


# COLLEGE CATALOG
# 2025/2027

# HIGHLAND COMMUNITY COLLEGE

## Catalog I 2025-2027

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| Highland Campus | (785) 442-6000 |
| Technical Center in Atchison | (785) 442-6180 |
| Western Center | (785) 442-6240 |
| HCC Online | (785) 442-6170 |
| Early College (High School) | (785) 442-6141 |
| Academic Affairs | (785) 442-6144 |
| Adult Basic Education | (785) 442-6180 |
| Allied Health | (785) 442-6180 |
| Alumni | (785) 442-6018 |
| Athletics | (785) 442-6040 |
| Bookstore | (785) 442-6009 |
| Business Office/Student Billing | (785) 442-6005 |
| Financial Aid | (785) 442-6000 |
| Library | (785) 442-6053 |
| Registrar | (785) 442-6025 |
| Student Affairs/Admissions | (785) 442-6020 |

### Accreditation

Highland Community College is authorized to operate by the Kansas Board of Regents and is regionally accredited by the Higher Learning Commission (HLC). HLC offices are located at 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604, www. hlcommission.org, (800) 621-7440/(312) 263-0456. We are authorized by the U.S. Department of Education to participate in the Title IV, HEA programs listed in our Program Participation Agreement available on file in the Financial Aid Office at Highland Community College, 606 W Main, Highland, KS 66035. Program specific accreditations are available on file at Highland Community College Technical Center, Atchison, KS. HCC's Auto Technology Program is ASE Education Foundation (formerly NATEF - National Automotive Technician Education Foundation) certified. HCC Nursing Programs are approved by the Kansas State Board of Nursing (KSBN). The curriculum for both the LPN - RN Program and the PN Program support the statewide alignment as outlined by the Kansas Post-Secondary Technical Education Authority (TEA) under the auspices of KBOR as approved by KSBN. The associate degree nursing program at Highland Community College at the Highland Community College Technical Center located in Atchison, KS is accredited by the: Accreditation Commission for Education in Nursing (ACEN), 3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326, (404) 975-5000.The most recent accreditation decision made by the ACEN Board of Commissioners for the associate degree nursing program is Initial Accreditation. View the public information disclosed by the ACEN regarding this program at https://www.acenursing.org/search-programs.

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**Highland Campus**
606 West Main, Highland, KS 66035
785-442-6000 admissions@highlandcc.edu

**Technical Center**
1501 West Riley St., Atchison, KS 66002
785-442-6180 hcctc@highlandcc.edu

**Western Center**
313 Nemaha, Baileyville, KS 66404
785-442-6240 western@highlandcc.edu

**HCC Online**
785-442-6170 hcconline@highlandcc.edu

**Early College (High School)**
785-442-6141 earlycollege@highlandcc.edu

**Adult Basic Education**
785-442-6180 mjohanning@highlandcc.edu

# Important Information

**Equal Opportunity Statement**
Highland Community College does not discriminate on the basis of race, color, religion, national origin, sex, age, disability, marital status, or military veteran status as defined by law, in employment, admission, or operation of its educational programs and activities, as prescribed by Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Executive Order 11246, as amended, sections 503 and 504 of the Rehabilitation Act of 1973, the Vietnam Era Veteran's Readjustment Assistance Act of 1974, the Age Discrimination Acts of 1974 and 1975, and other federal and state laws and regulations. Inquiries concerning the application of these laws and regulations to the College may be directed to either of the College's Title IX Coordinators or the Office of Civil Rights, U.S. Department of Education, Washington, D.C. 20201.

**Equal Opportunity, Harassment and Nondiscrimination Grievance**
HCC's full Equity Grievance Policy and processes associated with equal opportunity, harassment, and nondiscrimination may be found online at https://highlandcc.edu/pages/handbook. All students are required to review this policy.

**Content and Disclaimer**
Currently, the HCC website represents the curriculum, educational plans, offerings, and requirements that may be altered from time to time to carry out the purposes and objectives of the College. Highland Community College retains the right to cancel or change programs or course offerings when enrollments are insufficient to continue on an educationally sound and/or economically efficient basis.

Highland Community College expressly reserves the right to:

1. Add or delete courses from its offerings
2. Change times or locations of courses or programs
3. Reassign or substitute instructors
4. Change academic calendars without notice
5. Cancel any course for insufficient registration or other reasons
6. Revise or change tuition, rules, charges, fees, schedules, courses, requirements for degrees
7. Revise or change policies or regulations affecting students
8. Revise or change evaluation standards

The electronic catalog is updated periodically and represents the current legal document, available at **highlandcc.edu/ pages/catalog.**

**Revision of Regulations**
Any regulation adopted by the Board of Trustees or the administration of Highland Community College subsequent to the printing of this catalog shall have the same force as a printed regulation within the website. The new regulation shall supersede any ruling on the same subject, which may either appear in the print or on website or in official bulletins of the College.

**Photo and Videotape Policy**
Highland Community College takes photographs and videos of students throughout the year. These photographs often include students in classrooms, study areas, attending athletic events, etc. HCC reserves the right to use these photographs as a part of its publicity and marketing efforts. Students who enroll at HCC do so with the understanding that these photographs might include their likeness and might be used in College publications, both printed and electronic, for recruiting and advertising purposes.

**Academic Calendar**
The academic calendar is located at **highlandcc.edu/pages/calendar**. This may be altered or changed to carry out the purposes and objectives of the College. Highland Community College retains the right to cancel or change events listed without notice.

**Mission Statement**
HCC, the first college in Kansas, provides lifelong learning opportunities and contributes to economic development to enhance the quality of life in the communities we serve.

**History of Highland Community College**
Highland Community College began as Highland University in 1858, making it the first college in Kansas. After eight name changes, the college has now provided higher education opportunities to the people of Northeast Kansas for more than 160 years. The college has traditionally prepared students to continue their studies at baccalaureate institutions. Studies conducted at the Regents universities in Kansas show that students who begin their college careers at HCC and then transfer do as well or better academically as all other students who transfer to those universities and those who start there.

Approximately 4,000 students (1,699 FTE) are enrolled on the main campus (Highland), at regional centers in Atchison, Baileyville, and Wamego, through HCC Online, or Early College at one of the 30 high schools in HCC's service area. The main campus is located in a small, rural Northeast Kansas community surrounded by agricultural land. The main campus has 22 apartment style residence halls, thriving athletics programs, and active student life. Across all of its locations, HCC offers 14 different associate degrees and 16 technical certificates.

The history and mission of the college can best be described as providing opportunities for higher education that citizens in the region would not have had otherwise. Whether as a conduit to a four-year degree, for professional enhancement, or personal development, the college has provided affordable access to higher education in Northeast Kansas.

The college is governed by a six-member Board of Trustees elected from Doniphan County and is coordinated by the Kansas Board of Regents (KBOR).

## Course Locations and Delivery Methods

**Highland Campus**
Highland, Kansas, is a rural Northeast Kansas community surrounded by agricultural land and is an easy drive to several large metro areas including St. Joseph, Missouri, Kansas City, and Topeka. The Highland campus is home to over 400 students with 22 apartment-style residence halls, 12 competitive athletic programs, and an active student life including numerous student clubs, and music performances, intramurals, and campus events. Most classes are taught by full-time faculty members in a face-to-face setting with a 17:1 student to teacher ratio.

**Early College (High School)**
Highland's Early College program provides high schools students an opportunity to get a jump start on their college education. Either through concurrent or dual credit enrollment. High school sophomores, juniors, and seniors can take classes at their high schools, online, or at one of the HCC locations.

Highland's concurrent options provide high school students in the HCC service area the opportunity to expand their curriculum. Courses taught at the high school have identical course content or courses offered on campus, online, and at regional centers. High school faculty teaching college-level concurrent enrollment courses shall attain instructional eligibility by meeting the standards established by the Higher Learning Commission (HLC). All HCC approvals come through the HCC Human

Resources office. Faculty teaching college-level tiered technical courses through a concurrent enrollment partnership shall attain instructional eligibility by meeting the academic standards addressed above or possess a valid/current industry-recognized credential and a minimum of 4,000 hours of work experience in the specific technical field.

The Kansas Board of Regents encourages high school students to take advantage of post-secondary educational opportunities by enrolling in college courses while still in high school. The statute is known as the Dual Credit Cooperative Agreement. Taking college classes is a great opportunity for sophomores, juniors, and seniors or freshmen with a gifted I.E.P. in good standing to experience college while they are still in high school. The Early College program experience eases a student's transition from high school to college. It is possible to earn your high school degree and a certificate or associate degree from HCC at the same time.

**Interactive Distance Learning (IDL)**

The IDL system allows students to complete courses being taught at other HCC sites without having to travel to that location. Through a TV, camera setup, and microphone, students are able to physically attend class at one location and fully participate and interact with the instructor and classmates located at other sites. Instructors utilize lecture, board work, videos, and computer sharing to provide a high-quality learning environment.

**Live Synchronous**

Synchronous learning refers to all types of learning in which learner(s) and instructor(s) are in the same place, at the same time, for learning to take place. Live Synchronous refers to students who attend class at the established class time via digital video interaction such as Zoom or interactive distance learning. Students are expected to actively participate in class during Live Synchronous attendance.

**Hybrid**

Hybrid classes combine face-to-face classroom learning with computer-assisted online learning. Time in a hybrid course is divided between classroom learning activities and online classroom participation in the HCC online platform. Students benefit from the quality instruction delivered through different modes and the flexibility of both online and classroom learning environments through independent and collaborative work.

**Online**

The College has an active online program which offers courses in 8-week and 16-week sessions. Several degree programs are available entirely online, offering students the opportunity to pursue their educational goals, such as earning transfer credit or achieving personal and career growth. Online courses are an excellent option when attending college in a traditional classroom is not convenient. Courses taught in the online format meet the same competencies as those in a classroom yet fit the student's schedule.

**Regional Centers**

The College serves nine counties in Northeast Kansas. HCC operates Regional Centers in Atchison, and the Western Center is in Baileyville, Kansas. All administrative services for students — advising, placement testing, and enrollment are available at each regional center and online. Regional Centers offer day, evening, and weekend class options to meet our students' schedules.

**Adult Basic Education/General Educational Development (ABE/GED)**

The Highland Community College Adult Education Program offers free services to students 18 years of age and over and to 16- and 17-year-olds not currently enrolled in school (with a "Compulsory School Attendance Disclaimer" form) in Northeast Kansas.

New students may enter the program at appointed times throughout the year. Pre-tests are given to help

determine the level at which students begin their studies. Further testing is used to determine when a student is ready to take the General Educational Development (GED) test. More information is available at **highlandcc.edu/admissions/adult-education/.**

**Student Handbook**
Highland Community College annually publishes a Student Handbook with information about Student Conduct, Notification of Non-Discrimination, Campus Policies, Security, Sexual Harassment, Student Grievance, Directory Information and several other student related categories. Please consult the Student Handbook at **highlandcc.edu/abouthcc/policies-procedures/.**

**Student Accidents and Losses**
Although the College exercises reasonable precautions, it can assume no responsibility for accidents to students that may occur incidental to attendance at, or participation in classroom, laboratory work, intramural or intercollegiate activities. The College does not accept responsibility for any personal property lost, stolen, or misplaced.

**Student Identification Cards**
At registration, new students receive an identification card that is good for their period of enrollment at Highland Community College. The identification card is important because it is the student's permit to enter College buildings, one of the requirements for checking out books and accessing electronic information in the Library, an admittance card to many student activities and College events, meal plan access, and it allows benefits such as reduced rates at plays, concerts and other public events. A fee of $5.00 will be assessed for replacing a lost identification card. Online students may request an ID through any HCC location. IDs are only issued onsite and are not generated remotely.

## Admissions

Students who meet the requirements listed below may be admitted to Highland Community College. Admission to the College does not ensure entrance into a particular course or program of study. An application for admission is found at **highlandcc.edu/apply** on the HCC website or by contacting the Admissions Office at admissions@highlandcc.edu.

**Rights of the College**
The College reserves the right to deny a student admission or readmission if considered detrimental to the best interests of the College community, or if the College is unable to provide the services, courses, or program(s) needed to assist the student in meeting educational objectives.

**Placement Testing**
Entering freshmen are encouraged to take either the ACT or SAT assessment prior to registration. Highland Community College uses high school GPA, and when necessary, provides placement testing for incoming students who have no ACT or SAT scores to determine placement in English, reading, and mathematics. HCC currently administers the Work Keys and Accuplacer exams. Students may contact any location to set up an appointment for Accuplacer testing. Multiple attempts on assessments cost $25 each. Work Keys assessments are available at the technical centers for students applying for technical programs. The Work Keys assessments cost $15 each for reading and mathematics. Advisors will use these scores to place students in the appropriate level course(s).

**Regular Student Admission**
Any applicant who has graduated from an accredited high school or has successfully passed the General Educational Development (GED) examination is eligible to enroll at Highland Community College. If the applicant meets neither of these requirements, admission as a special student should be sought.

All students applying for regular admission must:

- Complete an application for admission at **highlandcc.edu/apply.**
- Submit a current high school or GED transcript and a complete official transcript upon graduation.
- Submit official college transcripts from each college attended.
- Submit ACT/SAT scores OR to arrange for an appropriate placement test.
- Comply with Tuberculosis Screening Requirement (excludes online only students). See "Additional Admissions Requirement for Face-to-Face Classroom Settings."

Regular students are eligible to receive federal financial aid and may earn a certificate and/or degree and may be eligible to compete in intercollegiate athletics. International students are not eligible to receive federal financial aid.

**Note:** *Students not submitting all official transcripts from all previously attended institutions prior to completion of the entering term will be changed to "Special Student" for the next term and not be eligible to receive federal financial aid.*

**Special Student Admission***
A person may be admitted to Highland Community College as a special student if the student meets one of the following criteria:

- Is not seeking an approved certificate or degree from Highland.
- Is taking classes for personal enrichment.
- Is a high school/home school freshman with permission from the high school/home school administrator.
- Is a high school/home school student enrolled in an approved gifted program with permission from the high school/home school administrator.
- Is taking classes to transfer to another school.

**Special students must comply with the Tuberculosis Screening Requirement (excludes online only students). See "Additional Admissions Requirement for Face-to-Face Classroom Settings." Special students are not required to submit transcripts, are not eligible for federal financial aid and most institutional aid, are not eligible to earn a certificate or degree from Highland and are not eligible to compete in intercollegiate athletics. Student services will be available upon the student's request. For purposes of placement, special students may be required to submit placement scores, college transcripts, or be assessed prior to enrollment. Special students taking face-to-face classes must comply with "Additional Admissions Requirement for Face-to- Face Classroom Settings."*

Highland Community College does not require ACT or SAT scores to be admitted to the College, but prerequisite verification is required for enrollment into English and math courses. ACT or SAT scores will be used as placement scores for students who have taken those tests. HCC will also consider an unweighted high school GPA and GED, Asset, and Accuplacer scores for placement. Students who have no placement, or outdated placement, will be given the Accuplacer NG assessment test prior to enrolling in English and math courses. The following guides outline the scores needed on each of the accepted options for enrollment in HCC courses. Placement tests are offered across HCC's Northeast Kansas Region. Virtual testing options are also available and require the student pay a testing fee for proctoring requirements with Accuplacer NG.

## English and Math Placement Scores

***English Placement:*** Per KBOR policy, each student who meets either a systemwide course placement measure OR an institutionally designated* course placement measure is eligible to enroll in a gateway

course without developmental support. Each student meeting neither of the above shall be placed into the gateway course with developmental support.

**ENG101 English Composition I**

- 18+ on ACT Reading AND ACT English; OR
- 500+ on SAT ERW (Evidence-based Reading and Writing); OR
- 255+ Accuplacer Reading AND Writing; OR
- 3.0+ high school cumulative unweighted GPA after five or more semesters; OR
- 16+ ACT Reading AND ACT English AND B or higher (not B-) in most recent high school English course; OR
- 2.7+ high school cumulative unweighted GPA after 5 or more semesters AND B or higher (not B-) in most recent high school English course; OR
- GED® Score: 160

If a student does not meet the systemwide course placement requirements, they will be required to enroll in ENG101R (Composition I Review), a co-requisite course for Composition I. ENG101R consists of three co-requisite hours (0 credit hours) that do not count toward degree requirements. Students who need the co-requisite section should enroll in the same section "number" of ENG101 and ENG101R.

***Math Placement:*** Per KBOR policy, each student who meets either a systemwide course placement measure OR an institutionally designated* course placement measure is eligible to enroll in a gateway course without developmental support. Each student meeting neither of the above shall be placed into the gateway course with developmental support. *Note: If a student athlete wishes to transfer to D1 school for athletics, they **MUST** take college algebra (with or without review).*

**MAT104 College Algebra**

- Math ACT: 22 or higher OR
- Math SAT: 540 or higher OR
- ALEKS PPL: 46 or higher OR
- Accuplacer QAS: 263 or higher OR
- HS GPA and Course Grade: 3.25 cumulative GPA (unweighted) **and** B- or higher in Second semester Algebra 2 or Integrated Math 3 OR
- GED® Score: 165 OR
- Institutional Measure*

**MAT108 Contemporary Math and MAT203 Basic Statistics**

- Math ACT: 19 or higher OR
- Math SAT: 510 or higher OR
- ALEKS PPL: 30 or higher OR
- Accuplacer QAS: 255 or higher OR
- HS GPA and Course Grade: 3.00 cumulative GPA (unweighted) **and** C- or higher in Second Semester Algebra 2 or Integrated Math 3 OR
- GED® Score: 160 OR
- Institutional Measure

If a student does not meet the systemwide course placement requirements, they will be required to enroll in a Review section, a co-requisite course. The following additional co-requisite hours are required but do not count toward degree requirements:

- MAT104R (College Algebra Review) – 3 hours

- MAT108R (Contemporary Math Review) – 2 hours
- MAT203R (Basic Statistics Review) – 2 hours

*Institutionally designated course placement measure is any course placement measure that is not included in the systemwide course placement measures and is used to determine eligibility to enroll in a gateway English or math course. These measures could include, but are not limited to, vendor-based assessments, homegrown assessments, or an evaluation of non-cognitive factors. These measures are approved at the institutional level and only apply in cases in which the student did not meet any of the applicable systemwide course placement measures. This category also provides institutions the professional discretion to place students in the gateway course by considering scores on multiple measures as well as non-cognitive factors known to the institution.

**Changing Status from Special Student to Regular Student**
Early College students must reapply to HCC to change status to a regular student. Other special students who wish to change their status from special student to regular student must contact the Highland Campus Admissions Office at admissions@highlandcc.edu.

**Transfer Students**
A degree-seeking transfer student must meet all of the regular student admission requirements. HCC reserves the right to determine which transfer courses will fulfill graduation or departmental program requirements. A maximum of forty-four (44) credit hours may be transferred to HCC and applied toward a degree, including hours transferred from other institutions as well as qualifying credit for prior learning.

Prior to registration, students transferring to HCC are required to submit official transcripts of all credits earned at other institutions. The Registrar will only evaluate successfully completed coursework from institutions accredited by the following agencies: Accrediting Commission for Community and Junior Colleges – Western Association of Schools and Colleges (ACCJC), Higher Learning Commission (HLC), Middle States Commission on Higher Education (MSCHE), New England Commission of Higher Education (NECHE), Northwest Commission on Colleges and Universities (NWCCU), Southern Association of Colleges and Schools Commission on Colleges (SACSCOC), and Western Association of Schools Senior College and University Commission (WSCUC) and the accreditation must have been in place at the time of attendance. If accepted as satisfying degree requirements, these transfer hours will be counted towards graduation and will be counted in the calculation of the GPA. A transfer student must complete sixteen (16) credit hours at Highland Community College to be eligible for graduation.

**Repeating a Course**
Highland Community College will transcript both the original and any repeated course. A grade with brackets [ ] indicates a course has been repeated. The record of both the original and the repeated course will be retained on the student's transcript, and the highest grade will be used in computing the cumulative grade point average.

**International Applicants**
For purposes of admission, international applicants are defined as all persons who are not citizens nor permanent residents of the United States. An international applicant must meet ALL the following requirements:

1. Submission of HCC application for admission **highlandcc.edu/apply** at least two months prior to the beginning of the semester for which application is being made.
2. Submission of official transcripts from all secondary schools and universities attended. Students must have a 3.0 minimum GPA on a 4.0 scale in secondary school.
    a. If English translation is needed: Students must have their foreign credits evaluated by an accredited, independent agency such as: World Education Services (wes.org), Educational Perspectives (educational-perspectives.org), or Educational Credential

Evaluators, Inc. (ece.org).

b. If English translation is not needed: Transcripts must be mailed, faxed, or emailed directly from the institution to HCC Student Services, 606 W. Main, Highland, KS 66035, faxed to: 785-442-6106, or emailed to: admissions@highlandcc.edu.

3. Submission of evidence of the ability to communicate in English, which will permit reasonable academic progress, through the following methods:
    a. Completion of a minimum of 15 weeks in an approved Intensive Language Center OR
    b. A score on the Test of English as a Foreign Language (TOEFL) of one of the following:
        i. 500 (paper-based)
        ii. 173 (computer-based)
        iii. 61 (internet-based)
    c. A score on the International English Language Testing System (IELTS) of 6.0
    d. Duolingo English Test Score of 90 or higher.

    *Students not possessing any of the above evidence of the ability to communicate in English will be evaluated for admission on a case-by-case basis.
4. Submission of the affidavit of support form and a bank statement dated within six months of the start of the semester.
5. Payment of $150 housing deposit and signed housing contract for HCC campus housing or provide written verification from a sponsor living within a 30-mile radius of the Highland campus or other HCC regional site the student is planning to attend.
6. Payment of $3,500, which is credited toward fees in the semester for which the I-20 is issued.
7. Provide a copy of the student's current passport (photo identification).
8. Before receiving an F-1 Visa, students must pay the $200 SEVIS fee for the I-901 document online at ice.gov/sevis/i901.

After Arriving at Campus:

9. Provide proof of adequate health insurance, which includes coverage for medical evacuation, repatriation, and medical coverage while in the US.
10. Provide a copy of the F-1 Visa to the Student Services Office.
11. Students, who are not citizens of the United States and come from TB endemic countries as defined by the WHO Global TB database, are required to have a TB skin test (known also as a PPD) upon arrival on campus.

**International Student Admission-Special Student**

International students whose I-20 is held by another college or university may take up to nine credit hours per semester at Highland Community College with no more than one online course and may be admitted as a Special Student after the following are provided:

1. Submission of HCC application for admission at **highlandcc.edu/apply.**
2. Letter (on official letterhead) from the PDSO or DSO of the SEVP university or college holding the I-20, stating that the student is maintaining their immigration status.
3. Copy of the I-20 form.
4. TB test (if applicable). Special students taking face-to-face classes must comply with "Additional Admissions Requirement for Face-to-Face Classroom Settings."

**Selective Admissions Policy**

Admission to Highland Community College does not guarantee acceptance and/or enrollment in the Practical Nursing or LPN to RN Completion Program (AAS Degree in Nursing). Additional admission requirements are listed below.

**Practical Nursing (PN)**
Admission to the Practical Nursing (PN) program recommends an active Certified Nurse Aide (CNA) certification and completion of the following prerequisite courses with a grade of C or higher:

- PSY 205 – Human Growth & Development (3 credit hours)
- ENG 101 – Composition I (3 credit hours)
- Computer Literacy elective (1 credit hour)
- Human Anatomy and Physiology with lab – minimum of 5 credit hours

*Note:* Anatomy and Physiology coursework has a seven-year expiration date. If the course was completed more than seven years ago, please contact the Nursing Department.

Practical Nursing program admits students at the Technical Center in Atchison, Kansas twice a year—during the Fall semester (August) and the Spring semester (January). Application deadlines are May 1 (fall) and October 1 (spring). There are 40 seats available annually for the PN program.

Applicants must submit the following items by the application deadline:

1. HCC Application
2. Nursing Program Application
3. NEX Assessment: Minimum average score: 138
4. Kansas CNA certification (highly recommended at time of application)
5. Proof of high school graduation or GED completion
6. Three Letters of Endorsement (form included in the information packet)
7. Official transcripts, including those verifying C or higher grades in prerequisite courses

Admission is based on a point system used to identify the most qualified applicants. Students who are accepted into the nursing program will receive an official acceptance letter outlining the next steps. This letter will include a list of additional required forms that must be completed and submitted to the Nursing Office in Atchison, Kansas no later than the time of orientation.

Instructions for completing a criminal background check and drug screening will also be provided in the acceptance letter. These requirements must be completed according to the directions given to remain eligible for enrollment.

A mandatory orientation will be held for all accepted students. Orientation provides important program information and expectations, and attendance is required to secure your place in the program.

Students must be at least 18 years old by graduation and able to meet the physical and mental requirements necessary for nursing practice.

**Associate Degree Nursing (ADN) – LPN to RN Bridge**
Applicants to the Associate Degree Nursing (ADN) – LPN to RN Bridge program must hold an active Licensed Practical Nurse (LPN) license. Applicants should have completed their practical nursing program at a regionally accredited postsecondary institution**;** however, graduates from non-regionally accredited programs may also apply.

Students who have successfully passed the NCLEX-PN are eligible to receive a 16-credit hour block of Credit for Prior Learning toward the Associate of Applied Science (AAS) in Nursing degree. Even with this credit, students may be required to complete additional coursework at Highland Community College to meet graduation requirements.
Prerequisite Courses:

Applicants must complete the following prerequisite courses with a grade of C or higher:

- Human Growth and Development (3 credit hours)
- Human Anatomy and Physiology with labs (minimum of 5 credit hours)

    - BS 104 Human Anatomy with lab (4 credit hours) and BS 105 Human Physiology with lab (4 credit hours)
- General Psychology (3 credit hours)
- Microbiology with lab (minimum of 4 credit hours)
    - BS 203 Microbiology with lab (5 credit hours)
- Composition I (3 credit hours)
- Composition II, Public Speaking, or Oral Communication (3 credit hours)
- Computer Literacy elective (1 credit hour)
- Humanities & Fine Arts elective (3 credit hours)

Note: Anatomy and Physiology and Microbiology courses must have been completed within the past seven years. Students with coursework older than seven years should contact the Nursing Department.

The Associate Degree Nursing (ADN) – LPN to RN Bridge program admits students at the Technical Center in Atchison, Kansas twice a year—during the Fall semester (August) and the Spring semester (January). Application deadlines are May 1 (fall) and October 1 (spring). There are 45 seats available annually for the PN program.

Applicants must submit the following items by the application deadline:

1. HCC Application
2. Nursing Program Application
3. NEX Assessment: Minimum average score: 138
4. Proof of high school graduation or GED completion
5. Copy of active, unencumbered LPN License
6. Three Letters of Endorsement (form included in the information packet)
7. Official college transcripts, verifying C or higher grades in prerequisite courses

Admission is based on a point system used to identify the most qualified applicants. Students who are accepted into the nursing program will receive an official acceptance letter outlining the next steps. This letter will include a list of additional required forms that must be completed and submitted to the Nursing Office in Atchison, Kansas no later than the time of orientation.

