Criminal Justice Internship* (3)							
	CJ	270 Drug Investigation (3)							
	CJ	285 Family Violence (3)							

ASSOCIATE OF APPLIED SCIENCE DEGREE									
Criminal Justice									
			Done	Curr	To do				
Orientation		2 hours					62 hours		
	COLL	105 Technical Career Dev I (1)							
	COLL	106 Technical Career Dev II (1)							
Communications		9 hours							
	<i>Written Communications (6 hours)</i>						<i>Oral Communications (3 hours)</i>		
	ENGL	101*					COMM 104*		
	ENGL	102*							
Mathematics		3 hours							
	MATH	125*, 134*, 135*					MATH 104*		
Civics		3 hours							
	HIST	106*					PLSC 103*		
	HIST	107*							
Required Support Courses		3 hours							
	BSAD	115					<i>OR</i> BSAD 125		
Required CJ Courses		36 hours							
	CJ	101 Intro to Criminal Justice (3)					CJ 265 Ethics in Criminal Justice (3)		
	CJ	102 Crime Scene Processing (3)					CJ 270 Drug Investigation (3)		
	CJ	103 Telecommunications (3)					CJ 280 Report Writing (3)		
	CJ	190 Patrol Operations (3)					CJ 285 Family Violence (3)		
	CJ	210 Criminal Procedures (3)					CJ 290 Police Supervision/Mgmt (3)		
	CJ	230 Criminal Justice Intern (3)					EMT 101 Emergency Medical Tech (9)		
	CJ	250 Criminal Law (3)					FSCI 111 Firefighter I and II (6)		
							PSYC 101 General Psychology (3)		
							SOC 101 General Sociology (3)		
							SWK 200 Intro to Social Work* (3)		
							SWK 230 Substance Abuse Inter (3)		
Required Online Course		0 hour							
	CV CS	Missouri Higher Ed Civics Examination							

Diesel Technology Electrical/Electronic I & II Certificates**Diesel Technology Engines I & II Certificates****Diesel Technology AAS**

Interesting and challenging career opportunities are offered by the transportation and agricultural industries in the area of diesel technology. Jobs available to graduates include technicians, equipment managers, mechanics, service center supervisors, parts personnel, and salesmen. This program prepares students for ASE certification testing.

The Diesel Technology Electrical/Electronic I & II certificates prepare students to enter careers in Diesel Technology with a basic skill set that will provide entry level knowledge of diesel electrical systems. The students will be introduced to basic theory, operation and testing of various electrical systems found on industrial and trucking equipment. The Electrical/Electronic I certificate will introduce the students to basic diesel powertrains, and air conditioning. The students will be instructed on advanced electronics including lighting systems, instrumentation, warning systems, ignition systems, computer controlled systems, and brake systems for the Electrical/Electronic II certificate.

The Diesel Engines I & II certificates prepare students to enter careers in Diesel Engine Technology with a basic skill set that will provide entry level knowledge of diesel engines including parts identification, measurements of parts, parts reusability, and preventive maintenance. This course will take the student into the operation and diagnostics on the Diesel Engine, including disassembling, repairs and reassemble. Students will have an introduction to Hydraulics, and Steering & Suspension.

Students will be required to complete an internship with this program.

Program of Study

Electrical/Electronic I Certificate Courses	16 hours
DIES 184 Electricity/Electronics (4)	
DIES 204 Diesel Powertrains (4)	
DIES 234 Air Conditioning (4)	
DIES 244* Internship (4)	
Electrical/Electronic II Certificate Courses	12 hours
All courses in Electrical/Electronic I plus:	
DIES 134 Diesel Hydraulics (4)	
DIES 164 Diesel Brake Systems (4)	
DIES 284 Diesel Electrical/Electronics (4)	
Diesel Engines I Certificate Courses	8 hours
DIES 124 Prevent Maintenance (4)	
DIES 144 Diesel Engines I (4)	
Also requires DIES 234 & 244	
Diesel Engines II Certificate Courses	8 hours
DIES 224 Diesel Steering & Suspension (4)	
DIES 294* Diesel Engines II (4)	
Also requires DIES 124, 134, 144, 234, & 244	
Orientation	2 hours
COLL 105 Technical Career Development I (1)	
COLL 106 Technical Career Development II (1)	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
ENGL 203*	
Oral Communications (3 hours)	
COMM 104*	
Mathematics	3 hours
MATH 104*	
Civics	3 hours
HIST 106* 107*	
PLSC 103*	
Required Support Courses	3 hours
BSAD 115 (3)	
BSAD 125 (3)	
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
DIES 124 Preventive Maintenance (1st 8 weeks)	4	
DIES 144 Diesel Engines I (2nd 8 weeks)	4	
DIES 234 Air Conditioning	4	
DIES 244 Internship	4	
	TOTAL	16
Graduate with Engines I Certificate		
Spring Semester (odd year)		Hours
COLL 105 Technical Career Dev I	1	
COLL 106 Technical Career Dev II	1	
DIES 134 Diesel Hydraulics	4	
DIES 224 Steering and Suspension	4	
DIES 294 Diesel Engines II (1st 8 weeks)	4	
MATH 104 Technical Mathematics	3	
	TOTAL	17
Graduate with Engines II Certificate		
SECOND YEAR		
Fall Semester		Hours
BSAD 115 - OR- BSAD 125	3	
COMM 104 Fundamentals of Speech	3	
DIES 204 Diesel Powertrains (1st 8 weeks)	4	
DIES 184 Electrical/Electronics (2nd 8 weeks)	4	
ENGL 101 English Composition	3	
	TOTAL	17
Graduate with Electrical/Electronic I Certificate		
Spring Semester (even year)		Hours
DIES 164 Diesel Brake Systems (2nd 8 weeks)	4	
DIES 284 Electrical/Electronics II (1st 8 weeks)	4	
ENGL 102 Advanced English Composition	3	
HIST 106 U.S. History I	3	
	TOTAL	14
Graduate with Electrical/Electronic II Certificate		
Graduate with Diesel Technology AAS		
Total Engines I Certificate Hours Required	16	
Additional Hours for Engines II Certificate	14	
Additional Hours for Electrical I Certificate	8	
Additional Hours for Electrical II Certificate	8	
	Additional Hours Needed for AAS	18
	Total AAS Hours Required	64

*Prerequisite requirement

Courses for Certificate	
Additional Courses for AAS Degree	



CERTIFICATE Diesel Technology: Electrical/Electronic I

Students must complete 16 hours for the Electrical/Electronic I certificate.

Done **Curr** **To do**

Major Courses		16 hours				
DIES	184 Electricity/Electronics (4)					
DIES	204 Diesel Powertrains (4)					
DIES	234 Air Conditioning (4)					
DIES	244 Internship* (4)					



CERTIFICATE Diesel Technology: Electrical/Electronic II

Students must complete 30 hours for the Diesel Technology certificate.

Done **Curr** **To do**

Orientation		2 hours				
COLL	105 Career Technical Development I (1)					
COLL	106 Career Technical Development II (1)					
Major Courses		28 hours				
DIES	134 Diesel Hydraulics (4)					
DIES	164 Diesel Brake Systems (4)					
DIES	184 Electricity/Electronics (4)					
DIES	204 Diesel Powertrains (4)					
DIES	234 Air Conditioning (4)					
DIES	244 Internship* (4)					
DIES	284 Diesel Electrical/Electronics (4)					



CERTIFICATE Diesel Technology: Engines I

Students must complete 16 hours for the Engines I certificate.

Done **Curr** **To do**

Major Courses		16 hours				
DIES	124 Prevent Maintenance (4)					
DIES	144 Diesel Engines I (4)					
DIES	234 Air Conditioning (4)					
DIES	244 Internship* (4)					



CERTIFICATE

Diesel Technology: Engines II

Students must complete 30 hours for the Engines II certificate.

Done **Curr** **To do**

Orientation		2 hours				
COLL	105 Technical Career Development I (1)		_____	_____	_____	
COLL	106 Technical Career Development II (1)		_____	_____	_____	
Major Courses		28 hours				
DIES	124 Prevent Maintenance (4)		_____	_____	_____	
DIES	134 Diesel Hydraulics (4)		_____	_____	_____	
DIES	144 Diesel Engines I (4)		_____	_____	_____	
DIES	224 Diesel Steering & Suspension (4)		_____	_____	_____	
DIES	234 Air Conditioning (4)		_____	_____	_____	
DIES	244 Internship* (4)		_____	_____	_____	
DIES	294 Diesel Engines II (4)		_____	_____	_____	

ASSOCIATE OF APPLIED SCIENCE DEGREE								
		Diesel Technology	Done	Curr	To do	Done	Curr	To do
Orientation		2 hours				64 hours		
COLL	105 Technical Career Dev. I (1)		_____	_____	_____			
COLL	106 Technical Career Dev. II (1)		_____	_____	_____			
Communications		9 hours						
<i>Written Communications (6 hours)</i>						<i>Oral Communications (3 hours)</i>		
ENGL	101*		_____	_____	_____	COMM	104*	
ENGL	102*		_____	_____	_____			
ENGL	203*		_____	_____	_____			
Mathematics		3 hours						
MATH	104*		_____	_____	_____			
Civics		3 hours						
HIST	106*		_____	_____	_____	PLSC	103*	
HIST	107*		_____	_____	_____			
Major Courses		44 hours						
DIES	124 Preventive Maintenance (4)		_____	_____	_____	DIES	224 Diesel Steering & Susp (4)	
DIES	134 Diesel Hydraulics (4)		_____	_____	_____	DIES	234 Air Conditioning (4)	
DIES	144 Diesel Engines I (4)		_____	_____	_____	DIES	244 Diesel Internship* (4)	
DIES	164 Diesel Brakes (4)		_____	_____	_____	DIES	284 Diesel Electrical/Elect II (4)	
DIES	184 Electricity/Electronics (4)		_____	_____	_____	DIES	294 Diesel Engines II* (4)	
DIES	204 Diesel Powertrain (4)		_____	_____	_____			
Required Support Courses		3 hours						
BSAD	115 Computer Concepts (3)		_____	_____	_____			
BSAD	125 Computer Applications (3)		_____	_____	_____			
Required Online Course		0 hour						
CVCS	101 Missouri Higher Ed Civics Exam		_____	_____	_____			

Digital Media Marketing Certificate

This cross-curricular certificate provides students with training and experience in a wide variety of career options in the field of digital media marketing. Career possibilities include social media manager, content generator, search engine manager, e-commerce manager, marketing analyst, digital marketing executive, graphic designer, email marketing manager, advertising manager, analytics manager, and many other developing job titles in this in-demand, high-paying career field. Digital media marketers can work for an organization's public relations or marketing department, use marketing skills to promote their own business, and/or work for a marketing or advertising agency. Students must earn a minimum of 24 hours for this certificate. Upon successful completion, students will have the opportunity to earn Industry Recognized Credentials (IRC) as an Adobe Certified Professional in Adobe InDesign and Adobe Illustrator and other marketing credentials.

Program of Study

Major Courses			18 hours
DIGM	101	Intro to Public Relations & Dig Mktg	(3)
DIGM	102*	Intro to Digital Media Content Creation	(3)
DIGM	103*	Intro to Graphics Software	(3)
DIGM	104*	Adv Digital Media Content Creation	(3)
DIGM	105*	Applied Graphic Design & Media Camp	(3)
DIGM	106*	Adv Digital Media Mktg Strategies	(3)
Approved Electives			6 hours
BSAD	150	Intro to Business	(3)
BMGT	200	Marketing	(3)
COMM	105	Intro to Human Communication	(3)
COMM	106	Photo Editing	(3)
COMM	108*	Internship	(3)
COMM	220	Photocommunication	(3)

Suggested Plan of Study

FIRST YEAR			
Fall Semester		Hours	
DIGM	101	Intro to Public Relations & Dig Mktg	3
DIGM	102	Intro to Digital Media Content Creation	3
DIGM	103	Intro to Graphics Software	3
Digital Marketing Elective		3	
		TOTAL	12
Spring Semester		Hours	
DIGM	104	Adv. Digital Media Content Creation	3
DIGM	105	Applied Graphic Design & Media Camp	3
DIGM	106	Adv. Digital Media Mktg. Strategies	3
Digital Marketing Elective		3	
		TOTAL	12
Total Hours Required		24	



CERTIFICATE Digital Media Marketing

Students must earn 24 hours for this certificate.

		Done	Curr	To do			Done	Curr	To do
Major Courses		18 hours							
DIGM	101 Intro to Public Rel & Dig Mktg (3)								
DIGM	102* Intro to Dig Med Cont Creatn (3)								
DIGM	103* Intro to Graphics Softw are (3)								
DIGM	104*Adv Dig Meda Cont Creatn (3)								
DIGM	105* App Graph Des & Med Camp (3)								
DIGM	106* Adv Digital Med Mkt Strat (3)								
Approved Electives		6 hours							
BSAD	150 Intro to Business (3)								
BMGT	200 Marketing (3)								
COMM	105 Intro to Human Communication (3)								
COMM	106 Photo Editing (3)								
COMM	108* Internship (3)								
COMM	220 Photocommunication (3)								

Drafting: Computer Aided Drafting (CAD) Technician Certificate

The certificate prepares students to enter a career in drafting technology with a basic skill set that will provide entry level knowledge of basic Engineering, Assembly and Technical drawings, and Print Reading. The drafting classes will provide training in computer aided drafting and design as they are used in industry. Students will utilize a variety of CAD software including Inventor, Revit, and AutoCAD.

Program of Study

Certificate Courses	17 hours
COLL 105 Technical Career Development I (1)	
COLL 106 Technical Career Development II (1)	
DRFT 101 Intro to Engineering Drawing & Print Reading (3)	
DRFT 115 Basic Computer Aided Drafting (3)	
DRFT 141 Assembly Drawings* (3)	
DRFT 153 Construction Graphics (3)	
DRFT 215 Adv Computer Aided Drafting* (3)	

Suggested Plan of Study

FIRST YEAR		
Fall Semester	Hours	
COLL 105 Technical Career Development I	1	
COLL 106 Technical Career Development II	1	
DRFT 101 Intro to Eng Drawing & Print Reading	3	
DRFT 115 Basic Computer Aided Drafting	3	
TOTAL	8	
Spring Semester	Hours	
DRFT 141 Assembly Drawings	3	
DRFT 153 Construction Graphics	3	
DRFT 215 Advanced CAD (Inventor)	3	
TOTAL	9	
Total Hours Required		17

*Prerequisite requirement

Courses for Certificate	
Additional Courses for AAS Degree	



CERTIFICATE
Computer Aided Drafting (CAD) Technician

Required Courses		17 hours	Done	Curr	To do			Done	Curr
COLL	105 Technical Career Development I (1)								
COLL	106 Technical Career Development II (1)								
DRFT	101 Intro to Eng Drwg & Print Reading (3)								
DRFT	115 Basic Computer Aided Drafting (3)								
DRFT	141 Assembly Drawings* (3)								
DRFT	153 Construction Graphics (3)								
DRFT	215 Advanced Computer Aided Drafting* (3)								

Fire Science Certificate

The Fire Science program at Crowder College Cassville prepares the student to enter an exciting career as a fire fighter. Courses will prepare students to complete State of Missouri Certification examinations. Upon successful passing of those examinations, students can be hired as an entry-level fire fighter at a Fire Department that recognizes State of Missouri qualifications.

Program of Study

Fire Science Major Courses		16 hours
COLL	101	College Orientation (1)
FSCI	111	Firefighter I & II (6)
EMT	101*	Emergency Med Tech (9)

*Prerequisite requirement

Suggested Plan of Study

FIRST YEAR		
FIRST YEAR		
Fall Semester		Hours
COLL 101	College Orientation	1
FSCI 111	Firefighter I & II	6
EMT 101	Emergency Med Tech	9
	TOTAL	16
	Total Hours Required	16



CERTIFICATE

Fire Science

Students must earn 16 hours for this certificate.

		Done	Curr	To do			Done	Curr	To do
Orientation	1 hour								
COLL	101 College Orientation (1)								
Major Courses	15 hours								
FSCI	111 Firefighter I & II (6)								
EMT	101 Emergency Med Tech* (9)								

General Studies AA

Students undecided about their major area of emphasis or career goals are urged to follow the General Studies curriculum. With the help of counseling from Student Services and consultation with an assigned faculty advisor, students should be able to transfer or graduate with a better idea of individual career strengths. For best results, general studies students should contact the four-year institution to which they plan to transfer while a sophomore.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101, 106, 107, 110, 111	HIST 101*, 102*
ASL 101, 102*	MUSC 101, 195, 196, 295, 296
BMGT 223 or PHIL 202*	PHIL 101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN 101, 102
ENGL 230*, 235*, 240*, 245*	TA 105, 108, 112, 115, 180
FREN 101	TA 205
Mathematics	3 hours
MATH 125*, 130*, 134*, 135*	
Science	7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab	
Lab	Non-Lab
BIOL 101, 110, 120	BIOL 102
BIOL 152*	PHYS 102
CHEM 101, 104, 111*	PHYS 105
GEOL 115, 210*	
PHYS 101, 190*	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
Civics - 3 hours	
HIST 106*, 107*	CJ 101
PLSC 103*	ECON 201*, 202*
	GEOG 111
	PSYC 101, 211
	SOC 101
GE CORE Electives	5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College . Courses cannot be used as Core electives if counted under another section.	
Approved Electives	18 hours
Courses cannot be used as electives if counted under another section and must be numbered 100 or higher.	
Required Online Course	0 hour
CVCS 101	Missouri Higher Ed Civics Examination

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
COLL 101 College Orientation	1
COMM 104 Fundamentals of Speech	3
ENGL 101 English Composition I	3
Approved Civics Course	3
Approved General Studies Elective	3
Approved Mathematics Course	3
TOTAL	15
Spring Semester	Hours
ENGL 102 English Composition II	3
Approved GE Core Elective	2-3
Approved General Studies Elective	3
Approved Humanities Course	3
Approved Science Course	3-5
TOTAL	14-17
SECOND YEAR	
Fall Semester	Hours
Approved GE Core Elective	2-3
Approved General Studies Elective	3
Approved General Studies Elective	3
Approved Humanities Course	3
Approved Science Course	3-5
TOTAL	14-17
Spring Semester	Hours
Approved General Studies Elective	3
Approved General Studies Elective	3
Approved Humanities Course	3
Approved Soc & Behavioral Sci Course	3
Approved Soc & Behavioral Sci Course	3
TOTAL	15
TOTAL HOURS REQUIRED	
61	

*Prerequisite required

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.