Instructions for completing a criminal background check and drug screening will also be provided in the acceptance letter. These requirements must be completed according to the directions given to remain eligible for enrollment.

A mandatory orientation will be held for all accepted students. Orientation provides important program information and expectations, and attendance is required to secure your place in the program.

**Kansas Army National Guard and Reservists**
Members of the Kansas Army National Guard can attend Highland Community College under an agreement between the Kansas Army National Guard and Kansas community colleges. The agreement allows Guard members to transfer military training and experiences under the recommendations of the American Council of Education (ACE) to Highland Community College and to gain credit through the College Level Examination Program (CLEP).

Generally, the Guard member must earn a minimum of sixty (60) credit hours of which sixteen (16) hours must be in residency (on campus, regional site, or online) at Highland Community College.

**Additional Admission Requirement for Face-to- Face Classroom Settings**
In compliance with Kansas Statute KSA 2009 Supp. 65-129, the College has instituted a tuberculosis prevention and control policy for students. All students applying for admission to Highland with classes in

a classroom setting at Highland Community College or at one of its regional sites will be required to complete a Tuberculosis Screening Questionnaire. Very Important: A yes response to ANY of the questions on the questionnaire will classify the student in a "high risk" tuberculosis category as defined by the Kansas Department of Health and Enrollment guidelines. These students will be required to complete a Tuberculosis Assessment at the local health department or medical clinic prior to attendance in a college classroom. Students who do not comply with this requirement will not be able to enroll in face-to-face classes.

## Credit for Prior Learning

**Credit by Examination**
The intent of credit by examination is to offer a method for students to demonstrate previously mastered competencies and to assist students in completion of educational goals at Highland Community College. Credit awarded by examination at HCC may not transfer to other post-secondary institutions. HCC does not accept credit awarded by departmental examination from other post-secondary institutions.

Students may earn college credit by attaining qualifying scores on the College Level Examination Program (CLEP), the Advanced Placement (AP) exams administered by the College Entrance Examination Board, and International Baccalaureate (IB).

Credit earned by examination will be placed on the student's HCC transcript after the start of the student's first semester of coursework at HCC. A grade of "CR" will be placed on the transcript but will not be included in calculating grade point average. The credit will count toward a degree at HCC.

**College Level Examination Program (CLEP)**
The CLEP permits students of any age or education level to gain college credit, following satisfactory completion of CLEP examinations. CLEP exams offered are sufficiently challenging to an individual who has a significant background in the subject area. Highland Community College will accept CLEP credit for scores at or above the American Council of Education's (ACE) credit-granting recommended score of 50 for the equivalent course or courses at HCC. For more information about taking CLEP examinations, visit the CLEP website. A list of CLEP examinations for which HCC awards credit is on page 12. Students must request their official transcript of CLEP scores be mailed to the HCC Registrar.

Sixteen (16) semester hours of credit is the maximum allowed toward a degree program through CLEP. A student's transcript will designate all credits earned through CLEP. CLEP credit earned does not count toward course load in any term. Students who fail a course offered by Highland Community College cannot replace that course with a CLEP subject examination covering similar content.

Exams may be retaken per the College Board's retake policy **(https://clep.collegeboard.org/earn-college-credit/taking- the-test)**: "Test takers may not repeat an exam of the same title within three months of the initial testing date. If you retake the exam within the three-month period, your administration will be considered invalid, your score will be canceled, and any test fees will be forfeited.

If you're repeating an exam of the same title and have a question regarding the date of the initial administration, you should immediately notify the test administrator and contact CLEP Services at 800-257-9558.

## Credit for Prior Learning – CLEP Exam Credit by Examination

| CLEP Subject Test | Exam Score | Credits | HCC Course ID and Title |
|---|---|---|---|
| American Government | 50+ | 3 | POL100 US Government |
| American Literature | 50+ | 6 | ENG202 American Lit: PreColonial Civil War and ENG209 American Literature: Reconstruction to Present |
| Analyzing and Interpreting Literature | 50+ | 3 | ENG104 Introduction to Literature |
| Biology | 50+ | 5 | BS 101 College Biology* |
| Calculus | 50+ | 5 | MAT106 Calculus I |
| Chemistry | 50+ | 10 | PS 111 College Chemistry I and PS 112 College Chemistry II* |
| College Composition | 50+ | 3 | ENG101 Composition I |
| College Mathematics | 50+ | 3 | MAT108 Contemporary Math |
| College Algebra | 50+ | 3 | MAT104 College Algebra |
| English Literature | 50+ | 3 | ENG212 British Lit I: Middle Ages to 1800 and ENG213 British Lit II: 1800 to Present |
| Financial Accounting | 50+ | 3 | BUS200 Financial Accounting |
| History of the United States I: Early Colonization to 1877 | 50+ | 3 | HIS101 US History to 1877 |
| History of the United States II: 1865 to Present | 50+ | 3 | HIS102 US History since 1877 |
| Human Growth and Development | 50+ | 3 | PSY205 Human Growth and Development |
| Introduction to Educational Psychology | 50+ | 3 | Psychology elective credit |
| Introductory Psychology | 50+ | 3 | PSY101 General Psychology |
| Introductory Sociology | 50+ | 3 | SOC101 General Sociology |
| Introductory Business Law | 50+ | 3 | BUS205 Business Law I |
| Principles of Macroeconomics | 50+ | 3 | BUS203 Macroeconomics |
| Principles of Management | 50+ | 3 | BUS201 Principles of Management |
| Principles of Marketing | 50+ | 3 | BUS210 Marketing |
| Principles of Microeconomics | 50+ | 3 | BUS204 Microeconomics |
| Spanish Language: Levels 1 and 2 | 50+ | 5 | LG 101 Elementary Spanish I |
| Spanish Language: Levels 1 and 2 | 63+ | 10 | LG 101 Spanish I and LG 102 Spanish II |
| Western Civilization I: Ancient Near East to 1648 | 50+ | 3 | HIS103 History of Western Civilization I |
| Western Civilization II: 1648 to the Present | 50+ | 3 | HIS104 History of Western Civilization II |

*Biology and Chemistry may not be used to satisfy laboratory science graduation requirements.

Highland Community College does not currently award credit for the following tests since we offer no equivalent courses: French Language: Levels 1 and 2, German Language: Levels 1 and 2, Humanities, Information Systems, Natural Sciences, Precalculus, and Social Sciences and History.

## Credit for Prior Learning – Advanced Placement (AP) Exam Credit by Examination

| Advanced Placement Test | HCC Course ID & Title | Credits | Required Score |
|---|---|---|---|
| 2-D Art and Design | A 103 Two-Dimensional Design | 3 | 3+ |
| 3-D Art and Design | A 104 Three-Dimensional Design | 3 | 3+ |
| Art History | A 201 Art History Survey: Prehistoric to Medieval and A 202 Art History Survey: Renaissance to Contemporary | 6 | 4+ |
| Biology | BS 101 College Biology | 5 | 3+ |
| Calculus AB | MAT106 Calculus I | 5 | 3+ |
| Calculus BC | MAT106 Calculus I and MAT 110 Calculus II | 10 | 3+ |
| Calculus BC: AB Subscore | MAT106 Calculus I | 5 | 3+ |
| Chemistry | PS 111 College Chemistry I | 5 | 3+ |
| Chemistry | PS 111 College Chemistry I and PS 112 College Chemistry II | 10 | 4+ |
| Drawing | A 107 Drawing I | 3 | 3+ |
| English Language and Composition | ENG101 Composition I | 3 | 3+ |
| English Literature and Composition | ENG102 Composition II: Literature & Research | 3 | 3+ |
| Environmental Science | BS 107 Intro to Environmental Science | 4 | 3+ |
| European History | HIS103 History or Western Civilization I and HIS104 History of Western Civilization II | 6 | 3+ |
| Human Geography | GEO212 World Regional Geography | 3 | 3+ |
| Macroeconomics | BUS204 Macroeconomics | 3 | 3+ |
| Microeconomics | BUS203 Microeconomics | 3 | 3+ |
| Music Theory | M 200 Music Theory I | 3 | 3+ |
| Physics 1: Algebra Based | PS 203 General Physics I | 5 | 4+ |
| Physics 2: Algebra Based | PS 204 General Physics II | 5 | 4+ |
| Physics C: Electricity and Magnetism | PS 216 College Physics II | 5 | 4+ |
| Physics C: Mechanics | PS 215 College Physics I | 5 | 4+ |
| Psychology | PSY101 General Psychology | 3 | 3+ |
| Spanish Language and Culture | LG 101 Spanish I and LG 102 Spanish II | 10 | 3+ |
| Spanish Literature and Culture | LG 201 Spanish III | 3 | 3+ |
| Statistics | MAT203 Basic Statistics | 3 | 3+ |
| United States Government and Politics | POL100 US Government | 3 | 3+ |
| United States History | HIS101 US History to 1877 and HIS102 US History since 1877 | 6 | 3+ |
| World History: Modern | HIS104 History of Western Civilization II | 3 | 3+ |

Highland Community College does not currently award credit for the following AP Exams: Chinese Language and Culture, Comparative Government and Politics, Computer Science, French Language and Culture, German Language and Culture, Italian Language and Culture, Japanese Language and Culture, and Latin.

## Credit for Prior Learning – International Baccalaureate (IB) Credit by Examination

| IB Test | Level/Score | HCC Course ID & Title | Credits |
|---|---|---|---|
| Biology | S/7 | BS 101 College Biology | 5 |
| Biology | H/4 | BS 101 College Biology | 5 |
| Chemistry | H/4 | PS 111 College Chemistry I **AND** PS 112 College Chemistry II | 10 |
| Economics | H/4 | BUS203 Macroeconomics **AND** BUS204 Microeconomics | 6 |
| English A: Language + Literature | H/4 | ENG101 Composition I | 3 |
| English A: Language + Literature | H/6 | ENG101 Composition I **AND** ENG102 Composition II | 3 |
| English A: Literature | H/4 | ENG101 Composition I | 3 |
| English A: Literature | H/6 | ENG101 Composition I **AND** ENG102 Composition II | 3 |
| Environmental Systems | S/4 | BS 107 Intro to Environmental Science | 4 |
| Environmental Systems | H/4 | BS 107 Intro to Environmental Science | 4 |
| Language B (Spanish) | S/6 or H/5 | LG 201 Spanish III | 5 |
| Mathematical Studies SL | S/4 | MAT103 Intermediate Algebra | 3 |
| Mathematics HL | H/4 | MAT106 Calculus I | 5 |
| Mathematics SL | S/4 | MAT104 College Algebra **AND** MAT105 Trigonometry | 3<br>3 |
| Philosophy | H/4 | PHI101 Introduction to Philosophy | 3 |
| Physics | S/4 | PS 102 Concepts of Physics | 4 |
| Physics | H/4 | PS 203 General Physics I **AND** PS 204 General Physics II | 5 |
| Psychology | H/4 | PSY101 General Psychology | 3 |
| Social and Cultural Anthropology | H/4 | ANT112 General Anthropology | 3 |
| US History | H/4 | HIS101 US History to 1877 | 3 |
| World Religions | S/4 | PHI105 Religions of the World | 3 |

**Advanced Placement Examinations (AP)**
AP refers specifically to courses offered in some high schools which are constructed and coordinated under the supervision of the College Entrance Examination Board. Before entering college, the student takes the examination, which is scored by Educational Testing Service. Students must request their official transcript of AP scores be mailed to the HCC Registrar. A list of AP examinations for which HCC awards credit is on page 13.

**International Baccalaureate Examinations (IB)**
Highland Community College awards credit to students who have participated in an International Baccalaureate program and have attained examination scores consistent with the guidelines on page 14. Students must request their official transcript of IB scores be mailed to the HCC Registrar.

**Credit for Practical Nursing Programs at Non-Regionally Accredited Institutions**
Students who completed a Practical Nursing program at a post-secondary institution not accredited by a regional accrediting association may be awarded 16 credit hours of Credit for Prior Learning toward their AAS in Nursing degree requirements based on successfully passing the NCLEX-PN. Even with the 16-credit hour block, students may still need additional credits at HCC in order to graduate with the AAS in Nursing degree. The granting of this credit by HCC does not guarantee transferability to any other institution.

**Credit for Military Training Education**
Students may earn college credit for education for non-collegiate educational experiences or armed services training. HCC is working to increase the number of articulated military occupations.

To see what credit can be currently earned, please check the Military Articulation Portal on the Kansas Board of Regents website. at **https://military.kansasregents.org/**. The Military Articulation Portal (MAP) is a tool connecting service members to postsecondary credit awardable for military learning. Kansas public institutions have evaluated military training and have agreed to award postsecondary course credit for service members' acquired skills and education. This free interactive search tool can be used by Veterans and Servicemembers to review credit for prior military learning offered by Kansas public postsecondary institutions.

The granting of this credit by HCC does not guarantee transferability to any other institution. HCC reserves the right to not accept transfer equivalency work that may be more than 5 years old.

**Technical Courses**
Technical education coursework taken at HCC may be applied to a Certificate program or the Associate of Applied Science degree for up to five years from the date such coursework was completed. Technical education coursework taken more than five years before a request for transfer of credit is made or HCC coursework taken more than five years before a request for certificate or degree is made, may be submitted to the Vice President of Technical Education for evaluation.

**Standard Course Syllabus**
There is a standard course syllabus for each course at HCC. The syllabus contains the course description, prerequisites, course content, credit hours, and course materials. Syllabi are located at **highlandcc.edu/academicaffairs/areasofstudy** under each individual area of interest. At the start of a course, the instructor will provide a First Day Handout which includes this syllabus content along with expectations and policies for that instructor's class.

**Credit Hour Definition**
Credit is the basic unit of collegiate level instruction assigned to a course or course equivalent learning. The credit hour is the unit by which HCC measures course work and calculates tuition charges.

**Course Load and Credit Hours**
A normal full-time course load consists of twelve (12) to eighteen (18) credit hours. Students enrolled in fewer than twelve (12) credit hours are considered part-time students. Students may register for up to eighteen (18) credit hours per Fall or Spring semester (or 12 credit hours over an 8-week session or 6 hours over a 4 week or shorter session). Students wishing to enroll in more than the semester maximum load must obtain approval. Visit the website at **highlandcc.edu/studentlife/student-resources/student-forms-index/** for the Overload Approval Form.

Students uncertain about the course load appropriate to their particular circumstances are urged to speak with an Academic Advisor. Highland Community College reserves the right to restrict students to less than full-time or to assign students to specific courses on the basis of placement test results, review of students' previous academic records, or other criteria as the College deems appropriate.

**Registration Procedure**
Class schedules are located on our website at **highlandcc.edu.** Questions concerning enrollment should be directed to the Student Services office (Highland campus), HCC Online, or the Regional Center you plan to attend.

Current students in good standing are eligible to enroll when registration is open. New students are eligible to enroll upon acceptance to the College. Enrollment is available for all students on a first-come, first-serve basis.

**College Success Classes**
College Success classes are scheduled to introduce all new students to the programs and requirements of the College. Attendance is mandatory. These sessions are specifically organized to help answer questions about admission, registration, enrollment, and program planning.

Students are encouraged to take the course in their first year at HCC. Students transferring more than thirty (30) hours into HCC or who have already taken a similar course are waived from this requirement. Sixty (60) credit hours or more will still be required based on the Associate degree the student pursues.

## Current Tuition and Fees

The HCC tuition and fees are in compliance with the laws of the state of Kansas and adopted by the Highland Community College Board of Trustees. These are subject to change at any time by the Board of Trustees. To determine the amount due from semester charges, Highland Community College will total all charges (tuition, all fees, room and board) and subtract verifiable financial aid (Pell, SEOG, loans, scholarships) and advance payments. If the student has a prior semester balance due that student will not be allowed to enroll until the prior semester's balance is paid in full. All tuition and fees are payable at the time of registration. Payment may be made with cash, check, or credit card. For the most current tuition and fees, please refer to the College website at **highlandcc.edu/admissions/tuition-fees/**

**Payment Plans**
Highland Community College offers payment plans as yet another way to make college more affordable. This payment plan is administered by Nelnet Business Solutions. Students taking a HCC course may finance a portion of their tuition, fees, and main campus Room/Board via one of the payment plans. There is a $30 non-refundable fee plus 2.85% servicing fee and 10% of your balance due immediately to establish a payment plan for each semester.

Students may set up a payment plan in their name, or they may authorize a parent, guardian or another individual to set up a payment plan on their behalf. To set up a payment plan or for more information visit

the website at **highlandcc.edu/admissions/tuition-fees/payment-plan/.**

**Third Party Payments**
Students receiving financial assistance from an employer or other 3rd party must notify HCC and provide documentation of this agreement. The required documentation for 3rd party students is a letter stating the student name, SSN, and classes approved for or the amount of the agreement, along with the 3rd party contact person and address for billing. This should be printed on letterhead and signed by the 3rd party. It is the responsibility of the student to submit this documentation prior to the start of classes. The College will bill the vendor. If the vendor does not pay the account in full, the student is responsible for any balance remaining.

**Billing**
By logging into MyHCC, students can view their statements online indicating amount due.

**Collections**
Accounts with outstanding balances and no payment arrangements with the Business Office could be sent to a collection agency.

**Refunds and Withdrawals**
1. If HCC cancels a course, the student will receive a full refund of tuition paid.
2. 100% refunds are given on student-initiated withdrawals within the first week of classes. (1st week is defined as three hours of class time in a 3-hour class; five hours of class time in a 5-hour class; and one hour of class time in a 1 credit hour class.)
3. 50% refunds are given on student-initiated withdrawals within two weeks of the class beginning. (Two weeks is defined as six hours of class time in a 3-credit hour class; 10 hours of class time in a 5-credit hour class; and two hours of class time in a 1 credit hour class.)
4. 0% refunds are given at the beginning of the 3rd week of classes. (Three weeks is defined as attending seven hours in a 3-credit hour class; 11 hours in a 5 credit hour class; and three hours in a 1 credit hour class.)

Campus students should contact their Advisor, regional students must contact the Regional Center Director, and online students must send an email to hcconline@highlandcc.edu to process withdrawals. For students who receive financial aid, refunds will be determined according to Federal Financial Aid regulations. Highland Community College will use the institutional policy or the 'Return of Title IV Funds' formula issued by the U.S. Department of Education.

**Housing and Food Service**
On-campus apartment-style housing is available at Highland Community College on a first-come basis. A completed contract and deposit will hold a housing space as received. Summer on-campus housing is also available for students enrolled in the Highland Summer Blitz session. Contact the Residential Life Office for details at 785-442-6071.

The deposit is a refundable damage deposit. Students must complete a required check out procedure with the College staff to confirm status of the room and contents. Pending the results of the checkout procedure and other debts to the College, a refund will be sent within forty-five (45) days of the end of the academic year. The contract also includes paid utilities and Internet access.

The Cafeteria, serving breakfast, lunch, and dinner, is located in the Student Union on the Highland campus. All dining hall costs for students living on campus are included in housing rates. Commuter students and guests can purchase meals at these rates.

# HCC Financial Aid

Financial aid from various sources is available to eligible students. The College administers a variety of federal, state, and local programs. A major source of funding for educational programs is obtained through federal and state governmental agencies. Financial aid staff will only ask for documents necessary to determine eligibility for financial assistance. All information students provide will be held in confidence as required by the Family Educational Rights and Privacy Act (FERPA) of 1974. Students may contact the financial aid office by calling 785-442-6000 ext. 2002 or emailing financialaid@highlandcc.edu.

**Getting Access to Financial Assistance**
The financial aid office assists students in gaining access to available sources of financial assistance to complete their college program. Federal, state, and local governmental agencies fund an assortment of financial assistance programs. Funds may also be obtained from various private businesses, foundations, or other philanthropic organizations.

**How to Apply for Federal and State Financial Aid**
Complete the Free Application for Federal Student Aid (FAFSA) electronically at **www.studentaid.gov**. When completing the FAFSA, it is important to indicate Highland Community College as the first school choice; the HCC school code is 001921. After submission, the applicant should receive a response from the financial aid office within two to four weeks.

The FAFSA is used for all federal, most state, and some independently funded financial aid programs. For timely processing, please provide the financial aid office with:

1. All requested documents to verify income, citizenship status, household size, and other essential data elements.
2. Documentation of a valid social security number upon request.
3. All other requested documents that are related to verification of your eligibility for financial aid funds.

**The Financial Aid Application Process**
Follow these guidelines to make the application process easier:

1. Apply early! Gather the requested documents and apply well before the published deadlines so there is time to resolve any problems.
2. Students and their parents must maintain copies of IRS tax forms, Social Security or Pension Benefit Letters, and other official documents needed to complete the application and verify family income.
3. Read all instructions carefully. Ask for help if necessary.
4. Make certain the student's mailing address is reported accurately and report any change of address.
5. Enter zero (0) instead of leaving items blank.
6. When mail is received from the College, the Department of Education, the State Scholarship Commission, or other similar agencies, open immediately, read carefully, and respond promptly.
7. Even if the student receives financial assistance, that aid will rarely cover all expenses while attending college. The student will be expected to contribute some portion of the total cost.

**Eligibility Requirements for Federal Financial Aid**
In addition to meeting all institutional admission requirements, students must meet the following requirements to be eligible to receive federal financial aid.

1. Be a U.S. citizen or eligible nonresident.
2. Have earned a high school diploma, GED, or recognized equivalent at the time of admission.

3. Enroll as a student in an eligible program with the objective of earning a degree or certificate.
4. Maintain satisfactory academic progress as defined by the College.
5. Cannot be in default, nor owe a refund or repayment, on a federal grant or education loan.
6. Establish a complete financial aid file.
7. Meet current federal guidelines for financial need.

**How Financial Need is Determined for Federal and State Programs**
Financial need is the difference between the cost of attendance (COA) at HCC and the amount the student and/or the student's family can reasonably be expected to contribute to the COA. The Student Aid Index (SAI) is computed based on documented income and other related information such as family size and family assets that must be furnished by every applicant completing the FAFSA. The data is used in a Congressionally approved needs analysis formula which determines the SAI. This figure can be found on the FAFSA Submission Summary and is used by the College to determine the total amount of federal financial aid one may receive.

After an application for federal financial aid is processed, depending on the availability of funds, the financial aid office will put together an individualized package, based on the applicant's computed SAI, and the institution's scheduled COA, also known as the student budget.

## Federal Financial Aid Programs

**Federal Work Study Program**
The Federal Work Study Program provides part-time jobs for students with financial need. Jobs are available on campus and with approved community partners. The program encourages community service work and work related to the student's course of study.

**Federal Pell Grant**
Pell grants are need-based federal funds intended to provide the basis for a student's financial aid package to help cover the cost of attendance. The actual amount of the grant will depend upon the number of credit hours enrolled and demonstrated financial need. Not all students will qualify for the Pell grant. Generally, grants do not have to be repaid.

**Supplemental Educational Opportunity Grant**
The Federal Supplemental Education Opportunity Grant (FSEOG) is a federal fund that supplements Pell grant awards for students with exceptional financial need who are enrolled in at least six credit hours a semester. Students are offered these awards on a first-come, first-served basis, depending on certified eligibility, demonstrated need, and availability of funds.

**Student Direct Loans**
HCC participates in the federally sponsored Direct Loan Program. Students demonstrating need may be eligible to receive a Subsidized Direct Loan with interest deferred by the federal government while the student is in school. Students who do not demonstrate need based upon their FAFSA may qualify for an Unsubsidized Direct Loan. Although the student may defer payment of interest on the loan until after leaving school, he or she remains responsible for all interest that accrues from the disbursement date of the loan. Students apply for these programs by completing the FAFSA and meeting all other institutional, federal, state, academic, and financial aid eligibility requirements. Loans are subject to interest rates and origination fees. Origination fees are deducted from the loan before the funds are sent to the college from the Federal Treasury. The student borrower must repay loan funds.

**Parent PLUS Loan**
The Federal Parent Loan to Undergraduate Students (PLUS) is available to parents as a means of helping

their dependent children pay for college. Parents may borrow an amount up to the student's cost of attendance minus any other financial aid received. Repayment generally begins 30-60 days after the second loan disbursement but can be deferred until up to six months after graduation. The PLUS loan has a higher origination fee and interest rate than student loans.

## Additional Financial Assistance

**Awards and Scholarships**
HCC offers a variety of awards and scholarships. The sources of these funds include the state, the College, and private donors. Scholarships are available in academic, performance, and athletic areas. For information containing a complete list of awards and requirements, please see the website at **highlandcc.edu/pages/scholarships.** Outstanding Academic Achievement is a cumulative grade point average (GPA) at or above 2.8.

**Veterans Affairs Educational Benefits**
The Registrar's office provides administrative assistance to obtain benefits for veterans enrolled at HCC.

There are numerous ways to apply for VA benefits depending on the type of benefit you are seeking. Please visit **www.va.gov/education/how-to-apply/** to determine which application corresponds to your situation. HCC also requires students to complete the following forms prior to being certified through the Registrar's office.

- HCC Enrollment Certification Request form
- HCC Veteran Services Compliance Agreement form
- Certificate of Eligibility
- Students must be enrolled in HCC courses prior to verification

Students may find this information and more at **highlandcc.edu/admissions/veterans-affairs/**.

*Note: The Veterans Benefits and Transition Act of 2018 requires HCC to allow students receiving VA benefits through chapters 31 or 33 to start courses without penalty. Without penalty means HCC cannot assess late fees, deny access to classes, or require the student to borrow additional funds to cover up-front costs.

## HCC Student Status Definitions for Continued Financial Aid Eligibility

**Standards of Satisfactory Academic Progress (SAP) for Financial Aid Eligibility**
Federal regulations require students receiving federal financial aid, including Pell Grants, Supplemental Educational Opportunity Grants, Federal Work Study, and Federal Direct Student Loans, to maintain satisfactory academic progress towards a degree or certificate to remain eligible to receive federal financial aid. Progress will be measured at the end of each semester according to three factors: 1) cumulative grade point average (GPA); 2) cumulative completion of credit hours; 3) and the time frame allowed for completing a certificate or degree.

The standard requirements are:

- **Grade Point Average (GPA)** - A minimum 2.0 GPA measured by cumulative credit hours. All hours, except for developmental and audit hours, are counted in a student's GPA. Developmental hours are included as hours paid and passed but are not calculated in the GPA. Audit hours are NOT considered for federal financial aid.
- **Minimum Completion Rate** - Students must complete 66.67% or two-thirds of all hours attempted. This will be measured using cumulative hours. Completion rate is calculated as

follows: hours completed / (divided by) hours attempted x (multiplied by) 100 = completion percentage.

- **Maximum Time Frame 150%** - Two-year degree seeking students may not receive federal financial aid for more than 150% of the required hours to complete a degree. Calculation: HCC degrees require students to complete 60 credit hours. 150% x (multiplied by) 60 = 90. At HCC, students may not receive federal financial aid for more than 90 hours.

**Good Standing Status:** Students who have a 2.0 cumulative grade point average (GPA); have completed 66.67% (two-thirds) of all attempted hours; and have not attempted more than 90 cumulative hours, will be in good standing for federal financial aid purposes and will be eligible to receive federal financial aid.

**Warning Status:** Students who have been in good standing but fail to meet the minimum requirements stated above will be placed on warning for the following semester of attendance but will continue to receive federal financial aid. At the end of the warning semester, students must have a cumulative 2.0 grade point average (GPA) and must have a 66.67% or two thirds cumulative completion rate. There is no warning status for students who have exceeded the maximum time frame of 150%. These students go directly into financial aid ineligible status.

**Financial Aid Ineligible:** A student will become financial aid ineligible from all federal funds if he or she is currently in a warning status and fails to return to good standing by the end of the next semester. To regain federal financial aid eligibility, the student must either submit, and be granted, a satisfactory academic progress (SAP) appeal or return to good standing per the good standing status criteria. The student may continue to take classes with HCC but will be required to pay for classes instead of using federal financial aid.

**Appealing the Financial Aid Ineligible Status:** Students who are financial aid ineligible will receive a financial aid ineligible notification letter via email at the end of the semester. The student may submit an appeal online at **highlandcc.edu/admissions/tuition-fees/financial-aid/form-sap-appeal/.** The student will need to provide a reasonable explanation of the extenuating circumstances which resulted in the student's inability to achieve good academic standing, what has changed in the student's situation to allow him or her to start working towards good academic standing, and what steps the student will take to maintain good academic standing. Documentation must be provided with the appeal to support the student's explanation. Documents provided will remain primarily with the financial aid office but may be shared with the CARE team or school counselor if deemed necessary. The appeal will be reviewed by the SAP committee, and the decision of the committee is final. The deadline for all appeals is the first day of class each semester.

**Probation Status:** Probation occurs when a financial aid ineligible student submits an appeal form to the SAP committee, and the appeal is approved. Probation students will be eligible for federal financial aid for one additional semester. Students on probation may need to set up an academic plan with an HCC advisor and will be notified if required to do so. Academic plans are designed to help guide the student back to good standing and are customized to each student. If a student shows good academic progress and has followed their academic plan, but has yet to return to good standing, the student may be allowed to receive financial aid for an additional semester only if a new academic plan is in place before the semester begins. If a student does not show good academic progress and/or does not follow their academic plan, the student will return to financial aid ineligible status and must return to good standing by paying on their own before being eligible for federal financial aid again.

**Maximum Time Frame:** Students who have exceeded the 150% maximum time frame, as stated above, will need to submit the maximum time frame appeal form. Students who do not have a 2.0 GPA or 66.67% (two-thirds) completion rate will not be considered for a maximum time frame appeal. An appeal will not be reviewed until all previous college transcripts have been received. Students must inform the financial aid office of all

other colleges they have attended. The maximum time frame appeal must include a graduation check obtained from the registrar's office to ensure the classes the student is enrolled in will count towards completing their degree. Students will only be eligible to receive federal financial aid for the credit hours needed to finish their degree at HCC. If it is determined that no hours are needed, then the student is not eligible for federal financial aid. There is no appeal once a student is out of hours that are eligible for federal financial aid.

**Repeated Coursework**
Students needing to retake a previously passed course can receive federal financial aid for one additional attempt. For federal financial aid, an A, B, C, or D is considered passed, regardless of the program of study. Federal financial aid can be used towards repeating failed courses only if the student is still eligible for federal financial aid. Technical programs, certificate programs, or course prerequisites may require a minimum earned grade for continuation.

Transfer credits that count toward the student's current program will be counted as both attempted and completed hours when determining a student's GPA, minimum completion rate, and maximum time frame. Per federal regulations, these hours must be counted regardless of whether the student received financial aid for those hours or not.

## Scholastic Honors

**President's Honor List**
Students completing a minimum of twelve credit hours within a semester and achieving a semester grade point average of 4.0 are placed on the President's Honor List.

**Dean's Honor List**
Students completing a minimum of twelve credit hours within a semester and achieving a semester grade point average of 3.5 or higher (with no grade lower than a "C") are placed on the Dean's Honor List. The scholastic honors lists are issued at the end of each semester.

**Grade Designations**

| Letter Grade | Description | Points per credit hour |
|---|---|---|
| A | Excellent | 4 |
| B | Above Average | 3 |
| C | Average | 2 |
| D | Below Average | 1 |
| F | Unsatisfactory | 0 |
| CR | Pass | 0 – not counted |
| NC | Fail | 0 – not counted |
| I | Incomplete | 0 – not counted |
| AU | Audit | 0 – not counted |
| W | Withdrawal | 0 – not counted |
| WF | Withdrawal/Failing | 0 – not counted |
| X | Grade Withheld | 0 – not counted (Partial Transcript for Administrative Reasons) |

*All letter grades earned will be included in a student's permanent academic record or transcript.*

**Credit/No Credit**
A student may request to take a class as Credit/No Credit with written approval from the instructor and the Vice President for Academic Affairs. The completed and signed approval form must be submitted to the Registrar's office prior to the first day of class. The courses are added to a student's credit hour total but

are not included in the grade point average. A “no credit” (NC) grade results in no credit earned for the course attempted.

**Incomplete**
Students who have actively pursued a course, are making a passing grade and cannot complete the required work in a course because of illness or some other approved reason, may be issued a grade of “I” by the instructor. A course recorded as “I” (Incomplete) must be completed within the first four (4) weeks following the termination of the semester, except when an extension of time is granted by an agreement between the Chief Academic Officer and the instructor of the course. If the coursework is not completed and given to the instructor by this deadline, the “I” grade will convert to an “F” grade. A student who has an “I” grade may not re-register in that course while the incomplete is in progress. However, if the “I” has changed to an “F”, the student may then re-register for the course.

**Audit**
Auditing a course means a student attends a course regularly without being required to take exams, complete assignments, or perform other tasks required to earn a grade. Students receive no credit for audited courses. Audited courses will not be considered in determining full-time enrollment status and may not satisfy enrollment requirements for graduation purposes. Students may not enroll to audit a course until the first day the class meets. Requests to audit a course will be granted only if space is available in the course and permission has been given by the instructor and the Chief Academic Officer. Credit enrollment cannot be converted to audit status and audit enrollment cannot be changed to credit enrollment. Students may not enroll for credit, drop the course, and then re-enroll for audit in the same course section.

Tuition and fees are the same as that charged for credit courses. Financial Aid cannot be used to pay for audited courses. For audit enrollment, payment is due on the same day you enroll. Student understands the following:

- I will not earn any college credit for this course.
- I cannot convert my audit enrollment in a course to earn college credit.
- I cannot change to audit status in a course I am currently enrolled in for credit.
- I cannot audit a course which I plan to take for credit in the future.

**Withdrawal**
***W—Administrative Withdrawal***
The College reserves the right to withdraw students from classes at any time during the semester. Generally, these withdrawals are initiated as a result of disciplinary issues.

***W—Student Initiated Withdrawal***
A student may withdraw from a course by the designated date each semester. A student-initiated withdrawal must be requested on the College’s official add/drop form, which may be obtained from the student’s Academic Advisor/Regional Center Director. The “W” appears on the student’s permanent academic record, but is not used to calculate cumulative grade point average.

**Academic Status**
Cumulative grade point average (GPA) is calculated on the basis of all grades, “A” through “F”, earned in college credit courses at Highland Community College. If a student repeats a course, the highest grade earned will be counted in the grade point average, although both grades will appear on the permanent academic record.
**Determining Student Class Standing**
A student who has earned:

- 1 credit hour to 29.5 credit hours = Freshman status
- 30+ credit hours = Sophomore status

**Final Examinations**
All final exams will be given in the regularly scheduled classrooms. The time each exam begins is available from each instructor or from the Academic Affairs office on the Highland Campus. All exams are scheduled for two hours except activity-based courses. Final exams for all other scheduled instruction will be given during the last regular class period or in the online classroom. The College reserves the right to revise these dates. Independent study arranged courses, and evening class finals will be scheduled by the course instructor.

Requests for exceptions to the final examination schedule should be directed to the Vice President for Academic Affairs (VPAA). Only with appropriate documentation of a major life event and approval from the VPAA will a student be permitted to deviate from the announced final examination schedule.

Note: *Students will not receive approval because of conflicts with travel arrangements, so students must be careful to schedule flights after their last final is completed.*

**Grade Change Policy**
In any course of instruction for which grades are awarded, the instructor of the course shall determine the grade to be awarded in accordance with the course syllabus and the grading designations listed above. The determination of the student's grade by the instructor shall be final in the absence of mistake, fraud, bad faith, incompetence, or caprice. The instructor of record may correct a grade given in error within one semester of the initial award of the grade.

**Academic Probation & Suspension**
HCC wants students to succeed and encourages students to make responsible academic choices. Therefore, the student's course load will be appropriately limited as defined in the course load policy (on page 15). In addition, students must maintain at least a 2.00 Cumulative Grade Point Average (CGPA) to remain in good standing.

**Academic Standings: Initial Standing**
Student has attempted fewer than 9 cumulative credit hours with a CGPA $\geq$ 2.00 for all classes attempted.

**Good Standing**
Student has attempted at least 9 cumulative credit hours and has a CGPA $\geq$ 2.00 for all classes attempted.

If the student's CGPA drops below a 2.00, HCC will place the student in one of the following categories to encourage the student to improve:

**Academic Alert**
The student has a CGPA lower than 2.00 after attempting 9 credit hours or fewer. The student may continue to enroll in classes after the student meets with his or her academic advisor to discuss a plan for academic improvement.

**Academic Probation**
The student has a CGPA lower than 2.00 after completing 9 or more credits at HCC. The student may continue to enroll in classes after the student meets with his or her academic advisor to discuss a plan for academic improvement and provided the student earns higher than a 2.00 Term GPA (TGPA) in the next full semester.

**Continuing Academic Probation**
The student has a CGPA lower than 2.00 for all courses completed in residence and the last Term GPA is 2.00 or higher.

**Academic Suspension**
If a student on academic probation earns a TGPA of less than 2.00 for all classes attempted, the student will be sus- pended and will not be allowed to enroll for the next term, excluding summer term (as summer term may not be used as a "suspension term").

A student that earns a TGPA of 0.00 for all classes attempted will be suspended and will not be allowed to enroll for the next term.

**Suspension Rules**

- Summer term may not be used as a "suspension term."
- Summer term may be used to improve the GPA. If a student wishes to enroll for summer term after being suspended, the student will need to apply for an exception to enroll.
- Initial suspension is for one term, excluding summer term.
- A second suspension is for two terms, excluding summer term.
- If a student who has served the suspension time for initial suspension or second suspension wishes to return, he or she will be allowed to re-enroll only after meeting with an academic advisor. The student will be placed on academic probation.
- A third suspension is for two full years or four academic terms, excluding summers.
- If a student who has served the third suspension time of two years wishes to return, the student must meet with an advisor in order to get the suspension hold removed.

Note: Academic probation/suspension is different from financial aid warning/probation/ineligibility. Please see Financial Aid SAP policy for information about this topic.

**Academic Appeal**
Students may appeal an academic decision only if the student believes it was based on illegal discrimination or arbitrary and capricious actions. For more information about illegal discrimination, refer to the Grievance Process, which can be found online or in hard-copy form in the Student Services Office. For information about arbitrary and capricious actions, contact the Office of the Dean of Students.

## Graduation Requirements

In order to graduate, students are expected to complete the graduation requirements listed in the catalog that was in effect at the time they first enrolled. However, if graduation requirements change while the student is pursuing a degree, the student will have the choice of continuing with the old requirements, where those courses are available, or accepting the new requirements in order to graduate. If a student sits out two consecutive semesters, the student will be readmitted under the graduation requirements in the current catalog.

Graduation requirements are as follows:

- Completion of the general education requirements.
- Completion of a minimum of 60 credit hours and an overall grade point average of at least 2.0. Courses must be 100 level or above.
- Students who complete requirements for the Associate of Arts or Associate of Science degree are not eligible to apply for the Associate of General Studies degree.
- For the Associate of Applied Science Degree, completion of the departmentally approved program.
- A student must earn 16 hours of credit as a Highland Community College student for completion of the Associate's Degree being sought. Any student who applies for graduation must provide an official high school or general education diploma (GED) transcript.

- Highland Community College holds one commencement ceremony in May of each year. Students completing graduation requirements must submit an application by March 15 to participate in the commencement ceremony. It is the responsibility of the student to meet all requirements for graduation, and to check with the Registrar's Office well in advance so there are no deficiencies.

## Additional College Policies

**Privacy of Records**
Highland Community College maintains various student records to assist students in achieving their educational goals. These records are regarded as confidential, and information contained in them can be released only by written permission from the student. The College complies fully with the provisions of the Family Educational Rights and Privacy Act (FERPA).

Highland Community College designates the following student information as public or "Directory Information."

- Name
- Address (permanent)
- Date of birth
- Major field of study
- Full or part-time enrollment status
- Highland E-mail address
- Photographs
- Classification (freshman, sophomore)
- Dates of attendance
- Degrees
- Awards received
- Previous institutions attended
- Sports - height, weight, and picture
- Participation in recognized activities

Currently enrolled students may withhold disclosure of this information to institutional persons or organizations. To withhold disclosure, written notification must be received in the Office of the Registrar by the end of the first week of each semester. This also will keep the student out of the Campus Directory which is published each semester and which is available to anyone on request.

All other information may not be released without written consent of the student. Grades, social security numbers, and student schedules may not be released to anyone other than the student and NEVER over the phone. Any questions concerning FERPA may be referred to the Office of the Registrar.

**Release of Disciplinary Information**

1. Access to any student's disciplinary file shall be governed by provisions of the Family Educational Rights and Privacy Act (FERPA).
2. Only the student charged and those College officials who have a legitimate educational interest in disciplinary information may have access to the files.
3. All other inquiries, including but not limited to employers, governmental agencies, news media, relatives, friends, or local police agencies must have a written release from the student to gain access to College disciplinary files.
4. When cases involve any crime of violence, the results of the disciplinary proceedings will be released upon request to the victim(s).
5. In cases of Title IX sexual misconduct, the results of the disciplinary proceedings will be

released to the victim(s).

Every effort will be made by the College to respect the privacy of the student. However, if the identity of the student(s) has been publicly disclosed in the news media, the College reserves the right to respond as it deems appropriate to describe fairly and accurately the disposition of disciplinary matters.

**Transcripts of Academic Records**
A transcript is a certified, official copy of a student's permanent academic record. It contains confidential information and cannot be released without a student's written permission and signature. Official HCC transcripts can be requested through the National Student Clearinghouse. In-person official transcript requests will be accepted only at the main campus in Highland, 606 West Main St., Highland, KS, at the Office of the Registrar. Transcript hours are Monday through Friday, 8:00 am to 4:30 pm. Please have your student I.D. or driver's license available for identification purposes. There is a fee for each transcript requested. Unofficial transcripts can be accessed by logging into the student's MyHCC account. Information about transcript ordering is available on the HCC website, **highlandcc.edu/academics/academic-affairs/office-of-registrar/transcripts/**.

**Financial/Materials**
A properly authorized agent of the College may restrict a student who has failed to meet financial obligations or to return library or other materials to the College.

**Judicial**
The Student Conduct Officer may suspend or place on disciplinary probation following due process a student who has failed to honor the Highland Community College Standards of Conduct as outlined in the Student Handbook.

**Condition of Registration**
The Admissions Office may restrict a student who has not fulfilled a duly established condition of registration.

**SARA Complaint Resolution Policy**
Complaints regarding State Authorization Reciprocity Agreement (SARA) courses delivered by SARA member community colleges may be filed by students enrolled in those courses with the Kansas Board of Regents office.

## Academic Standards

Students are expected to spend at least two hours in preparation for each hour of class session. For twelve semester hours, at least twenty-four hours per week should be budgeted for class preparation. Laboratory hours meet one and a half hours of instruction per week for one hour of credit. Other instruction may vary with each program.

Students who are employed and attending college should consider carefully the number of hours they undertake in order to ensure that they have sufficient study time.

The College reserves the right to select from the courses listed in this catalog those that can be offered during any session. Further, the College reserves the right to change any of its offerings or regulations without previous notice.

**Responsibility of the Student**
It is the student's responsibility to meet course prerequisites and graduation requirements. Students who

plan to complete the admission and graduation requirements of a transfer institution should refer directly to the catalog of that institution and the transfer guidelines.

The curricula of Highland Community College are described in this catalog. HCC offers a number of resources to assist students in planning their educational programs. Academic Advisors are available, ***but it is the student alone who makes final choices and assumes responsibility for decisions and actions.***

Please consult the Student Handbook at **highlandcc.edu/abouthcc/policies-procedures/** for additional details about academic student policies.

**Academic Integrity**
Highland Community College faculty and students have the responsibility to maintain high academic standards. Academic dishonesty by students, which includes but is not limited to cheating, fabrication, plagiarism, or facilitation of academic work, is a reason for disciplinary action. Students should submit their own academic work based on their instructor's written directions (see First Day Handouts). All faculty are expected to respond to and document any known cases of academic dishonesty, including referral to the Student Conduct Process (see Student Conduct Process section of Student Handbook).

Cheating and other forms of academic dishonesty affect more than just the student who engages in cheating, plagiarism, etc. It frustrates the honest efforts of other students, degrades the learning environment, and reflects poorly on any institution that tolerates it. Ultimately tolerance of academic dishonesty de- grades the value of the education, degree, credits, that a student receives from HCC. Academic dishonesty violations become part of the student's record. Multiple violations of the Academic Integrity policy may result in more serious penalties, including possible suspension or expulsion from HCC.

**Electronic/Online Testing**
HCC makes use of electronic/online testing platforms/programs (e.g., Assessment Technologies Institute® [ATI] & Canvas®). Unless otherwise specified, in writing by the instructor, HCC expects students who participate in electronic/online examinations to only use and interact with the testing platform during their exam. This means HCC faculty/staff will consider exiting the testing screen, splitting a computer/tablet/other device display with the testing screen and other programs, and or accessing re- sources (e.g., phones, books, persons, etc.) not explicitly allowed by the instructor as a form of academic dishonesty.

**Classroom Disruption**
A student who disrupts the classroom environment (in-person or virtual) will be held accountable for the disruption. Classroom disruption for the purpose of this Handbook will be any behavior that objectively and substantially interferes with or prevents others from participating in a given class/course. Disruptive behavior is not limited to in-person classroom interactions. A student may also be considered in violation of this policy if their behavior in a virtual classroom (e.g., Zoom, Canvas, etc.) has the same effect of interfering with or limiting others' ability to participate in the class/course.

Examples of classroom disruption may include but are not limited to threats of violence (in person or via electronic media), tardiness (excessive or repeated), creating distractions within the classroom (e.g., talking, use of electronic devices, music, etc.), and more.

It is the responsibility of each faculty member to explicitly state any specific forms of classroom disruption not included above or to make permissible any activity or behavior that is listed above.

If a faculty member does not provide such direction, in writing, within the first-day handout (or in some

other written communication to their class), the definition above will be used when considering allegations of classroom disruption.

**Immediate Removal from Class**

In extreme cases, a student may be removed from and denied access to their classroom if their behavior is objectively severe in its disruption of the classroom. In such cases, the student may not return to class until their case is reviewed and or resolved. After a student is removed from the class (severe disruptions) the student receives written communications/notifications per the Student Conduct Process.

Examples of removable behavior include but are not limited to: engaging in or encouraging a physical fight, a clear and direct threat of violence against a person, group, or property (whether or not the object of the threat is present), failure to comply with reasonable requests made by class instructor, or other behavior that severely interferes with or limits the business of the class.

**Grade Appeals**

Students are responsible for meeting the academic performance standards for each course in which they are enrolled. The course instructor is responsible for the establishment of the criteria for grades and the consistent evaluation of student academic performance. However, where there are no related allegations of academic misconduct against the student, a student has the right to appeal grades for a particular assignment/exam/course. These appeals are submitted via the Highland Community College website at www.highlandcc.edu/studentlife/student-resources/student-forms-index/

The grade appeal procedure is NOT a review of the faculty's grading method. The grade appeal procedure is available only for the review of allegedly capricious grading.

Capricious grading, as the term is used here, consists of any of the following:

1. The assignment of a grade to a particular student on some basis other than documented performance in the course.
2. Applying more stringent or demanding standards than were applied to other students in the course.
3. A substantial departure from the instructor's previously stated (written) standards.

The Vice President of Academic Affairs (for academic courses) or the Vice President of Technical Education (for technical courses) serves as the evaluator. The evaluator reviews all materials from the student and instructor. Within 10 working days, emailed notification is sent to the student of the decision to uphold the grade as posted or change the grade. If a grade change is necessary, the evaluator submits the change to the Registrar.

## Systemwide Transfer (SWT) Courses

"Approved by the Kansas Board of Regents, Systemwide Transfer (SWT) courses transfer to any Kansas public institution offering an equivalent course."

| COURSE ID & HOURS | INSTITUTION COURSE TITLE | SUBJECT / DISCIPLINE | SWT CODE | SWT COURSE TITLE |
|---|---|---|---|---|
| BUS103 (3 Hours) AND BUS105 (3 Hours) | ACCOUNTING I & ACCOUNTING II | ACCOUNTING | ACC101 | FINANCIAL ACCOUNTING |

| | | | | |
|---|---|---|---|---|
| BUS200 (4 Hours) | FINANCIAL ACCOUNTING | ACCOUNTING | ACC101 | FINANCIAL ACCOUNTING |
| BUS216 (3 Hours) | MANAGERIAL ACCOUNTING | ACCOUNTING | ACC201 | MANAGERIAL ACCOUNTING |
| ANT112 (3 Hours) | CULTURAL ANTHROPOLOGY | ANTHROPOLOGY | ANT1010 | INTRODUCTION TO CULTURAL ANTHROPOLOGY |
| A 101 (3 Hours) | ART APPRECIATION | ART | ART1010 | ART APPRECIATION |
| A 201 (3 Hours) | ART HISTORY SURVEY:PREHISTORIC TO MEDIEVAL | ART | ART1020 | ART HISTORY I - PREHISTORIC TO MEDIEVAL |
| A 202 (3 Hours) | ART HISTORY SURVEY: RENAISSANCE TO CONTEMPORARY | ART | ART1030 | ART HISTORY II: RENAISSANCE TO CONTEMPORARY |
| A 107 (3 Hours) | DRAWING I | ART | ART1040 | INTRODUCTION TO DRAWING |
| A 103 (3 Hours) | TWO DIMENSIONAL DESIGN (2-D DESIGN) | ART | ART1050 | TWO DIMENSION DESIGN |
| A 104 (3 Hours) | THREE-DIMENSIONAL DESIGN (3-D DESIGN) | ART | ART2010 | THREE DIMENSION DESIGN |
| BS 101 (5 Hours) | COLLEGE BIOLOGY | BIOLOGY | BIO1010 | GENERAL BIOLOGY AND LAB FOR NON-MAJORS |
| BS 101 (5 Hours) | COLLEGE BIOLOGY | BIOLOGY | BIO1020 | BIOLOGY I AND LAB FOR MAJORS |
| BS 107 (4 Hours) | INTRODUCTION TO ENVIRONMENTAL SCIENCE | BIOLOGY | BIO1040 | ENVIRONMENTAL SCIENCE LECTURE AND LAB (COMBINED) |
| BS 104 (4 Hours) AND BS 105 (4 Hours) | HUMAN ANATOMY & HUMAN PHYSIOLOGY | BIOLOGY | BIO2030 | ANATOMY AND PHYSIOLOGY AND LAB - 8 CREDIT HOURS |
| BS 203 (5 Hours) | MICROBIOLOGY | BIOLOGY | BIO2040 | MICROBIOLOGY AND LAB |
| BUS102 (3 Hours) | PERSONAL FINANCE | BUSINESS | BUS1010 | PERSONAL FINANCE |
| BUS101 (3 Hours) | INTRODUCTION TO BUSINESS | BUSINESS | BUS1020 | INTRODUCTION TO BUSINESS |
| BUS210 (3 Hours) | MARKETING | BUSINESS | BUS1030 | PRINCIPLES OF MARKETING |
| IDS120 (3 Hours) | INTRODUCTION TO LEADERSHIP CONCEPTS | BUSINESS | BUS2010 | PRINCIPLES OF LEADERSHIP |
| BUS201 (3 Hours) | PRINCIPLES OF MANAGEMENT | BUSINESS | BUS2020 | PRINCIPLES OF MANAGEMENT |
| BUS205 (3 Hours) | BUSINESS LAW | BUSINESS | BUS2030 | BUSINESS LAW |
| BUS213 (3 Hours) | BUSINESS COMMUNICATIONS | BUSINESS | BUS2040 | BUSINESS COMMUNICATIONS |

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|---|---|---|---|---|
| CHM111 (5 Hours) | GENERAL CHEMISTRY I WITH LAB | CHEMISTRY | CHM1010 | CHEMISTRY I AND LAB FOR MAJORS |
| CHM112 (5 Hours) | GENERAL CHEMISTRY II WITH LAB | CHEMISTRY | CHM1020 | CHEMISTRY II AND LAB FOR MAJORS |
| CHM107 (5 Hours) | INTRODUCTORY CHEMISTRY WITH LAB | CHEMISTRY | CHM1030 | GENERAL CHEMISTRY AND LAB FOR NON-MAJORS |
| CHM211 (5 Hours) | ORGANIC CHEMISTRY I WITH LAB | CHEMISTRY | CHM2010 | ORGANIC CHEMISTRY I AND LAB |
| CHM212 (5 Hours) | ORGANIC CHEMISTRY II WITH LAB | CHEMISTRY | CHM2020 | ORGANIC CHEMISTRY II AND LAB |
| SP 106 (3 Hours) | PUBLIC SPEAKING | COMMUNICATION | COM1010 | PUBLIC SPEAKING |
| SP 105 (3 Hours) | INTERPERSONAL COMMUNICATIONS | COMMUNICATION | COM1020 | INTERPERSONAL COMMUNICATION |
| MT 110 (3 Hours) | INTRODUCTION TO MASS COMMUNICATIONS | COMMUNICATION | COM1030 | INTRODUCTION TO MASS COMMUNICATION |
| BUS130 (3 Hours) | MICRO APPL I: WD PROCESS, SS, DB, PP | COMPUTER SCIENCE | CSC1010 | COMPUTER CONCEPTS AND APPLICATIONS |
| CJ 100 (3 Hours) | INTRODUCTION TO CRIMINAL JUSTICE | CRIMINAL JUSTICE | CRJ1010 | INTRODUCTION TO CRIMINAL JUSTICE |
| CJ 201 (3 Hours) | CRIMINAL LAW | CRIMINAL JUSTICE | CRJ2010 | CRIMINAL LAW |
| ECH112 (3 Hours) | INTRODUCTION TO EARLY CHILDHOOD EDUCATION | EARLY CHILDHOOD | ECE1010 | INTRODUCTION TO EARLY CHILDHOOD EDUCATION |
| BUS204 (3 Hours) | MICROECONOMICS | ECONOMICS | ECO1010 | MICROECONOMICS |
| BUS203 (3 Hours) | MACROECONOMICS | ECONOMICS | ECO1020 | MACROECONOMICS |
| ED110 (3 Hours) | INTRODUCTION TO ELEMENTARY & SECONDARY EDUCATION | EDUCATION | EDU1010 | INTRODUCTION TO EDUCATION |
| ED105 (3 Hours) | CHILDRENS LITERATURE | EDUCATION | EDU2010 | CHILDREN'S LITERATURE |
| ENG101 (3 Hours) | COMPOSITION I | ENGLISH | ENG1010 | ENGLISH COMPOSITION I |
| ENG102 (3 Hours) | COMPOSITION II: LITERATURE AND RESEARCH | ENGLISH | ENG1020 | ENGLISH COMPOSITION II |
| ENG103 (3 Hours) | COMPOSITION II: RHETORIC AND RESEARCH | ENGLISH | ENG1020 | ENGLISH COMPOSITION II |
| ENG104 (3 Hours) | INTRODUCTION TO LITERATURE | ENGLISH | ENG1030 | INTRODUCTION TO LITERATURE |
| ENG202 (3 Hours) | AMERICAN LITERATURE: PRE-COLONIAL TO CIVIL WAR | ENGLISH | ENG2010 | AMERICAN LITERATURE I |