ASSOCIATE OF ARTS DEGREE General Studies

General Education Core		Done	Curr	To do		Done	Curr	To do	
Orientation	1 hour				61 hours				
COLL	101								
Communications	9 hours				Oral Communications (3 hours)				
ENGL	101*				COMM 104*				
ENGL	102*				COMM 105				
Humanities	9 hours								
ART	101, 106, 107, 110, 111				HIST 101*, 102*				
ASL	101, 102*				MUSC 101, 195, 196, 295, 296				
BMGT	223 or PHIL 202*				PHIL 101*, 121, 201*				
ENGL	109*, 222*, 225*				SPAN 101, 102*				
ENGL	230*, 235*, 240*, 245*				TA 105, 108, 112, 115, 180, 205				
FREN	101								
Mathematics	3 hours								
MATH	125*, 130*, 134* & 135*								
Science	7 hours				Non-Lab				
Lab					BIOL 102				
BIOL	101, 110, 120				CHEM 106				
BIOL	152*				PHYS 102				
CHEM	101, 104, 111*				PHYS 105				
GEOL	115, 210*								
PHYS	101, 190*								
Social and Behavioral Science	9 hours								
Civics (3 hours)									
HIST	106*				CJ 101				
HIST	107*				ECON 201*, 202*				
PLSC	103*				GEOG 111				
					PSYC 101, 211*				
					SOC 101				
GE Core Electives	5 hours								
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.									
Approved Electives	18 hours	(Courses cannot be used as electives if counted under another section and must be numbered 100 or higher)					Done	Curr	To do
Required Online Course	0 hour								
CVCS	101 MO Higher Ed Civics Exam								

ASSOCIATE OF ARTS DEGREE

H

History AA

History majors are directed toward teaching, social services, and law. Requirements for an Associate of Arts Degree in History include the American History and Western Civilization survey courses and the completion of the general education core.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101, 106	HIST 101*, 102*
ASL 101, 102*	MUSC 101
BMGT 223 or PHIL 202*	PHIL 101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN 101, 102*
ENGL 230*, 235*, 240*, 245*	TA 205
FREN 101	
Mathematics	3 hours
MATH 125#*, 130*, 134*, 135*	
Science	7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab	
Lab	Non-Lab
BIOL 101, 110, 120	BIOL 102
BIOL 152*	CHEM 106
CHEM 101, 104, 111*	PHYS 102
GEOL 115, 210*	PHYS 105
PHYS 101, 190*	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
Civics - 3 hours	
PLSC 103#	ECON 201*#
Additional 3 Hours	GEOG 111#
ECON 202	PSYC 101#, 211*
SOC 101	
GE CORE Electives	5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.	
Major Courses	18 hours
Required Courses (15 hours)	
HIST 101*	HIST 107*
HIST 102*	HIST 224*
HIST 106*	
Approved Electives (3 hours)	
ECON 201*, 202*	PSYC 101
GEOG 111	SOC 101
PHIL 121	
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

- Preferred class for this degree option

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
COLL 101 College Orientation	1
COMM 104 Fundamentals of Speech	3
ENGL 101 English Composition I	3
HIST 106 U.S. History I	3
MATH 125 Quantitative Reasoning	3
Approved Soc & Behavioral Science Course	3
TOTAL	16
Spring Semester	Hours
ENGL 102 English Composition II	3
HIST 107 OR HIST 224 (odd years)	3
PLSC 103 Nat, State, & Local Gov't	3
Approved Humanities Course	3
Approved Science Course	3-5
TOTAL	15-17
SECOND YEAR	
Fall Semester	Hours
HIST 101 Western Civilization I	3
Approved Elective	3
Approved Humanities Course	3
Approved Science Course	3-5
TOTAL	12-14
Spring Semester	Hours
HIST 102 Western Civilization II	3
HIST224 (odd years) OR HIST 107	3
Approved Elective	3
Approved GE Core Elective	5
Approved Soc & Behavioral Science Course	3
TOTAL	17
TOTAL HOURS REQUIRED	60-64

*Prerequisite required

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.



ASSOCIATE OF ARTS DEGREE

History

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation		1 hour		60 - 64 hours			
COLL 101							
Communications		9 hours					
<i>Written Communications (6 hours)</i>				<i>Oral Communications (3 hours)</i>			
ENGL 101*				COMM 104*			
ENGL 102*				COMM 105			
Humanities		9 hours					
ART 101, 106				HIST 101*, 102*			
ASL 101, 102*				MUSC 101			
BMGT 223 or PHIL 202*				PHIL 101*, 121, 201*			
ENGL 109*, 222*, 225*				SPAN 101, 102*			
ENGL 230*, 235*, 240*, 245*				TA 205			
FREN 101							
Mathematics		3 hours					
MATH 125* (Recommended)				MATH 130*, 134*, 135*			
Science		7 hours					
<i>Lab</i>				<i>Non-Lab</i>			
BIOL 101, 110, 120				BIOL 102			
BIOL 152*				CHEM 106			
CHEM 101, 104, 111*				PHYS 102			
GEOL 115, 210*				PHYS 105			
PHYS 101, 190*							
Social and Behavioral Science		9 hours					
<i>Missouri Constitution (3 hours)</i>							
PLSC 103*				ECON 201*			
<i>3 hours of the following:</i>				GEOG 111			
ECON 202*				PSYC 101, 211*			
SOC 101							
GE Core Electives		5 hours					
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crow der College. Courses cannot be used as Core electives if counted under another section.							
Major Courses		18 hours					
<i>Required (15 hours)</i>				<i>Approved Electives (3 hours)</i>			
HIST 101 Western Civ I* (3)				ECON 201 Prin of Econ I* (3)			
HIST 102 Western Civ II* (3)				ECON 202 Prin of Econ II* (3)			
HIST 106 U.S. History I* (3)				GEOG 111 World Regional Geography* (3)			
HIST 107 U.S. History II* (3)				PHIL 121 World Religions (3)			
HIST 224 Research & Writ in Hist* (3)				PSYC 101 Gen Psychology (3)			
				SOC 101 Gen Sociology (3)			
Required Online Course		0 hour					
CVCS 101 MO Higher Ed Civics Exam							

HVAC Technician: HVAC Technician Certificate**HVAC Technician AAS**

The HVAC Technology program prepares students for employment as entry-level service and warranty technicians in the heating and air conditioning industry by providing a variety of hands on, real-world experiences. Student will have the opportunity to earn the EPA 608 refrigerant certification.

The HVAC Installer and HVAC Technician certificates prepare students for employment in HVAC with a skill set that includes electrical safety, fundamentals of heating and cooling, electrical and mechanical systems, ductwork, airflow, and print reading. In the HVAC Technician certificate, students will gain experience troubleshooting equipment and gain an understanding of commercial equipment.

Program of Study

HVAC Technician Certificate Courses		34 hours
AMT	111 Intro to Industrial Safety (1)	
CONS	131 Plumbing (3)	
CONS	141 Electrical (3)	
HVAC	105 Introduction to HVAC/R (3)	
HVAC	115 Heating Fundamentals (3)	
HVAC	116* Heating Service (3)	
HVAC	120 Refrigeration Systems I (3)	
HVAC	121* Refrigeration Systems II (3)	
HVAC	125 Equipment Design (3)	
HVAC	130* HVAC Control & Troubleshooting (3)	
HVAC	140 Refrigerant Management & EPA Certification (3)	
HVAC	145* Air Distribution Systems & Fabrication (3)	
Orientation		2 hours
COLL	105 Technical Career Development I (1)	
COLL	106 Technical Career Development II (1)	
Communications		9 hours
Written Communications (6 hours)		
ENGL	101* English Composition (3)	
ENGL	102* Advanced English Composition (3)	
ENGL	103* Honors English Composition (3)	
Oral Communications (3 hours)		
COMM	104* Fundamentals of Speech (3)	
Mathematics		3 hours
MATH	104 Technical Math	
Civics		3 hours
HIST	106*, 107*	
PLSC	103*	
AAS Technical Courses		6 hours
BSAD	115 Computer Concepts (3) - OR - BSAD 125 (3)	
HVAC	135* Commercial Equipment & Applications (3)	
AAS Approved Electives		6 hours
AMT	102 Intro to Industrial Electricity (3)	
AMT	104 Electrical Motor Controls (3)	
BSAD	150 Intro to Business (3)	
CNS	111 Intro to Electronics (3)	
CONS	105 Intro to Construction (3)	
CONS	108 Energy Conservation Techniques (3)	
DRFT	101 Intro to Engineering Drawing & Print Reading (3)	
DRFT	153 Construction Graphics (3)	
ENER	105 Intro to Energy (3)	
ENER	265 Alternative Energy Marketing & Promotion (3)	
HVAC	290 HVAC Internship (3)	
Required Online Course		0 hour
CVCS	101 Missouri Higher Ed Civics Examination	

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
AMT 111 Intro to Industrial Safety	1
CONS 131 Plumbing	3
CONS 141 Electrical	3
HVAC 105 Introduction to HVAC/R	3
HVAC 115 Heating Fundamentals	3
HVAC 116 Heating Service	3
HVAC 125 Equipment Design	3
TOTAL	19
Spring Semester	Hours
COLL 105 Technical Career Development I	1
COLL 106 Technical Career Development II	1
HVAC 120 Refrigeration Systems I	3
HVAC 121 Refrigeration Systems II	3
HVAC 130 HVAC Control & Troubleshooting	3
HVAC 140 Refrigerant Mgmt & EPA Certification	3
HVAC 145 Air Distribution Systems & Fabrication	3
TOTAL	17
Graduate with HVAC Technician Certificate	
SECOND YEAR	
Fall Semester	Hours
HVAC 135 Commercial Equipment & Applications	3
HVAC 290 HVAC Internship	3
MATH 104 Technical Math	3
Approved AAS Elective	3
Approved Written Communications Course	3
TOTAL	15
Spring Semester	Hours
BSAD 115 OR BSAD 125	3
COMM 104 Fundamentals of Speech	3
Approved Civics Course	3
Approved Written Communications Course	3
TOTAL	12

Graduate with HVAC Technician AAS

Total HVAC Technician Certificate Hours Required	36
Additional Hours Needed for HVAC Tech AAS	27
TOTAL HOURS REQUIRED	63

*Prerequisite requirement

Courses for Certificate	
Additional Courses for AAS Degree	



CERTIFICATE

HVAC Technician

Orientation		2 hours	Done	Curr	To do	36 hours	Done	Curr	To do
	COLL	105 Technical Career Development I (1)							
	COLL	106 Technical Career Development II (1)							
Certificate Courses		34 hours							
	AMT	111 Intro to Industrial Safety (1)				HVAC	125 Equipment Design (3)		
	CONS	131 Plumbing (3)				HVAC	130* HVAC Control & Trblshng (3)		
	CONS	141 Electrical (3)				HVAC	140 Refrigerant Mgmt & EPA (3)		
	HVAC	105 Introduction to HVAC/R (3)				HVAC	145* Air Distribution Sys & Fab (3)		
	HVAC	115 Heating Fundamentals (3)							
	HVAC	116* Heating Service (3)							
	HVAC	120 Refrigeration Systems I (3)							
	HVAC	121* Refrigeration Systems II (3)							

ASSOCIATE OF APPLIED SCIENCE DEGREE									
HVAC Technician									
		Done	Curr	To do			Done	Curr	To do
Orientation		2 hours			63 hours total				
COLL		105 & 106							
Communications		9 hours							
		<i>Written Communications (6 hours)</i>			<i>Oral Communications (3 hours)</i>				
ENGL		101*			COMM 104*				
ENGL		102*							
ENGL		103*							
Mathematics		3 hours							
MATH		104*							
Civics		3 hours							
HIST		106*			PLSC 103*				
HIST		107*							
HVAC		34 hours			Approved Electives		6 hours		
Required Courses									
AMT		111 Intro to Industrial Safety (1)			AMT 102 Intro to Ind Electricity (3)				
CONS		131 Plumbing (3)			AMT 104 Electrical Motor Controls (3)				
CONS		141 Electrical (3)			BSAD 150 Intro to Business (3)				
HVAC		105 Introduction to HVAC/R (3)			CNS 111 Intro to Electronics (3)				
HVAC		115 Heating Fundamentals (3)			CONS 105 Intro to Construction (3)				
HVAC		116* Heating Service (3)			CONS 108 Energy Conservation Tech (3)				
HVAC		120 Refrigeration Systems I (3)			DRFT 101 Intro to Eng Draw & Print Read (3)				
HVAC		121* Refrigeration Systems II (3)			DRFT 153 Construction Graphics (3)				
HVAC		125 Equipment Design (3)			ENER 105 Intro to Energy (3)				
HVAC		130* HVAC Control & Troubleshooting (3)			ENER 265 Alt Energy Mktg & Promotion (3)				
HVAC		140 Refrigerant Mgmt & EPA Cert (3)			HVAC 290 HVAC Internship (3)				
HVAC		145* Air Distribution Sys & Fab (3)							
Technical Courses		6 hours							
BSAD		115 Computer Concepts (3)			OR BSAD 125 (3)				
HVAC		135* Commercial Equipment & Apps (3)							
Required Online Course		0 hour							
CVCS		101 Missouri Higher Ed Civics Exam							

Mathematics AA

A major in mathematics is designed for students planning to teach mathematics at the secondary school level as well as for those desiring to work as professional mathematicians outside of education. Students entering this program should enjoy working with logic and numbers and should enjoy the challenge of applying mathematics to the sciences and related areas. A bachelor degree is necessary as a minimum requirement for employment in these areas. Students with mathematics backgrounds which require pre-calculus courses may need to plan for more than four semesters to complete this program.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101, 106, 107, 110	HIST 101*, 102*
ASL 101, 102*	MUSC 101
BMGT 223 or PHIL 202*	PHIL 101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN 101, 102*
ENGL 230*, 235*, 240*, 245*	TA 205
FREN 101	
Mathematics	3 hours
MATH 150*#, 160*#	
Science	7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab	
Lab	Non-Lab
BIOL 110, 120	BIOL 102
BIOL 152*	CHEM 106
CHEM 101, 104, 111*	PHYS 105
GEOL 115, 210*	
PHYS 101	
PHYS 190* (Required)	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
Civics (3 hours)	
HIST 106*, 107*	CJ 101
PLSC 103*	ECON 201*, 202*
	GEOG 111
	PSYC 101, 211*
	SOC 101
GE CORE Electives	5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College.	
Courses cannot be used as Core electives if counted under another section.	
Major Courses	17-19 hours
Required Courses (14 hours)	
COMP 111*	MATH 202*
MATH 201*	
Approved Electives (3-5 hours)	
MATH 210*	PHYS 210*
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
COLL 101 College Orientation		1
COMM 104 Fundamentals of Speech		3
COMP 111 Intro to Programming		4
ENGL 101 English Composition I		3
MATH 150 Calculus I, Part 1		2
Approved Civics Course		3
	TOTAL	16
Spring Semester		Hours
ENGL 102 English Composition II		3
MATH 160 Calculus I, Part 2		3
PHYS 190 General Physics I		5
Approved GE Core Elective		3
Approved Humanities Course		3
	TOTAL	17
SECOND YEAR		
Fall Semester		Hours
MATH 201 Calculus II		5
Approved GE Core Elective		2
Approved Humanities Course		3
Approved Science Course		3-5
Approved Soc & Behavioral Science Course		3
	TOTAL	16-18
Spring Semester		Hours
MATH 202 Calculus III		5
Approved Elective		3-5
Approved Humanities Course		3
Approved Soc & Behavioral Science Course		3
	TOTAL	14-16
TOTAL HOURS REQUIRED		63-65

*Prerequisite required

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.

- Preferred class for this degree option



ASSOCIATE OF ARTS DEGREE

Mathematics

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation		1 hour		65 hours			
COLL 101							
Communications		9 hours					
Written Communications (6 hours)				Oral Communications (3 hours)			
ENGL 101*				COMM 104*			
ENGL 102*				COMM 105			
Humanities		9 hours					
ART 101, 106, 107, 110				HIST 101*, 102*			
ASL 101, 102*				MUSC 101			
BMGT 223 or PHIL 202*				PHIL 101*, 121, 201*			
ENGL 109*, 222*, 225*				SPAN 101, 102*			
ENGL 230*, 235*, 240*, 245*				TA 205			
FREN 101							
Mathematics		5 hours					
MATH 150* & 160* (Required)							
Science		7 hours					
Lab				Non-Lab			
BIOL 110, 120				BIOL 102			
BIOL 152*				CHEM 106			
CHEM 101, 104, 111*				PHYS 105			
GEOL 115, 210*							
PHYS 101							
PHYS 190* (Required)							
Social and Behavioral Science		9 hours					
Civics (3 hours)				CJ 101			
HIST 106*				ECON 201*, 202*			
HIST 107*				GEOG 111			
PLSC 103*				PSYC 101, 211*			
				SOC 101			
GE Core Electives		5 hours					
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.							
Major Courses		17-19 hours					
Required Courses (14 hours)				Approved Electives (3-5 hours)			
COMP 111 Intro to Computer Science* (4)				MATH 210 Diff Equations* (3)			
MATH 201 Calculus II* (5)				PHYS 210 Gen Physics II* (5)			
MATH 202 Calculus III* (5)							
Required Online Course		0 hour					
CVCS 101 MO Higher Ed Civics Exam							

Nursing (Practical) Certificate

Crowder College offers a 56 credit hour (1212 clock hours) Practical Nursing (PN) program at the Nevada instructional site in a hybrid delivery format. The Practical Nursing program is fully approved by the Missouri State Board of Nursing (MSBN). This is a selective admission program. Candidates applying to the PN program must have a valid high school diploma or equivalent (such as GED or HiSet), complete the TEAS pre-entrance examination, have good moral character as evidenced by references, verify a criminal background check free of Class A or B felony, enroll in Family Care Safety Registry and not be on Employee Disqualification List, have adequate finances to complete the program and reliable transportation plus the ability to perform required functional abilities. Applications are open by December 15 each year and the application cycle is open until seats are filled. First cut-off for selection of students is April 15 with additional applications accepted on a space available basis. This two-semester program follows the Fall/Spring schedule of the college. Students can obtain an application from www.crowder.edu/Nursing/PracticalNursing or by contacting the Nursing Department at: nursing@crowder.edu.

Program of Study**Suggested Plan of Study**

Certificate Courses	56 hours
COLL 101 College Orientation	
NURS 141 Pharmacology I	
PN 150 Personal & Vocational Concepts I	
PN 152 Fundamentals in Nursing I	
PN 153 Fundamentals in Nursing II	
PN 156 Gerontology	
PN 157 Human Structure & Function	
PN 158 Med Surg Nursing I	
PN 250 Fundamentals in Nursing III	
PN 254 Personal & Vocational Concepts II	
PN 255 Mental Health	
PN 256 Maternal-Child Nursing	
PN 258 Med Surg Nursing II	

FIRST SEMESTER		
Fall Semester		Hours
COLL 101 College Orientation		1
PN 150 Personal & Voc Concepts I (1st 8 wk)		3
PN 152 Fundamentals in Nursing I (1st 8 wk)		4
PN 153 Fundamentals in Nursing II (2nd 8 wk)		5
PN 156 Gerontology (1st 8 wk)		3
PN 157 Human Structure & Function (1st 8 wk)		3
PN 158 Med Surg Nursing I (2nd 8 wk)		6
NURS 141 Pharmacology I (2nd 8 wk)		2
TOTAL		27

SECOND SEMESTER		
Spring Semester		Hours
PN 250 Fundamentals in Nursing III (16 wk)		8
PN 254 Personal & Voc Conc II (2nd 8 wk)		2
PN 255 Mental Health (2nd 8 wk)		3
PN 256 Maternal-Child Nursing (1st 8 wk)		5
PN 258 Med Surg Nursing II		11
TOTAL		29
Total Hours Required		56



CERTIFICATE Nursing (Practical)

Done Curr To do

Done Curr To do

Required Courses	56 hours										
COLL	101 College Orientation (1)										
NURS	141 Pharmacology I (2)										
PN	150 Personal & Vocational Concepts I (3)										
PN	152 Fundamentals in Nursing I (4)										
PN	153 Fundamentals in Nursing II (5)										
PN	156 Gerontology (3)										
PN	157 Human Structure & Function (3)										
PN	158 Med Surg Nursing I (6)										
PN	250 Fundamentals in Nursing III (8)										
PN	254 Personal & Vocational Concepts II (2)										
PN	255 Mental Health (3)										
PN	256 Maternal-Child Nursing (5)										
PN	258 Med Surg Nursing II (11)										

Nursing (Registered) AS

The purpose of the Crowder College Nursing program is to prepare graduates who can demonstrate entry-level competencies as generalist professional nurses and to provide a foundation for continued learning. The format provides a multiple entry program where licensed practical nurses can enter with advanced standing or students may enter with no previous nursing education. The program is approved by the Missouri State Board of Nursing and nationally accredited by the Accreditation Commission for Education in Nursing (ACEN). Graduation from the nursing program does not guarantee eligibility to write the licensure exam. Eligibility is determined on an individual basis by Missouri State Board of Nursing based on the Missouri Nursing Practice Act section 335.066 or as recognized by the state in which the graduate desires to license.

The nursing faculty ascribe to adult learning theory in a conceptual learning environment where the adult learner must be an active participant in the educational process. Registered nurses function as an integral part of the health care team to deliver quality, safe, and patient-centered care using clinical judgment that is built on evidence-based practice. The nursing program is a multiple entry, limited admission program. All classes applied toward the Associate of Science in Nursing degree (both general education and core nursing courses) must be passed with a C or better. A grade point average of 2.75 on courses required for the degree and a minimum ACT composite score of 19 are required for both levels of students to be eligible for admission. Students without previous nursing education (those who are NOT licensed practical nurses) enter the program at Level I. These students complete Anatomy & Physiology I (BIOL 152), PNUR101 Introduction to Professional Nursing, and PNUR111 Medical Terminology prior to beginning the nursing program. All accepted nursing students will be required to have an active CNA, RMA, CMA or EMT certification or Paramedic license prior to beginning the nursing courses (Missouri or equivalent). Applications for Level I are accepted from May 1 to September 1 for the Neosho and Cassville program that begins in January. Applications are accepted from October 15 to February 15 for the Nevada and McDonald County Nursing programs which begin in August.

Licensed practical nurses are given credit for first year nursing classes and may enter the program at Level II. The LPNs are not required to complete PNUR 101 or PNUR 111. LPNs entering with advanced standing must have a valid license to practice (and be eligible for Missouri licensure), be IV certified, and must have completed at least Anatomy and Physiology I (BIOL 152) and II (BIOL 252) and Microbiology (BIOL 220) before beginning the second level nursing sequence. Applications for Level II are accepted from May 1 to September 1 for the Neosho and Cassville program and October 15 to February 15 for the Nevada and McDonald County program.

Program of Study

Orientation	1 hour
COLL 101	
Communications	6 hours
Written Communications (3 hrs)	
ENGL 101*	
Oral Communications (3 hrs)	
COMM 104*	
Mathematics	3 hours
MATH 125*, 130*, 134*, 135*	
Science	15 hours
BIOL 152*	BIOL 252*
BIOL 220*	
Social and Behavioral Science	6 hours
Civics (3 hours)	Additional 3 hours:
HIST 106*, 107*	PSYC 101
PLSC 103*	SOC 101
Pre-Nursing	5 hours
PNUR 101	
PNUR 111	
Nursing Courses	37 hours
Level I courses (20 hours)	
NURS 111*	NURS 141*
NURS 112*	NURS 171*
NURS 120*	NURS 175*
NURS 122*	
-OR- NURS 201* LPNs Only	
Level II courses (17 hours)	
NURS 210*	NURS 271*
NURS 212*	NURS 290*
NURS 220*	
Require Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

*Prerequisite requirement

Suggested Plan of Study**Based On Acceptance to the Program**

Program Prerequisites: PNUR 101 Introduction to Nursing
PNUR 111 Medical Terminology
Anatomy & Physiology I (BIOL 152) – 5 credit hours
Active CNA , RMA or EMT certification or Paramedic license (Missouri or equivalent)
All general education courses must be completed by both Level I & Level II students.

Pre-Requisite Semester	Hours
BIOL 152 Human Anatomy & Physiology I	5
COLL 101 College Orientation	1
Approved Mathematics Course	3
PSYC 101—OR—SOC 101	3
PNUR 101 Introduction to Professional Nursing	2
PNUR 111 Medical Terminology	3
TOTAL	17
First Semester	
NURS 111 Health Concepts IA (1st 8 wks)	3
NURS 112 Health Concepts IB (2nd 8 wks)	3
NURS 141 Pharmacology I (2nd 8 wks)	2
NURS 171 Professional Concepts I (1st 8 wks)	1
BIOL 252 Human Anatomy & Physiology II	5
TOTAL	14
Second Semester	
BIOL 220 General Microbiology	5
NURS 120 Health Concepts IIA (1st 8 wks)	5
NURS 122 Health Concepts IIB (2nd 8 wks)	4
NURS 175 Professional Concepts II (2nd 8 wks)	2
TOTAL	16
Third Semester	
COMM 104 Fundamentals of Speech	3
NURS 210 Health Concepts IIIA (1st 8 wks)	5
NURS 212 Health Concepts IIIB (2nd 8 wks)	4
NURS 271 Professional Concepts III (2nd 8 wks)	2
TOTAL	14
Fourth Semester	
ENGL 101 English Composition	3
HIST 106, 107 - OR - PLSC 103	3
NURS 220 Health Concepts IV (1st 8 wks)	4
NURS 290 Nursing Capstone (2nd 8 wks)	2
TOTAL	12
TOTAL HOURS REQUIRED	73



ASSOCIATE OF SCIENCE DEGREE Nursing (Registered)

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation		1 hour			73 hours		
COLL	101	_____	_____	_____	_____	_____	_____
Communications		6 hours			Oral Communications (3 hours)		
ENGL	101*	_____	_____	_____	COMM	104*	_____
Mathematics		3 hours			_____	_____	_____
MATH	125*, 130*, 134*, 135*	_____	_____	_____	_____	_____	_____
Science		15 hours			BIOL	252*	_____
BIOL	152*	_____	_____	_____	_____	_____	_____
BIOL	220*	_____	_____	_____	_____	_____	_____
Social and Behavioral Science		6 hours			And 3 hours of the following:		
<i>Civics (3 hours)</i>					PSYC	101 (Recommended)	_____
HIST	106*	_____	_____	_____	SOC	101	_____
HIST	107*	_____	_____	_____	_____	_____	_____
PLSC	103*	_____	_____	_____	_____	_____	_____
Pre-Nursing Courses		5 hours			_____	_____	_____
PNUR	101 Introduction to Nursing (2)	_____	_____	_____	_____	_____	_____
PNUR	111 Medical Terminology (3)	_____	_____	_____	_____	_____	_____
Nursing Courses		37 hours			Level I courses (20 hours)		
NURS	111 Health Concepts IA* (3)	_____	_____	_____	NURS	210 Health Concepts IIIA* (5)	_____
NURS	112 Health Concepts IB* (3)	_____	_____	_____	NURS	212 Health Concepts IIIB* (4)	_____
NURS	120 Health Concepts IIA* (5)	_____	_____	_____	NURS	220 Health Concepts IV* (4)	_____
NURS	122 Health Concepts IIIB* (4)	_____	_____	_____	NURS	271 Professional Concepts III* (2)	_____
NURS	141 Pharmacology I* (2)	_____	_____	_____	NURS	290 Nursing Capstone* (2)	_____
NURS	171 Professional Concepts I* (1)	_____	_____	_____	_____	_____	_____
NURS	175 Professional Concepts II* (2)	_____	_____	_____	_____	_____	_____
OR	NURS 201 Transition *(2) LPNs Only	_____	_____	_____	_____	_____	_____
Required Online Course		0 hour			_____	_____	_____
CVCS	101 Missouri Higher Ed Civics Exam	_____	_____	_____	_____	_____	_____

Occupational Therapy Assistant AS

The Occupational Therapy Assistant program prepares graduates to demonstrate entry level competencies as an Occupational Therapy Assistant (OTA) and provides a strong foundation for continued learning. The Certified Occupational Therapy Assistant functions as a member of the health care team; working under the supervision of a licensed Occupational Therapist, the Occupational Therapy Assistant helps disabled people of all ages acquire, improve, or regain the ability to do all activities that have meaning, value, or purpose. The OTA curriculum combines biological and behavioral sciences, along with the theory and principles of Occupational Therapy. The program is built to support the standards of the American Occupational Therapy Association and prepares students to sit for the National Board Certification for Occupational Therapy Assistant Exam. The Crowder College Occupational Therapy Assistant Program has applied for accreditation and has been granted Developing Program Status by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814-3449. ACOTE's telephone number c/o AOTA is (301) 652-AOTA. Once accreditation of the program has been obtained, its graduates will be eligible to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). In addition, most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. Note that a felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

The Occupational Therapy faculty believes all humans learn: the way an individual responds to and uses the stimuli in their environment determines how and what is learned. The Occupational Therapy Assistant curriculum is delivered through the uses of multiple learning styles and a wide variety of teaching methods. The OTA program is a single entry, limited admission program. Students must have and maintain a 2.75 grade point average. No courses below a grade of C will be accepted. Applications for the OTA program are accepted April 15th – August 1st of each year.

Program of Study

Orientation	1 hour	
COLL 101		
Communications	6 hours	
Written Communications (3 hours)		
ENGL 101*		
Oral Communications (3 hours)		
COMM 104*		
Humanities	3 hours	
ART 101, 106	HIST 101*, 102*	
ASL 101, 102*	MUSC 101	
ENGL 109*, 222*, 225*	PHIL 101*, 121, 201*, 202*	
ENGL 230*, 235*, 240*, 245*	SPAN 101, 111	
FREN 101	TA 205	
Mathematics	3 hours	
MATH 125*, 130*, 134*, 135*		
Science	10 hours	
BIOL 152*		
BIOL 252*		
Social and Behavioral Science	6 hours	
PSYC 101		
Civics (3 hours)		
HIST 106*, 107*		
PLSC 103		
OTA Courses	44 hours	
OTA 101	OTA 221*	
OTA 116	OTA 228*	
OTA 125	OTA 236*	
OTA 131*	OTA 240*	
OTA 201*	OTA 245*	
OTA 211*	OTA 250*	
OTA 218*		
Required Online Course	0 hour	
CVCS 101 Missouri Higher Ed Civics Examination		

*Prerequisite required

This Suggested Plan of Study is based on course offerings at the Webb City Instructional Site. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.

Suggested Plan of Study

FIRST YEAR

Pre-Admission Requirements: Must be completed prior to the spring semester –

Fall Semester	Hours
BIOL 152 Human Anatomy and Physiology I	5
COLL 101 College Orientation	1
COMM 104 Fundamentals of Speech	3
ENGL 101 English Composition	3
PSYC 101 General Psychology	3
TOTAL	15

Spring Semester	Hours
BIOL 252 Human Anatomy and Physiology II	5
OTA 101 Princ of Occupational Therapy	2
OTA 116 Princ of Therapeutic Intervention	3
OTA 125 Occupational Therapy Documentation	2
Approved Humanities Course	3
TOTAL	15

Summer Semester	Hours
Approved Civics Course	3
Approved Mathematics Course	3
TOTAL	6

SECOND YEAR	
Fall Semester	Hours
OTA 131 Functional Mvmt: Occ & Adaptation	3
OTA 201 Practice: Children & Adolescents	5
OTA 211 Practice: Mental Health	4
TOTAL	12

Spring Semester	Hours
OTA 218 Occupational Therapy FW Prep	1
OTA 221 Practice: Physical Rehabilitation	5
OTA 228 Occ Performance Across Lifespan	3
OTA 236 Occ Perf Issues in Later Adulthood	4
TOTAL	13

THIRD YEAR	
Fall Semester	Hours
OTA 240 Fieldwork level II A	5
OTA 245 Occupational Therapy Management	2
OTA 250 Fieldwork level II B	5
TOTAL	12
TOTAL HOURS REQUIRED	73



ASSOCIATE OF SCIENCE DEGREE Occupational Therapy Assistant

General Education Core		Done	Curr	To do			Done	Curr
Orientation		1 hour					73 hours	
COLL	101							
Communications		6 hours						
<i>Written Communications (3 hours)</i>					<i>Oral Communications (3 hours)</i>			
ENGL	101				COMM	104*		
Humanities		3 hours						
ART	101, 106				HIST	101*, 102*		
ASL	101, 102*				MUSC	101		
ENGL	109*, 222*, 225*				PHIL	101*, 121, 201*, 202*		
ENGL	230*, 235*, 240*, 245*				SPAN	101, 111		
FREN	101				TA	205		
Mathematics		3 hours						
MATH	125*, 130*, 134*, 135*							
Science		10 hours						
BIOL	152*							
BIOL	252*							
Social and Behavioral Science		6 hours						
<i>Civics (3 hours)</i>					<i>Additional 3 hours</i>			
HIST	106*				PSYC	101		
HIST	107*							
PLSC	103*							
OTA Courses		44 hours						
OTA 101	Principles of Occ Therapy (2)				OTA 221	Prin of OT Practice: Phys Rehab* (5)		
OTA 116	Principles of Therapeutic Interventions (3)				OTA 228	Occ Perf Across the Lifespan*(3)		
OTA 125	OT Documentation (2)				OTA 236	Occ Perf Issues in Later Adulthood*(4)		
OTA 131	Functional Movement: Occ and Adapt* (3)				OTA 240	240 Fieldw ork Level II - A* (5)		
OTA 201	Prin of OT Practice: Child and Adol* (5)				OTA 245	OT Management* (2)		
OTA 211	Prin of OT Practice: Mental Health* (4)				OTA 250	250 Fieldw ork Level II - B* (5)		
OTA 218	OT Fieldw ork Prep* (1)							
Required Online Course		0 hour						
CVCS	101 Missouri Higher Ed Civics Exam							

CERTIFICATE

AEMT

Advanced Emergency Medical Technician (AEMT) Certificate

The Advanced Emergency Medical Technician (AEMT) certificate program is designed for the professional AEMT positions in Emergency Medical Services and prepares graduates to sit for the NREMT AEMT certification exams. Must be at least 18 years old, hold a current NREMT and/or state license at the EMT level, valid AHA Healthcare provider level CPR card, verification of immunization history, physical examination, and criminal background check.

Program of Study

AEMT Courses		19 hours
AEMT	110 AEMT I (6)	
AEMT	115* AEMT II (6)	
AEMT	120* AEMT III (4)	
AEMT	151* Advanced Clinical I (3)	

Suggested Plan of Study

Spring Semester	Hours
AEMT 110 AEMT I (1st 8-week)	6
AEMT 115 AEMT II (2nd 8-week)	6
TOTAL	12
Summer Semester	Hours
AEMT 120 AEMT III	4
AEMT 151 Advanced Clinical I	3
TOTAL	7
Total Hours Required	19

*Prerequisite requirement



CERTIFICATE

AEMT

Major Courses	19 Hours	Done	Curr	To do
AEMT	110 AEMT I (6)	_____	_____	_____
AEMT	115* AEMT II (6)	_____	_____	_____
AEMT	120* AEMT III (4)	_____	_____	_____
AEMT	151* Advanced Clinical I (3)	_____	_____	_____

Paramedic Certificate
Paramedical Science AAS

The Paramedical Science degree is designed for the professional paramedic positions in Emergency Medical Services. The accompanying certificate is designed to be offered in one year. This program prepares graduates to sit for the Paramedic certification exam. EMT licensure and admission to the program are prerequisites for this degree.