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|---|---|---|---|---|
| ENG209 (3 Hours) | AMERICAN LITERATURE: RECONSTRUCTION TO PRESENT | ENGLISH | ENG2020 | AMERICAN LITERATURE II |
| ENG223 (3 Hours) | CREATIVE WRITING | ENGLISH | ENG2030 | CREATIVE WRITING |
| GEO212 (3 Hours) | WORLD REGIONAL GEOGRAPHY | GEOGRAPHY | GEO1010 | WORLD REGIONAL GEOGRAPHY |
| BS 110 (3 Hours) | NUTRITION | HEALTH SCIENCES | HSC1010 | NUTRITION |
| PE 112 (3 Hours) | PERSONAL AND COMMUNITY HEALTH | HEALTH SCIENCES | HSC1020 | PERSONAL AND COMMUNITY HEALTH |
| BS 109 (3 Hours) | MEDICAL TERMINOLOGY | HEALTH SCIENCES | HSC1030 | MEDICAL TERMINOLOGY |
| PE 113 (3 Hours) | FIRST AID AND SAFETY | HEALTH SCIENCES | HSC1040 | FIRST AID AND CPR |
| PE 224 (3 Hours) | CARE AND PREVENTION OF ATHLETIC INJURIES | HEALTH SCIENCES | HSC2010 | PREVENTION AND CARE OF ATHLETIC INJURIES |
| HIS101 (3 Hours) | UNITED STATES HISTORY I TO 1877 | HISTORY | HIS1010 | UNITED STATES HISTORY TO 1877 |
| HIS102 (3 Hours) | UNITED STATES HISTORY II SINCE 1877 | HISTORY | HIS1020 | UNITED STATES HISTORY SINCE 1877 |
| HIS103 (3 Hours) | WORLD HISTORY I | HISTORY | HIS1030 | WORLD HISTORY TO 1500 |
| HIS104 (3 Hours) | WORLD HISTORY II | HISTORY | HIS1040 | WORLD HISTORY 1500 TO PRESENT |
| MAT103 (3 Hours) | INTERMEDIATE ALGEBRA | MATH | MAT0990 | INTERMEDIATE ALGEBRA |
| MAT104 (3 Hours) | COLLEGE ALGEBRA | MATH | MAT1010 | COLLEGE ALGEBRA |
| MAT104L (5 Hours) | COLLEGE ALGEBRA WITH LAB | MATH | MAT1010 | COLLEGE ALGEBRA |
| MAT203 (3 Hours) | BASIC STATISTICS | MATH | MAT1020 | ELEMENTARY STATISTICS |
| MAT105 (3 Hours) | TRIGONOMETRY | MATH | MAT1030 | TRIGONOMETRY |
| MAT108 (3 Hours) | CONTEMPORARY MATH | MATH | MAT1040 | CONTEMPORARY MATH / ESSENTIAL MATH |
| MAT107 (3 Hours) | GENERAL CALCULUS AND LINEAR ALGEBRA | MATH | MAT1050 | GENERAL / BUSINESS CALCULUS |
| MAT106 (5 Hours) | CALCULUS I | MATH | MAT2010 | CALCULUS I |
| MAT110 (5 Hours) | CALCULUS II | MATH | MAT2020 | CALCULUS II |
| MAT202 (5 Hours) | DIFFERENTIAL EQUATIONS | MATH | MAT2030 | DIFFERENTIAL EQUATIONS |
| M103 (3 Hours) | MUSIC HISTORY AND APPRECIATION | MUSIC | MUS1010 | MUSIC APPRECIATION |

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|---|---|---|---|---|
| M 200 (3 Hours) | MUSIC THEORY I | MUSIC | MUS1020 | MUSIC THEORY I |
| M 201 (3 Hours) | MUSIC THEORY II | MUSIC | MUS1030 | MUSIC THEORY II |
| M 105 (1 Hour) | APPLIED KEYBOARD I | MUSIC | MUS1060 | PIANO I |
| M 106 (1 Hour) | APPLIED KEYBOARD II | MUSIC | MUS1070 | PIANO II |
| PHI101 (3 Hours) | INTRODUCTION TO PHILOSOPHY | PHILOSOPHY | PHL1010 | INTRODUCTION TO PHILOSOPHY |
| PHI102 (3 Hours) | INTRODUCTION TO ETHICS | PHILOSOPHY | PHL1020 | ETHICS |
| PHI103 (3 Hours) | LOGIC AND CRITICAL THINKING | PHILOSOPHY | PHL1030 | LOGIC AND CRITICAL THINKING |
| PS 101 (5 Hours) | COLLEGE PHYSICAL SCIENCE | PHYSICAL SCIENCE | PSI1010 | PHYSICAL SCIENCE AND LAB |
| PS 104 (4 Hours) | PHYSICAL GEOLOGY | PHYSICAL SCIENCE | PSI1030 | PHYSICAL GEOLOGY LECTURE AND LAB (COMBINED) |
| PS 203 (5 Hours) | GENERAL PHYSICS I | PHYSICS | PHY1010 | PHYSICS I AND LAB |
| PS 108 (4 Hours) | ASTRONOMY | PHYSICS | PHY1020 | DESCRIPTIVE ASTRONOMY LECTURE AND LAB (COMBINED) |
| PS 215 (5 Hours) | COLLEGE PHYSICS I | PHYSICS | PHY1030 | ENGINEERING PHYSICS I AND LAB |
| PS 204 (5 Hours) | GENERAL PHYSICS II | PHYSICS | PHY2020 | PHYSICS II AND LAB |
| PS 216 (5 Hours) | COLLEGE PHYSICS II | PHYSICS | PHY2030 | ENGINEERING PHYSICS II AND LAB |
| POL101 (3 Hours) | INTRODUCTION TO POLITICAL SCIENCE | POLITICAL SCIENCE | POL1010 | INTRODUCTION TO POLITICAL SCIENCE |
| POL100 (3 Hours) | UNITED STATES GOVERNMENT | POLITICAL SCIENCE | POL1020 | AMERICAN GOVERNMENT |
| POL115 (3 Hours) | STATE AND LOCAL GOVERNMENT | POLITICAL SCIENCE | POL2020 | STATE AND LOCAL GOVERNMENT |
| PSY101 (3 Hours) | GENERAL PSYCHOLOGY | PSYCHOLOGY | PSY1010 | INTRODUCTION TO PSYCHOLOGY |
| PSY205 (3 Hours) | HUMAN GROWTH AND DEVELOPMENT | PSYCHOLOGY | PSY2020 | HUMAN LIFESPAN/DEVELOPMENTAL PSYCHOLOGY |
| PSY202 (3 Hours) | CHILD PSYCHOLOGY | PSYCHOLOGY | PSY2030 | CHILDHOOD GROWTH AND DEVELOPMENT |
| PHI105 (3 Hours) | RELIGIONS OF THE WORLD | RELIGION | REL1010 | WORLD / COMPARATIVE RELIGIONS |
| ENG205 (3 Hours) | OLD TESTAMENT LITERATURE | RELIGION | REL1020 | OLD TESTAMENT |
| SOC101 (3 Hours) | GENERAL SOCIOLOGY | SOCIOLOGY/ SOCIAL WORK | SOC1010 | INTRODUCTION TO SOCIOLOGY |
| SOC104 (3 Hours) | INTRODUCTION TO SOCIAL WORK | SOCIOLOGY/ SOCIAL WORK | SOC1020 | INTRODUCTION TO SOCIAL WORK |

| | | | | |
|---|---|---|---|---|
| SOC210 (3 Hours) | SOCIAL PROBLEMS | SOCIOLOGY/ SOCIAL WORK | SOC2010 | SOCIAL PROBLEMS |
| SOC102 (3 Hours) | MARRIAGE AND THE FAMILY | SOCIOLOGY/ SOCIAL WORK | SOC2020 | MARRIAGE AND FAMILY |
| LG 101 (5 Hours) | SPANISH I | SPANISH | SPA1010 | SPANISH I |
| LG 102 (5 Hours) | SPANISH II | SPANISH | SPA1020 | SPANISH II |
| LG 201 (3 Hours) | SPANISH III | SPANISH | SPA2010 | SPANISH III |
| TH 108 (3 Hours) | HISTORY AND APPRECIATION OF THEATRE ARTS | THEATRE | THT1010 | THEATRE APPRECIATION |
| TH 110 (3 Hours) | ACTING I | THEATRE | THT1020 | ACTING I |
| TH 152 (3 Hours) | STAGECRAFT I | THEATRE | THT1030 | STAGECRAFT |
| TH 103 (1 Hour) | THEATRE PRACTICUM I | THEATRE | THT1040 | THEATRE PRACTICUM |
| TH 104 (1 Hour) | THEATRE PRACTICUM II | THEATRE | THT1040 | THEATRE PRACTICUM |
| TH 203 (1 Hour) | THEATRE PRACTICUM III | THEATRE | THT1040 | THEATRE PRACTICUM |
| TH 204 (1 Hour) | THEATRE PRACTICUM IV | THEATRE | THT1040 | THEATRE PRACTICUM |
| TH 206 (3 Hours) | ACTING II | THEATRE | THT2010 | ACTING II |

## General Education Program

In alignment with the Kansas Board of Regents (KBOR) Systemwide General Education (SGE) Framework, students satisfying the requirements outlined in these seven bucket areas will be verified as completing the Kansas General Education Program. Completion will be notated on the student transcript and meet general education core course requirements for Associate in Arts (AA), Associate in Fine Arts (AFA), Associate in Science (AS), and Baccalaureate degrees from community colleges and public universities in Kansas. Courses marked with an asterisk (*) are part of the KBOR Systemwide Transfer Matrix. These courses transfer seamlessly among the community colleges and public universities in Kansas. Some courses require prerequisites that must be met prior to enrolling. A course used for fulfillment of bucket area 020 thru 060 cannot also be used to meet the requirements of bucket area 070.

**010 ENGLISH BUCKET AREA - 6 Credit Hours (Students must complete two courses from this area.)**
ENG101 Composition I*
ENG102 Composition II: Literature & Research*
ENG103 Composition II: Rhetoric & Research*

**020 COMMUNICATION BUCKET AREA - 3 Credit Hours (Students must complete one course from this area.)**
SP 105 Interpersonal Communications*
SP 106 Public Speaking*

**030 MATHEMATICS & STATISTICS BUCKET AREA - 3 Credit Hours (Students must complete one**

**course from this area.)**
MAT104 College Algebra*
MAT105 Trigonometry*
MAT106 Calculus I*
MAT108 Contemporary Math*
MAT203 Basic Statistics*

**040 NATURAL & PHYSICAL SCIENCE BUCKET AREA - 4 Credit Hours (Students must complete one course from this area. Course must include lab credit.)**
BS 101 College Biology w/ Lab*
BS 104 Human Anatomy w/ Lab*
BS 105 Human Physiology w/ Lab*
BS 107 Introduction to Environmental Science w/ Lab*
CHM107 Introductory Chemistry w/ Lab*
CHM111 General Chemistry I w/ Lab*
PS 101 College Physical Science w/ Lab*
PS 104 General Geology w/ Lab*
PS 108 Astronomy w/ Lab*
PS 215 College Physics I w/ Lab*

**050 SOCIAL & BEHAVIORAL SCIENCES BUCKET AREA - 6 Credit Hours (Students must complete two courses from this area. The courses must be from two different subject areas.)**
**Anthropologyant**
112 Cultural Anthropology*

**Criminal Justice**
CJ 100 Introduction to Criminal Justice*
CJ 120 Juvenile Delinquency & Justice

**Economics**
BUS203 Macroeconomics*
BUS204 Microeconomics*

**Geography**
GEO212 World Regional Geography*

**Political Science**
POL100 US Government*
POL101 Introduction to Political Science*
POL115 State & Local Government*

**Psychology**
PSY101 General Psychology*
PSY205 Human Growth & Development*

**Sociology**
SOC101 General Sociology*
SOC102 Marriage & the Family*
SOC104 Introduction to Social Work*

**060 ARTS & HUMANITIES BUCKET AREA - 6 Credit Hours (Students must complete two courses from this area. The courses must be from two different subject areas.)**
**Art**

A 101 Art Appreciation*
A 107 Drawing I
A 201 Art History Survey: Prehistoric to Medieval*
A 202 Art History Survey: Renaissance to Contemporary*

**Language Foreign**
LG 101 Spanish I*

**History**
HIS101 US History to 1877*
HIS102 US History since 1877*
HIS103 World History I*
HIS104 World History II*
HIS202 Introduction to Ancient History

**Education**
ED 105 Children's Literature*

**Philosophy**
PHI101 Introduction to Philosophy*
PHI102 Introduction to Ethics*
PHI103 Logic & Critical Thinking*
PHI105 Religions of the World*

**Literature**
ENG104 Introduction to Literature*
ENG202 American Literature: Pre-Colonial to Civil War*
ENG208 Introduction to Short Story
ENG209 American Literature: Reconstruction to Present*
ENG210 World Literature: Beginnings to Renaissance
ENG211 World Literature: Enlightenment to Present
ENG212 British Literature: Middle Ages to 1800
ENG213 British Literature: 1800 to Present
ENG215 Diverse Voices in Literature

**Music**
M 103 Music History & Appreciation*
M 146 Musical Theatre History (does not count if TH 146 completed)
M 162 Introduction to World Music
M 223 History of Jazz

**Speech**
SP 101 Oral Communications
SP 103 Oral Interpretation

**Theater**
TH 105 Introduction to Drama
TH 108 History & Appreciation of Theatre Arts*
TH 146 Musical Theatre History (does not count if TH 146 completed)
TH 208 Film Literature

**070 INSTITUTIONALLY DESIGNATED BUCKET AREA - 6 Credit Hours (Students must complete 6 credit hours of courses from this area. Courses already being used to fulfill requirements in a**

**bucket area 020 thru 060 cannot also be used to meet the requirements of bucket area 070.)**
A 101 Art Appreciation*
A 103 2-D Design*
A 104 3-D Design*
A 105 Prints I
A 107 Drawing I
A 108 Drawing II
A 110 Painting I
A 111 Painting II
A 112 Ceramics I
A 113 Typography
A 114 Watercolor I
A 117 Ceramics II
A 121 Design Software Applications
A 201 Art History Survey: Prehistoric to Medieval*
A 202 Art History Survey: Renaissance to Contemporary*
A 215 Graphic Design
A 223 Comp Graphics: Illustration
A 224 Comp Graphics :Enhanc Photo
A 260 Portfolio Preparation
AB 114 Ag Orientation
ANT112 General Anthropology*
BS 101 College Biology with lab*
BS 104 Human Anatomy with Lab*
BS 105 Human Physiology with Lab*
BS 109 Medical Terminology
BS 110 Nutrition*
BS 111 Nutrition for Health-Fitness-Sports
BS 112 Nutrition for health, Fitness, and Sports w/Lab
BS 203 Microbiology with Lab*
BS 241 CPR-Basic
BS 107 Introduction to Environmental Science with Lab
BUS101 Introduction to Business*
BUS102 Personal Finance*
BUS103 Accounting I*
BUS105 Accounting II*
BUS125 Human Resources
BUS127 Principles of Entrepreneurship I
BUS201 Principles of Management*
BUS203 Macroeconomics*
BUS204 Microeconomics*
BUS205 Business Law*
BUS210 Marketing*
BUS213 Business Communications*
BUS216 Managerial Accounting*
BUS230 Principles of Entrepreneurship II
CHM107 Introductory Chemistry with Lab
CHM111 General Chemistry I with Lab*
CHM112 General Chemistry II with Lab*
CHM211 Organic Chemistry I with Lab*
CHM212 Organic Chemistry II with Lab
CJ 100 Introduction to Criminal Justice*
CJ 105 Introduction to Corrections

CJ 110 Criminal Investigation
CJ 111 Forensic Investigation
CJ 116 Criminal Justice Interview & Report Writing
CJ 120 Juvenile Delinquency & Justice
CJ 140 Criminal Procedures
CJ 201 Criminal Law*
CJ 204 Professional Responsibility in Criminal Justice
CJ 205 Law Enforcement Operations & Procedures
CJ 212 Agency Administration
CJ 220 Practicum in Admin of Justice
COL103 College Success
COL182 Student Success Seminar
ED 101 Pre-Professional Lab I
ED 102 Pre-Professional Lab II
ED 105 Children's Literature*
ED 110 Introduction Elementary-Secondary Education*
ENG104 Introduction to Literature*
ENG110 Technical Composition
ENG202 American Literature: Pre-Colonial to Civil War*
ENG205 Old Testament Literature*
ENG208 Introduction to Short Story
ENG209 American Literature: Reconstruction to Present*
ENG215 Diverse Voices in Literature
ENG223 Creative Writing*
GEO212 World Regional Geography*
HIS101 U.S. History to 1877*
HIS102 U.S. History since 1877*
HIS103 World History I*
HIS104 World History II*
HIS202 Introduction to Ancient History
IDS120 Introduction to Leadership Concepts*
LG 101 Spanish I*
LG 102 Spanish II*
M 101 Music Fundamentals
M 103 Music History/Appreciation*
M 135 Aural Skills I
M 145 Aural Skills II
M 146 Musical Theatre History
M 162 Introduction to World Music
M 200 Music Theory I*
M 201 Music Theory II*
M 223 History of Jazz
MAT104 College Algebra*
MAT104L College Algebra with Lab*
MAT105 Trigonometry*
MAT106 Calculus I*
MAT107 General Calculus & Linear Algebra*
MAT108 Contemporary Math*
MAT110 Calculus II
MAT201 Calculus III
MAT202 Differential Equations
MAT203 Basic Statistics*
MT 110 Introduction Mass Communications

PE 102 PE for Women
PE 110 Rules and Officiating I
PE 112 Personal/Community Health*
PE 119 Tennis PE 122 Archery
PE 123 Introduction to Physical Education
PE 124 Weightlifting I
PE 125 Introduction to Recreation
PE 135 Running Awareness
PE 139 Lifetime Fitness
PE 139 A Lifetime Fitness
PE 141 PE for Men
PE 143 Introduction to Athletic Train I
PE 220 Theory of Coaching Basketball
PE 221 Theory of Coaching Track/Field
PE 222 Theory of Coaching Football
PE 223 Theory of Coaching Baseball
PE 224 Care/Prevention Athletic Injuries*
PE 250 Exercise Physiology
PHI101 Introduction to Philosophy*
PHI102 Introduction to Ethics*
PHI103 Logic and Critical Thinking*
PHI105 Religions of the World*
PHO107 History of Photography
PHO110 Photography Fundamentals
PHO210/PHO210A Landscape Photography
POL100 United States Government*
POL101 Introduction to Political Science*
POL115 State & Local Government*
PS 101 College Physical Science with Lab*
PS 104 Physical Geology with Lab*
PS 108 Astronomy with Lab*
PS 203 General Physics I with Lab*
PS 204 General Physics II with Lab*
PS 210 Organic Chemistry I with Lab
PS 215 College Physics I with Lab*
PS 216 College Physics II with Lab*
PSY101 General Psychology*
PSY202 Child Psychology*
PSY205 Human Growth & Development*
PSY206 Social Psychology
PSY280 Health Psychology
PSY290 Abnormal Psychology
SOC101 General Sociology*
SOC102 Marriage & the Family*
SOC104 Introduction to Social Work*
SOC105 Death, Loss, Grief
SOC210 Social Problems*
SP 101 Oral Communications
SP 105 Interpersonal Communication*
SP 106 Public Speaking*
TH 108 History/Appreciation of Theatre Arts*
TH 109 Fund Style/Principle of Acting
TH 110 Acting I*

TH 146 Musical Theatre History
TH 206 Acting II*
TH 208 Film Appreciation

Highland Community College

# Associate in Arts

(60 total credit hours)

## BASIC SKILLS (14 Credits)

❑ **ENG101 Composition I (3)** GE1

❑ **ENG102 Composition II: Lit & Research (3)** GE1

**OR ENG103 Composition II: Rhetoric & Research (3)** GE1

❑ **SP 106 Public Speaking (3)** GE2
**OR SP 105 Interpersonal Communication (3)** GE2

❑ **MAT104 College Algebra (3)** GE3
**OR MAT108 Contemporary Math (3)** GE3
**OR MAT203 Basic Statistics (3)** GE3

❑ **Computer Literacy (1)~**
___A 113 Typography (3)
___A 121 Design Software Applications (3)
___A 215 Graphic Design (3)
___A 223 Computer Graphics: Illustration (3)
___A 224 Computer Graphics: Enhanced Photo (3)
___AB 227 Agriculture Microcomputer I (3)
___BUS130 Microcomputer Applications I (3)
___BUS133 Micro App I: Spreadsheet (3)
___BUS139 Micro App I: Word Processing (3)
___BUS181 Micro App I: Word Processing (1)
___BUS183 Micro App I: Spreadsheet (1)
___BUS189 Micro App I: Electronic Bus Pres (1)

~The one credit hour of Computer Literacy must have been completed within the past five years. Additional Computer Literacy course credit can be counted as elective credit.

❑ **Orientation (1)**
___COL103 College Success (1) GE7
___AB 114 Agriculture Orientation (2) GE7

## HUMANITIES and FINE ARTS (9 Credits)

***Select from 3 DIFFERENT areas***

❑ **Art**
___A 101 Art Appreciation (3) GE6

___A 107 Drawing I (3) GE6
___A 201 Art History Survey: Prehistoric to Medieval(3) GE6
___A 202 Art Hist Survey: Renaissance to Contemp (3) GE6

❑ **Education**
___ED 105 Children's Literature (3) GE7

❑ **Foreign Language**
___LG 101 Spanish I (5) GE6
___LG 102 Spanish II (5) GE6
___LG 201 Spanish III (3) GE6

❑ **History**
___HIS101 United States History to 1877 (3) GE6
___HIS102 United States History since 1877 (3) GE6
___HIS103 History of Western Civilization I (3) GE6
___HIS104 History of Western Civilization II (3) GE6

❑ **Literature**
___ENG104 Introduction to Literature (3) GE6
___ENG202 American Lit: Pre-Colonial to Civil War (3) GE6
___ENG208 Introduction to Short Story (3) GE6
___ENG209 American Lit: Reconstruction to Pres (3) GE6
___ENG211 World Lit: Enlightenment to Present (3) GE6
___ENG213 British Literature: 1800 to Present (3) GE6
___ENG215 Diverse Voices in Literature (3) GE6

❑ **Music**

___M 103 Music History/Appreciation (3) GE6
___M 146 Musical Theatre History (3) (= to TH 146) GE6
___M 162 Introduction to World Music (3) GE6
___M 223 History of Jazz (3) GE6

❑ **Philosophy**
___PHI101 Introduction to Philosophy (3) GE6
___PHI102 Introduction to Ethics (3) GE6
___PHI103 Logic & Critical Thinking (3) GE6
___PHI105 Religions of the World (3) GE6

❑ **Speech**
___SP 101 Oral Communication (3) GE6

❑ **Theatre**
___TH 108 History/Appreciation of Theatre Arts (3) GE6
___TH 146 Musical Theatre History (3) (= to M 146) GE6
___TH 208 Film Appreciation (3) GE6

## SOCIAL & BEHAVIORAL SCIENCES (9 Credits)

***Select from 3 DIFFERENT areas***

❑ **Anthropology**

___ANT112 Cultural Anthropology (3) T GE5

❑ **Criminal Justice**

___CJ 100 Intro to Criminal Justice (3) T GE5

___CJ 120 Juvenile Delinquency and Justice (3) GE5

❑ **Economics**

___BUS203 Macroeconomics (3) T GE5

___BUS204 Microeconomics (3) T GE5

❑ **Geography**

___GEO212 World Regional Geography (3) T GE5

❑ **Political Science**

___POL100 United States Government (3) T GE5

___POL101 Introduction to Political Science (3) T GE5

___POL115 State & Local Government (3) T GE5

❑ **Psychology**

___PSY101 General Psychology (3) T GE5

- PSY205 Human Growth & Development (3) T GE5

❑ **Sociology**

___SOC101 General Sociology (3) T GE5

___SOC102 Marriage & the Family (3) T GE5

___SOC104 Introduction to Social Work (3) T GE5

## NATURAL & PHYSICAL SCIENCES (9 Credits)

***Select 1 from EACH area-must have two labs***

❑ **Natural Sciences**

___BS 101 College Biology with lab (5) T GE4

___BS 104 Human Anatomy with lab (4) T GE4

___BS 105 Human Physiology with lab (4) T GE4

___BS 107 Intro to Environmental Science with lab (4) T GE4

___BS 110 Nutrition (3) T GE7

___BS 112 Nutrition for Health, Fitness and Sports w/lab (5) GE7

___BS 201 General Zoology with lab (5) GE7

___BS 203 Microbiology with lab (5) T GE4

❑ **Physical Science**

___CHM107 Introductory Chemistry with lab (5) T GE4

___CHM111 General Chemistry I with lab (5) T GE4

___CHM112 General Chemistry II with lab (5) T GE4

___CHM211 Organic Chemistry I with lab (5)

___PS 101 College Physical Science with lab (5) T GE4

- PS 104 Physical Geology with lab (4) GE4

___PS 108 Astronomy with lab (4) T GE4

___PS 203 General Physics I with lab (5) T

___PS 204 General Physics II with lab (5) T

___PS 215 College Physics I with lab (5) T GE4

___PS 216 College Physics II with lab (5) T GE4

## ELECTIVES (Must take 19 credits)

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T This course is approved by the Kansas Board of Regents for System Wide Transfer (SWT) among all Kansas public postsecondary institutions offering an equivalent course. Additional courses may also be eligible for transfer. Please visit the Highland Registrar to learn more.

GE This course is approved by the Kansas Board of Regents for the General Education Transfer among all Kansas public postsecondary institutions offering an equivalent course.