Program of Study

Paramedic Certificate Courses		42 hours
EMTP	225 EMT Paramedic (9)	
EMTP	230* EMT Paramedic (9)	
EMTP	236* EMT Paramedic (9)	
EMTP	241* EMT Paramedic (6)	
EMTP	245 EMT Paramedic	
	Clinical 1 (3)	
EMTP	251* EMT Paramedic Capstone (6)	
Orientation		1 hour
COLL	101	
Communications		9 hours
<i>Written Communications (6 hours)</i>		
ENGL	101*	
ENGL	102*, 203*	
<i>Oral Communications (3 hours)</i>		
COMM	104*	
Mathematics		3 hours
MATH	125*, 130*, 134*, 135*	
Science		8 hours
BIOL	101, 152*	
CHEM	104* (Recommended)	
Social and Behavioral Science		6 hours
PSYC	101 (3 hours)	
<i>Civics (3 hours)</i>		
HIST	106*, 107*	
PLSC	103*	
Office Administration Courses		3 hours
NURS	105 (3)	
Required Online Course		0 hour
CVCS	101 Missouri Higher Ed Civics Examination	

*Prerequisite requirement

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
EMTP 225 EMT Paramedic		9
EMTP 230 EMT Paramedic		9
	TOTAL	18
Spring Semester		Hours
EMTP 236 EMT Paramedic		9
EMTP 241 EMT Paramedic		6
EMTP 245 EMT Paramedic Clinical I		3
	TOTAL	18
Summer Semester (Optional)		Hours
EMTP 251 EMT – Paramedic Capstone		6
	TOTAL	6
Graduate with Paramedic Certificate		
SECOND YEAR		
Fall Semester		Hours
COLL 101 College Orientation		1
NURS 105 Medical Terminology		3
Approved Civics Course		3
Approved Science Course		4
Approved Written Communications Course		3
	TOTAL	14
Spring Semester		Hours
COMM 104 Fundamentals of Speech		3
PSYC 101 General Psychology		3
Approved Mathematics Course		3
Approved Science Course		4
Approved Written Communications Course		3
	TOTAL	16
Graduate with Paramedical Science AAS		
Total Paramedic Certificate Hours Required		42
Additional Hours Needed for AAS		30
Total AAS Hours Required		72

EMTP 250 can be taken any semester after completion of the paramedic courses, but only needs to be taken one time.

Courses for Certificate	
Additional Courses for AAS Degree	



CERTIFICATE

Paramedic

			Done	Curr	To do				
Major Courses		42 Hours							
	EMTP	225 Paramedic (9)							
	EMTP	230* Paramedic (9)							
	EMTP	236* Paramedic (9)							
	EMTP	241* Paramedic (6)							
	EMTP	245* Paramedic Clinical (3)							
	EMTP	251* Paramedic Capstone (6)							
Prerequisites: EMT licensure and admission to the Paramedic program are prerequisites for this program.									

ASSOCIATE OF APPLIED SCIENCE DEGREE

Paramedical Science

			Done	Curr	To do		Done	Curr	To do
Orientation		1 hour					72 hours		
COLL	101								
Communications		9 hours							
<i>Written Communications (6 hours)</i>							<i>Oral Communications (3 hours)</i>		
ENGL	101*						COMM	104*	
ENGL	102*								
ENGL	203*								
Mathematics		3 hours							
MATH	125*								
MATH	130*						MATH	135*	
MATH	134*								
Science		8 hours							
BIOL	101, 152*								
CHEM	104* (Recommended)								
Social and Behavioral Science		6 hours							
PSYC	101								
Civics	(3 hours)						PLSC	103*	
HIST	106*								
HIST	107*								
Paramedic Courses		42 hours							
EMTP	225 (9)								
EMTP	230* (9)								
EMTP	236* (9)								
EMTP	241* (6)								
EMTP	245* (3)								
EMTP	251* (6)								
Support Courses		3 hours							
NURS	105 Medical Terminology (3)								
Required Online Course									
CVCS	101 Missouri Higher Ed Civics Exam								

Patient Care Technician Certificate

This certificate program prepares students for employment as a Patient Care Technician (PCT) by developing in students the personal traits and professional skills required to perform as competent entry-level PCT in the hospital setting beyond the training of CNA. Students must earn 16 hours for this certificate.

Program of Study

PCT Major Courses	16 hours
CNA 101 CNA Techniques (5)	
CNA 102 CNA Clinical Experience (2)	
ALLH 106 Phlebotomy (3)	
ALLH 107 EKG (3)	
ALLH 110 Patient Care Tech (3)	

Suggested Plan of Study

Fall Semester	Hours
CNA 101 CNA Techniques	5
CNA 102 CNA Clinical Experience	2
TOTAL	7
Spring Semester	Hours
ALLH 106 Phlebotomy	3
ALLH 107 EKG	3
ALLH 110 Patient Care Tech	3
TOTAL	9
Total Hours Required	16



CERTIFICATE

Patient Care Technician

Major Courses	16 Hours	Done	Curr	To do		
CNA	101 CNA Techniques (5)	_____	_____	_____		
CNA	105 CNA Clinical Experience (2)	_____	_____	_____		
ALLH	106 Phlebotomy (3)	_____	_____	_____		
ALLH	107 EKG (3)	_____	_____	_____		
ALLH	110 Patient Care Tech (3)	_____	_____	_____		

CERTIFICATE

PT

Pharmacy Technician Certificate

This certificate program prepares students for employment as Pharmacy Technicians with medical and office skills helpful for initial placement in pharmacy settings and other related occupations; and students have a career path into the Health Care Specialist AAS. Basic communication, computer/Internet skills, ethics and core courses in pharmacy will be completed.

Program of Study

Pharmacy Tech Major Courses		16 hours
BSAD	125	Bus Computer Apps (3) – OR – BSAD 115
COLL	101	College Orientation (1)
PHAR	101*	Pharmacy Techniques I (3)
PHAR	102*	Pharmacy Techniques II (3)
PHAR	110	Pharmacology Concepts (3)
PHAR	150	Pharmacy Tech Internship* (3)

*Prerequisite requirement

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
BSAD 125 – OR – BSAD 115 (Pharmacy)	3
COLL 101 College Orientation	1
PHAR 101 Pharmacy Techniques I (Pharmacy)	3
PHAR 102 Pharmacy Techniques II (Pharmacy)	3
PHAR 110 Pharmacology Concepts (Pharmacy)	3
PHAR 150 Pharmacy Tech Internship (Pharmacy)	3
TOTAL	16
Total Hours Required	16



CERTIFICATE

Pharmacy Technician

Students must earn 16 hours for this certificate.

		Done	Curr	To do		Done	Curr	To do		
Orientation	1 hour									
COLL	101 College Orientation (1)									
Major Courses	15 hours									
BSAD	125 Computer Applications (3)									
PHAR	101 Pharmacy Techniques I* (3)									
PHAR	102 Pharmacy Techniques II* (3)									
PHAR	110 Pharmacology Concepts (3)									
PHAR	150 Pharmacy Tech Internship* (3)									
		<i>OR</i>		BSAD 115 (3)						
Certification Component										
Passing a national certification exam is not a requirement for obtaining this certificate or for job placement. However, a national certification exam must be taken as part of the program.										

Photography Certificate

This cross-curricular certificate provides students with training and experience in a wide variety of career options in the field of photography. Options include digital media marketing, photojournalism, fine arts photography, and commercial endeavors, including products, portraiture and events such as weddings. Photographers can work for an employer, own their own business, and/or work as freelancers. Students must earn a minimum of 18 hours for this certificate. Students who earn the certificate may stack their credentials to earn the Photography Associate of Arts degree.

Program of Study

Major Courses	18 hours
Require Courses (9 hours)	
COMM 106 Photo Editing (3)	
COMM 220 Photocommunication I (3)	
COMM 231* Photocommunication II (3)	
Approved Electives (9 hours)	
ART 103 Intro to 2D Design (3)	
BMGT 200 Marketing (3)	
BSAD 150 Intro to Business (3)	
COMM 108* Internship (3)	
COMM 171 Topics in Communication (1-3)	
DIGM 101 Intro to Public Rel Dig Med Mktg (3)	
DIGM 102* Intro to Digital Media Content Creation (3)	
DIGM 105* Applied Graphic Des & Media Campaigns (3)	

Suggested Plan of Study

FIRST YEAR	
Fall Semester	
COMM 106 Photo Editing	3
COMM 220 Photocommunication I	3
Approved Photography Elective	3
	TOTAL
	9
Spring Semester	
COMM 231 Photocommunication II	3
Approved Photography Elective	3
Approved Photography Elective	3
	TOTAL
	9
	Total Hours Required
	18



CERTIFICATE Photography

Students must earn 18 hours for this certificate.

Done Curr To do

Done Curr To do

Major Courses		18 hours									
		Required Courses (9)									
COMM	106 Photo Editing (3)										
COMM	220 Photocommunication I (3)										
COMM	231* Photocommunication II (3)										
		Approved Electives (9)									
ART	103 Intro to 2D Design (3)										
BMGT	200 Marketing (3)										
BSAD	150 Intro to Business (3)										
COMM	108* Internship (3)										
COMM	171 Topics in Communication (1-3)										
DIGM	101 Intro to Public Rel Dig Med Mktg (3)										
DIGM	102* Intro to Dig Med Content Creation (3)										
DIGM	105* Applied Graph Des & Med Camp (3)										

Photography AA

This multi-disciplinary program encompasses the wide variety of career options in the field of photography. Options include photojournalism, fine art photography, and commercial endeavors, which include products, portraiture, and events such as weddings. Photographers can work for an employer, own their own business, and/or work as freelancers.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101#, 106	HIST 101*, 102*
ASL 101, 102*	MUSC 101
BMGT 223 or PHIL 202*	PHIL 101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN 101, 102*
ENGL 230*, 235*, 240*, 245*	TA 205
FREN 101	
Mathematics	3 hours
MATH 125*#, 130*, 134*, 135*	
Science	7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab	
Lab	Non-Lab
BIOL 101, 110, 120	BIOL 102
BIOL 152*	CHEM 106
CHEM 101, 104, 111*	PHYS 102
GEOL 115, 210*	PHYS 105
PHYS 101, 190*	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
Civics (3 hours)	
HIST 106*, 107*	ECON 201*, 202*
PLSC 103*	GEOG 111
	PSYC 101, 211*
	SOC 101
GE CORE Electives	5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Educational Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.	
Major Courses	18 hours
Required Courses (9 hours)	
COMM 106 Photo Editing	COMM 231* Photocomm II
COMM 220 Photocomm I	
Approved Electives (9 hours)	
ART 103	COMM 108*
BSAD 150	DIGM 101
BMGT 200	DIGM 102*
COMM 105*	DIGM 105*
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

- Preferred class for this degree option

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
COLL 101 College Orientation		1
COMM 104 Fundamentals of Speech		3
COMM 106 Photo Editing		3
COMM 220 Photocommunication I		3
ENGL 101 English Composition		3
MATH 125 Quantitative Reasoning		3
TOTAL		16
Spring Semester		Hours
ART 101 Art Appreciation		3
COMM 231 Photocommunication II		3
ENGL 102 Advanced English Comp		3
Approved Photography Elective		3
Approved Soc & Behavioral Science Course		3
TOTAL		15
SECOND YEAR		
Fall Semester		Hours
Approved Civics Course		3
Approved GE Core Elective		3
Approved Humanities Course		3
Approved Photography Elective		3
Approved Science Course		3-5
TOTAL		15-17
Spring Semester		Hours
Approved GE Core Elective		2
Approved Humanities Course		3
Approved Photography Elective		3
Approved Science Course		3-5
Approved Social Science Course		3
TOTAL		14-16
TOTAL HOURS REQUIRED		60-64

*Prerequisite required

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.



ASSOCIATE OF ARTS DEGREE

Photography

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation		1 hour		60-64 hours			
COLL 101							
Communications		9 hours					
<i>Written Communications (6 hours)</i>				<i>Oral Communications (3 hours)</i>			
ENGL 101*				COMM 104*			
ENGL 102*				COMM 105			
Humanities		9 hours					
ART 101 (Recommended)				FREN 101			
ART 106				HIST 101*, 102*			
ASL 101, 102*				MUSC 101			
BMGT 223 or PHIL 202*				PHIL 101*, 121, 201*			
ENGL 109*, 222*, 225*				SPAN 101, 102*			
ENGL 230*, 235*, 240*, 245*				TA 205			
Mathematics		3 hours					
MATH 125* (Recommended)				MATH 130*, 134*, 135*			
Science		7 hours					
<i>Lab</i>				<i>Non-Lab</i>			
BIOL 101, 110, 120				BIOL 102			
BIOL 152*				CHEM 106			
CHEM 101, 104, 111*				PHYS 102			
GEOL 115, 210*				PHYS 105			
PHYS 101, 190*							
Social and Behavioral Science		9 hours					
<i>Civics (3 hours)</i>							
HIST 106*				ECON 201*, 202*			
HIST 107*				GEOG 111			
PLSC 103*				PSYC 101, 211*			
				SOC 101			
GE Core Electives		5 hours					
Any additional 5 credit hours from courses listed from the Missouri Higher Educational Transfer Core Curriculum at Crow der College. Courses cannot be used as Core electives if counted under another section.							
Major Courses		18 hours					
<i>Required Courses (9 hours)</i>				<i>Approved Electives (9 hours)</i>			
COMM 106 Photo Editing (3)				ART 103 Intro to 2-D Design (3)			
COMM 220 Photocommunication I (3)				BSAD 150 Intro to Business (3)			
COMM 231 Photocommunication II* (3)				BMGT 200 Marketing (3)			
				COMM 105 Intro to Human Communication (3)			
				COMM 108* Internship (3)			
				DIGM 101 Intro to PR & Dig Media Mktg (3)			
				DIGM 102* Intro to Dig Media Cont Creation (3)			
				DIGM 105* App GD & Media Campaigns (3)			
Required Online Course		0 hour					
CVCS 101 MO Higher Ed Civics Exam							

Physical Education AA

Most successful Physical Education majors have a strong interest in general health, physical fitness, and sports. A desire to work with young people in their overall development is essential for success in this field. Students who transfer and complete a Bachelor of Science in Physical Education can find job opportunities in teaching, coaching, recreation, athletic training, and health promotion and wellness. Students seeking teaching/coaching careers in public schools must meet state certification requirements. The following program is suggested for students who intend to transfer following graduation. For best transfer, students should contact the four-year institution to which they plan to transfer as early in the program as possible.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101, 106	HIST 101*, 102*
ASL 101, 102*	MUSC 101
BMGT 223 or PHIL 202	PHIL 101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN 101, 102*
ENGL 230*, 235*, 240*, 245*	TA 205
FREN 101	
Mathematics	3 hours
MATH 125*#, 130*, 134*, 135*	
Science	7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab	
Lab	Non Lab
BIOL 101#, 110, 120	CHEM 106
BIOL 152*	
CHEM 101, 104, 111*	
GEOL 115, 210*	
PHYS 101#, 190*	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
Civics (6 hours)	
HIST 106*#, 107*	ECON 201*, 202*
PLSC 103*#	GEOG 111
	PSYC 101#, 211*
	SOC 101
GE CORE Electives	5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.	
Major Courses	13 hours
PE 113	PE 142
PE 115	PE 150
PE 120	PE 160, 260
PE 125	
PE Activities Classes (2 one hour classes maximum)	
Approved Electives (6-8 hours)	
BIOL 152*	PSYC 211*
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Cmcs Examination	

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
COLL 101 College Orientation	1
ENGL 101 English Composition	3
MATH 125 Quantitative Reasoning	3
PE 115 First Aid (Fall Only)	2
PSYC 101 General Psychology	3
Approved Humanities Course	3
TOTAL	15
Spring Semester	Hours
BIOL 101 General Biology	4
ENGL 102 Advanced English Comp	3
HIST 106 U.S. History I	3
PE 125 Athletic Training (Spring Only)	2
PE 142 Personal & Community Health	3
TOTAL	15
SECOND YEAR	
Fall Semester	Hours
EDUC 231 Educational Psychology	3
ENGL 109 Intro to Literature	3
PE 120 Intro to PE (Fall Only)	2
PHYS 101 Survey of Phys. Science	4
Approved GE Core Elective	2
Approved PE Elective	2
TOTAL	16
Spring Semester	Hours
COMM 104 Fundamentals of Speech	3
PE 113 Lifetime Fitness & Wellness	2
PE 260 Coaching Methods II (Spring Only)	2
PLSC 103 Nat, State, Local Gov't	3
Approved GE Core Elective	3
Approved Humanities Course	3
TOTAL	16
TOTAL HOURS REQUIRED	62

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.

*Prerequisite required

- Preferred class for this degree option



ASSOCIATE OF ARTS DEGREE

Physical Education

General Education Co	62 hours	Done	Curr	To do	Done	Curr	To do
Orientation	1 hour						
COLL	101						
Communications	9 hours				Oral Communications (3 hours)		
ENGL	101*				COMM	104*	
ENGL	102*				COMM	105	
Humanities	9 hours						
ART	101, 106				HIST	101*, 102*	
ASL	101, 102*				MUSC	101	
BMGT	223 or PHIL 202*				PHIL	101*, 121, 201*	
ENGL	109*, 222*, 225*				SPAN	101, 102*	
ENGL	230*, 235*, 240*, 245*				TA	205	
FREN	101						
Mathematics	3 hours						
MATH	125* (Recommended)				MATH	130*, 134*, 135*	
Science	7 hours						
Lab					Non Lab		
BIOL	101 (Recommended)				CHEM	106	
BIOL	110, 120, 152*						
CHEM	101, 104, 111*						
GEOL	115, 210*						
PHYS	101 (Recommended), 190*						
Social and Behavioral Science	9 hours						
Civics (6 hours)							
HIST	106* (Recommended), 107*				ECON	201*, 202*	
PLSC	103*				GEOG	111	
					PSYC	101 (Recommended), 211*	
					SOC	101	
GE Core Electives	5 hours						
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crow der College. Courses cannot be used as Core electives if counted under another section.							
Major Courses	13 hours				Approved Electives 6-8 hours		
PE	113 Lifetime Wellness (2)				BIOL	152 Anat & Phys I(5)	
PE	115 First Aid (2)				EDUC	125 Intro to Education (3) (Recommended)	
PE	120 Intro to Phys Educ (2)				EDUC	231 Educ Psych* (3) (Recommended)	
PE	125 Athletic Training (2)				PSYC	211 Lifespan Development* (3)	
PE	142 Personal & Comm Health (3)						
PE	150 Sport Psych (2)						
PE	160 or 260 Coaching Methods (2)						
PE	Activities classes (2 one-hour classes maximum)						
List below :							
Required Online Course	0 hour						
CVCS	101 MO Higher Ed Civics Exam						

Physics AA

Instruction in the Physical Sciences is offered in the areas of chemistry, physics, geology, and astronomy as the foundation for baccalaureate and graduate studies in these and related sciences at a university or four-year college. Physical Science students find employment in industrial research and development, government regulatory agencies, or secondary and post-secondary education. Each suggested curriculum that follows assumes a mathematics background that will permit an enrollment in the calculus series as a freshman. If pre-calculus classes are needed, more than four semesters may be necessary to complete this program.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101, 106	HIST 101*, 102*
ASL 101, 102*	MUSC 101
BMGT 223 or PHIL 202*	PHIL 101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN 101, 102*
ENGL 230*, 235*, 240*, 245*	TA 205
FREN 101	
Mathematics	5 hours
MATH 150*#, 160*#	
Science	10 hours
Students must meet the ten hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab	
Lab	Non Lab
BIOL 101, 110, 120	CHEM 106
BIOL 152*	
CHEM 101, 104, 111*	
GEOL 115, 210*	
PHYS 101, 190*# (Required)	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
Civics (3 hours)	
HIST 106*, 107*	ECON 201*, 202*
PLSC 103*	GEOG 111
	PSYC 101, 211*
	SOC 101
GE CORE Electives	5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.	
Major Courses	22 hours
COMP 111*	MATH 210*
MATH 201*	PHYS 210*
MATH 202*	
Other Recommended Courses	
CHEM 111*	CHEM 112*
Any classes in Alternative Energy	
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
COLL 101 College Orientation		1
COMM 104 Fundamentals of Speech		3
COMP 111 Intro to Programming		4
ENGL 101 English Composition I		3
MATH 150 Calculus I, Part 1		2
Approved Civics Course		3
	TOTAL	16
Spring Semester		Hours
ENGL 102 English Composition II		3
MATH 160 Calculus I, Part 2		3
PHYS 190 General Physics I		5
Approved GE Core Elective		5
Approved Humanities Course		3
	TOTAL	19
SECOND YEAR		
Fall Semester		Hours
MATH 201 Calculus II		5
PHYS 210 General Physics II		5
Approved Humanities Course		3
Approved Soc & Behavioral Science Course		3
	TOTAL	16
Spring Semester		Hours
MATH 202 Calculus III		5
MATH 210 Differential Equations		3
Approved Humanities Course		3
Approved Science Course		3-4
Approved Soc & Behavioral Science Course		3
	TOTAL	17-18
TOTAL HOURS REQUIRED		68-69

*Prerequisite required

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.

- Preferred class for this degree option



ASSOCIATE OF ARTS DEGREE

Physics

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation	1 hour				69 hours		
COLL 101							
Communications	9 hours						
	Written Communications (6 hours)				Oral Communications (3 hours)		
ENGL 101*					COMM 104*		
ENGL 102*					COMM 105		
Humanities	9 hours						
ART 101, 106					HIST 101*, 102*		
ASL 101, 102*					MUSC 101		
BMGT 223 or PHIL 202*					PHIL 101*, 121, 201*		
ENGL 109*, 222*, 225*					SPAN 101, 102*		
ENGL 230*, 235*, 240*, 245*					TA 205		
FREN 101							
Mathematics	5 hours						
MATH 150* & 160* (Required)							
Science	10 hours						
Lab					Non Lab		
BIOL 101, 110, 120					CHEM 106		
BIOL 152*							
CHEM 101, 104, 111*							
GEOL 115, 210*							
PHYS 101							
PHYS 190* (Required)							
Social and Behavioral Science	9 hours						
Civics (3 hours)							
HIST 106*					ECON 201*, 202*		
HIST 107*					GEOG 111		
PLSC 103*					PSYC 101, 211*		
					SOC 101		
GE Core Electives	5 hours						
Any additional 5 credit hours from courses listed from the Missouri Higher Educational Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.							
Major Courses	22 hours				Additional Recommended Classes		
COMP 111 Intro to Computer Sci* (4)					CHEM 111 Gen Chemistry I* (5)		
MATH 201 Calculus II* (5)					CHEM 112 Gen Chemistry II* (5)		
MATH 202 Calculus III* (5)					Any classes in Alternative Energy		
MATH 210 Diff Equations* (3)							
PHYS 210 Gen Physics II* (5)							
Required Online Course	0 hour						
CVCS 101 MO Higher Ed Civics Exam							

Pre-Engineering AS

The Associate in Science (A.S.) Pre-Engineering degree is a cooperative program between Crowder College and the School of Engineering at the Missouri University of Science & Technology. In addition, similar cooperative programs have been developed with the University of Missouri - Columbia and the University of Arkansas. Although not specifically designed for transfer to other engineering schools, the A.S. program does incorporate the essential course work for the first two years of study in any engineering field at other universities. Some of the course requirements vary with the engineering departments cooperating in this program. Those requirements are marked with a (†). In such cases, students will need to consult with the adviser as to the appropriate class for a particular engineering major.

Crowder College and the School of Engineering at Missouri University of Science & Technology have instituted an advisement and counseling program for pre-engineering majors. Students enrolling at Crowder can be simultaneously enrolled at Missouri S&T's Transfer Assistance Program. This allows for a smoother transition between the two institutions. Students are also allowed to participate in special pre-registration programs on the Missouri S&T campus.

Program of Study

Orientation	1 hour
COLL 101	
Communications †	6 hours
ENGL 101*	COMM 104*
ENGL 102*	
ENGL 203*	
Humanities †	3 hours
ART 101, 106	HIST 101*, 102*
ASL 101, 102*	MUSC 101
ENGL 109*, 222*, 225*	PHIL 101*, 121, 201*, 202*
ENGL 230*, 235*, 240*, 245*	SPAN 101, 102*
FREN 101	TA 205
Mathematics	18 hours
MATH 150*	MATH 202*
MATH 160*	MATH 210*
MATH 201*	
Science	18 hours
PHYS 190*	PHYS 250*
PHYS 210*	CHEM 111*
Social and Behavioral Science †	9 hours
Civics (3 hours)	Additional 3 hours
HIST 106*, 107*	ECON 201*, 202*
PLSC 103	GEOG 111
Economics (3 hours)	PSYC 101, 211*
ECON 201*, 202*	SOC 101
Computer Science	4 hours
COMP 111*	
Technical Electives	5 hours
AMT 102	CONS 141*
AMT 122	CONS 155*
CHEM 112*	DRFT 101
CHEM 201*	DRFT 115
CNS 101	DRFT 141*
CNS 131*	DRFT 153*
CNS 141*	DRFT 215*
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
CHEM 111	General Chemistry I	5
COLL 101	College Orientation	1
COMP 111	Introduction to Programming	4
ENGL 101	English Composition I	3
MATH 150	Calculus I, Part 1	2
TOTAL		15
Spring Semester		Hours
ECON 201 – OR – ECON 202		3
MATH 160	Calculus I, Part 2	3
PHYS 190	General Physics I	5
Approved Communications Course		3
Approved Humanities Course		3
TOTAL		17
SECOND YEAR		
Fall Semester		Hours
MATH 201	Calculus II	5
PHYS 210	General Physics II	5
Approved Civics Course		3
Approved Soc & Behavioral Science Course		3
TOTAL		16
Spring Semester		Hours
MATH 202	Calculus III	5
MATH 210	Differential Equations	3
PHYS 250	Statics	3
Approved Technical Electives		5
TOTAL		16
TOTAL HOURS REQUIRED		
64		

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.

- Preferred class for this degree option

*Prerequisite requirement



ASSOCIATE OF SCIENCE DEGREE Pre-Engineering

		Done	Curr	To do	Done	Curr	To do
Orientation		1 hour			64 hours		
COLL 101							
Communications		6 hours					
ENGL 101* (3)					COMM 104* (3)		
ENGL 102*							
ENGL 203* (3)							
Humanities		3 hours					
ART 101, 106					HIST 101*, 102*		
ASL 101, 102*					MUSC 101		
ENGL 109*, 222*, 225*					PHIL 101*, 121, 201*, 202*		
ENGL 230*, 235*, 240*, 245*					SPAN 101, 102*		
FREN 101					TA 205		
Mathematics		18 hours					
MATH 150 Calculus I Part I* (2)					MATH 202 Calculus III* (5)		
MATH 160 Calculus I Part II* (3)					MATH 210 Differential Equations* (3)		
MATH 201 Calculus II* (5)							
Science		18 hours					
PHYS 190 General Physics I* (5)					PHYS 250 Statics* (3)		
PHYS 210 General Physics II* (5)					CHEM 111 General Chemistry I* (5)		
Social & Behavioral Science		9 hours					
Civics (3 hours)					Additional (3 hours)		
HIST 106*					ECON 201*, 202*		
HIST 107*					GEOG 111		
PLSC 103*, 104*					PSYC 101, 211		
Economics (3 hours)					SOC 101		
ECON 201*, 202*							
Computer Science		4 hours					
COMP 111 Intro to Computer Sci* (4)							
Technical Electives		5 hours					
AMT 102 (3)					CONS 141* (3)		
AMT 122 (3)					CONS 155* (3)		
CHEM 112* (5)					DRFT 101 (3)		
CHEM 201* (5)					DRFT 115 (3)		
CNS 101 (3)					DRFT 141* (3)		
CNS 121 (3)					DRFT 153* (3)		
CNS 131* (3)					DRFT 215* (3)		
CNS 141* (3)							
Required Online Course		0 hour					
CVCS 101 MO Higher Ed Civics Exam							
CHEM 112 required for Chem Engineering majors							

Pre-Medicine AA

This program provides introductory courses for students interested in application to a college of medicine. Students should consult their advisors, as well as the institution to which they intend to transfer to finish their prerequisites, to ensure that their course selections are appropriate. Prerequisite requirements for the college of medicine of interest should also be considered.

Program of Study

Orientation	1 hour	
COLL 101		
Communications	9 hours	
Written Communications (6 hours)		
ENGL 101*		
ENGL 102*		
Oral Communications (3 hours)		
COMM 104*	COMM 105	
Humanities	9 hours	
Students should select classes from two different disciplines (prefixes)		
ART 101, 106, 110	HIST 101*, 102*	
ASL 101, 102*	MUSC 101	
BMGT 223 or PHIL 202*	PHIL 101*, 121, 201*	
ENGL 109*, 222*, 225*	SPAN 101, 102*	
ENGL 230*, 235*, 240*, 245*	TA 205	
FREN 101		
Mathematics	3 hours	
MATH 134*, 135*		
Science	9 hours	
Lab		
Non Lab		
Biol 101 or 110*	CHEM 106	
CHEM 111*		
Social and Behavioral Science	9 hours	
Students should select classes from two different disciplines (prefixes)		
Civics (3 hours)		
HIST 106*, 107*	ECON 201*, 202*	
PLSC 103*	GEOG 111	
	PSYC 101, 211*	
	SOC 101	
GE CORE Electives	5 hours	
<i>BIOL 110 should be used to satisfy the additional 5 credit hours elective requirement. Courses cannot be used as Core electives if counted under another section of this Program of Study</i>		
Major Courses	15 hours	
BIOL 120* #	MATH 150*	
BIOL 220* #	MATH 160*	
CHEM 112* #		
Required Online Course	0 hour	
CVCS 101 Missouri Higher Ed Civics Examination		

*Prerequisite required

- Preferred class for this degree option

Suggested Plan of Study**FIRST YEAR**

Fall Semester	Hours
BIOL 101 Biology	4
COLL 101 College Orientation	1
ENGL 101 English Composition I	3
MATH 135 Algebra for Calculus	3
Approved Soc & Behavioral Science Course	3
TOTAL	14
Spring Semester	Hours
BIOL 120 General Botany	5
ENGL 102 Advanced English Comp	3
Approved Civics Course	3
Approved Humanities Course	3
TOTAL	14

SECOND YEAR

Fall Semester	Hours
BIOL 110 General Zoology	5
CHEM 111 General Chemistry 1	5
Approved Humanities Course	3
Approved Soc & Behavioral Course	3
TOTAL	16
Spring Semester	Hours
BIOL 220 General Microbiology	5
CHEM 112 General Chemistry II	5
COMM 104 Fundamentals of Speech	3
Approved Humanities Course	3
TOTAL	16
TOTAL HOURS REQUIRED	60

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.



ASSOCIATE OF ARTS DEGREE

Pre-Medicine

General Education Core

			Done	Curr	To do		Done	Curr	To do
Orientation		1 hour				60 hours			
COLL	101								
Communications		9 hours							
		Written Communications (6 hours)				Oral Communications (3 hours)			
ENGL	101*					COMM 104*			
ENGL	102*					COMM 105			
Humanities		9 hours							
ART	101, 106					HIST 101*, 102*			
ASL	101, 102*					MUSC 101			
BMGT	223 or PHIL 202*					PHIL 101*, 121, 201*			
ENGL	109*, 222*, 225*					SPAN 101, 102*			
ENGL	230*, 235*, 240*, 245*					TA 205			
FREN	101								
Mathematics		3 hours							
MATH	134*, 135*								
Science		9 hours							
<i>Lab</i>						<i>Non Lab</i>			
BIOL	101 or 110*					CHEM 106			
CHEM	111*								
Social and Behavioral Science		9 hours							
	<i>Civics (3 hours)</i>								
HIST	106*					ECON 201*, 202*			
HIST	107*					GEOG 111			
PLSC	103*					PSYC 101, 211*			
						SOC 101			
GE Core Electives		5 hours							
BIOL 110	should be used to satisfy the additional 5 credit hours elective requirement. Courses cannot be used as Core electives if counted under another section of this Program of Study.								
Major Courses		15 hours							
BIOL	120 Gen Botany* # (5)								
BIOL	220* # General Microbiology (5)								
CHEM	112 General Chem II* # (5)								
MATH	150 Calculus 1, Part I* (2)								
MATH	160 Calculus 1, Part II* (3)								
Required Online Course		0 hour							
CVCS	101 MO Higher Ed Civics Exam								

Preschool Teacher/Paraprofessional AA

The Preschool Teacher/Paraprofessional Program is designed for individuals who need an associate degree in early childhood. Graduates are prepared to continue as an early childhood teacher at Head Start, as a paraprofessional in a P-12 setting, an Autism assistant, or in a private institution. If the student prefers to pursue a BA, the student will have completed the general education requirements and the 18 hours in the major which include courses that are transferable to several four-year institutions in our area. Students must have a cleared background check letter before completing any observation in schools.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101#, 106, 110	HIST 101*, 102*
ASL 101, 102*	MUSC 101#
BMGT 223 or PHIL 202*	PHIL 101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN 101, 102*
ENGL 230*, 235*, 240*, 245*	TA 205
FREN 101	
Mathematics	3 hours
MATH 125* #, 130*, 134*, 135*	
Science	7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab	
Lab	Non-Lab
BIOL 101#, 110, 120	BIOL 102
BIOL 152*	CHEM 106
CHEM 101, 104, 111*	PHYS 102
GEOL 115, 210*	PHYS 105
PHYS 101#, 190*	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
Civics (3 hours)	
HIST 106*, 107*	ECON 201*, 202*
PLSC 103*	GEOG 111
	PSYC 101#, 211*
	SOC 101#
GE CORE Electives	5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Educational Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.	
Major Courses	18 hours
ECD 101 OR EDUC 125	PSYC 203
ECD 103	PSYC 204
ECD 201*	PSYC 211*
ECD 203* OR EDUC 251	PSYC 290
EDUC 206*	
Students with the Child Development Associate (CDA) national credential or the Pre-Professional Assessment and Certification in Early Childhood Education through American Association of Family and Consumer Sciences will be credited with completed ECD 101 and ECD 103.	
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
COLL 101 College Orientation		1
ENGL 101 English Composition I		3
PSYC 101 General Psychology		3
Approved Science Course		3-5
Major Course		3
	TOTAL	13-15
Spring Semester		Hours
ENGL 102 English Composition II		3
MATH 125 Quantitative Reasoning		3
SOC 101 General Sociology		3
Approved Civics Course		3
Major Course		3
	TOTAL	15
SECOND YEAR		
Fall Semester		Hours
COMM 104 Fundamentals of Speech		3
PHYS 101 Survey of Physical Science		3-5
Approved GE Core Elective		3
Approved Humanities Course		3
Major Course		3
	TOTAL	15-17
Spring Semester		Hours
Approved GE Core Elective		2
Approved Humanities Course		3
Approved Humanities Course		3
Major Course		3
Major Course		3
Major Course		3
	TOTAL	17
	TOTAL HOURS REQUIRED	60-64

*Prerequisite required

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.

- Preferred class for this degree option



ASSOCIATE OF ARTS DEGREE

Preschool Teacher/Paraprofessional

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation		1 hour			61 hours		
COLL 101							
Communications		9 hours					
Written Communications (6 hours)					Oral Communications (3 hours)		
ENGL 101*					COMM 104*		
ENGL 102*					COMM 105		
Humanities		9 hours					
ART 101#, 106, 110					HIST 101*, 102*		
ASL 101, 102*					MUSC 101#		
BMGT 223 or PHIL 202*					PHIL 101*, 121, 201*, 202*		
ENGL 109*, 222*, 225*					SPAN 101, 102*		
ENGL 230*, 235*, 240*, 245*					TA 205		
FREN 101							
Mathematics		3 hours					
MATH 125* (Recommended)					MATH 130*, 134*, 135*		
Science		7 hours					
Lab					Non-Lab		
BIOL 101#, 110, 120					BIOL 102		
BIOL 152*					CHEM 106		
CHEM 101, 104, 111*					PHYS 102		
GEOL 115, 210*					PHYS 105		
PHYS 101#, 190*							
Social and Behavioral Science		9 hours					
Civics (3 hours)							
HIST 106*					ECON 201*, 202*		
HIST 107*					GEOG 111		
PLSC 103*					PSYC 101, 211*		
					SOC 101 (Recommended)		
GE Core Electives		5 hours					
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.							
Students with the Child Development Associate (CDA) national credential or the Pre-Assessment and Certification in Early Childhood Education through American Association of Family and Consumer Sciences will be credited with completed ECD 101 and ECD 103.							
Major Courses		18 hours					
ECD 101 Foundations (3)					OR EDUC 125 Introduction to Education (3)		
ECD 103 Health and Safety (3)							
ECD 201 Curriculum* (3)							
ECD 203 Practicum* (2)					OR EDUC 251 Teaching Profession* (3)		
EDUC 206 Literature for Children* (3)							
PSYC 203 Autism Disorders (3)							
PSYC 204 Applied Behavior (3)							
PSYC 211 Lifespan Development (3)							
PSYC 290 Clinical I (3)							
Required Online Course		0 hour					
CVCS 101 MO Higher Ed Civics Exam							

Pre-Veterinary Medicine AA

This program provides introductory courses for students interested in application to a college of veterinary medicine. Students should consult their advisors, as well as the institution to which they intend to transfer to finish their prerequisites, to insure that their course selections are appropriate. Prerequisite requirements for the college of veterinary medicine of interest should also be considered.