Revised 6/25

Highland Community College

# Associate in General Studies

(60 total credit hours)

## BASIC SKILLS (14 Credits)

❑ **ENG101 Composition I (3)** GE1

❑ **ENG102 Composition II: Lit & Research (3)** GE1

**OR ENG103 Composition II: Rhetoric & Research (3)** GE1

❑ **SP 106 Public Speaking (3)** GE2
**OR SP 105 Interpersonal Communication (3)** GE2

❑ **MAT100 Beginning Algebra (3)**
**OR MAT104 College Algebra (3)** GE3
**OR MAT108 Contemporary Math (3)** GE3
**OR MAT203 Basic Statistics (3)** GE3

❑ **Computer Literacy (1)~**
___A 113 Typography (3)
___A 121 Design Software Applications (3)
___A 215 Graphic Design (3)
___A 223 Computer Graphics: Illustration (3)
___A 224 Computer Graphics: Enhanced Photo (3)
___AB 227 Agriculture Microcomputer I (3)
___BUS130 Microcomputer Applications I (3)
___BUS133 Micro App I: Spreadsheet (3)
___BUS139 Micro App I: Word Processing (3)
___BUS181 Micro App I: Word Processing (1)
___BUS183 Micro App I: Spreadsheet (1)
___BUS189 Micro App I: Electronic Bus Pres (1)

**~**The one credit hour of Computer Literacy must have been completed within the past five years. Additional Computer Literacy course credit can be counted as elective credit.

❑ **Orientation (1)**
___COL103 College Success (1) GE7
___AB 114 Agriculture Orientation (2) GE7

## HUMANITIES and FINE ARTS (6 Credits)

***Select from 2 DIFFERENT areas***

❑ **Art**
___A 101 Art Appreciation (3) GE6

___A 107 Drawing I (3) GE6
___A 201 Art History Survey: Prehistoric to Medieval(3) GE6
___A 202 Art Hist Survey: Renaissance to Contemp (3) GE6

❑ **Education**
___ED 105 Children's Literature (3) GE7

❑ **Foreign Language**
___LG 101 Spanish I (5) GE6
___LG 102 Spanish II (5) GE6
___LG 201 Spanish III (3) GE6

❑ **History**
___HIS101 United States History to 1877 (3) GE6
___HIS102 United States History since 1877 (3) GE6
- HIS103 History of Western Civilization I (3) GE6
-___HIS104 History of Western Civilization II (3) GE6

❑ **Literature**
___ENG104 Introduction to Literature (3) GE6
___ENG202 American Lit: Pre-Colonial to Civil War (3) GE6
___ENG208 Introduction to Short Story (3) GE6
___ENG209 American Lit: Reconstruction to Pres (3) GE6
___ENG211 World Lit: Enlightenment to Present (3) GE6
___ENG213 British Literature: 1800 to Present (3) GE6
___ENG215 Diverse Voices in Literature (3) GE6

❑ **Music**
___M 103 Music History/Appreciation (3) GE6
___M 146 Musical Theatre History (3) (= to TH 146) GE6
___M 162 Introduction to World Music (3) GE6
___M 223 History of Jazz (3) GE6

❑ **Philosophy**
___PHI101 Introduction to Philosophy (3) GE6
___PHI102 Introduction to Ethics (3) GE6
___PHI103 Logic & Critical Thinking (3) GE6
___PHI105 Religions of the World (3) GE6

❑ **Speech**
___SP 101 Oral Communication (3) GE6

❑ **Theatre**
___TH 108 History/Appreciation of Theatre Arts (3) GE6
___TH 146 Musical Theatre History (3) (= to M 146) GE6
___TH 208 Film Appreciation (3) GE6

## SOCIAL & BEHAVIORAL SCIENCES (6 Credits)

***Select from 2 DIFFERENT areas***

❑ **Anthropology**

___ANT112 Cultural Anthropology (3) GE5

❑ **Criminal Justice**

___CJ 100 Intro to Criminal Justice (3) GE5

___CJ 120 Juvenile Delinquency and Justice (3) GE5

❑ **Economics**

___BUS203 Macroeconomics (3) GE5

___BUS204 Microeconomics (3) GE5

❑ **Geography**

___GEO212 World Regional Geography (3) GE5

❑ **Political Science**

___POL100 United States Government (3) GE5

___POL101 Introduction to Political Science (3) GE5

___POL115 State & Local Government (3) GE5

❑ **Psychology**

___PSY101 General Psychology (3) GE5

- PSY205 Human Growth & Development (3) GE5

❑ **Sociology**

___SOC101 General Sociology (3) GE5

___SOC102 Marriage & the Family (3) GE5

___SOC104 Introduction to Social Work (3) GE5

## NATURAL & PHYSICAL SCIENCES (5 Credits)

❑ **Natural Sciences**

___BS 101 College Biology with lab (5) GE4

___BS 104 Human Anatomy with lab (4) GE4

___BS 105 Human Physiology with lab (4) GE4

___BS 107 Intro to Environmental Science with lab (4) GE4

___BS 110 Nutrition (3)

___BS 112 Nutrition for Health, Fitness and Sports w/lab (5)

___BS 201 General Zoology with lab (5)

___BS 203 Microbiology with lab (5) GE4

❑ **Physical Science**

___CHM107 Introductory Chemistry with lab (5) GE4

___CHM111 General Chemistry I with lab (5) GE4

___CHM112 General Chemistry II with lab (5) GE4

___CHM211 Organic Chemistry I with lab (5)

___PS 101 College Physical Science with lab (5) GE4

___PS 104 Physical Geology with lab (4) GE4

- PS 108 Astronomy with lab (4) GE4

___PS 203 General Physics I with lab (5)

___PS 204 General Physics II with lab (5)

___PS 215 College Physics I with lab (5) GE4

___PS 216 College Physics II with lab (5) GE4

## ELECTIVES (Must take 29 credits)

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This course is approved by the Kansas Board of Regents for System Wide Transfer (SWT) among all Kansas public postsecondary institutions offering an equivalent course. Additional courses may also be eligible for transfer. Please visit the Highland Registrar to learn more.

GE This course is approved by the Kansas Board of Regents for the General Education Transfer among all Kansas public postsecondary institutions offering an equivalent course.

Revised 6/25

Highland Community College

# Associate in Science

(60 total credit hours)

## BASIC SKILLS (14 Credits)

❑ **ENG101 Composition I (3)** GE1

❑ **ENG102 Composition II: Lit & Research (3)** GE1

**OR ENG103 Composition II: Rhetoric & Research (3)** GE1

❑ **SP 106 Public Speaking (3)** GE2
**OR SP 105 Interpersonal Communication (3)** GE2

❑ **MAT104 College Algebra (3)** GE3
**OR MAT203 Basic Statistics (3)** GE3
**OR Higher level mathematics (3)*** GE3
*MAT108 Contemporary Mathematics does not fulfill this requirement.

❑ **Computer Literacy (1)~**
___A 113 Typography (3)
___A 121 Design Software Applications (3)
___A 215 Graphic Design (3)
___A 223 Computer Graphics: Illustration (3)

___ A 224 Computer Graphics: Enhanced Photo (3)
___AB 227 Agriculture Microcomputer I (3)
___BUS130 Microcomputer Applications I (3)
___BUS133 Micro App I: Spreadsheet (3)
___BUS139 Micro App I: Word Processing (3)
___BUS181 Micro App I: Word Processing (1)
___BUS183 Micro App I: Spreadsheet (1)
___BUS189 Micro App I: Electronic Bus Pres (1)

**~**The one credit hour of Computer Literacy must have been completed within the past five years. Additional Computer Literacy course credit can be counted as elective credit.

❑ **Orientation (1)**
___COL103 College Success (1) GE7
___AB 114 Agriculture Orientation (2) GE7

## HUMANITIES and FINE ARTS (6 Credits)

***Select from 2 DIFFERENT areas.***

❑ **Art**
___A 101 Art Appreciation (3) GE6

___A 107 Drawing I (3) GE6
___A 201 Art History Survey: Prehistoric to Medieval(3) GE6
___A 202 Art Hist Survey: Renaissance to Contemp (3) GE6

❑ **Education**
___ED 105 Children's Literature (3) GE7

❑ **Foreign Language**
___LG 101 Spanish I (5) GE6
___LG 102 Spanish II (5) GE6
___LG 201 Spanish III (3) GE6

❑ **History**
___HIS101 United States History to 1877 (3) GE6
___HIS102 United States History since 1877 (3) GE6
___HIS103 History of Western Civilization I (3) GE6
___HIS104 History of Western Civilization II (3) GE6

❑ **Literature**

- ENG104 Introduction to Literature (3) GE6
___ENG202 American Lit: Pre-Colonial to Civil War (3) GE6
___ENG208 Introduction to Short Story (3) GE6
___ENG209 American Lit: Reconstruction to Pres (3) GE6
___ENG211 World Lit: Enlightenment to Present (3) GE6
___ENG213 British Literature: 1800 to Present (3) GE6
___ENG215 Diverse Voices in Literature (3) GE6

❑ **Music**
___M 103 Music History/Appreciation (3) GE6
___M 146 Musical Theatre History (3) (= to TH 146) GE6
___M 162 Introduction to World Music (3) GE6
___M 223 History of Jazz (3) GE6

❑ **Philosophy**
___PHI101 Introduction to Philosophy (3) GE6
___PHI102 Introduction to Ethics (3) GE6
___PHI103 Logic & Critical Thinking (3) GE6
___PHI105 Religions of the World (3) GE6

❑ **Speech**
___SP 101 Oral Communication (3) GE6

❑ **Theatre**
___TH 108 History/Appreciation of Theatre Arts (3) GE6
___TH 146 Musical Theatre History (3) (= to M 146) GE6
___TH 208 Film Appreciation (3) GE6

## SOCIAL & BEHAVIORAL SCIENCES (6 Credits)

***Select from 2 DIFFERENT areas.***

❑ **Anthropology**

___ANT112 Cultural Anthropology (3) GE5

❑ **Criminal Justice**

___CJ 100 Intro to Criminal Justice (3) GE5

___CJ 120 Juvenile Delinquency and Justice (3) GE5

❑ **Economics**

___BUS203 Macroeconomics (3) GE5

___BUS204 Microeconomics (3) GE5

❑ **Geography**

___GEO212 World Regional Geography (3) GE5

❑ **Political Science**

___POL100 United States Government (3) GE5

___POL101 Introduction to Political Science (3) GE5

___POL115 State & Local Government (3) GE5

❑ **Psychology**

___PSY101 General Psychology (3) GE5

___PSY205 Human Growth & Development (3) GE5

❑ **Sociology**

___SOC101 General Sociology (3) GE5

___SOC102 Marriage & the Family (3) GE5

___SOC104 Introduction to Social Work (3) GE5

## ELECTIVES (Must take 14 credits)

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## MATHEMATICS OR SCIENCES (20 Credits)

❑ **Natural Sciences**

___BS 101 College Biology with lab (5) GE4

___BS 104 Human Anatomy with lab (4) GE4

___BS 105 Human Physiology with lab (4) GE4

___BS 107 Intro to Environmental Sci. with lab (4) GE4

___BS 109 Medical Terminology (3)

___BS 110 Nutrition (3)

___BS 201 General Zoology with lab (5)

___BS 203 Microbiology with lab (5) GE4

___PE 250 Exercise Physiology (3)

❑ **Physical Science**

___CHM107 Introductory Chemistry with lab (5) GE4

___CHM111 General Chemistry I with lab (5) GE4

___CHM112 General Chemistry II with lab (5) GE4

___CHM211 Organic Chemistry I with lab (5)

___PS 101 College Physical Science with lab (5) GE4

___PS 104 Physical Geology with lab (4) GE4

___PS 108 Astronomy with lab (4) GE4

___PS 203 General Physics I with lab (5)

___PS 204 General Physics II with lab (5)

___PS 215 College Physics I with lab (5) GE4

___PS 216 College Physics II with lab (5) GE4

❑ **Mathematics**

___MAT105 Trigonometry (3) GE3

___MAT106 Calculus I (5) GE3

___MAT107 General Calculus and Linear Algebra (3)

___MAT110 Calculus II (5) GE3

___MAT201 Calculus III (5) GE3

___MAT202 Differential Equations (5) GE3

___MAT203 Basic Statistics (3) GE3

This course is approved by the Kansas Board of Regents for System Wide Transfer (SWT) among all Kansas public postsecondary institutions offering an equivalent course. Additional courses may also be eligible for transfer. Please visit the Highland Registrar to learn more.

GE This course is approved by the Kansas Board of Regents for the General Education Transfer among all Kansas public postsecondary institutions offering an equivalent course.

Revised 6/25

## Technical Programs

**Agribusiness**
The Associate in Applied Science in Agribusiness degree program is for students who want to work in some aspect of agriculture sales and service. Farm supplies sales could include livestock and poultry feed products, chemicals, fertilizer, seed, insecticide, and equipment. A successful background in sales and service could also lead to management positions at agriculture products plants, corporate divisions, or retail operations.

**Automotive Collision and Refinishing Technology**
Auto collision and refinishing technicians repair and replace automotive body and frame components. The job involves many skills including frame repair, welding, cutting, metal straightening, application of up-to-date body materials, metal finishing, painting, and alignment of body components. Technicians also estimate damage and compute labor and material costs. Certificate program graduates are prepared for employment as an entry level auto collision repair technician. The first year of the program is designed to teach the basics of auto collision repair. The complete program offers hands-on training in body repair, estimating, shop management, and customer relations.

**Automotive Technology**
Automotive technicians are skilled in the use of automotive testing equipment, special tools and the latest information on specifications to service many types of automobiles. Technicians diagnose trouble in any one of thousands of automobile components. They work with many ever-changing systems each year that require new service techniques and training. The program is certified by the National Institute for Automotive Service Excellence (ASE). Hands-on laboratory/live work experiences and technical instruction give students the skills needed to complete ASE certification.

The certificate and associate in applied science (AAS) degree prepares graduates for entry-level employment as an automotive technician. The AAS degree is for individuals seeking automotive technology training and additional academic preparation for advancement into management, engineering, sales, and other related areas.

**Business and Accounting**
The Associate in Applied Science in Business and Accounting degree program is for students who want to begin a business career, who seek semi-professional opportunities in the general accounting field or other areas of specialized financial reporting, or who wish to upgrade their knowledge and skills for employment advancement. This program applies to retailing, wholesaling, finance, hospitality, health care, nonprofit, real estate, insurance, construction, promotion and advertising, and transportation and is intended for those who want to enter the workforce. Business managers deal with organization, personnel, record-keeping, sales, production, marketing, payroll, and other tasks. Accounting clerks calculate, post, and verify financial data needed for maintaining accounting records. They also work with office machines and documents such as vouchers, invoices, account statements, payroll, periodic reports, and other records.

**Business Technology**
The Business Technology program is designed for students who wish to enter the office workforce or update existing skills. Through hands-on training, students will learn project management, basic accounting, graphic design, and how to maintain records. Students in the program work towards Microsoft certifications in Word, PowerPoint, Excel, Access and Outlook with the option for Expert certification in Microsoft Word and Excel. Students also work toward QuickBooks certification. Graduates should learn the skills needed to be a leader in an office environment.

**Computer Support Specialist**
As businesses rely more and more on computer applications, the importance of quality computer support grows, Computer support specialists must enjoy working with people to offer technical assistance with knowledge of computer networking, repair and programming. Students may choose to pursue an 18-month technical certification or an Associate in Applied Science degree (AAS). Both choices include extensive course work and hands-on experience in networking and repair technology. Training includes the opportunity to become CompTIA A+, Network +, Security +, and CISCO CCNA certified.

**Construction Technology**
The Construction Technology program prepares students for entry-level employment in the construction industry through hands-on training and real-world projects. Instruction covers all phases of construction, including blueprint reading, framing of walls, roofs, and stairs, as well as interior and exterior finish work. This nine-month program allows full-time students to develop foundational construction skills and enter the workforce upon completion.

**Criminal Justice**
The Associate in Applied Science Degree in Criminal Justice program is for students who want to work in law enforcement upon graduation. The program provides a foundation for immediate employment as well as potential career advancement later. Employment opportunities exist in state and local police, highway patrol, private security, courts, and corrections.

**Diesel Technology**
The Diesel Technology program prepares students for employment as diesel technicians. Responsibilities of trained diesel technicians are becoming more complex as more electronic components control engines. The Diesel program includes hands-on real-work experience in diesel engine overhaul, air and hydraulics, electrical, fuel systems, and many more components. Students may complete either a two-year certificate or an Associate of Applied Science degree program which includes general education courses. With either option, students get intensive hands-on experience in repairing and servicing trucks and trailers.

**Early Childhood**
The Early Childhood certificate provides academic study and hands-on experience that encourage a reflective approach to early childhood responsibilities. This program provides a good foundation in developing appropriate curriculum, creating classroom environments that meet children's developmental needs and working effectively with parents and families. Career opportunities include family childcare provider, childcare program director, curriculum specialist, teacher or teaching assistant in childcare centers or programs, au pair or nanny.

**Electrical Technology**
The Electrical Technology program includes training in AC and DC fundamentals, residential and construction wiring, blueprint reading, commercial and industrial wiring, National Electrical Code (NEC), motor controls and programmable logic controllers (PLC's). The combination of theory and hands-on training prepares graduates for a successful career in the electrical field. The Electrical program offers students the choice between an 18-month technical certificate or an Associate in Applied Science degree. The Associate of Applied Science degree is for those individuals seeking electrical training and additional academic preparation for advancement into management and other related areas. Either choice includes hands-on experience in the field.

**Engineering Graphics and Technologies**
The Engineering Graphics and Technologies program exposes students to architecture drawing, 3-D modeling, mechanical/CNC drafting, digital drafting and design, 3-D animations and much more. Students may choose to pursue either a two-year certificate or an Associate of Applied Science degree, which requires general education courses. Program graduates should have the basic CAD skills to

translate the ideas of engineers, architects, and designers into working plans to create products such as buildings, maps, and machine parts.

**Graphic Design**
The Associate in Applied Science Degree in Graphic Design program is for students who want to work in commercial design or visual communication. This curriculum provides a good foundation in art, advertising, graphic arts, photography, and art history for those interested in entering the job market after completing two years of study. Graphic Designers might work in advertising, publishing, or corporate settings, creating visual designs to enhance a variety of products or messaging.

**Heating, Ventilation, and Air Conditioning (HVAC)**
Students in the Heating, Ventilation, and Air Conditioning program will learn to install, diagnose, and repair a variety of HVAC and refrigeration systems. The program gives students hands-on training with real-world experience installing ductwork, furnaces, and air conditioners. The HVAC shop offers a variety of up-to-date equipment and trainers to prepare students for a career as a technician. The HVAC program is a 9-month certificate program designed to prepare you for successful employment as an HVAC technician. Because of the competitive workforce, your training includes the opportunity to become EPA certified. EPA certification will give you the edge you need for immediate employment in the HVAC/Plumbing field.

**LPN to RN Completion**
The LPN to RN Completion Program awards an Associate Degree in Nursing (ADN). This is a two-semester program that allows licensed practical nurses to “bridge” to the next level of nursing.

The LPN to RN Completion Program enables the qualified LPN to obtain the knowledge, skills, and abilities of the entry level registered nurse. Through a series of courses that build upon the knowledge and experience of the LPN, the program encourages critical thinking skills, ethical principles, and legal practices of professional nursing established in the Kansas Nurse Practice Act. Successful completion of this program enables the graduate to take the national licensure examination (NCLEX-RN ®) to become a registered nurse.

**Medical Assistant**
Medical Assistants are critical to the health care industry. Physicians rely on well-trained medical office professionals to assist them in the documentation of patient care. The Medical Assistant’s job, using the latest technology, may include transcribing reports, composing and processing correspondence, coding of diagnosis and procedures, completing insurance forms, maintaining financial records, making calls for physicians, making patient appointments, and other related duties. Medical Assistants also check vital signs, perform phlebotomy and EKG’s, administer injections, and apply bandages. This program is designed to provide educational opportunities to individuals to obtain the knowledge, skills, and attitudes necessary to succeed in the areas of medical assisting.

The Medical Assistant program provides instruction for the development of basic manipulative skills, including some of the latest computer equipment. It also provides for the development of communicative skills for gaining proficiency in skill areas such as document production, machine transcription, microcomputer applications, gaining patient history, and clinical occupational information.

**Medical Coding**
The Medical Coding degree is designed to prepare students to work in the medical field as coders in a variety of healthcare settings. Recipients of this degree will have the skills and knowledge necessary to use, analyze and assign the proper codes to medical procedures and diagnoses for the purposes of billing and insurance. Medical coders are essential members of the healthcare field who monitor costs and ensure patient care satisfaction.

The Associate in Applied Science degree requires 65 semester credit hours and is designed to prepare students to take the national Certified Coding Associate (CCA) exam administered by the AHIMA. The entire program is available online and can be completed in two years with full-time enrollment.

**Personal Fitness Trainer**
The Department of Labor statistics indicate Personal Fitness Training will be one of the fastest growing occupations over the next 10 years. Students successfully completing this degree program at HCC will be competent in the field of personal training. The Personal Fitness Trainer Program is recommended for those desiring employment after the two-year degree. The individual will obtain a solid background in the areas of fitness, nutrition, and wellness.

**Practical Nursing**
Health Service is a growing industry that focuses on providing medical care to many. Demand for professionals who work to prevent illness and restore health is well known. Within the health care arena, men and women with special knowledge and abilities are needed to assist other professionals such as registered nurses and doctors. Licensed Practical Nurses fill that role. In the Practical Nursing program, students will learn the skills necessary in today's health care system. This program is designed to provide educational opportunities to individuals that will enable them to obtain the knowledge, skills, and attitudes necessary to function in the role of an entry level Licensed Practical Nurse. Upon completion of the program, students are qualified to take the national licensure examination for practical nursing (NCLEX).

The certificate program prepares graduates for employment as licensed practical nurses under the supervision of registered nurses and physicians. LPNs use technical skills acquired from this program to assist clients in meeting their physical and psychosocial needs. Licensed practical nurses administer medications, perform treatments, assist in preparing a care plan, document care, and monitor client progress.

**Precision Agriculture**
Precision Agriculture is the practice of using remote sensing, soil sampling, and information management tools to improve production. Precision agriculture is about the whole farm management with the goal of optimizing returns on inputs while preserving resources. It relies on growing technologies like satellite imagery, information technology, and geospatial tools.

Precision Ag is becoming increasingly important in local farming operations. With the increasing availability of such mapping technologies as GPS (Global Positioning Systems) and GIS (Geographical Information Systems), Precision Ag technicians will install, operate, troubleshoot, and repair precision ag systems. Technicians will also use advanced processing software to collect, visualize, and analyze data.

**Viticulture & Enology**
The Viticulture and Enology certificate is designed to prepare individuals to better confront the many challenges facing Kansas and Midwestern wine-grape growers. The curriculum leading to this certificate covers the most pivotal and most controversial issues that pertain to someone considering a future in Kansas Viticulture. The program prepares students to become vineyard and winery technicians.

**Welding Technology**
The welding program offers students hands-on experience in all major arc welding processes. Students will be exposed to metal arc welding (stick), gas shielded arc welding (wire), gas tungsten arc welding (tig), oxy-acetylene welding (gas), plasma and carbon arc cutting, blueprint reading, and pipe welding. The certificate program prepares graduates for employment in the welding field. Graduates will be able to find employment in construction, fabrication plants, railroads, manufacturing foundries, farm equipment repair, and in sales of welding equipment and supplies. The certificate program is intended to produce graduates who are prepared for employment as welders. In the Welding Technology program, all areas of welding listed above, and blueprint reading are taught. Graduates will be able to find

employment in construction, fabrication plants, railroads, manufacturing foundries, farm equipment repaid, and in sales of welding equipment and supplies.