Program of Study

Orientation	1 hour
COLL 101 OR AGRI 111	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101, 106	HIST 101*, 102*
ASL 101, 102*	MUSC 101
BMGT 223 or PHIL 202*	PHIL 101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN 101, 102*
ENGL 230*, 235*, 240*, 245*	TA 205
FREN 101	
Mathematics	3 hours
MATH 125*, 130*, 134*, 135*#	
Science	7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab	
Lab	Non-Lab
BIOL 101, 110#, 120	CHEM 106
BIOL 152*	PHYS 105
CHEM 101, 104, 111*	
GEOL 115, 210*	
PHYS 101, 190*	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
Civics (3 hours)	
HIST 106*, 107*	ECON 201*, 202*
PLSC 103*	GEOG 111
	PSYC 101, 211*
	SOC 101
GE CORE Electives	5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.	
Major Courses	23 hours
Required Courses (17 hours)	
ANSC 114	CHEM 112*
BIOL 220*	MATH 112*
Approved Electives (6 hours)	
ANSC 101*	BIOL 120*
ANSC 180*	CHEM 221*
ANSC 213	MATH 150*
ANSC 223	MATH 160*
ANSC 232*	PHYS 190*
ANSC 233	PHYS 210*
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

Suggested Plan of Study**FIRST YEAR**

Fall Semester	Hours
AGRI 111 – OR – COLL 101	1
ANSC 114 Animal Science (elective)	4
BIOL 110 General Zoology	5
ENGL 101 English Composition I	3
MATH 135 Algebra for Calculus	3
Approved GE Core Elective	2
TOTAL	18

Spring Semester	Hours
BIOL 220 General Microbiology	5
COMM 104 Fundamentals of Speech	3
ENGL 102 English Composition II	3
MATH 112 Trigonometry	3
Approved Elective(s)	3-5
TOTAL	17-19

SECOND YEAR

Fall Semester	Hours
Approved Elective(s)	3-5
Approved GE Core Elective	3
Approved Humanities Course	3
Approved Science Course	3-5
Approved Soc & Behavioral Science Course	3
TOTAL	15-19

Spring Semester	Hours
CHEM 112 General Chemistry II	5
Approved Civics Course	3
Approved Humanities Course	3
Approved Humanities Course	3
Approved Soc & Behavioral Science Course	3
TOTAL	17

TOTAL HOURS REQUIRED**67-73**

*Prerequisite required

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.

- Preferred class for this degree option



ASSOCIATE OF ARTS DEGREE

Pre-Veterinary Medicine

General Education Core		Done	Curr	To do	67 hours	Done	Curr	To do
Orientation		1 hour		OR	67 hours			
COLL	101			AGRI	111 Ag Career Development			
Communications		9 hours						
<i>Written Communications (6 hours)</i>				<i>Oral Communications (3 hours)</i>				
ENGL	101*			COMM	104*			
ENGL	102*			COMM	105			
Humanities		9 hours						
ART	101, 106			HIST	101*, 102*			
ASL	101, 102*			MUSC	101			
BMGT	223 or PHIL 202*			PHIL	101*, 121, 201*			
ENGL	109*, 222*, 225*			SPAN	101, 102*			
ENGL	230*, 235*, 240*, 245*			TA	205			
FREN	101							
Mathematics		3 hours						
MATH	135* (Recommended)			MATH	125*, 130*, 134*			
Science		7 hours						
<i>Lab</i>				<i>Non-Lab</i>				
BIOL	101, 120			CHEM	106			
BIOL	110 (Recommended)			PHYS	105			
BIOL	152*							
CHEM	101, 104, 111*							
GEOL	115, 210*							
PHYS	101, 190*							
Social and Behavioral Science		9 hours						
<i>Civics (3 hours)</i>								
HIST	106*			ECON	201*, 202*			
HIST	107*			GEOG	111			
PLSC	103*			PSYC	101, 211*			
				SOC	101			
GE Core Electives		5 hours						
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crow der College. Courses cannot be used as Core electives if counted under another section.								
Major Courses		23 hours						
<i>Required Courses (17 hours)</i>				<i>Approved Electives (6 hours)</i>				
ANSC	114 Animal Science (4)			ANSC	101 Livestock Selection* (1)			
BIOL	220 Gen Microbiology* (5)			ANSC	180 Intro to Vet Science* (2)			
CHEM	112 Gen Chemistry II* (5)			ANSC	213 Feeds & Nutrition (3)			
MATH	112 Trigonometry* (3)			ANSC	223 Farm Animal Health (3)			
				ANSC	232 AI/Animal Reproduct* (3)			
				ANSC	233 Horse Science (3)			
				Biol	120 General Botany* (5)			
				CHEM	221 Organic & Biochemistry* (5)			
				MATH	150 Calculus I, Part 1* (2)			
				MATH	160 Calculus 1, Part II* (3)			
				PHYS	190 Physics I* (5)			
				PHYS	210 General Physics II* (5)			
Required Online Course		0 hour						
CVCS	101 MO Higher Ed Civics Exam							

Psychology: General AA

Career opportunities for psychology majors include social work, teaching and counseling. After completion of a baccalaureate degree, graduates often find work with government agencies. An Associate in Arts in Psychology requires completion of the general education core, nine hours in psychology, and Sociology 101.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101, 106, 110	HIST 101*, 102*
ASL 101, 102*	MUSC 101
BMGT 223 or PHIL 202*	PHIL 101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN 101, 102*
ENGL 230*, 235*, 240*, 245*	TA 205
FREN 101	
Mathematics	3 hours
MATH 134*, 135*	MATH 125*, 130*
Science	7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab	
Lab	Non -Lab
BIOL 101, 110, 120	BIOL 102
BIOL 152*	CHEM 106
CHEM 101, 104, 111*	PHYS 102
GEOL 115, 210*	PHYS 105
PHYS 101, 190*	
Social and Behavioral Science	9 hours
Civics (3 hours)	
HIST 106*, 107*	ECON 201*, 202*
PLSC 103*	GEOG 111
GE CORE Electives	5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Educational Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.	
Major Courses	12 hours
PSYC 101	PYSC 213*
PSYC 211*	SOC 101
Approved Electives (6 hours)	
EDUC 231*	PSYC 110*
HIST 106*, 107*	PSYC 203
PLSC 103*	PSYC 204
	PSYC 290*
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

- Preferred class for this degree option

Suggested Plan of Study**FIRST YEAR**

Fall Semester	Hours
COLL 101 College Orientation	1
COMM 104 Fundamentals of Speech	3
ENGL 101 English Composition I	3
MATH 135 Algebra for Calculus	3
PSYC 101 General Psychology	3
Approved Civics Course	3
TOTAL	16

Spring Semester	Hours
ENGL 102 English Composition II	3
PSYC 211 Lifespan Development	3
Approved Humanities Course	3
Approved Science Course	3-5
Approved Social & Behavioral Science Course	3
TOTAL	15-17

SECOND YEAR

Fall Semester	Hours
PSYC 213 Abnormal Psychology	3
Approved GE Core Elective	3
Approved Humanities Course	3
Approved Science Course	3-5
Approved Psychology Elective	3
TOTAL	15-17

Spring Semester	Hours
SOC 101 General Sociology	3
Approved GE Core Elective	3
Approved Humanity Course	3
Approved Psychology Elective	3
Approved Social and Behavioral Course	3
TOTAL	15

TOTAL HOURS REQUIRED **61-65**

*Prerequisite required

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.



ASSOCIATE OF ARTS DEGREE

Psychology

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation	1 hour				61 hours		
COLL 101							
Communications	9 hours				Oral Communications (3 hours)		
ENGL 101*					COMM 104*		
ENGL 102*					COMM 105		
Humanities	9 hours						
ART 101, 106, 110					HIST 101*, 102*		
ASL 101, 102*					MUSC 101		
BMGT 223 or PHIL 202*					PHIL 101*, 121, 201*		
ENGL 109*, 222*, 225*					SPAN 101, 102*		
ENGL 230*, 235*, 240*, 245*					TA 205		
FREN 101							
Mathematics	3 hours						
MATH 135* (Recommended)					MATH 125*, 130*, 134*		
Science	7 hours						
Lab					Non-Lab		
BIOL 101, 110, 120					BIOL 102		
BIOL 152*					CHEM 106		
CHEM 101, 104, 111*					PHYS 102		
GEOL 115, 210*					PHYS 105		
PHYS 101, 190*							
Social and Behavioral Science	9 hours						
Civics (3 hours)							
HIST 106*					ECON 201*, 202*		
HIST 107*					GEOG 111		
PLSC 103*							
GE Core Electives	5 hours						
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crow der College. Courses cannot be used as Core electives if counted under another section.							
Required Courses	18 hours						
Required Courses (12 hours)							
PSYC 101 General Psych (3)					PSYC 213 Abnormal Psychology (3)		
PSYC 211 Lifespan Development* (3)					SOC 101 General Sociology (3)		
Approved Electives (6 hours)							
EDUC 231 Educational Psych* (3)					PSYC 110 Psych of Pers Adj* (3)		
HIST 106 U.S. History I* (3)					PSYC 203 Autism Spectrum Disorders (3)		
HIST 107 U.S. History II* (3)					PSYC 204 Applied Behavior Analysis (3)		
PLSC 103, 104 Nat, State, & Loc Gov* (3)					PSYC 290 Clinical I* (3)		
Required Online Course	0 hour						
CVCS 101 MO Higher Ed Civics Exam							

Social Work AA

The Social Work program provides students with an introduction to and a foundation in the field of Social Work. An associate of arts in social work leads to a Bachelor's degree, which paves the way for a job in social work. The following program is suggested for graduation. It is recommended that students contact the transfer institution for its specific Bachelor's degree requirements.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101, 106, 110	HIST 101*, 102*
ASL 101, 102*	MUSC 101
BMGT 223 or PHIL 202	PHIL 101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN 101, 102*
ENGL 230*, 235*, 240*, 245*	TA 205
FREN 101	
Mathematics	3 hours
MATH 125*#, 130*, 134*, 135*	
Science	7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab	
Lab	Non-Lab
BIOL 101, 110, 120	BIOL 102
BIOL 152*	CHEM 106
CHEM 101, 104, 111*	PHYS 102
GEOL 115, 210*	PHYS 105
PHYS 101, 190*	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
Civics (3 hours)	
HIST 106*, 107*	ECON 201* (Required)
Plus 3 Hours	
PLSC 103*	GEOG 111
GE CORE Electives	5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.	
Major Courses	18 hours
PSYC 101	SWK 200*
PSYC 211*	SWK 221
SOC 101	SWK 230
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
COLL 101 College Orientation		1
COMM 104 Fundamentals of Speech		3
ENGL 101 English Composition I		3
MATH 125 Quantitative Reasoning		3
SOC 101 General Sociology		3
SWK 200 Intro to Social Work		3
	TOTAL	16
Spring Semester		Hours
ENGL 102 English Composition II		3
HIST 106 US History I		3
SWK 221 Basic Helping Skills		3
Approved Science Course		3-5
	TOTAL	12-14
SECOND YEAR		
Fall Semester		Hours
ECON 201 Principles of Economics I		3
PSYC 101 General Psychology		3
SWK 230 Substance Abuse Interventions		3
Approved Humanities Course		3
Approved Science Course		3-5
	TOTAL	15-17
Spring Semester		Hours
PLSC 103 Nat'l, State, Local Gov't		3
Approved GE Core Elective		5
Approved Humanities Course		3
Approved Humanities Course		3
	TOTAL	14
TOTAL HOURS REQUIRED		61

*Prerequisite required

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.

- Preferred class for this degree option



ASSOCIATE OF ARTS DEGREE Social Work

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation		1 hour		61 hours			
COLL 101							
Communications		9 hours					
<i>Written Communications (6 hours)</i>				<i>Oral Communications (3 hours)</i>			
ENGL 101*				COMM 104*			
ENGL 102*				COMM 105			
Humanities		9 hours					
ART 101, 106, 110				HIST 101*, 102*			
ASL 101, 102*				MUSC 101			
BMGT 223 or PHIL 202*				PHIL 101*, 121, 201*			
ENGL 109*, 222*, 225*				SPAN 101, 102*			
ENGL 230*, 235*, 240*, 245*				TA 205			
FREN 101							
Mathematics		3 hours					
MATH 125* (Recommended)				MATH 130*, 134*, 135*			
Science		7 hours					
Lab				Non-Lab			
BIOL 101, 110, 120				BIOL 102			
BIOL 152*				CHEM 106			
CHEM 101, 104, 111*				PHYS 102			
GEOL 115, 210*				PHYS 105			
PHYS 101, 190*							
Social and Behavioral Science		9 hours					
<i>Civics (6 hours - one from each line)</i>							
HIST 106*, 107*				ECON 201* (Recommended)			
PLSC 103*				ECON 202*			
				GEOG 111			
GE Core Electives		5 hours					
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.							
Major Courses		18 hours					
PSYC 101 Gen Psyc (3)				SWK 200 Intro to Social Work* (3)			
PSYC 211 Lifespan Development (3)				SWK 221 Basic Helping Skills (3)			
SOC 101 Gen Sociology (3)				SWK 230 Substance Abuse Intvnnts (3)			
Required Online Course		0 hour					
CVCS 101 MO Higher Ed Civics Exam							

Spanish Certificate

Those wishing to pursue a Spanish specific career (translating, interpreting, teaching Spanish, etc.) should pursue an AAT—Spanish option or AA General Studies. This certificate will provide an opportunity for current students, and those already in the workforce, to demonstrate a level of Spanish proficiency that could appeal to potential employers in any field. Students who successfully complete the program will be prepared to take the globally recognized Oral Proficiency Interview (OPI). While there is no minimum required OPI score for obtaining this certificate, the exam will provide students with documentation providing the official oral proficiency level achieved by the end of this program.

Program of Study		Suggested Plan of Study	
		FIRST YEAR	
		Fall Semester	Hours
Spanish Major Courses	15 hours	SPAN 101 Beginning Spanish I (3)	3
SPAN 101 Beginning Spanish (3)		SPAN 102 Beginning Spanish II (3)	3
SPAN 102* Beginning Spanish II (3)		College Orientation	1
SPAN 105* Conversational Spanish I (3)			
SPAN 201* Intermediate Spanish I (3)			
SPAN 202* Intermediate Spanish II (3)			
Orientation	1 hour		
COLL 101 College Orientation (1)			
		TOTAL	7
		Spring Semester	Hours
		SPAN 105 Conversational Spanish (3)	3
		SPAN 201 Intermediate Spanish I (3)	3
		SPAN 202 Intermediate Spanish II (3)	3
		TOTAL	9
		Total Hours Required	16

*Prerequisite requirement



CERTIFICATE Spanish

General Education Core			Done	Curr	To do	16 hours			Done	Curr	To do
Required Courses		15 hours									
	SPAN	101 Begin Spanish I (3)				SPAN	201 Intermed Spanish I* (3)				
	SPAN	102 Begin Spanish II* (3)				SPAN	202 Intermed Spanish II* (3)				
	SPAN	105 Conv Spanish I* (3)									
Orientation		1 hour									
	COLL	101 College Orientation (1)									

Surgical Technology Certificate

Surgical Technology AAS

The Surgical Technology Program is designed to prepare Surgical Technology students with the education needed to deliver quality patient care during the perioperative experience. Certification as a Surgical Technician will prepare the graduate to work in several roles in the medical field including Scrub Tech, Circulator, Second Assistance, and Instrumentation Specialist.

Upon completion of the associates degree, students will need to take the National Board of Surgical Technology and Surgical Assisting (NBSTSA) exam.

Program of Study

Certificate Courses	36 hours
SURG 111 Surgical Tech I (6)	
SURG 115 Surgical Tech I Lab (3)	
SURG 121* Surgical Tech II (6)	
SURG 125* Surg Tech II Lab (3)	
SURG 131* Surgical Tech III (6)	
SURG 135* Surg Tech III Lab/C (3)	
SURG 141* Surgical Tech IV (6)	
SURG 145* Surg Tech IV Lab/C (3)	
Orientation	2 hours
COLL 105 Technical Career Dev (1)	
COLL 106 Technical Career Dev II (1)	
Communications	6 hours
Written Communications (3 hours)	
ENGL 101*	
Oral Communications (3 hours)	
COMM 104*	
Mathematics	3 hours
MATH 125*, 130*, 135*	
Civics	3 hours
HIST 106*, 107*	
PLSC 103*	
Science	10 hours
BIOL 152*, 220*	
Medical Terminology	3 hours
NURS 105	
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
BIOL 152 Human Anatomy & Physiology	5	
COLL 105 Technical Career Development	1	
COLL 106 Technical Career Development II	1	
ENGL 101 English Composition	3	
NURS 105 Medical Terminology	3	
TOTAL	13	

Spring Semester	Hours
BIOL 220 Microbiology	5
COMM 104 Fundamentals of Speech	3
Approved Civics Course	3
Approved Mathematics Course	3
TOTAL	14

Graduate with Surgical Technology AAS

SECOND YEAR		
Fall Semester		Hours
SURG 111 Surgical Tech I	6	
SURG 115 Surgical Tech I Lab	3	
SURG 121 Surgical Tech II	6	
SURG 125 Surgical Tech II Lab	3	
TOTAL	18	

Spring Semester	Hours
SURG 131 Surgical Tech III	6
SURG 135 Surgical Tech III Lab/Clinicals	3
SURG 141 Surgical Tech IV	6
SURG 145 Surgical Tech IV Lab/Clinicals	3
TOTAL	18

Graduate with Surgical Technology Certificate

Graduate with Surgical Technology AAS

Total Certificate Hours Required	36
Additional Hours Needed for AAS	27
Total AAS Hours Required	63

*Prerequisite required



CERTIFICATE

Surgical Technology

Students must earn 36 hours for this certificate.

			Done	Curr	To do
Orientation			36 hours		
SURG	111 Surg Tech I (6)				
SURG	115 Surg Tech I Lab (3)				
SURG	121 Surg Tech II Lab (6)				
SURG	125 Surg Tech II Lab (3)				
SURG	131 Surgical Tech III (6)				
SURG	135 Surg Tech III Lab/Clinical (3)				
SURG	141 Surg Tech IV (6)				
SURG	145 Surg Tech IV Lab/Clinical (3)				

ASSOCIATE OF APPLIED SCIENCE DEGREE

Surgical Technology

			Done	Curr	To do	Done	Curr	To do
Orientation			2 hours			63 hours		
COLL	105							
COLL	106							
Communications			6 hours			Oral Communications (3 hours)		
<i>Written Communications (3 hours)</i>								
ENGL	101*					COMM	104*	
Mathematics			3 hours					
MATH	125*							
OR	MATH 130*							
MATH	135* (Recommended)							
Science			10 hours					
BIOL	152*, 220*							
Civics			3 hours					
HIST	106*, 107*							
PLSC	103*							
Surg Tech Courses			36 hours					
SURG	111 (6)							
SURG	115 (3)							
SURG	121* (6)							
SURG	125* (3)							
SURG	131* (6)							
SURG	135* (3)							
SURG	141* (6)							
SURG	145* (3)							
Medical Terminology			3 hours					
NURS	105 Medical Terminology (3)							
Required Online Course			0 hour					
CVCS	101 Missouri Higher Ed Civics Exam							

Teaching (AAT)

This is a statewide AAT degree that all community colleges will offer. This degree includes courses that are required for any initial certification. The students will select the electives based on one of several criteria: preparation for the MoGEA/ACT/MOCA, requirement for a specific teaching credential, or a required course at the institution to which they plan to transfer. The courses in the degree will transfer to any institution in the state of Missouri that accepts the AAT degree. Additional requirements for the AAT degree are a minimum GPA of 2.5 and a passing score approved by DESE on each section of the MoGEA or National ACT composite score of 17 (superscore is allowed). Because GPA and test entrance score requirements vary by institution, it is important to work closely with your education advisor at Crowder and the institution to which you plan to transfer. Students must have a cleared background check letter before completing any observation or field experience in schools.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101#, 106	HIST 101*, 102*
ASL 101, 102*	MUSC 101#
BMGT 223 or PHIL 202*	
ENGL 109*, 222*, 225*	PHIL 101*, 121, 201*
ENGL 230*, 235*, 240*, 245*	SPAN 101, 102*
FREN 101	TA 205
Mathematics	3 hours
MATH 125*, 130* or 134*, 135*	
Science	7 hours
Students must meet the seven hour requirement by selecting at least one lab course and one non-lab course	
Lab	Non -Lab
BIOL 101, 110#, 120	BIOL 102
BIOL 152*	CHEM 106
CHEM 101, 104, 111*	PHYS 102
GEOL 115, 210*	PHYS 105
PHYS 101 (Elementary majors)	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
HIST 106*, 107*	ECON 201*, 202*
PLSC 103*	GEOG 111
PSYC 101#	PSYC 211*
Preferred GE CORE Electives	5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.	
Major Courses	18 hours
Required Courses (12 hours)	
EDUC 125	EDUC 231*
EDUC 240*	EDUC 251*
Approved Electives (6 hours) (Check with advisor)	
ECON 201*, 202*	GEOG 111
EDUC 205	GEOL 210*
EDUC 206	PSYC 204
EDUC 212*	PSYC 211*
Any content specific courses for Middle School or HS certification	
Students must pass the MoGEA with a DESE approved score in each section or have National ACT composite score of 17 or better (superscore is allowed).	
Overall GPA of 2.5 is required	
Required Online Course	0 hour
CVCS 101 Missouri Higher Ed Civics Examination	

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
BIOL 101 General Biology	4
COLL 101 College Orientation	1
EDUC 125 Introduction to Education	3
ENGL 101 English Composition I	3
PSYC 101 General Psychology	3
TOTAL	14
Spring Semester	Hours
COMM 104 Fundamentals of Speech	3
EDUC 240 Education of Exceptional Learners	3
ENGL 102 English Composition II	3
HIST 107 – OR – HIST 106	3
MATH 125 Quantitative Reasoning	3
Approved GE Core Elective	2
TOTAL	17
SECOND YEAR	
Fall Semester	Hours
EDUC 231 Educational Psychology	3
PLSC 103 Nat'l, State, Local Gov't	3
Approved GE Core Elective	3
Approved Humanities Course	3
Approved Science Course	3-5
TOTAL	15-17
Spring Semester	Hours
EDUC 251 Teaching Prof w/Field Exp	3
Approved Education Elective	3
Approved Education Elective	3
Approved Humanities Course	3
Approved Humanities Course	3
TOTAL	15
TOTAL HOURS REQUIRED	
61-63	

*Prerequisite required

- Preferred class for this degree option

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.

Within the AAT Program, there are several Options that can be tailored to meet various Teacher Education Programs including:

Elementary Education	K-12 Music
Special Education	K-12 Art
Physical Education	K-12 Spanish
Middle School/High School English	Speech/Theater
Middle School/High School Math	
Middle School/High School Science	
Middle School/High School Social Studies	
Middle School /High School Agriculture	

Please see your advisor or the Teacher Education Department for more details on an Option that is right for you.



ASSOCIATE OF ARTS DEGREE Teaching (AAT)

General Education Core		Done	Curr	To do	Done	Curr	To do
Orientation		1 hour			61 hours		
COLL 101							
Communications		9 hours			Oral Communications (3 hours)		
Written Communications (6 hours)					COMM 104*		
ENGL 101*					COMM 105		
ENGL 102*							
Humanities		9 hours			Additional 6 hours		
DESE Requirement (3 hours)					ART 106		
ART 101					ASL 101, 102*		
MUSC 101					BGMT 223 or PHIL 202*		
					ENGL 109*, 222*, 225*		
					ENGL 230*, 235*, 240*, 245*		
					FREN 101		
					HIST 101*, 102*		
					PHIL 101*, 121, 201*, 202*		
					SPAN 101, 102*		
					TA 205		
Mathematics		3 hours			MATH 130*, 134*, 135*		
MATH 125* (Recommended)							
Science		7 hours			Non-Lab		
Lab					BIOL 102		
BIOL 101, 110#, 120					CHEM 106		
BIOL 152*					PHYS 102		
CHEM 101, 104, 111*					PHYS 105		
GEOL 115, 210*							
PHYS 101# (Elementary majors)							
Social and Behavioral Science		9 hours					
Choose one from each line							
HIST 106*, 107*					ECON 201*, 202*		
PLSC 103*, 104*					GEOG 111		
PSYC 101					PSYC 211*		
Preferred GE Core Electives		5 hours					
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.							
Major Courses		18 hours			Electives (6 hours) (Check with advisor)		
Required Courses (12 hours)					ECON 201 Prin of Economics* (3)		
EDUC 125 Introduction to Education (3)					EDUC 205 Music for Elem Teachers* (3)		
EDUC 231 Educational Psychology* (3)					EDUC 206 Lit for Children* (3)		
EDUC 240 Education of Exceptional Learners* (3)					EDUC 212* Educational Technology* (3)		
EDUC 251 Teaching Prof w/FE* (3)					GEOG 111 World Regional Geography (3)		
					GEOL 210 Earth & Space Science* (4)		
					PSYC 204 Applied Behavior Analysis (3)		
					PSYC 211 Lifespan Development* (3)		
Students must pass the MOGEA or ACT with a DESE approved score in each section.							
Overall GPA of 2.5 is required							
Required Online Course		0 hour					
CVCS 101 MO Higher Ed Civics Exam							
Within the AAT Program, there are several Options that can be tailored to meet various Teacher Education Programs including:							
Elementary Education K-12 Music							
Special Education K-12 Art							
Physical Education K-12 Spanish							
Middle School/High School English Speech/H/Theater							
Middle School/High School Math							
Middle School/High School Science							
Middle School/High School Social Studies							
Middle School/High School Agriculture							
Please see your advisor or the Teacher Education Department for more details on an Option that is right for you.							

ASSOCIATE OF ARTS DEGREE

T

Theatre AA

The Theatre Department has three general goals. First, all courses encourage the students to appreciate the theatre as an art form. Second, the courses encourage an understanding of how live theatre develops from script to performance. Third, the courses provide the student with many opportunities to experience live theatre performance and to participate in Crowder College Theatre productions in both performance and technical areas.

Program of Study

Orientation	1 hour
COLL 101	
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	
ENGL 102*	
Oral Communications (3 hours)	
COMM 104*	COMM 105
Humanities	9 hours
Students should select classes from two different disciplines (prefixes)	
ART 101, 106	HIST 101*#, 102*
ASL 101, 102*	MUSC 101
BMGT 223 or PHIL 202*	PHIL 101*, 121, 201*
ENGL 109*, 222*, 225*	SPAN 101, 102*
ENGL 230*, 235*, 240*, 245*	TA 205
FREN 101	
Mathematics	3 hours
MATH 125*#, 130*, 134*, 135*	
Science	7 hours
Students must meet the seven hour requirement by selecting two courses from different disciplines (prefixes) and at least one course with a lab	
Lab	Non-Lab
BIOL 101, 110, 120	BIOL 102
BIOL 152*	PHYS 102
CHEM 101, 104, 111*	PHYS 105
GEOL 115, 210*	
PHYS 101, 190*	
Social and Behavioral Science	9 hours
Students should select classes from two different disciplines (prefixes)	
Civics (3 hours)	
HIST 106*, 107*	ECON 201*, 202*
PLSC 103*	GEOG 111
	PSYC 101, 211*
	SOC 101
GE CORE Electives	5 hours
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College.	
Courses cannot be used as Core electives if counted under another section.	
Major Courses	9 hours
TA 105	TA Theatre Practicum
TA 115	
Approved Electives	9 hours
TA 108	TA 208
TA 112	TA Theatre Practicum
TA 125, 225	TA Topics in Theatre
TA 180	
Required Online Course	0 hour
CVCS 101	Missouri Higher Ed Civics Examination

Suggested Plan of Study

FIRST YEAR		
Fall Semester		Hours
COLL 101 College Orientation		1
COMM 104 Fundamentals of Speech		3
ENGL 101 English Composition I		3
MATH 125 Quantitative Reasoning		3
TA 105 Acting I		3
TA 106/116 Theatre Practicum (Performance or Technical)		1
TA 205 Introduction to Theatre		3
	TOTAL	17
Spring Semester		Hours
ENGL 102 English Composition II		3
TA 107/117 Theatre Practicum (Performance or Technical)		1
TA 115 Stagecraft (Spring only)		3
Approved Civics Course		3
Approved Science Lab Course		4
	TOTAL	14
SECOND YEAR		
Fall Semester		Hours
TA 206/216 Theatre Practicum (Performance or Technical)		1
Approved GE Core Elective		3
Approved Science Non - Lab Course		3
Approved Soc & Behavioral Science Course		3
Approved Theatre Elective		3
	TOTAL	13
Spring Semester		Hours
Approved GE Core Elective		2
Approved Humanities Course		3
Approved Humanities Course		3
Approved Soc & Behavioral Science Course		3
Approved Theatre Elective(s)		5
	TOTAL	16
TOTAL HOURS REQUIRED		61

*Prerequisite required

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.

- Preferred class for this degree option



ASSOCIATE OF ARTS DEGREE

Theatre

General Education Core		Done	Curr	To do		Done	Curr	To do
Orientation		1 hour				61-63 hours		
COLL	101							
Communications		9 hours				Oral Communications (3 hours)		
ENGL	101*					COMM	104*	
ENGL	102*					COMM	105	
Humanities		9 hours						
ART	101, 106					HIST	101* (Recommended), 102*	
ASL	101, 102*					MUSC	101	
BMGT	223 or PHIL 202*					PHIL	101*, 121, 201*	
ENGL	109*, 222*, 225*					SPAN	101, 102*	
ENGL	230*, 235*, 240*, 245*					TA	205	
FREN	101							
Mathematics		3 hours						
MATH	125* (Recommended)					MATH	130*, 134*, 135*	
Science		7 hours						
Lab						Non-Lab		
BIOL	101, 110, 120					BIOL	102	
BIOL	152*					CHEM	106	
CHEM	101, 104, 111*					PHYS	102	
GEOL	115, 210*					PHYS	105	
PHYS	101, 190*							
Social and Behavioral Science		9 hours						
Civics (3 hours)								
HIST	106*					ECON	201*, 202*	
HIST	107*					GEOG	111	
PLSC	103*, 104*					PSYC	101, 211*	
						SOC	101	
GE Core Electives		5 hours						
Any additional 5 credit hours from courses listed from the Missouri Higher Education Transfer Core Curriculum at Crowder College. Courses cannot be used as Core electives if counted under another section.								
Major Courses		9 hours				Approved Electives		9 hours
TA	105 Acting I (3)					TA	108 Playwriting (3)	
TA	115 Stagecraft (3)					TA	112 Directing (3)	
TA	Theatre Practicum (3)					TA	125, 225 Summer Theatre (3)	
						TA	180 Stage Makeup (3)	
						TA	208 Scene Work (3)	
						TA	Theatre Practicum (1-3)	
						TA	Topics in Theatre (1-4)	
Required Online Course		0 hour						
CVCS	101 MO Higher Ed Civics Exam							

Veterinary Technology AAS

The Crowder College Veterinary Technology Program is a 78 credit hour program which is fully accredited by the American Veterinary Medical Association (AVMA) and prepares students for careers as veterinary technicians. This is a selective admission program. Applications are accepted until the last Friday in March for the class which begins the following August. An ACT test result must accompany the application. Students must complete a minimum of BIOL 101 or BIOL 110, be eligible to take MATH 134 or MATH 135, be eligible for ENGL 101 or higher, be college-level in reading, and must have worked with or observed a licensed veterinarian in practice for a minimum of 40 clock hours to be eligible for the program. To be licensed as a Registered Veterinary Technician in Missouri, a student must be at least 19 years of age, graduate from an AVMA accredited program, pass the Veterinary Technician National Examination, and pass the Missouri State Veterinary Medical Board Examination. An applicant must be approved by the Missouri State Veterinary Medical Board, or the State Veterinary Medical Board of any other state in which the student wishes to be licensed, before being allowed to sit for these examinations.

Program of Study

Orientation	1 hour		
AGRI 111	OR	COLL 101	
Communications	6 hours		
<i>Written Communications (3 hours)</i>			
ENGL 101*			
<i>Oral Communications (3 hours)</i>			
COMM 104*			
Mathematics	3 hours		
MATH 134*, 135*			
Civics	3 hours		
PLSC 103*	HIST	106*, 107*	
Science	13-14 hours		
BIOL 101 (4)	OR	BIOL 110* (5)	
BIOL 220* (5)			
CHEM 104# (4)	OR	CHEM 111* (5)	
General Agriculture	15 hours		
AGEC 223 (3)			
ANSC 114 (4)			
ANSC 180* (2)	OR	VETC 101 Intro to Vet Tech (2)	
ANSC 223* (3)			
ANSC 233 (3)			
Program Core	35 hours		
VETC 110* (2)	VETC	250* (3)	
VETC 120* (3)	VETC	263* (3)	
VETC 130* (3)	VETC	270* (1)	
VETC 140* (3)	VETC	280* (2)	
VETC 180* (4)	VETC	284* (4)	
VETC 220* (3)	VETC	285* (1)	
VETC 230* (2)	VETC	286* (1)	
Required Online Course	0 hour		
CVCS 101 Missouri Higher Ed Civics Examination			

*Prerequisite requirement

- Preferred class for this degree option

Suggested courses for students with a desire to take additional credits not required for the Veterinary Technology AAS degree: Medical Terminology, Artificial Insemination and Reproduction, Feeds and Nutrition, Meat Science, Public Relations in Agri-Business, Business Math, Spanish, or general education courses toward an Associate of Arts degree. Students interested in Biomedical Sciences at the University of Missouri, Columbia must take ENGL 102 and MATH 135.