## Technical Certificate Program Requirements

| Automotive Collision & Refinishing Technology | | |
|---|---|---|
| TCH100 | OSHA 10 | 1 |
| ACR105 | Paint & Refinishing 1 | 3 |
| ACR115 | Non-Structural A & D Repair I | 4 |
| ACR125 | Structural A & D Repair I | 2 |
| ACR135 | Airbrush, Fiberglass, & Pinstriping | 2 |
| ACR155 | Paint & Refinishing II | 3 |
| ACR165 | Non-Structural A & D Repair II | 4 |
| ACR175 | Structural A & D Repair II | 2 |
| ACR185 | Panel Fabrication | 3 |
| ACR205 | Paint & Refinishing III | 3 |
| ACR215 | Non-Structural A & D Repair III | 4 |
| ACR220 | Introduction to Estimating | 3 |
| ACR235 | Fleet & Commercial Vehicles | 3 |
| ACR255 | Paint & Refinishing IV | 4 |
| ACR265 | Non-Structural A & D Repair IV | 5 |
| ACR270 | Advanced Estimating & Blueprinting | 3 |
| ACR285 | Mechanical & Electrical | 3 |
| **Total Credits for Certificate:** | | **52** |

| Automotive Technology | | |
|---|---|---|
| AUT101 | Electrical I | 3 |
| AUT121 | Auto Electricity and Electronics | 2 |
| AUT122 | Brakes I | 3 |
| AUT142 | Automotive Technology Lab I | 5 |
| AUT132 | Engine Performance I | 3 |
| AUT151 | Heating and Air Conditioning | 2 |
| AUT161 | Suspension and Steering I | 3 |
| AUT192 | Automotive Technology Lab II | 5 |
| AUT193 | Hybrid and Fuel Cell Vehicles | 1 |
| AUT201 | Manual Drive Trains and Axles | 2 |
| AUT211 | Automatic Transmissions & Transaxles I | 2 |
| AUT221 | Engine Performance II | 2 |
| AUT242 | Automotive Technology III | 7 |
| AUT251 | Engine Repair | 2 |
| AUT255 | Automatic Transmissions & Transaxles II | 1 |
| AUT261 | Auto Service Management | 2 |
| AUT281 | Automotive Technology Lab IV | 7 |
| AUT291 | Service Management Practicum | 1 |
| **Total Credits for Certificate:** | | **53** |

| Business Technology | | |
|---|---|---|
| ADM116 | Office Simulations I | 3 |
| ADM115 | Administrative Procedures I | 3 |
| ADM121 | Proofreading and Editing | 3 |
| ADM131*<br>BUS101<br>BUS189<br>BUS185 | Microcomputer Applications I<br>OR Micro App I: Word Proc<br>AND Micro App I: Elec Bus Present<br>AND Micro App I: Desktop Publish | 3<br>1<br>1<br>1 |
| ADM135 | Business Finance | 3 |
| ADM138 | Project Management I | 2 |
| ADM182 | Project Management II | 2 |
| ADM141 | Applied Media Technology | 3 |
| ADM152 | Office Simulations II | 3 |
| ADM161 | Administrative Procedures II | 3 |
| ADM171<br>BUS182<br>BUS183<br>BUS132 | Microcomputer Applications II<br>OR Micro App I: Database Management<br>AND Micro App I: Spreadsheets<br>AND Micro App I: Outlook | 3<br>1<br>1<br>1 |
| ADM180 | Accounting I | 3 |
| **Total Credits for Certificate:** | | **34** |

| Computer Support Specialist | | |
|---|---|---|
| CST103 | Operating Systems | 2 |
| CST106 | Introduction to Networking: CCNA I | 3 |
| CST107 | Intro to Computers and Applications | 3 |
| CST115 | PC Troubleshooting Lab | 1 |
| CST124 | PC Troubleshooting Essentials | 2 |
| CST159<br>CST118<br>CST125 | Routers & Routing: CCNA2<br>OR Linux Essentials<br>AND Web Design | 4<br>2<br>2 |
| CST154 | CompTIA A+ Essentials | 3 |
| CST158 | CompTIA A+ Practical Applications | 3 |
| CRT190 | Certification Training Lab | 1 |
| CST212<br>CST201 | LAN Switching and Wireless: CCNA3<br>OR Advanced Operating Systems | 3<br>3 |
| CST218 | Linux | 2 |
| CST219 | Server Operating Systems & Virtualization | 3 |
| CST206 | Programming | 2 |
| CST207<br>CST225 | Tech Support Lab I<br>OR Web Development | 2<br>3 |
| CST223 | Server Administration | 3 |
| CST224 | Computer and Network Security | 3 |
| NET196 | Certification Training Lab: NET + | 1 |
| **Total Credits for Certificate:** | | **44** |

| Construction Technology | | |
|---|---|---|
| BTT105 | Safety & Orientation (OSHA 10) | 1 |
| BTT106 | Introductory Craft Skills | 3 |
| BTT109 | Carpentry Basics | 4 |
| BTT111 | Roof & Framing | 3 |
| BTT119 | Floors, Walls, & Ceiling Framing | 4 |
| BTT121 | Residential Concrete Construction | 2 |
| BTT155 | Residential Interior Finish Carpentry | 5 |
| BTT159 | Windows, Doors, & Stairs | 3 |
| BTT170 | Painting, Finishing, & Decorating | 4 |
| CST105 | Industrial Computer Applications | 2 |
| **Total Credits for Certificate:** | | **31** |

| Diesel Technology | | |
|---|---|---|
| DSL102 | OSHA I0 | 1 |
| DSL111 | Fundamentals/Operating Principles | 4 |
| DSL133 | Diesel Engines I | 5 |
| DSL141 | Welding and Fabrication Labs | 1 |
| DSL172 | Brakes | 3 |
| DSL152 | Fuel System Diagnosis/Repair | 4 |
| DSL162 | Electrical/Electronic Systems | 5 |
| DSL182 | Introduction to Hydraulics | 3 |
| DSL192 | Advanced Engine Maintenance | 2 |
| DSL212 | Advanced Engine Overhaul | 3 |
| DSL222 | Advanced Electrical/Electronic Systems | 5 |
| DSL232 | Hydraulic Diagnosis/Repair | 3 |
| DSL261 | Air Conditioning Diagnosis/Repair | 2 |
| DSL272 | Suspension and Steering | 3 |
| DSL275 | Diesel Management | 3 |
| DSL281 | Transmission Overhaul/Diagnosis | 3 |
| DSL291 | Advanced Clutch & Power Train | 3 |
| **Total Credits for Certificate:** | | **53** |

| Early Childhood | | |
|---|---|---|
| ECH100 | Early Childhood Fundamentals | 3 |
| ECH110 | Early Childhood Credential Portfolio I | 3 |
| ECH115 | Early Childhood Credential Portfolio II | 3 |
| ECH150 | Creative Experiences w/ Young Children | 3 |
| ECH160 | Observing & Interacting w/ Young Children | 3 |
| ECH180 | Early Childhood Literacy & Language Development | 3 |
| ECH200 | Program Planning and Development | 3 |
| ECH210 | Family Involvement in Early Childhood | 3 |
| ECH220 | Supportive Practices of All Children | 3 |
| ECH250 | Early Childhood Practicum | 3 |
| ECH101 | Recognizing Child Abuse, Neglect & Head Trauma | 1 |
| **Total Credits for Certificate:** | | **31** |

| Electrical Technology | | |
|---|---|---|
| ELE102 | Safety (OSHA 10) | 1 |
| ELE112 | AC/DC Circuits I | 4 |
| ELE125 | Generators & Transformers | 3 |
| ELE122 | Residential Wiring I | 4 |
| ELE115 | Print Reading | 2 |
| ELE132 | Commercial Wiring I | 4 |
| ELE135 | Troubleshooting Techniques | 4 |
| ELE142 | National Electrical Code I | 4 |
| ELE151 | Industrial Wiring & Design | 4 |
| ELE161 | Electrical Motor Operations & Control | 5 |
| ELE165 | Blueprints & Schematics | 3 |
| ELE163 | Electrical Motor Operations & Control II | 5 |
| ELE172 | Fundamentals of PLCs | 2 |
| ELE175 | Troubleshooting Techniques II | 4 |
| ELE182 | National Electrical Code II | 4 |
| **Total Credits for Certificate:** | | **53** |

| Engineering Graphics & Technology | | |
|---|---|---|
| CAD101 | Technical Drawing I | 4 |
| MFT110 | Blueprint Reading & Geometric Dimensioning | 3 |
| TCH100 | OSHA 10 | 1 |
| MFT120 | Precision Measurement | 2 |
| CAD131 | Computer Graphics I | 5 |
| CAD151 | Technical Drawing II | 4 |
| EGT106 | Computer Numeric Control Concepts | 3 |
| EGT186 | Engineering Graphics Applications | 2 |
| CAD182 | Computer Graphics II | 5 |
| CAD201 | Technical Drawing III | 4 |
| EGT226 | Computer CAD/CAM Operation | 4 |
| MFT240 | Precision Measurement II | 2 |
| EGT206 | Machining Processes | 3 |
| CAD232B | Computer Graphics III | 2 |
| CAD251 | Technical Drawing IV | 4 |
| BUS130 | Microcomputer Applications I | 3 |
| CAD282 | Computer Graphics IV | 5 |
| **Total Credits for Certificate:** | | **56** |

| Heating, Ventilation, & Air Conditioning | | |
|---|---|---|
| HVA102 | Blueprint Reading and Sketching | 2 |
| HVA103 | Hand and Power Tools | 1 |
| HVA104 | Safety Orientation/OSHA 10 | 1 |
| HVA106 | Technical Math | 2 |
| HVA112 | EPA 608 | 1 |
| HVA118 | Electrical Fundamentals | 4 |
| HVA121 | Domestic Refrigeration | 3 |
| HVA122 | HVAC Fundamentals | 4 |
| HVA126 | Plumbing I | 2 |
| HVA136 | Electric Circuits and Controls | 3 |
| HVA140 | Workplace Skills | 1 |
| HVA145 | Sheet Metal | 3 |
| HVA158 | Heating System Fundamentals | 3 |
| HVA170 | Air Conditioning Control Systems | 3 |
| HVA175 | Commercial Refrigeration | 3 |
| HVA181 | Plumbing II | 2 |
| **Total Credits for Certificate:** | | **38** |

| Medical Assistant | | |
|---|---|---|
| MOA109 | Emergency Preparedness | 1 |
| MOA110 | Medical Administrative Aspects | 4 |
| MOA114 | Patient Care I | 4 |
| MOA123 | Insurance Billing and Coding | 3 |
| MOA125 | Medical Terminology | 3 |
| MOA128 | Body Structures and Function | 3 |
| MOA137 | Medical Professional Issues | 2 |
| MOA113 | Clinical Externship I | 2 |
| MOA121 | Principles of Pharmacology | 3 |
| MOA133 | Medical Administrative Aspects II | 3 |
| MOA134 | Patient Care II | 3 |
| MOA135 | Clinical Externship II | 2 |
| MOA136 | Clinical Laboratory Procedures | 4 |
| **Total Credits for Certificate:** | | **37** |

| Practical Nursing | | |
|---|---|---|
| NUR103 | PN Success | 2 |
| NUR106 | KSPN Foundations of Nursing | 4 |
| NUR109 | KSPN Fundamentals of Pharmacology & Safe Medication Administration | 2 |
| NUR122 | KSPN Nursing Care of Adults I | 5 |
| NUR126 | KSPN Foundations of Nursing Clinical | 1 |
| NUR127 | KSPN Nursing Care of Adults I Clinical | 2 |
| NUR150 | KSPN Care of Aging Adults | 2 |
| NUR156 | KSPN Mental Health Nursing | 2 |
| NUR157 | KSPN Maternal Child Nursing | 2 |
| NUR159 | KSPN Nursing Care of Adults II | 5 |
| NUR163 | KSPN Leadership, Roles, and Issues | 2 |
| NUR168 | KSPN Maternal Child Nursing Clinical | 1 |
| NUR170 | KSPN Nursing Care of Adults II Clinical | 2 |
| NUR180 | PN Concept Synthesis | 1 |
| **Total Credits for Certificate:** | | **33** |
| **Total Credits Including Prerequisites:** | | **46** |

| Precision Agriculture | | |
|---|---|---|
| AB114 | Agriculture Orientation | 2 |
| AB116 | Applied Agronomy for Precision Ag | 3 |
| AB130 | Precision Farming Systems | 3 |
| AB118 | Agricultural GIS | 3 |
| AB138 | Remote Sensing | 3 |
| AB148 | Positioning Systems Management | 3 |
| AB128 | Agriculture Electronic Devices & Systems | 3 |
| AB132 | Agricultural Data Management Systems | 3 |
| AB134 | Precision Farming Hardware | 3 |
| AB142 | Field Mapping for Decision Making | 3 |
| AB146 | Aerial Systems Management | 2 |
| AB244 | Precision Agriculture Capstone | 3 |
| **Total Credits for Certificate:** | | **34** |

| Viticulture & Enology – Certificate A | | |
|---|---|---|
| ENO116<br>ENO180 | Introduction to Enology<br>OR Science of Winemaking | 3<br>3 |
| ENO130<br>ENO266 | Intermediate Enology<br>OR Sensory Evaluation | 3<br>3 |
| VIN111<br>VIN135 | Fundamentals of Variable Climate Viticulture<br>OR Winter – Spring Viticulture | 3<br>3 |
| VIN215<br>VIN211 | Summer – Fall Viticulture<br>OR Integrated Pest Management | 3<br>3 |
| | Business Electives | 4 |
| **Total Credits for Certificate A:** | | **16** |
| **Viticulture & Enology – Certificate B** | | |
| ENO116 | Introduction to Enology | 3 |
| ENO180 | Science of Winemaking | 3 |
| ENO130 | Intermediate Enology | 3 |
| ENO266 | Sensory Evaluation | 3 |
| VIN111 | Fundamentals of Variable Climate Viticulture | 3 |
| VIN135 | Winter – Spring Viticulture | 3 |
| VIN211 | Integrated Pest Management | 3 |
| VIN215 | Summer – Fall Viticulture | 3 |
| | Business Electives | 6 |
| **Total Credits for Certificate B:** | | **30** |

| Welding Technology | | |
|---|---|---|
| IWT105 | Welding Safety/OSHA 10 | 1 |
| IWT115 | Cutting Processes | 3 |
| IWT125 | Shield Metal Arc Welding (SMAW) | 3 |
| IWT135 | Gas Metal Arc Welding (GMAW) | 3 |
| IWT145 | Gas Tungsten Arc Welding (GTAW) | 3 |
| IWT162 | Blueprint Reading | 4 |
| IWT175 | Shield Metal Arc Welding II (SMAW II) | 5 |
| IWT180 | Gas Metal Arc Welding II (GMAW II) | 5 |
| IWT185 | Gas Tungsten Arc Welding II (GTAW II) | 5 |
| IWT190 | Blueprint Reading II | 3 |
| **Total Credits for Certificate:** | | **35** |

Highland Community College

# Agribusiness

Associate in Applied Science
(60 credit hours)

## BASIC SKILLS (10 Credits)

### ❑ Composition and Speech (6)

___ ENG101 Composition I (3) GE1
___ ENG102 Composition II: Literature and Research (3) GE1
___ ENG103 Composition II: Rhetoric and Research (3) GE1
___ ENG110 Technical Composition (3)
___ SP 105 Interpersonal Communication (3) GE2
___ SP 106 Public Speaking (3) GE2

### ❑ Computer Literacy (3 Credits)~

___ BUS130 Microcomputer Applications I (3)

~The three credit hours of Computer Literacy must have been completed within the past five years.

### ❑ Orientation (1 Credits)

___ COL103 College Success (1) GE7
___ AB 114 Agriculture Orientation (2) GE7

## SOCIAL & BEHAVIORAL SCIENCES (3 Credits)

### ❑ Economics

___ BUS203 Macroeconomics (3) GE5

## HUMANITIES and FINE ARTS (3 Credits)

### ❑ Art

___ A 101 Art Appreciation (3) GE6
___ A 107 Drawing I (3) GE6
___ A 201 Art History Survey: Prehistoric to Medieval (3) GE6
___ A 202 Art Hist Survey: Renaissance to Contemp (3) GE6

### ❑ Education

___ ED 105 Children's Literature (3) GE7

### ❑ Foreign Language

___ LG 100 Conversational Spanish (2)
___ LG 101 Spanish I (5) GE6
___ LG 102 Spanish II (5) GE6
___ LG 201 Spanish III (3) GE6

### ❑ History

___ HIS101 United States History to 1877 (3) GE6
___ HIS102 United States History since 1877 (3) GE6
___ HIS103 History of Western Civilization I (3) GE6
___ HIS104 History of Western Civilization II (3) GE6

### ❑ Literature

___ ENG104 Introduction to Literature (3) GE6
___ ENG202 American Lit: Pre-Colonial to Civil War (3) GE6
___ ENG208 Introduction to Short Story (3) GE6
___ ENG209 American Lit: Reconstruction to Pres (3) GE6
___ ENG210 World Lit: Beginnings to Renaissance (3)
___ ENG211 World Lit: Enlightenment to Present (3) GE6
___ ENG212 British Literature: Middle Ages to 1800 (3)
___ ENG213 British Literature: 1800 to Present (3) GE6
___ ENG215 Diverse Voices in Literature (3) GE6

### ❑ Music

___ M 103 Music History/Appreciation (3) GE6
___ M 146 Musical Theatre History (3) (= to TH 146) GE6
___ M 162 Introduction to World Music (3) GE6
___ M 223 History of Jazz (3) GE6

### ❑ Philosophy

___ PHI101 Introduction to Philosophy (3) GE6
___ PHI102 Introduction to Ethics (3) GE6
___ PHI103 Logic & Critical Thinking (3) GE6
___ PHI105 Religions of the World (3) GE6

### ❑ Speech

___ SP 101 Oral Communications (3) GE6
___ SP 103 Oral Interpretation (3)

### ❑ Theatre

___ TH 105 Introduction to Drama (3)
___ TH 108 History/Appreciation of Theatre Arts (3) GE6
___ TH 146 Musical Theatre History (3) (= to M 146) GE6
___ TH 208 Film Appreciation (3) GE6

## MATHEMATICS OR SCIENCES (3 Credits)

### ❑ Mathematics

___ MAT102 Technical Math (3)
___ MAT104 College Algebra (3) GE3
___ MAT108 Contemporary Math (3) GE3
___ MAT203 Basic Statistics (3) GE3

### ❑ Natural Sciences

___ BS 101 College Biology with lab (5) ) GE4
___ BS 104 Human Anatomy with lab (4) ) GE4
___ BS 105 Human Physiology with lab (4) ) GE4
___ BS 107 Intro to Environmental Sci. with lab (4) ) GE4
___ BS 110 Nutrition (3) ) GE7
___ BS 112 Nutrition for Health, Fitness & Sports w/Lab (5) GE7
___ BS 201 General Zoology (5) GE7
___ BS 202 General Botany with lab (5)
___ BS 203 Microbiology with lab (5) ) GE4

### ❑ Physical Science

___ CHM107 General Chemistry with lab (5) ) GE4
___ CHM111 College Chemistry I with lab (5) ) GE4
___ CHM112 College Chemistry II with lab (5) ) GE4
___ CHM210 Organic Chemistry I with lab (5)
___ PS 101 College Physical Science with lab (5) GE4
___ PS 102 Concepts of Physics with lab (4)
___ PS 104 Physical Geology with lab (4) GE4
___ PS 108 Astronomy with lab (4) ) GE4
___ PS 203 General Physics I with lab (5) ) GE4
___ PS 204 General Physics II with lab (5) ) GE4
___ PS 215 College Physics I with lab (5) ) GE4
___ PS 216 College Physics II with lab (5) ) GE4

Notes:
@ indicates a degree requirement course that can be no more than 5 years old to count toward this AAS degree.

*BUS200 Financial Accounting (4) can be taken instead of BUS103 Accounting I (3) and BUS105 Accounting II (3) and would calculate as 3 hours Required Agribusiness Courses and 1 hour Agribusiness Electives. Total Degree Requirement credit hours completed must still meet a minimum of 41 credits.

This course is approved by the Kansas Board of Regents for System Wide Transfer (SWT) among all Kansas public postsecondary institutions offering an equivalent course. Additional courses may also be eligible for transfer. Please visit the Highland Registrar to learn more.

## DEGREE REQUIREMENTS (41 credits)

### Required Agribusiness Courses (19 credits)

❑ @AB 108 Principles of Animal Science (3)
❑ @AB 202 Agriculture Economics I (3)
❑ @AB 207 Fundamentals of Animal Nutrition (3)
❑ @AB 203 Soil Science with lab (4)
-or- ❑ @AB 210 Crop Science w/ lab (4)
❑ @BUS101 Introduction to Business (3)
❑ @BUS103 Accounting I (3)

### Agribusiness Electives (22 Credits)

❑ @AB 114 Agriculture Orientation (2)
❑ @AB 116 Applied Agronomy for Precision Ag (3)
❑ @AB 118 Agricultural GIS (3)
❑ @AB 126 Principles of Agronomy (3)
❑ @AB 128 Agricultural Electronic Devices & System (3)
❑ @AB 130 Precision Farming Systems (3)
❑ @AB 132 Agricultural Data Management System (3)
❑ @AB 134 Precision Farming Hardware (3)
❑ @AB 138 Remote Sensing (3)
❑ @AB 142 Field Mapping for Decision Making (3)
❑ @AB 146 Aerial Systems Management (2)
❑ @AB 148 Positioning Systems Management (3)
❑ @AB 224 Range Management (3)
❑ @AB 244 Precision Agriculture Capstone (3)
❑ @BUS102 Personal Finance (3)
❑ @BUS105 Accounting II (3)
❑ @BUS115 Business Math Using Calculators (3)
❑ @BUS117 Computerized Accounting (3)
❑ BUS125 Human Resources (3)
❑ @BUS127 Principles of Entrepreneurship I (3)
❑ @BUS133 Micro Applications I: Spreadsheet (3)
❑ @BUS139 Micro Applications I: Word Processing (3)
❑ BUS201 Principles of Management (3)
❑ BUS204 Microeconomics (3) GE GE5
❑ BUS205 Business Law (3)
❑ BUS210 Marketing (3)
❑ @BUS213 Business Communications (3)
❑ @BUS216 Managerial Accounting (3)
❑ BUS230 Principles of Entrepreneurship II (3)

Revised 11/25

Highland Community College

# Automotive Technology

Associate in Applied Science

(68 credit hours)

## BASIC SKILLS (9 Credits)

**❑ Composition and Speech (6)**

___ ENG101 Composition I (3) GE1
___ ENG102 Composition II: Literature and Research (3) GE1
___ ENG103 Composition II: Rhetoric and Research (3) GE1
___ ENG110 Technical Composition (3)
___ SP 105 Interpersonal Communication (3) GE2
___ SP 106 Public Speaking (3) GE2

## HUMANITIES and FINE ARTS (3 Credits)

**❑ Art**

___ A 101 Art Appreciation (3) GE6
___ A 107 Drawing I (3) GE6
___ A 201 Art History Survey: Prehistoric to Medieval (3) GE6
___ A 202 Art Hist Survey: Renaissance to Contemp (3) GE6

**❑ Education**

___ ED 105 Children's Literature (3) GE7

**❑ Foreign Language**

___ LG 100 Conversational Spanish (2)
___ LG 101 Spanish I (5) GE6
___ LG 102 Spanish II (5) GE6
___ LG 201 Spanish III (3) GE6

**❑ History**

___ HIS101 United States History to 1877 (3) GE6
___ HIS102 United States History since 1877 (3) GE6
___ HIS103 History of Western Civilization I (3) GE6
___ HIS104 History of Western Civilization II (3) GE6

**❑ Literature**

___ ENG104 Introduction to Literature (3) GE6
___ ENG202 American Lit: Pre-Colonial to Civil War (3) GE6
___ ENG208 Introduction to Short Story (3) GE6
___ ENG209 American Lit: Reconstruction to Pres (3) GE6
___ ENG210 World Lit: Beginnings to Renaissance (3)
___ ENG211 World Lit: Enlightenment to Present (3) GE6
___ ENG212 British Literature: Middle Ages to 1800 (3)
___ ENG213 British Literature: 1800 to Present (3) GE6
___ ENG215 Diverse Voices in Literature (3) GE6

**❑ Music**

___ M 103 Music History/Appreciation (3) GE6
___ M 146 Musical Theatre History (3) (= to TH 146) GE6
___ M 162 Introduction to World Music (3) GE6
___ M 223 History of Jazz (3) GE6

**❑ Philosophy**

___ PHI101 Introduction to Philosophy (3) GE6
___ PHI102 Introduction to Ethics (3) GE6
___ PHI103 Logic & Critical Thinking (3) GE6
___ PHI105 Religions of the World (3) GE6

**❑ Speech**

___ SP 101 Oral Communications (3) GE6
___ SP 103 Oral Interpretation (3)

**❑ Theatre**

___ TH 105 Introduction to Drama (3)
___ TH 108 History/Appreciation of Theatre Arts (3) GE6
___ TH 146 Musical Theatre History (3) (= to M 146) GE6
___ TH 208 Film Appreciation (3) GE6

## SOCIAL & BEHAVIORAL SCIENCES (3 Credits)

### ❑ Anthropology
___ ANT112 General Anthropology (3) GE5

### ❑ Criminal Justice
___ CJ 100 Intro to Criminal Justice (3) GE5
___ CJ 120 Juvenile Delinquency and Justice (3) GE5

### ❑ Business
___ BUS101 Introduction to Business (3)
___ BUS102 Personal Finance (3)
___ BUS125 Human Resources (3)
___ BUS127 Principles of Entrepreneurship I (3)
___ BUS203 Macroeconomics (3) GE5
___ BUS204 Microeconomics (3) GE5

### ❑ Geography
___ GEO212 World Regional Geography (3) GE5

### ❑ Political Science
___ POL100 United States Government (3) GE5
___ POL101 Introduction to Political Science (3) GE5
___ POL115 State & Local Government (3) GE5

### ❑ Psychology
___ PSY101 General Psychology (3) GE5
___ PSY105 Industrial & Organizational Psychology (3)
___ PSY205 Human Growth & Development (3) GE5

### ❑ Sociology
___ SOC101 General Sociology (3) GE5
___ SOC102 Marriage & the Family (3) GE
___ SOC104 Introduction to Social Work (3) GE5

## DEGREE REQUIREMENTS (53 credits)
___ @AUT101 Electrical I (3)
___ @AUT121 Auto Electricity and Electronics (2)
___ @AUT122 Brakes I (3)
___ @AUT142 Automotive Tech Lab I (5)
**OR** ___ AUT142A Automotive Tech Lab I A (2)
**AND** ___AUT142B Automotive Tech Lab I B (3)
___ @AUT132 Engine Performance I (3)
___ @AUT151 Heating and Air Conditioning (2)
___ @AUT161 Suspension and Steering I (3)
___ @AUT192 Automotive Tech Lab II (5)
**OR** ___ AUT192A Automotive Tech Lab II A (2)
**AND** ___ AUT192B Automotive Tech Lab II B (3)
___ @AUT193 Hybrid and Fuel Cell Vehicles (1)
___ @AUT201 Manual Drive Trains and Axles (2)
___ @AUT211 Automatic Transmissions/Transaxles I (2)
___ @AUT221 Engine Performance II (2)
___ @AUT242 Automotive Tech Lab III (7)
**OR** ___ AUT242A Automotive Tech Lab III A (4)
**AND** ___ AUT242B Auto Tech Lab III B (3)
___ @AUT251 Engine Repair (2)
___ @AUT255 Automatic Transmissions/Transaxles II (1)
___ @AUT261 Auto Service Management (2)
___ @AUT281 Automotive Tech Lab IV (7)
**OR** ___ AUT281A Automotive Tech Lab IV A (4)
**AND** ___ AUT281B Auto Tech Lab IV B (3)
___ @AUT291 Service Management Practicum (1)

## MATHEMATICS OR SCIENCES (3 Credits)

### ❑ Mathematics
___ MAT102 Technical Math (3)
___ MAT104 College Algebra (3) GE3
___ MAT108 Contemporary Math (3) GE3
___ MAT203 Basic Statistics (3) GE3

### ❑ Natural Sciences
___ BS 101 College Biology with lab (5) ) GE4
___ BS 104 Human Anatomy with lab (4) ) GE4
___ BS 105 Human Physiology with lab (4) ) GE4
___ BS 107 Intro to Environmental Sci. with lab (4) ) GE4
___ BS 110 Nutrition (3) ) GE7
___ BS 112 Nutrition for Health, Fitness & Sports w/Lab (5) GE7
___ BS 201 General Zoology (5) GE7
___ BS 202 General Botany with lab (5)
___ BS 203 Microbiology with lab (5) ) GE4

### ❑ Physical Science
___ CHM107 General Chemistry with lab (5) ) GE4
___ CHM111 College Chemistry I with lab (5) ) GE4
___ CHM112 College Chemistry II with lab (5) ) GE4
___ CHM 210 Organic Chemistry I with lab (5)
___ PS 101 College Physical Science with lab (5) GE4
___ PS 102 Concepts of Physics with lab (4)
___ PS 104 Physical Geology with lab (4) GE4
___ PS 108 Astronomy with lab (4) ) GE4
___ PS 203 General Physics I with lab (5) ) GE4
___ PS 204 General Physics II with lab (5) ) GE4
___ PS 215 College Physics I with lab (5) ) GE4
___ PS 216 College Physics II with lab (5) ) GE4

## CERTIFICATIONS
**Automotive Service Excellence (ASE):**
___ ASE Entry Level: all 8 ASE categories
___ ASE G1 Professional Level Maintenance & Light Repair (Optional)

Notes:
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This course is approved by the Kansas Board of Regents for System Wide Transfer (SWT) among all Kansas public postsecondary institutions offering an equivalent course. Additional courses may also be eligible for transfer. Please visit the Highland Registrar to learn more.