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
AGRI 111 – OR – COLL 101	1
ANSC 114 Animal Science	4
BIOL 101 General Biology	4
MATH 135 Algebra for Calculus	3
TOTAL	12
Spring Semester	Hours
AGEC 223 Ag Computer Applications	3
ANSC 180 Intro to Veterinary Science	2
CHEM 104 OR CHEM 111	4-5
ENGL 101 English Composition I	3
TOTAL	12-13
APPLY FOR THE VETERINARY TECHNOLOGY PROGRAM IN APRIL OF THIS SPRING SEMESTER	
SECOND YEAR	
Fall Semester	Hours
COMM 104 Fundamentals of Speech	3
VETC 110 Sanitation and Animal Care	2
VETC 140 Companion Animal Technology	3
VETC 180 Vet Anatomy and Physiology	4
TOTAL	12
Spring Semester	Hours
ANSC 233 Horse Science	3
VETC 120 Veterinary Hospital Technology I	3
VETC 130 Clinical Pathology I	3
VETC 285 Vet Tech Clinical Experience I	1
Approved Civics Course	3
TOTAL	13
Summer Semester	Hours
VETC 284 Vet Tech Internship	4
TOTAL	4
THIRD YEAR	
Fall Semester	Hours
ANSC 223 Farm Animal Health	3
BIOL 220 General Microbiology	5
VETC 220 Vet Hospital Technology II	3
VETC 280 Radiology and Elect Procedures	2
TOTAL	13
Spring Semester	Hours
VETC 230 Lab Animal/Avian Technology	2
VETC 250 Clinical Pathology II	3
VETC 263 Large Animal Med/Surg	3
VETC 270 Board Review	1
VETC 286 Vet Tech Clinical Experience II	1
TOTAL	10
TOTAL HOURS REQUIRED	76-77



ASSOCIATE OF APPLIED SCIENCE DEGREE

Veterinary Technology

		Done	Curr	To do		Done	Curr	To do
Orientation		1 hour				76-77 hours		
AGRI	111				OR	COLL 101		
Communications		6 hours						
	Written Communications (3 hours)							
ENGL	101*							
	Oral Communications (3 hours)							
COMM	104*							
Mathematics		3 hours						
MATH	134*, 135*							
Civics		3 hours						
HIST	106*				PLSC	103*		
HIST	107*							
Science		13-14 hours						
BIOL	101				CHEM	104 (Recommended)		
	OR	BIOL 110*			OR	CHEM 101, 111*		
BIOL	220*							
General Agriculture		15 hours						
AGEC	223 Ag Comp Apps (3)							
ANSC	114 Animal Sci (4)							
ANSC	180 Intro to Vet Science* (2)							
ANSC	223 Farm Animal Health* (3)							
ANSC	233 Horse Science (3)							
Program Core		35 hours						
VETC	110 Sanitat & Animal Care* (2)				VETC	250 Clinical Path II* (3)		
VETC	120 Vet Hospital Tech I* (3)				VETC	263 Large Animal Med/Surg* (3)		
VETC	130 Clinical Path I* (3)				VETC	270 Board Review * (1)		
VETC	140 Companion Animal Tech* (3)				VETC	280 Radiology & Elect Procs* (2)		
VETC	180 Vet Anatomy and Phys* (4)				VETC	284 Vet Tech Internship* (4)		
VETC	220 Vet Hospital Tech II* (3)				VETC	285 Vet Tech Clinical Exp I* (1)		
VETC	230 Lab Animal/Avian Tech* (2)				VETC	286 Vet Tech Clinical Exp II* (1)		
Required Online Course		0 hour						
CVCS	101 Missouri Higher Ed Civics Exam							

Welding: Welding Certificate (Plate)**Welding: Welding Certificate (Plate & Pipe)****Welding: Welding Certificate (Plate & Fabrication)****Welding AAS**

This program prepares students for a variety of welding career opportunities. The program is built around a set of core classes designed to give students the basic skill set required for the workforce, the construction industry, the oil & gas industry and many other career options. Students also are prepared for employment in companies with automated manufacturing processes.

The multiple Certificates prepare students for employment as entry level welders using Electric Arc and Pipe & Plate (& Fabrication) welding technology. Students will be introduced to Oxy-fuel cutting (OFC), Flux Core welding, and Carbon Arc Air Cutting. The program will instruct the students in advanced welding applications for pipe welding, which will include the Electrical Arc Welding Technology. This program will also provide the student with a technical understanding of tacking and welding techniques for completing projects to reflect industry standards. Additionally, the Pipe & Plate & Fabrication Certificate students will learn a technical understanding of advanced cutting operations including Numerical Control (NC) programming, and robotic controls.

Program of Study

Plate Certificate Courses	16 hours
WELD 117	Blue Print Reading (2)
WELD 160	Plate Methods I (7)
WELD 165*	Plate Methods II (7)
Plate & Pipe Certificate Courses	16 hours
WELD 270*	Pipe Methods I (8)
WELD 275*	Pipe Methods II (8)
Plate & Fab Certificate Courses	15 hours
DRFT 101	Intro to Eng Drwg and Print Reading (3)
WELD 136	Metallurgy Concepts (2)
WELD 280*	Fabrication Methods I (5)
WELD 285*	Fabrication Methods II (5)
Orientation	2 hours
COLL 105	Technical Career Development I (1)
COLL 106	Technical Career Development II (1)
Communications	9 hours
Written Communications (6 hours)	
ENGL 101*	English Composition (3)
ENGL 102*	Advanced English Comp (3)
ENGL 203*	Technical Report Writing (3)
Oral Communications (3 hours)	
COMM 104*	Fundamentals of Speech (3)
Mathematics	3 hours
MATH 104*	Technical Mathematics (3)
MATH 125*	Quantitative Reasoning (3)
MATH 134*	Algebra for Calculus with Support (5)
MATH 135*	Algebra for Calculus (3)
Civics	3 hours
HIST 106*, 107*	
PLSC 103*	
Required Courses	3 hours
AMT 182	Introduction to Automated Robotics (3)
Required Online Course	0 hour
CVCS 100	Missouri Higher Ed Civics Examination

Suggested Plan of Study

Fall Semester	Hours
DRFT 101 Intro to Engineering Drawing (PPF)	3
WELD 117 Blue Print Reading	2
WELD 160 Plate Methods I	7
WELD 165 Plate Methods II	7
TOTAL	19
Graduate with Welding Plate Certificate	
Spring Semester	Hours
COLL 105 Technical Career Dev. I	1
COLL 106 Technical Career Dev. II	1
WELD 270 Pipe Methods I	8
WELD 275 Pipe Methods II	8
TOTAL	18
Graduate with Welding Pipe & Plate Certificate	
SECOND YEAR	
Fall Semester	Hours
WELD 136 Metallurgy Concepts	5
WELD 280 Fabrication Methods I	5
WELD 285 Fabrication Methods II	2
Approved Civics Course	3
Approved Written Communications Course	3
TOTAL	18
Graduate with Welding Plate & Fab Certificate	
Spring Semester	Hours
AMT 182 Intro to Automated Robotics	3
COMM 104 Fundamentals of Speech	3
Approved Mathematics Course	3
Approved Written Communications Course	3
TOTAL	12
Graduate with Welding AAS	
Total Plate Certificate Hours Required	16
Additional Hours Needed for P&P Cert	18
Additional Hours Needed for P&F Cert	15
Additional Hours Needed for AAS	18
Total AAS Hours Required	67

*Prerequisite requirement

- Preferred class for this degree option

Courses for Certificate	
Additional Courses for AAS Degree	



CERTIFICATE
Welding Certificate (Plate)

		Done	Curr	To do				
Major courses		16 hours						
	WELD	117 Blue Print Reading (2)						
	WELD	160 Plate Methods I (7)						
	WELD	165* Plate Methods II (7)						



CERTIFICATE
Welding Certificate (Plate & Pipe)

		Done	Curr	To do	34 hours			
Orientation		2 hours						
	COLL	105 Technical Career Development I (1)						
	COLL	106 Technical Career Development II (1)						
Major courses		32 hours						
	WELD	117 Blue Print Reading (2)						
	WELD	160 Plate Methods I (7)						
	WELD	165* Plate Methods II (7)						
	WELD	270* Pipe Methods I (8)						
	WELD	275* Pipe Methods II (8)						



CERTIFICATE
Welding Certificate (Plate & Fabrication)

		Done	Curr	To do				
Orientation		2 hours				33 hours		
	COLL	105 Technical Career Development I (1)						
	COLL	106 Technical Career Development II (1)						
Major courses		31 hours						
	DRFT	101 Intro to Eng Drwg and Print Reading (3)						
	WELD	117 Blue Print Reading (2)						
	WELD	136 Metallurgy Concepts (2)						
	WELD	160 Plate Methods I (7)						
	WELD	165* Plate Methods II (7)						
	WELD	280* Fabrication Methods I (5)						
	WELD	285* Fabrication Methods II (5)						



ASSOCIATE OF APPLIED SCIENCE DEGREE

Welding AAS

			Done	Curr	To do		Done	Curr	To do
Orientation		2 hours					67 hours		
	COLL	105 Technical Career Dev I (1)							
	COLL	106 Technical Career Dev II (1)							
Communications		9 hours							
		Written Communications (6 hours)					Oral Communications (3 hours)		
	ENGL	101*					COMM 104*		
	ENGL	102*							
	ENGL	203*							
Mathematics		3 hours							
	MATH	134*, 135*					MATH 104*, MATH 125*		
Civics		3 hours							
	HIST	106*					PLSC 103*		
	HIST	107*							
Required Courses		50 hours							
	AMT	182 Intro to Automated Robotics (3)					WELD 285* Fabrication Methods II (5)		
	DRFT	101 Intro to Eng, Drawing & PR (3)							
	WELD	117 Welding Blue Print Reading* (2)							
	WELD	136 Metallurgy Concepts (2)							
	WELD	160 Plate Methods I (7)							
	WELD	165* Plate Methods II (7)							
	WELD	270* Pipe Methods I (8)							
	WELD	275* Pipe Methods II (8)							
	WELD	280* Fabrication Methods I (5)							
*Prerequisite course(s) or minimum test scores required. See catalog course descriptions for details.									
Required Online Course		0 hour							
	CVCS	101 Missouri Higher Ed Civics Exam							

CERTIFICATE

WSCT

Workplace Skills Certificate

This certificate addresses the workforce and soft skills needs of students completing a broad range of career and technical plans-of-study. Area employers identify these skills as important when hiring and retaining employees.

Program of Study

Certificate Courses	13 hours
BSAD 115 Computer Concepts (3) - OR - Approved Computer-Based Course	
BSAD 121 Business Mathematics (3) - OR - MATH 104 Technical Mathematics (3) - OR - Approved Math Course	
COLL 104 Practical Communication (3) - OR Approved COMM course	
COLL 105 Technical Career Development I (1) - OR - BSAD 103 Professional Development (2)	
COLL 106 Technical Career Development II* (1) - OR - BSAD 103 Professional Development (2)	
COLL 205 Career and Life Development* (2)	
Approved Electives	3 hours
BSAD 108 Personal Finance (3)	
BSAD 110 Leadership Development and Service (1)	
BSAD 125 Computer Applications (3)	
BMGT 115 Customer Service (3)	
CJ 280 Report Writing (3)	
ENGL 203 Technical Report Writing* (3)	
LOC 100 College Success (3)	
LOC 105 Career Directions (1)	
LOC 206 Career Exploration (1)	
Any CTEC courses	

Suggested Plan of Study

FIRST YEAR	
Fall Semester	Hours
COLL 104 Practical Communication	3
COLL 105 Technical Career Development I	1
COLL 106 Technical Career Development II	1
COLL 205 Career and Life Development	2
BSAD 115 Computer Concepts	3
BSAD 121 Business Mathematics	3
Approved Electives	3
	TOTAL
	16
Total Hours Required	16

*Prerequisite requirement



CERTIFICATE

Workplace Skills

16 hours			Done	Curr	To do
Major Courses			13 Hours		
BSAD	115 Computer Concepts (3) -OR- Approved Computer-Based Course				
BSAD	121 Business Mathematics (3) -OR- MATH 104 Technical Mathematics (3) -OR- Approved Math				
COLL	104 Practical Communication (3) -OR- Approved ENGL course & Approved COMM course				
COLL	105 Technical Career Development I (1) -OR- BSAD 103 Professional Development (2)				
COLL	106 Technical Career Development II* (1) -OR- BSAD 103 Professional Development (2)				
COLL	205 Career and Life Development* (2)				
Approved Electives			3 Hours		
BSAD	108 Personal Finance (3)				
BSAD	110 Leadership Development and Service (1)				
BSAD	125 Computer Applications (3)				
BMGT	115 Customer Service (3)				
CJ	280 Report Writing (3)				
ENGL	203 Technical Report Writing* (3)				
LOC	100 College Success (3)				
LOC	105 Career Directions (1)				
LOC	206 Career Exploration (1)				
Any CTEC Courses					

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Missouri Higher Education Transfer Core Curriculum at Crowder College

Social and Behavioral Sciences (9 Credit Hours Total)

Students must meet the nine credit hour requirement by selecting courses from two different disciplines (prefixes), including at least one Civics course

Other SBS Courses, 6 Credit Hours Required		Civics, 3 Credit Hours Required	
Principles of Macro Economics I, ECON 201 (<i>MOTR ECON 101</i>)	3	U.S. History I, HIST 106 (<i>MOTR HIST 101</i>)	3
Principles of Micro Economics II, ECON 202 (<i>MOTR ECON 102</i>)	3	U.S. History II, HIST 107 (<i>MOTR HIST 102</i>)	3
World Regional Geography GEOG 111 (<i>MOTR GEOG 101</i>)	3	National, State, Local Government, PLSC 103 (<i>MOTR POSC 101</i>)	3
General Psychology, PSYC 101 (<i>MOTR PSYC 100</i>)	3		
Life Span Development, PSYC 211 (<i>MOTR PSYC 200</i>)	3		
Principles of Agriculture Economics, AGEC 123 (<i>MOTR ECON 102A</i>)	3		
Introduction to the Criminal Justice System, CJ 101 (<i>MOTR CRJS 101</i>)	3		
General Sociology, SOC 101 (<i>MOTR SOCI 101</i>)	3		

Written Communications and Oral Communications (9 Credit Hours Total)

Written Communication, 6 Credit Hours Required		Oral Communication, 3 Credit Hours Required	
English Composition, ENGL 101 (<i>MOTR ENGL 100</i>)	3	Fundamentals of Speech, COMM 104 (<i>MOTR COMM 110</i>)	3
Advanced English Composition, ENGL 102 (<i>MOTR ENGL 200</i>)	3	Introduction to Human Communication, COMM 105 (<i>MOTR COMM 100</i>)	3
Technical Report Writing, ENGL 203 (<i>MOTR ENGL 110</i>)	3		

Natural Sciences (7 Credit Hours Total)

Seven credit hour requirement must include two different disciplines (prefixes), including at least one Lab course

Lab		Non-Lab	
General Biology, BIOL 101 (<i>MOTR BIOL 100L</i>)	4	Descriptive Astronomy, PHYS 105 (<i>MOTR ASTR 100</i>)	3
General Zoology, BIOL 110 (<i>MOTR BIOL 150LZ</i>)	4	Biology Concepts, BIOL 102 (<i>MOTR BIOL 100</i>)	3
General Botany, BIOL 120 (<i>MOTR BIOL 150LB</i>)	4	Physical Science Essentials, PHYS 102 (<i>MOTR PHYS 110</i>)	3
Human A & P I, BIOL 152 (<i>MOTR LIFS 150LAP</i>)	5	Survey of Chemistry Essentials, CHEM 106 (<i>Under Review</i>)	3
Survey of Chemistry, CHEM 101 (<i>MOTR CHEM 100L</i>)	5		
Chemistry for Health Sciences, CHEM 104 (<i>MOTR CHEM 100LHP</i>)	4		
General Chemistry I, CHEM 111 (<i>MOTR CHEM 150L</i>)	5		
Introduction to Geology, GEOL 115 (<i>MOTR GEOL 100L</i>)	4		
Earth and Space Science for Teachers, GEOL 210 (<i>MOTR PHYS 110LT</i>)	4		
Survey of Physical Science, PHYS 101 (<i>MOTR PHYS 110L</i>)	4		
General Physics I, PHYS 190 (<i>MOTR PHYS 200L</i>)	4		

Mathematical Sciences (3 Credit Hours Total)

Algebra for Calculus, MATH 135 (<i>MOTR MATH 130</i>)	3
Algebra for Calculus with Support, MATH 134 (<i>MOTR MATH 130</i>)	5
Quantitative Reasoning, MATH 125 (<i>MOTR MATH 120</i>)	3
Elementary Statistics, MATH 130 (<i>MOTR MATH 110</i>)	3

Humanities and Fine Arts (9 Credit Hours Total)

Students must meet the nine credit hour requirement by selecting courses from two different disciplines (prefixes)

Art Appreciation, ART 101 (<i>MOTR ARTS 100</i>)	3	Western Civilization I, HIST 101 (<i>MOTR WCIV 101</i>)	3
Ceramics, ART 110 (<i>MOTR PERF 105C</i>)	3	Western Civilization II, HIST 102 (<i>MOTR WCIV 102</i>)	3
Drawing I, ART 106 (<i>MOTR PERF 105D</i>)	3	Music Appreciation, MUSC 101 (<i>MOTR MUSC 100</i>)	3
Beginning American Sign Language I, ASL 101 (<i>MOTR LANG 105</i>)	3	World Religions, PHIL 121 (<i>MOTR RELG 100</i>)	3
Beginning American Sign Language II, ASL 102 (<i>MOTR LANG 106</i>)	3	Beginning Spanish I, SPAN 101 (<i>MOTR LANG 103</i>)	3
Introduction to Literature ENGL 109 (<i>MOTR LITR 100</i>)	3	Beginning Spanish II, SPAN 102 (<i>MOTR LANG 104</i>)	3
World Literature I, ENGL 222 (<i>MOTR LITR 200A</i>)	3	Introduction to Theatre, TA 205 (<i>MOTR THEA 100A</i>)	3
World Literature II, ENGL 225 (<i>MOTR LITR 200M</i>)	3	Painting I, ART 107 (<i>MOTR PERF 105P</i>)	3
American Literature I, ENGL 230 (<i>MOTR LITR 101A</i>)	3	Sculpture I, ART 111 (<i>MOTR PERF 105S</i>)	3
American Literature II, ENGL 235 (<i>MOTR LITR 101B</i>)	3	Chorale, MUSC 106, 107, 206, 207 (<i>MOTR MUSC 102C</i>)	1
British Literature I, ENGL 240 (<i>MOTR LITR 102A</i>)	3	Acting I, TA 105 (<i>MOTR PERF 100</i>)	1
British Literature II, ENGL 245 (<i>MOTR LITR 102B</i>)	3	Playwriting, TA 108 (<i>MOTR PERF 103P</i>)	3
French I, FREN 101 (<i>MOTR LANG 101</i>)	3	Directing, TA 112 (<i>MOTR PERF 101</i>)	3
Introduction to Western Philosophy, PHIL 101 (<i>MOTR PHIL 100</i>)	3	Stagecraft, TA 115 (<i>MOTR PERF 104S</i>)	3
Logic, PHIL 201 (<i>MOTR PHIL 101</i>)	3	Stage Makeup, TA 180 (<i>MOTR PERF 104M</i>)	3
Ethics, PHIL 202 (<i>MOTR PHIL 102</i>)	3	Creative Writing, ENGL 250 (<i>MOTR PERF 106</i>)	3
Business Ethics, BMGT 223 (<i>MOTR PHIL 102P</i>)	3	Masterworks of Non-Fiction, ENGL 2(MOTR PERF 106NF)	3

CORE Electives (5 Credit Hours Total)

Any additional 5 credit hours from courses listed above; Cannot be used if counted under another section.