Revised 11/25

Highland Community College

# Business and Accounting

Associate in Applied Science
(60 credit hours)

## BASIC SKILLS (6 Credits)

**❑ Composition and Speech (6)**

___ ENG101 Composition I (3) GE1
___ ENG102 Composition II: Literature and Research (3) GE1
___ ENG103 Composition II: Rhetoric and Research (3) GE1
___ ENG110 Technical Composition (3)
___ SP 105 Interpersonal Communication (3) GE2
___ SP 106 Public Speaking (3) GE2

## SOCIAL & BEHAVIORAL SCIENCES (3 Credits)

**❑ Economics**

___ BUS203 Macroeconomics (3) GE5

## HUMANITIES and FINE ARTS (3 Credits)

**❑ Art**

___ A 101 Art Appreciation (3) GE6
___ A 107 Drawing I (3) GE6
___ A 201 Art History Survey: Prehistoric to Medieval (3) GE6
___ A 202 Art Hist Survey: Renaissance to Contemp (3) GE6

**❑ Education**

___ ED 105 Children's Literature (3) GE7

**❑ Foreign Language**

___ LG 100 Conversational Spanish (2)
___ LG 101 Spanish I (5) GE6
___ LG 102 Spanish II (5) GE6
___ LG 201 Spanish III (3) GE6

**❑ History**

___ HIS101 United States History to 1877 (3) GE6
___ HIS102 United States History since 1877 (3) GE6
___ HIS103 History of Western Civilization I (3) GE6
___ HIS104 History of Western Civilization II (3) GE6

**❑ Literature**

___ ENG104 Introduction to Literature (3) GE6
___ ENG202 American Lit: Pre-Colonial to Civil War (3) GE6
___ ENG208 Introduction to Short Story (3) GE6
___ ENG209 American Lit: Reconstruction to Pres (3) GE6
___ ENG210 World Lit: Beginnings to Renaissance (3)
___ ENG211 World Lit: Enlightenment to Present (3) GE6
___ ENG212 British Literature: Middle Ages to 1800 (3)
___ ENG213 British Literature: 1800 to Present (3) GE6
___ ENG215 Diverse Voices in Literature (3) GE6

**❑ Music**

___ M 103 Music History/Appreciation (3) GE6
___ M 146 Musical Theatre History (3) (= to TH 146) GE6
___ M 162 Introduction to World Music (3) GE6
___ M 223 History of Jazz (3) GE6

**❑ Philosophy**

___ PHI101 Introduction to Philosophy (3) GE6
___ PHI102 Introduction to Ethics (3) GE6
___ PHI103 Logic & Critical Thinking (3) GE6
___ PHI105 Religions of the World (3) GE6

**❑ Speech**

___ SP 101 Oral Communications (3) GE6
___ SP 103 Oral Interpretation (3)

**❑ Theatre**

___ TH 105 Introduction to Drama (3)
___ TH 108 History/Appreciation of Theatre Arts (3) GE6
___ TH 146 Musical Theatre History (3) (= to M 146) GE6
___ TH 208 Film Appreciation (3) GE6

## MATHEMATICS OR SCIENCES (3 Credits)

❑ **Mathematics**

___ MAT102 Technical Math (3)
___ MAT104 College Algebra (3) GE3
___ MAT108 Contemporary Math (3) GE3
___ MAT203 Basic Statistics (3) GE3

❑ **Natural Sciences**

___ BS 101 College Biology with lab (5) ) GE4
___ BS 104 Human Anatomy with lab (4) ) GE4
___ BS 105 Human Physiology with lab (4) ) GE4
___ BS 107 Intro to Environmental Sci. with lab (4) ) GE4
___ BS 110 Nutrition (3) ) GE7
___ BS 112 Nutrition for Health, Fitness & Sports w/Lab (5) GE7
___ BS 201 General Zoology (5) GE7
___ BS 202 General Botany with lab (5)
___ BS 203 Microbiology with lab (5) ) GE4

❑ **Physical Science**

___ CHM107 General Chemistry with lab (5) ) GE4
___ CHM111 College Chemistry I with lab (5) ) GE4
___ CHM112 College Chemistry II with lab (5) ) GE4
___ CHM210 Organic Chemistry I with lab (5)
___ PS 101 College Physical Science with lab (5) GE4
___ PS 102 Concepts of Physics with lab (4)
___ PS 104 Physical Geology with lab (4) GE4
___ PS 108 Astronomy with lab (4) ) GE4
___ PS 203 General Physics I with lab (5) ) GE4
___ PS 204 General Physics II with lab (5) ) GE4
___ PS 215 College Physics I with lab (5) ) GE4
___ PS 216 College Physics II with lab (5) ) GE4

## DEGREE REQUIREMENTS (45 credits)

### Required Business Courses (27 credits)

❑ @BUS101 Introduction to Business (3)
❑ @BUS102 Personal Finance (3)
❑ @BUS103 Accounting I (3)*
❑ @BUS105 Accounting II (3)*
❑ @BUS117 Computerized Accounting (3)
❑ @BUS127 Principles of Entrepreneurship I (3)
❑ @BUS130 Microcomputer Applications I (3)
❑ @BUS213 Business Communications (3)
❑ @BUS216 Managerial Accounting (3)

### Business Electives (18 Credits)

❑ BUS112 The Business of Personal Training (3)
❑ @BUS115 Business Math Using Calculators (3)
❑ BUS125 Human Resources (3)
❑ @BUS133 Micro Applications I: Spreadsheet (3)
❑ @BUS139 Micro Applications I: Word Processing (3)
❑ BUS201 Principles of Management (3)
❑ BUS204 Microeconomics (3)
❑ BUS205 Business Law (3)
❑ BUS210 Marketing (3)
❑ BUS230 Principles of Entrepreneurship II (3)
❑ MAT107 General Calculus & Linear Algebra (3)
❑ MAT203 Basic Statistics (3)

Notes:
@ indicates a degree requirement course that can be no more than 5 years old to count toward this AAS degree.

If MAT107 or MAT203 is used as the Math/Science credit, it will not count as a Business Elective course

*BUS200 Financial Accounting (4) can be taken instead of BUS103 Accounting I (3) and BUS105 Accounting II (3) and would calculate as 3 hours Required Agribusiness Courses and 1 hour Agribusiness Electives. Total Degree Requirement credit hours completed must still meet a minimum of 41 credits.

This course is approved by the Kansas Board of Regents for System Wide Transfer (SWT) among all Kansas public postsecondary institutions offering an equivalent course. Additional courses may also be eligible for transfer. Please visit the Highland Registrar to learn more.

Revised 11/25

Highland Community College

# Computer Support Specialist

Associate in Applied Science

(61 credit hours)

## BASIC SKILLS (9 Credits)

**❑ Composition and Speech (6)**

___ ENG101 Composition I (3) GE1
___ ENG102 Composition II: Literature and Research (3) GE1
___ ENG103 Composition II: Rhetoric and Research (3) GE1
___ ENG110 Technical Composition (3)
___ SP 105 Interpersonal Communication (3) GE2
___ SP 106 Public Speaking (3) GE2

## HUMANITIES and FINE ARTS (3 Credits)

**❑ Art**

___ A 101 Art Appreciation (3) GE6
___ A 107 Drawing I (3) GE6
___ A 201 Art History Survey: Prehistoric to Medieval (3) GE6
___ A 202 Art Hist Survey: Renaissance to Contemp (3) GE6

**❑ Education**

___ ED 105 Children's Literature (3) GE7

**❑ Foreign Language**

___ LG 100 Conversational Spanish (2)
___ LG 101 Spanish I (5) GE6
___ LG 102 Spanish II (5) GE6
___ LG 201 Spanish III (3) GE6

**❑ History**

___ HIS101 United States History to 1877 (3) GE6
___ HIS102 United States History since 1877 (3) GE6
___ HIS103 History of Western Civilization I (3) GE6
___ HIS104 History of Western Civilization II (3) GE6

**❑ Literature**

___ ENG104 Introduction to Literature (3) GE6
___ ENG202 American Lit: Pre-Colonial to Civil War (3) GE6
___ ENG208 Introduction to Short Story (3) GE6
___ ENG209 American Lit: Reconstruction to Pres (3) GE6
___ ENG210 World Lit: Beginnings to Renaissance (3)
___ ENG211 World Lit: Enlightenment to Present (3) GE6
___ ENG212 British Literature: Middle Ages to 1800 (3)
___ ENG213 British Literature: 1800 to Present (3) GE6
___ ENG215 Diverse Voices in Literature (3) GE6

**❑ Music**

___ M 103 Music History/Appreciation (3) GE6
___ M 146 Musical Theatre History (3) (= to TH 146) GE6
___ M 162 Introduction to World Music (3) GE6
___ M 223 History of Jazz (3) GE6

**❑ Philosophy**

___ PHI101 Introduction to Philosophy (3) GE6
___ PHI102 Introduction to Ethics (3) GE6
___ PHI103 Logic & Critical Thinking (3) GE6
___ PHI105 Religions of the World (3) GE6

**❑ Speech**

___ SP 101 Oral Communications (3) GE6
___ SP 103 Oral Interpretation (3)

**❑ Theatre**

___ TH 105 Introduction to Drama (3)
___ TH 108 History/Appreciation of Theatre Arts (3) GE6
___ TH 146 Musical Theatre History (3) (= to M 146) GE6
___ TH 208 Film Appreciation (3) GE6

## SOCIAL & BEHAVIORAL SCIENCES (3 Credits)

### ❑ Anthropology
___ ANT112 General Anthropology (3) GE5

### ❑ Criminal Justice
___ CJ 100 Intro to Criminal Justice (3) GE5
___ CJ 120 Juvenile Delinquency and Justice (3) GE5

### ❑ Business
___ BUS101 Introduction to Business (3)
___ BUS102 Personal Finance (3)
___ BUS125 Human Resources (3)
___ BUS127 Principles of Entrepreneurship I (3)
___ BUS203 Macroeconomics (3) GE5
___ BUS204 Microeconomics (3) GE5

### ❑ Geography
___ GEO212 World Regional Geography (3) GE5

### ❑ Political Science
___ POL100 United States Government (3) GE5
___ POL101 Introduction to Political Science (3) GE5
___ POL115 State & Local Government (3) GE5

### ❑ Psychology
___ PSY101 General Psychology (3) GE5
___ PSY105 Industrial & Organizational Psychology (3)
___ PSY205 Human Growth & Development (3) GE5

### ❑ Sociology
___ SOC101 General Sociology (3) GE5
___ SOC102 Marriage & the Family (3) GE
___ SOC104 Introduction to Social Work (3) GE5

## DEGREE REQUIREMENTS (44 credits)
___ CST106 Introduction to Networks: CCNA I (3)
___ CST107 Intro to Computers and Applications (3)
___ CST115 PC Troubleshooting Lab I (1)
___ CST124 PC Troubleshooting Essentials (2)
___ CST154 CompTIA A+ Core I (3)
___ CST158 CompTIA A+ Core 2 (3)
___ CST159 Switching, Routing, & Wireless Essentials: CCNA2 (4)
___ CST125 Web Design (2) or
___ CST152 Network Essentials (3)
___ CST206 Programming (2)
___ CST207 Technical Support Lab I (2)
___ CST212 Net, Security, & Automation: CCNA3 (3) or
___ CST201 Advanced Operating Systems (3)
___ CST215 Essentials to Cloud Computing (3)
___ CST218 Linux (2)
___ CST219 Server Operating Sys & Virtualization (3)
___ CST223 Server Administration (3)
___ CST224 Computer and Network Security (3)
___ NET125 Introduction to Net+ (3)
___ NET196 Certification Training Lab: NET+ (1)

## MATHEMATICS OR SCIENCES (3 Credits)

### ❑ Mathematics
___ MAT102 Technical Math (3)
___ MAT104 College Algebra (3) GE3
___ MAT108 Contemporary Math (3) GE3
___ MAT203 Basic Statistics (3) GE3

### ❑ Natural Sciences
___ BS 101 College Biology with lab (5) ) GE4
___ BS 104 Human Anatomy with lab (4) ) GE4
___ BS 105 Human Physiology with lab (4) ) GE4
___ BS 107 Intro to Environmental Sci. with lab (4) ) GE4
___ BS 110 Nutrition (3) ) GE7
___ BS 112 Nutrition for Health, Fitness & Sports w/Lab (5) GE7
___ BS 201 General Zoology (5) GE7
___ BS 202 General Botany with lab (5)
___ BS 203 Microbiology with lab (5) ) GE4

### ❑ Physical Science
___ CHM107 General Chemistry with lab (5) ) GE4
___ CHM111 College Chemistry I with lab (5) ) GE4
___ CHM112 College Chemistry II with lab (5) ) GE4
___ PS 101 College Physical Science with lab (5) GE4
___ PS 102 Concepts of Physics with lab (4)
___ PS 104 Physical Geology with lab (4) GE4
___ PS 108 Astronomy with lab (4) ) GE4
___ PS 203 General Physics I with lab (5) ) GE4
___ PS 204 General Physics II with lab (5) ) GE4
___ PS 210 Organic Chemistry I with lab (5)
___ PS 215 College Physics I with lab (5) ) GE4
___ PS 216 College Physics II with lab (5) ) GE4

## CERTIFICATIONS
**CompTIA:**
___ CompTIA A+
___ CompTIA Net+
**CompTIA (select one):**
___ CompTIA Server+
___ CompTIA Security+
___ CompTIA Cloud+

Notes:
@ indicates a degree requirement course that can be no more than 5 years old to count toward this AAS degree.

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Revised 11/25

Highland Community College

# Diesel Technology

Associate in Applied Science
(68 credit hours)

## BASIC SKILLS (9 Credits)

**❑ Composition and Speech (6)**

___ ENG101 Composition I (3) GE1
___ ENG102 Composition II: Literature and Research (3) GE1
___ ENG103 Composition II: Rhetoric and Research (3) GE1
___ ENG110 Technical Composition (3)
___ SP 105 Interpersonal Communication (3) GE2
___ SP 106 Public Speaking (3) GE2

## HUMANITIES and FINE ARTS (3 Credits)

**❑ Art**

___ A 101 Art Appreciation (3) GE6
___ A 107 Drawing I (3) GE6
___ A 201 Art History Survey: Prehistoric to Medieval (3) GE6
___ A 202 Art Hist Survey: Renaissance to Contemp (3) GE6

**❑ Education**

___ ED 105 Children's Literature (3) GE7

**❑ Foreign Language**

___ LG 100 Conversational Spanish (2)
___ LG 101 Spanish I (5) GE6
___ LG 102 Spanish II (5) GE6
___ LG 201 Spanish III (3) GE6

**❑ History**

___ HIS101 United States History to 1877 (3) GE6
___ HIS102 United States History since 1877 (3) GE6
___ HIS103 History of Western Civilization I (3) GE6
___ HIS104 History of Western Civilization II (3) GE6

**❑ Literature**

___ ENG104 Introduction to Literature (3) GE6
___ ENG202 American Lit: Pre-Colonial to Civil War (3) GE6
___ ENG208 Introduction to Short Story (3) GE6
___ ENG209 American Lit: Reconstruction to Pres (3) GE6
___ ENG210 World Lit: Beginnings to Renaissance (3)
___ ENG211 World Lit: Enlightenment to Present (3) GE6
___ ENG212 British Literature: Middle Ages to 1800 (3)
___ ENG213 British Literature: 1800 to Present (3) GE6
___ ENG215 Diverse Voices in Literature (3) GE6

**❑ Music**

___ M 103 Music History/Appreciation (3) GE6
___ M 146 Musical Theatre History (3) (= to TH 146) GE6
___ M 162 Introduction to World Music (3) GE6
___ M 223 History of Jazz (3) GE6

**❑ Philosophy**

___ PHI101 Introduction to Philosophy (3) GE6
___ PHI102 Introduction to Ethics (3) GE6
___ PHI103 Logic & Critical Thinking (3) GE6
___ PHI105 Religions of the World (3) GE6

**❑ Speech**

___ SP 101 Oral Communications (3) GE6
___ SP 103 Oral Interpretation (3)

**❑ Theatre**

___ TH 105 Introduction to Drama (3)
___ TH 108 History/Appreciation of Theatre Arts (3) GE6
___ TH 146 Musical Theatre History (3) (= to M 146) GE6
___ TH 208 Film Appreciation (3) GE6

## SOCIAL & BEHAVIORAL SCIENCES (3 Credits)

**❑ Anthropology**

___ ANT112 General Anthropology (3) GE5

❑ **Criminal Justice**

___ CJ 100 Intro to Criminal Justice (3) GE5
___ CJ 120 Juvenile Delinquency and Justice (3) GE5

❑ **Business**

___ BUS101 Introduction to Business (3)
___ BUS102 Personal Finance (3)
___ BUS125 Human Resources (3)
___ BUS127 Principles of Entrepreneurship I (3)
___ BUS203 Macroeconomics (3) GE5
___ BUS204 Microeconomics (3) GE5

❑ **Geography**

___ GEO212 World Regional Geography (3) GE5

❑ **Political Science**

___ POL100 United States Government (3) GE5
___ POL101 Introduction to Political Science (3) GE5
___ POL115 State & Local Government (3) GE5

❑ **Psychology**

___ PSY101 General Psychology (3) GE5
___ PSY105 Industrial & Organizational Psychology (3)
___ PSY205 Human Growth & Development (3) GE5

❑ **Sociology**

___ SOC101 General Sociology (3) GE5
___ SOC102 Marriage & the Family (3) GE
___ SOC104 Introduction to Social Work (3) GE5

## DEGREE REQUIREMENTS (53 credits)

___ DSL 102 OSHA 10 (1)
___ DSL 111 Fund./Operating Principles (4)
___ DSL 133 Diesel Engine I (5)
___ DSL 141 Welding and Fabrication Lab (1)
___ DSL 152 Fuel System Diagnosis/Repair (4)
___ DSL 162 Electrical/Electronics Systems (5)
___ DSL 172 Brakes (3)
___ DSL 182 Introduction to Hydraulics (3)
___ DSL 192 Advanced Engine Maintenance (2)
___ DSL 212 Advanced Engine Overhaul (3)
___ DSL 222 Adv. Electronic Diagnosis/Repair (5)
___ DSL 232 Hydraulic Diagnosis/Repair (3)
___ DSL 261 Air Conditioning Diag./Repair (2)
___ DSL 272 Suspension and Steering (3)
___ DSL 275 Diesel Management (3)
___ DSL 281 Transmission Overhaul/Diagnosis (3)
___ DSL 291 Advanced Clutch & Power Train (3)

## MATHEMATICS OR SCIENCES (3 Credits)

❑ **Mathematics**

___ MAT102 Technical Math (3)
___ MAT104 College Algebra (3) GE3
___ MAT108 Contemporary Math (3) GE3
___ MAT203 Basic Statistics (3) GE3

❑ **Natural Sciences**

___ BS 101 College Biology with lab (5) ) GE4
___ BS 104 Human Anatomy with lab (4) ) GE4
___ BS 105 Human Physiology with lab (4) ) GE4
___ BS 107 Intro to Environmental Sci. with lab (4) ) GE4
___ BS 110 Nutrition (3) ) GE7
___ BS 112 Nutrition for Health, Fitness & Sports w/Lab (5) GE7
___ BS 201 General Zoology (5) GE7
___ BS 202 General Botany with lab (5)
___ BS 203 Microbiology with lab (5) ) GE4

❑ **Physical Science**

___ CHM107 General Chemistry with lab (5) ) GE4
___ CHM111 College Chemistry I with lab (5) ) GE4
___ CHM112 College Chemistry II with lab (5) ) GE4
___ CHM 210 Organic Chemistry I with lab (5)
___ PS 101 College Physical Science with lab (5) GE4
___ PS 102 Concepts of Physics with lab (4)
___ PS 104 Physical Geology with lab (4) GE4
___ PS 108 Astronomy with lab (4) ) GE4
___ PS 203 General Physics I with lab (5) ) GE4
___ PS 204 General Physics II with lab (5) ) GE4
___ PS 215 College Physics I with lab (5) ) GE4
___ PS 216 College Physics II with lab (5) ) GE4

## CERTIFICATIONS

**Automotive Service Excellence (ASE):**

___ ASE Entry Level: all 4 ASE categories

Notes:
@ indicates a degree requirement course that can be no more than 5 years old to count toward this AAS degree.

GE This course is approved by the Kansas Board of Regents for System Wide Transfer (SWT) among all Kansas public postsecondary institutions offering an equivalent course. Additional courses may also be eligible for transfer. Please visit the Highland Registrar to learn more.

Revised 11/25

Highland Community College

# Engineering Graphics and Technologies

Associate in Applied Science
(68 credit hours)

## BASIC SKILLS (9 Credits)

### ❑ Composition and Speech (6)

___ ENG101 Composition I (3) GE1
___ ENG102 Composition II: Literature and Research (3) GE1
___ ENG103 Composition II: Rhetoric and Research (3) GE1
___ ENG110 Technical Composition (3)
___ SP 105 Interpersonal Communication (3) GE2
___ SP 106 Public Speaking (3) GE2

### ❑ Computer Literacy (3 Credits)~

___ BUS130 Microcomputer Applications I (3)

~The three credit hours of Computer Literacy must have been completed within the past five years.

## HUMANITIES and FINE ARTS (3 Credits)

### ❑ Art

___ A 101 Art Appreciation (3) GE6
___ A 107 Drawing I (3) GE6
___ A 201 Art History Survey: Prehistoric to Medieval (3) GE6
___ A 202 Art Hist Survey: Renaissance to Contemp (3) GE6

### ❑ Education

___ ED 105 Children's Literature (3) GE7

### ❑ Foreign Language

___ LG 100 Conversational Spanish (2)
___ LG 101 Spanish I (5) GE6
___ LG 102 Spanish II (5) GE6
___ LG 201 Spanish III (3) GE6

### ❑ History

___ HIS101 United States History to 1877 (3) GE6
___ HIS102 United States History since 1877 (3) GE6
___ HIS103 History of Western Civilization I (3) GE6
___ HIS104 History of Western Civilization II (3) GE6

### ❑ Literature

___ ENG104 Introduction to Literature (3) GE6
___ ENG202 American Lit: Pre-Colonial to Civil War (3) GE6
___ ENG208 Introduction to Short Story (3) GE6
___ ENG209 American Lit: Reconstruction to Pres (3) GE6
___ ENG210 World Lit: Beginnings to Renaissance (3)
___ ENG211 World Lit: Enlightenment to Present (3) GE6
___ ENG212 British Literature: Middle Ages to 1800 (3)
___ ENG213 British Literature: 1800 to Present (3) GE6
___ ENG215 Diverse Voices in Literature (3) GE6

### ❑ Music

___ M 103 Music History/Appreciation (3) GE6
___ M 146 Musical Theatre History (3) (= to TH 146) GE6
___ M 162 Introduction to World Music (3) GE6
___ M 223 History of Jazz (3) GE6

### ❑ Philosophy

___ PHI101 Introduction to Philosophy (3) GE6
___ PHI102 Introduction to Ethics (3) GE6
___ PHI103 Logic & Critical Thinking (3) GE6
___ PHI105 Religions of the World (3) GE6

### ❑ Speech

___ SP 101 Oral Communications (3) GE6
___ SP 103 Oral Interpretation (3)

### ❑ Theatre

___ TH 105 Introduction to Drama (3)
___ TH 108 History/Appreciation of Theatre Arts (3) GE6
___ TH 146 Musical Theatre History (3) (= to M 146) GE6
___ TH 208 Film Appreciation (3) GE6

## SOCIAL & BEHAVIORAL SCIENCES (3 Credits)

### ❑ Anthropology
___ ANT112 General Anthropology (3) GE5

### ❑ Criminal Justice
___ CJ 100 Intro to Criminal Justice (3) GE5
___ CJ 120 Juvenile Delinquency and Justice (3) GE5

### ❑ Business
___ BUS101 Introduction to Business (3)
___ BUS102 Personal Finance (3)
___ BUS125 Human Resources (3)
___ BUS127 Principles of Entrepreneurship I (3)
___ BUS203 Macroeconomics (3) GE5
___ BUS204 Microeconomics (3) GE5

### ❑ Geography
___ GEO212 World Regional Geography (3) GE5

### ❑ Political Science
___ POL100 United States Government (3) GE5
___ POL101 Introduction to Political Science (3) GE5
___ POL115 State & Local Government (3) GE5

### ❑ Psychology
___ PSY101 General Psychology (3) GE5
___ PSY105 Industrial & Organizational Psychology (3)
___ PSY205 Human Growth & Development (3) GE5

### ❑ Sociology
___ SOC101 General Sociology (3) GE5
___ SOC102 Marriage & the Family (3) GE
___ SOC104 Introduction to Social Work (3) GE5

## DEGREE REQUIREMENTS (56 credits)
___ @CAD101 Technical Drawing I (4)
___ @CAD131 Computer Graphics I (5)
___ @CAD151 Technical Drawing II (4)
___ @CAD182 Computer Graphics II (5)
___ @CAD201 Technical Drawing III (4)
___ @CAD232B Computer Graphics III (2)
___ @CAD251 Technical Drawing IV (4)
___ @CAD282 Computer Graphics IV (5)
___ @EGT106 Computer Numeric Control Concepts (3)
___ @EGT186 Engineering Graphics Applications (2)
___ @EGT206 Machining Processes (3)
___ @EGT226 Computer CAD/CAM Operation (4)
___ @MFT110 Blueprint Reading/Geometric (3)
___ @MFT120 Precision Measurements (2)
___ @MFT240 Precision Measurements II (2)
___ @TCH100 OSHA 10 (1)

## MATHEMATICS OR SCIENCES
**Math/Science Requirement fulfilled by degree requirements in the EGT program.

Notes:
@ indicates a degree requirement course that can be no more than 5 years old to count toward this AAS degree.

This course is approved by the Kansas Board of Regents for System Wide Transfer (SWT) among all Kansas public postsecondary institutions offering an equivalent course. Additional courses may also be eligible for transfer. Please visit the Highland Registrar to learn more.

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Highland Community College

# Electrical Technology

Associate in Applied Science
(68 credit hours)

## BASIC SKILLS (9 Credits)

### ❑ Composition and Speech (6)

___ ENG101 Composition I (3) GE1
___ ENG102 Composition II: Literature and Research (3) GE1
___ ENG103 Composition II: Rhetoric and Research (3) GE1
___ ENG110 Technical Composition (3)
___ SP 105 Interpersonal Communication (3) GE2
___ SP 106 Public Speaking (3) GE2

### ❑ Computer Literacy (3 Credits)~

___ AB 227 Agriculture Microcomputer I (3)
___ A 113 Typography (3)
___ A 121 Design Software Application (3)
___ A 139 Computer Graphics: Web Design (3)
___ A 215 Graphic Design (3)
___ A 223 Computer Graphics: Illustration (3)
___ A 224 Computer Graphics: Enhanced Photo (3)
___ BUS130 Microcomputer Applications I (3)
___ BUS133 Micro App I: Spreadsheet (3)
___ BUS139 Micro App I: Word Processing (3)
___ BUS181 Micro App I: Word Processing (1)
___ BUS183 Micro App I: Spreadsheet (1)
___ BUS189 Micro App I: Electronic Bus Pres (1)
___ BUS246D Micro App I: Web Design (2)
___ CAD131A Computer Graphics I (3)
___ CAD131B Computer Graphics I (2)
___ CST105 Industrial Computer Applications (2)

~The three credit hours of Computer Literacy must have been completed within the past five years.

## HUMANITIES and FINE ARTS (3 Credits)

### ❑ Art

___ A 101 Art Appreciation (3) GE6
___ A 107 Drawing I (3) GE6
___ A 201 Art History Survey: Prehistoric to Medieval (3) GE6
___ A 202 Art Hist Survey: Renaissance to Contemp (3) GE6

### ❑ Education

___ ED 105 Children's Literature (3) GE7

### ❑ Foreign Language

___ LG 100 Conversational Spanish (2)
___ LG 101 Spanish I (5) GE6
___ LG 102 Spanish II (5) GE6
___ LG 201 Spanish III (3) GE6

### ❑ History

___ HIS101 United States History to 1877 (3) GE6
___ HIS102 United States History since 1877 (3) GE6
___ HIS103 History of Western Civilization I (3) GE6
___ HIS104 History of Western Civilization II (3) GE6

### ❑ Literature

___ ENG104 Introduction to Literature (3) GE6
___ ENG202 American Lit: Pre-Colonial to Civil War (3) GE6
___ ENG208 Introduction to Short Story (3) GE6
___ ENG209 American Lit: Reconstruction to Pres (3) GE6
___ ENG210 World Lit: Beginnings to Renaissance (3)
___ ENG211 World Lit: Enlightenment to Present (3) GE6
___ ENG212 British Literature: Middle Ages to 1800 (3)
___ ENG213 British Literature: 1800 to Present (3) GE6
___ ENG215 Diverse Voices in Literature (3) GE6

### ❑ Music

___ M 103 Music History/Appreciation (3) GE6
___ M 146 Musical Theatre History (3) (= to TH 146) GE6
___ M 162 Introduction to World Music (3) GE6
___ M 223 History of Jazz (3) GE6

### ❑ Philosophy

___ PHI101 Introduction to Philosophy (3) GE6
___ PHI102 Introduction to Ethics (3) GE6
___ PHI103 Logic & Critical Thinking (3) GE6
___ PHI105 Religions of the World (3) GE6

### ❑ Speech

___ SP 101 Oral Communications (3) GE6
___ SP 103 Oral Interpretation (3)

### ❑ Theatre

___ TH 105 Introduction to Drama (3)
___ TH 108 History/Appreciation of Theatre Arts (3) GE6
___ TH 146 Musical Theatre History (3) (= to M 146) GE6
___ TH 208 Film Appreciation (3) GE6

## SOCIAL & BEHAVIORAL SCIENCES (3 Credits)

### ❑ Anthropology
___ ANT112 General Anthropology (3) GE5

### ❑ Criminal Justice
___ CJ 100 Intro to Criminal Justice (3) GE5
___ CJ 120 Juvenile Delinquency and Justice (3) GE5

### ❑ Business
___ BUS101 Introduction to Business (3)
___ BUS102 Personal Finance (3)
___ BUS125 Human Resources (3)
___ BUS127 Principles of Entrepreneurship I (3)
___ BUS203 Macroeconomics (3) GE5
___ BUS204 Microeconomics (3) GE5

### ❑ Geography
___ GEO212 World Regional Geography (3) GE5

### ❑ Political Science
___ POL100 United States Government (3) GE5
___ POL101 Introduction to Political Science (3) GE5
___ POL115 State & Local Government (3) GE5

### ❑ Psychology
___ PSY101 General Psychology (3) GE5
___ PSY105 Industrial & Organizational Psychology (3)
___ PSY205 Human Growth & Development (3) GE5

### ❑ Sociology
___ SOC101 General Sociology (3) GE5
___ SOC102 Marriage & the Family (3) GE
___ SOC104 Introduction to Social Work (3) GE5

## DEGREE REQUIREMENTS (53 credits)
___ @ELE102 Safety (OSHA 10) (1)
___ @ELE112 AC/DC Circuits I (4)
___ @ELE125 Generators & Transformers (3)
___ @ELE122 Residential Wiring I (4)
___ @ELE115 Print Reading (2)
___ @ELE132 Commercial Wiring I (4)
___ @ELE135 Troubleshooting Techniques (4)
___ @ELE142 National Electrical Code 1 (4)
___ @ELE152 Industrial Wiring & Design (4)
___ @ELE162 Electrical Motor Operation & Control (5)
___ @ELE163 Electrical Motor Operations & Control II (5)
___ @ELE165 Blueprints & Schematics (3)
___ @ELE172 Fundamentals of PLC's (2)
___ @ELE175 Troubleshooting Techniques II (4)
___ @ELE182 National Electrical Code II (4)

## MATHEMATICS OR SCIENCES
**Math/Science Requirement fulfilled by degree requirements in the Electrical Program.

Notes:
@ indicates a degree requirement course that can be no more than 5 years old to count toward this AAS degree.

This course is approved by the Kansas Board of Regents for System Wide Transfer (SWT) among all Kansas public postsecondary institutions offering an equivalent course. Additional courses may also be eligible for transfer. Please visit the Highland Registrar to learn more.

Revised 11/25

Highland Community College

# Medical Coding

Associate in Applied Science
(65 credit hours)

## BASIC SKILLS (10 Credits)

### ❑ Composition and Speech (6)

___ ENG101 Composition I (3) GE1
___ ENG102 Composition II: Literature and Research (3) GE1
___ ENG103 Composition II: Rhetoric and Research (3) GE1
___ ENG110 Technical Composition (3)
___ SP 105 Interpersonal Communication (3) GE2
___ SP 106 Public Speaking (3) GE2

### ❑ Computer Literacy (3 Credits)

___ @ BUS130 Microcomputer Applications I (3)

### ❑ Orientation (1 Credits)

___ COL103 College Success (1) GE7

## SCIENCES (8 Credits)

### ❑ Natural Sciences

___ BS 104 Human Anatomy with lab (4) ) GE4
___ BS 105 Human Physiology with lab (4) ) GE4

## HUMANITIES and FINE ARTS (3 Credits)

### ❑ Art

___ A 101 Art Appreciation (3) GE6
___ A 107 Drawing I (3) GE6
___ A 201 Art History Survey: Prehistoric to Medieval (3) GE6
___ A 202 Art Hist Survey: Renaissance to Contemp (3) GE6

### ❑ Education

___ ED 105 Children's Literature (3) GE7

### ❑ Foreign Language

___ LG 100 Conversational Spanish (2)
___ LG 101 Spanish I (5) GE6
___ LG 102 Spanish II (5) GE6
___ LG 201 Spanish III (3) GE6

### ❑ History

___ HIS101 United States History to 1877 (3) GE6
___ HIS102 United States History since 1877 (3) GE6
___ HIS103 History of Western Civilization I (3) GE6
___ HIS104 History of Western Civilization II (3) GE6

### ❑ Literature

___ ENG104 Introduction to Literature (3) GE6
___ ENG202 American Lit: Pre-Colonial to Civil War (3) GE6
___ ENG208 Introduction to Short Story (3) GE6
___ ENG209 American Lit: Reconstruction to Pres (3) GE6
___ ENG210 World Lit: Beginnings to Renaissance (3)
___ ENG211 World Lit: Enlightenment to Present (3) GE6
___ ENG212 British Literature: Middle Ages to 1800 (3)
___ ENG213 British Literature: 1800 to Present (3) GE6
___ ENG215 Diverse Voices in Literature (3) GE6

### ❑ Music

___ M 103 Music History/Appreciation (3) GE6
___ M 146 Musical Theatre History (3) (= to TH 146) GE6
___ M 162 Introduction to World Music (3) GE6
___ M 223 History of Jazz (3) GE6

### ❑ Philosophy

___ PHI101 Introduction to Philosophy (3) GE6
___ PHI102 Introduction to Ethics (3) GE6
___ PHI103 Logic & Critical Thinking (3) GE6
___ PHI105 Religions of the World (3) GE6

### ❑ Speech

___ SP 101 Oral Communications (3) GE6
___ SP 103 Oral Interpretation (3)

### ❑ Theatre

___ TH 105 Introduction to Drama (3)
___ TH 108 History/Appreciation of Theatre Arts (3) GE6
___ TH 146 Musical Theatre History (3) (= to M 146) GE6
___ TH 208 Film Appreciation (3) GE6

## DEGREE REQUIREMENTS (41 credits)

❑ @ BS 109 Medical Terminology (3)
❑ @ HS 101 Introduction to Health Information (4)
❑ @ HS 103 Legal and Ethical Issues in Health Care (3)
❑ @ HS 105 Insurance and Health Information Compliance (3)
❑ @ HS 110 Pathopharmacology for Health Science (4)
❑ @ HS 115 International Classification of Disease (ICD) Coding I (3)
❑ @ HS 118 Current Procedural Terminology (CPT) Coding I (3)
❑ @ HS 120 Healthcare Computer Applications/Electronic Encoder (3)
❑ @ HS 125 International Classification of Disease (ICD) Procedural Coding (3)
❑ @ HS 130 Reimbursement Methodologies (Physician) (3)
❑ @ HS 210 International Classification of Disease (ICD) Coding II (3)
❑ @ HS 218 Current Procedural Terminology (CPT) Coding II (3)
❑ @ HS 225 Healthcare Coding Practicum (3)

Notes:
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Revised 11/25

Highland Community College

# Precision Agriculture

Associate in Applied Science

(61 credit hours)

## BASIC SKILLS (9 Credits)

### ❑ Composition and Speech (6)

___ ENG101 Composition I (3) GE1
___ ENG102 Composition II: Literature and Research (3) GE1
___ ENG103 Composition II: Rhetoric and Research (3) GE1
___ ENG110 Technical Composition (3)
___ SP 105 Interpersonal Communication (3) GE2
___ SP 106 Public Speaking (3) GE2

### ❑ Computer Literacy (3 Credits)~

___ AB 227 Agriculture Microcomputer I (3)
___ BUS130 Microcomputer Applications I (3)

~The three credit hours of Computer Literacy must have been completed within the past five years.

## HUMANITIES and FINE ARTS (3 Credits)

### ❑ Art

___ A 101 Art Appreciation (3) GE6
___ A 107 Drawing I (3) GE6
___ A 201 Art History Survey: Prehistoric to Medieval (3) GE6
___ A 202 Art Hist Survey: Renaissance to Contemp (3) GE6

### ❑ Education

___ ED 105 Children's Literature (3) GE7

### ❑ Foreign Language

___ LG 100 Conversational Spanish (2)
___ LG 101 Spanish I (5) GE6
___ LG 102 Spanish II (5) GE6
___ LG 201 Spanish III (3) GE6

### ❑ History

___ HIS101 United States History to 1877 (3) ) GE6
___ HIS102 United States History since 1877 (3) GE6
___ HIS103 History of Western Civilization I (3) GE6
___ HIS104 History of Western Civilization II (3) GE6

### ❑ Literature

___ ENG104 Introduction to Literature (3) ) GE6
___ ENG202 American Lit: Pre-Colonial to Civil War (3) ) GE6
___ ENG208 Introduction to Short Story (3) GE6
___ ENG209 American Lit: Reconstruction to Pres (3) ) GE6
___ ENG210 World Lit: Beginnings to Renaissance (3)
___ ENG211 World Lit: Enlightenment to Present (3) GE6
___ ENG212 British Literature: Middle Ages to 1800 (3)
___ ENG213 British Literature: 1800 to Present (3) GE6
___ ENG215 Diverse Voices in Literature (3) GE6

### ❑ Music

___ M 103 Music History/Appreciation (3) ) GE6
___ M 146 Musical Theatre History (3) (= to TH 146) GE6
___ M 162 Introduction to World Music (3) GE6
___ M 223 History of Jazz (3) GE6

### ❑ Philosophy

___ PHI101 Introduction to Philosophy (3) ) GE6
___ PHI102 Introduction to Ethics (3) ) GE6
___ PHI103 Logic & Critical Thinking (3) ) GE6
___ PHI105 Religions of the World (3) ) GE6

### ❑ Speech

___ SP 101 Oral Communications (3) GE6
___ SP 103 Oral Interpretation (3)

### ❑ Theatre

___ TH 105 Introduction to Drama (3)
___ TH 108 History/Appreciation of Theatre Arts (3) GE6
___ TH 146 Musical Theatre History (3) (= to M 146) GE6
___ TH 208 Film Appreciation (3) GE6

## SOCIAL & BEHAVIORAL SCIENCES (3 Credits)

### ❑ Anthropology
___ ANT112 General Anthropology (3) GE5

### ❑ Criminal Justice
___ CJ 100 Intro to Criminal Justice (3) GE5
___ CJ 120 Juvenile Delinquency and Justice (3) GE5

### ❑ Business
___ BUS101 Introduction to Business (3)
___ BUS102 Personal Finance (3)
___ BUS125 Human Resources (3)
___ BUS127 Principles of Entrepreneurship I (3)
___ BUS203 Macroeconomics (3) GE5
___ BUS204 Microeconomics (3) GE5

### ❑ Geography
___ GEO212 World Regional Geography (3) GE5

### ❑ Political Science
___ POL100 United States Government (3) GE5
___ POL101 Introduction to Political Science (3) GE5
___ POL115 State & Local Government (3) GE5

### ❑ Psychology
___ PSY101 General Psychology (3) GE5
___ PSY105 Industrial & Organizational Psychology (3)
___ PSY205 Human Growth & Development (3) GE5

### ❑ Sociology
___ SOC101 General Sociology (3) GE5
___ SOC102 Marriage & the Family (3) GE
___ SOC104 Introduction to Social Work (3) GE5

## DEGREE REQUIREMENTS (41 credits)
___ @AB 114 Agriculture Orientation (2)
___ @AB 116 Applied Agronomy for Precision Ag (3)
___ @AB 118 Agricultural GIS (3)
___ @AB 128 Agricultural Electronic Devices & Sys (3)
___ @AB 130 Precision Farming Systems (3)
___ @AB 132 Agricultural Data Management System (3)
___ @AB 134 Precision Farming Hardware (3)
___ @AB 138 Remote Sensing (3)
___ @AB 142 Field Mapping for Decision Making (3)
___ @AB 146 Aerial Systems Management (2)
___ @AB 148 Positioning Systems Management (3)
___ @AB 203 Soil Science with lab (4)
___ @AB 244 Precision Agriculture Capstone (3)
___ @AB 126 Principles of Agronomy (3)
**OR** ___ @AB 224 Range Management (3)
**OR** ___ @AB 202 Agriculture Economics (3)

## MATHEMATICS OR SCIENCES (5 Credits)

### ❑ Physical Science
___ CHM107 General Chemistry with lab (5) ) GE4
___ CHM111 College Chemistry I with lab (5) ) GE4

Notes:
@ indicates a degree requirement course that can be no more than 5 years old to count toward this AAS degree.

This course is approved by the Kansas Board of Regents for System Wide Transfer (SWT) among all Kansas public postsecondary institutions offering an equivalent course. Additional courses may also be eligible for transfer. Please visit the Highland Registrar to learn more.

Revised 11/25

## Course Descriptions

***Note: Pre-requisites for courses should be verified against current course syllabus.***

**^** Indicates a Technical course that can be no more than 5 years old to count toward HCC certificate or degree requirements. Some non-technical courses must also be no more than 5 years old to count toward Associate in Applied Science degree requirements. Those courses are marked with an @ symbol on the AAS degree worksheets in this Catalog.

▸ This course is approved by the Kansas Board of Regents for System Wide Transfer (SWT) among all Kansas public postsecondary institutions offering an equivalent course. Additional courses may also be eligible for transfer. Please visit the Highland Registrar to learn more.

**GE** This course is approved by the Kansas Board of Regents for the General Education Transfer among all Kansas public postsecondary institutions offering an equivalent course.

**(#)** Indicates the number of credits for the course.

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**A 101 Art Appreciation ▸ GE (3)**
This course is an introduction to the fundamentals of the visual arts. The course focuses on the analysis, description, and interpretation of art, the importance of art in the contemporary world, and the historical aspects of art and its influence on western culture.

**A 103 Two-Dimensional (2D) Design ▸ (3)**
This course provides an introductory study of the elements and principles of two-dimensional design. Emphasis will be placed on two-dimensional spatial organization. A variety of materials and approaches will be explored and applied.

**A 104 Three-Dimensional (3D) Design ▸ (3)**
This studio design course covers the elements and principles of three-dimensional design. Course projects will deal with the linear and planar aspects of 3-D design as well as the structural concepts of volume, mass, and form.

**A 105 Prints I (3)**
This course provides an introduction to the tools, methods, and techniques used in intaglio and relief printing processes. Emphasis will be placed on the variety of ways to create an intaglio plate, such as etching, soft mezzotint, engraving, aquatint, and dry point. Relief processes such as linocut and woodcut will also be included.

**A 107 Drawing I ▸ GE (3)**
This course will cover the fundamentals of drawing as applied to the realistic and expressive representation of objects through the use of various media, approaches, and techniques. Emphasis will be placed on composition, line, value, texture, and spatial relationships.

**A 108 Drawing II (3)**
This class continues the investigation of various drawing media with an emphasis on creative expression. The course will cover techniques as well as compositional problems. Subject matter will include still life, landscape, the figure, and invented compositions. Prerequisite: A 107

**A 110 Painting I (3)**
This course will provide a brief history of painting and an introduction to the color wheel and various painting techniques. The course will emphasize the use of oil and acrylic paint, and projects will deal with line, color, form, texture, and space in both representational and non-objective subject matter.

**A 111 Painting II (3)**
This course will provide a continuation of Painting I concepts and will also emphasize individual expression and exploration. Prerequisite: A 110

**A 112 Ceramics I (3)**
This course will provide an introduction to the use of clay as an art medium. The course will cover traditional techniques used in hand-building and wheel thrown forming methods and will also introduce ceramic glazes, slips, stains, and firing methods.

**A 113 Typography ^ (3)**
This course will provide a study of the principles of contemporary typographic design. The course will focus on size, form, contrast, color, spacing, and design of the printed word and printed page. Typography production from traditional letterpress through photomechanical processes will also be discussed. The course will provide an introduction to the Macintosh computer and the latest graphic design software.

**A 114 Watercolor I (3)**
This is a fundamental course in the use of color via the medium of watercolor. Skill development and color theory are areas of emphasis. A small amount of emphasis will also be given to other water-based media. Students will find a basic understanding of drawing concepts helpful. Drawing I recommended (not required).

**A 115 Watercolor II (3)**
This is an advanced course in the use of color via the medium of watercolor. Personal development and color theory are areas of emphasis. Attention will be being placed on the development of personal skills and techniques. The course will also be concerned with a study of some of the experimental techniques, which can be used to produce a watercolor painting. Other water-based media may be explored at the discretion of the student. Prerequisite: A 114

**A 117 Ceramics II (3)**
This course continues the instruction and skill building begun in Ceramics I. The course will emphasize the development of sound clay design and form and will cover contemporary hand-building and throwing techniques, as well as kiln firing and glaze formulation. Prerequisite: A 112

**A 121 Design Software Applications ^ (3)**
This course provides an introduction to computer hardware, software, and peripherals commonly used by graphic designers and professional artists. Students will complete projects using graphic design software.

**A 201 Art History Survey: Prehistoric to Medieval ▸ GE (3)**
This course provides an introductory survey of the art and architecture of the Western world from the Prehistoric times through the Early Renaissance. Because of the extensive time period and the number of civilizations being examined, the course will focus on art objects and monuments that are most representative and significant for each historical period. A broad range of art forms will be examined, including monumental architecture, sculpture, ceramics, paintings (including frescoes, mosaics, and manuscripts), textiles, and metalwork.

**A 202 Art History Survey: Renaissance-Contemporary ▶ GE (3)**
This course provides an introductory survey of the art and architecture of the Western world from the Renaissance through Modern periods, ending with a survey of trends in contemporary American and European art. The course will explore the relationships between the art periods and styles as well as the achievements of individual artists. Because of the extensive time period and the number of cultures and styles being examined, the course will focus on art objects and monuments that are most representative and significant for each historical period. A broad range of art forms will be examined, including monumental architecture, sculpture, ceramics, paintings (including frescoes, mosaics, and manuscripts), textiles, and metalwork.

**A 205 Art Methods (3)**
An examination of the principles and practices of teaching art to children from preschool through middle school.

**A 215 Graphic Design ^ (3)**
This course covers the resources, materials, and procedures of graphic design. The course will provide an introduction to problem solving, basic layout skills, and graphic design terminology. An introduction to the Macintosh computer with the latest graphic software will be included. Projects will emphasize color, form, and typography.

**A 223 Computer Graphics - Illustration ^ (3)**
This course provides an introduction to contemporary illustration practice, including the use of traditional drawing, painting, and printmaking techniques supplemented with digital manipulation using the most recent version of Adobe Illustrator and Ado- be Photoshop. The course also covers hand rendering, computer rendering, scanning, digital tablet use, image manipulation, and printing. The course will also focus on a client based approach to image creation, emphasizing the development of concepts and ideas concluded by finished images. Prerequisite: None (A 103 or A 121 recommended)

**A 224 Computer Graphics - Enhanced Photography ^ (3)**
This course provides experience in the use of high-tech enhanced photography software. Course projects will incorporate use of Macintosh computers and Adobe Photoshop software for digital imaging and manipulation as well as image editing, scanning, and printing.

**A 240 Art Seminar (1)**
This course is designed for students interested in research, discussion, and studio experience in various media within academic or vocational areas such as art education, art therapy, computer graphics, graphic design, interior design, drawing, painting, print- making, watercolor, illustration, ceramics, sculpture, art theory, art criticism, or museum studies.

**A 250 Advanced Studio I (1)**
This studio course is designed for the student with an interest in fine arts. The course will allow students to explore the possibilities of self-expression with media and materials of their own choosing. Prerequisite: Any previous studio course.

**A 251 Advanced Studio II (1)**
This studio course is designed for the student with an interest in fine arts. The course will allow students to explore the possibilities of self-expression with media and materials of their own choosing. Continues Advanced Studio I. Prerequisite: A 250

**A 252 Advanced Studio III (1)**
This studio course is designed for the student with an interest in fine arts. The course will allow students to explore the possibilities of self-expression with media and materials of their own choosing. Continues Advanced Studio II. Prerequisite: A 251

**A 260 Portfolio Preparation (1)**
This course is intended to provide students with the skills and knowledge to design and prepare a portfolio that can be used for college admissions or scholarship applications as well as for pursuing employment opportunities. Prerequisite: Sophomore standing

**AB 108 Principles of Animal Science (3)**
This course will introduce the field of animal science. The course will focus on fundamental concepts of genetics, animal breeding, physiology, anatomy, nutrition, digestion, and the scope of the livestock industry.

**AB 114 Ag Orientation (2)**
This course will provide an introduction to the various careers in agriculture. The course will also cover career and job trends, setting academic goals, note taking, designing a term study plan, preparing for tests, and test taking strategies and skills.

**AB 116 Applied Agronomy for Precision Ag ^ (3)**
This course presents instruction in plant identification, plant health, plant pathology, soil health and crop production. This course covers cropping practices, tillage methods, planting methods and pest control methods with the application of precision agriculture technologies. The course includes hands on experience in tillage, planting, and fertilizer/insecticide applications using variable rate application maps.

**AB 118 Agriculture GIS ^ (3)**
This course focuses on the concepts and procedures used in dis- covering and applying the spatial relationships within and among maps. It utilizes the mapping and geo-query capabilities of the agricultural Geographic Information System (GIS) platforms to map, analyze, and construct spatial models. This course establishes a comprehensive framework that encompasses a wide range of multi-layered queries, such as: multi-year yield analysis, yield versus field attribute, or fertility versus observed field attribute. The gathering of these layers enables the end-user to design comprehensive models for the analysis of farming operations leading to the development and implementation of improved strategies on the farm or in industry.

**AB 126 Principles of Agronomy (3)**
This course presents instruction in crop plant classification, use, and identification. The course also covers cropping systems, tillage methods, planting methods, harvesting methods, and crop growth patterns. Course emphasis will be balanced between theoretical and practical crop science.

**AB 128 Agriculture Electronic Devices & Systems ^ (3)**
This course is designed to teach a person with basic electrical knowledge how sophisticated electronic control systems are applied to Precision Agriculture applications. The course will cover simple open-loop control to the more complex closed-loop control systems. The class will introduce a variety of sensors and actuators that are commonly used in conjunction with the con- trollers, to measure and control various agricultural operations. In addition to control technology, wiring symbols and wiring diagrams will be taught for diagnostics applications.

**AB 130 Precision Farming Systems ^ (3)**
This course provides an overview of precision agriculture concepts and the tools of the discipline: Global Navigation Satellite System (GNSS), Spatial Data Management Platforms, Intelligent Devices, and Implements. Introductory use of each of these tools within the processes of precision agriculture is covered. Hands-on activities with agricultural data and data collection equipment will provide an initial experience in the use of these tools. The primary and secondary economic and environmental benefits to the adoption of these practices are also discussed.

**AB 132 Agriculture Data Management Systems ^ (3)**
This course will prepare the student in the use of various spatial data management platforms. Students will be required to do the initial setup, create management and production lists, save and unload data cards, process field data, and duplicate the process that end-users must do to complete the task of transferring data from the field to the computer. After setting up a data management tree, students will be required to do a field check to ensure that it works to collect and separate the appropriate data. In addition, students will use the software to create reports and prescription maps. Ag Leader® Spatial Management System™ will be the primary platform demonstrated in this course. This will be a project-driven course for which the instructor will provide guidance and the student will be required to read software documentation to complete most of the tasks.

**AB 134 Precision Farming Hardware ^ (3)**
This course will prepare the student in the use of various precision farming hardware components. Basic concepts of electricity, electronics, hydraulics, and pneumatics will be covered first. Students will then get hands-on experience in the installation of display modules, guidance units, and control components. This is a project driven course which requires the students to read and understand technical manuals for the installation. Monitoring and guidance to be demonstrated include: Outback® MAX w/A321 RTK, John Deere® GreenStar™ 3 2630 w/StarFire™ 3000 RTK, Case IH® AFS™ 700,Trimble® TMX-2050, Raven® Viper Pro™, and Ag Leader® Integra™.

**AB 136 Introduction to Agricultural GIS ^ (3)**
This introductory course focuses on the concepts and procedures used in discovering and applying the spatial relationships within and among maps. It utilizes the mapping and geo-query capabilities of the agricultural Geographic Information System (GIS) platform, SST® Summit Professional™, to map, analyze, and construct spatial models. This course establishes a comprehensive framework that encompasses a wide range of multi-layered queries, such as multi-year yield analysis, yield versus field attribute, or fertility versus observed field attribute. The gathering of these layers enables the end-user to design comprehensive models for the analysis of farming operations.

**AB 138 Remote Sensing ^ (3)**
This course examines fundamental concepts and theories from the geospatial, cartographic, and computing sciences to understand the emergence, use, and development of this rapidly growing area of geographic inquiry and research. Focused on GIS, Global Positioning System (GPS), and remote sensing as well as spatial data production, analysis, and management, this course combines an in-depth review of the major geospatial theoretical foundations with hands-on practical exercises to offer participants key opportunities to gain knowledge and expertise with which to collect, analyze, and produce geospatial and attribute information.

**AB 142 Field Mapping for Decision Making ^ (3)**
The primary purpose is to demonstrate the various tools available in industry to assist GIS Specialists, Precision Ag Technicians, Agronomists, and Soil Surveyors in collecting accurate field data. The data will then be interpreted using GIS software to create management zones, grids, and other agronomic research-based decisions. The equipment used in this course will consist of GPS
receivers for spatial data, soil collection equipment, GIS plat- forms for interpretation, and soil contact electrical conductivity sensors.

**AB 144 Intermediate Agricultural GIS ^ (3)**
This intermediate course builds upon on the concepts and procedures used in discovering and applying the spatial relationships within and among maps learned in Introduction to Agricultural GIS. It further utilizes the mapping and geo-query capabilities of SST® Summit Professional™ to map, analyze, and construct spatial models while adding the mobile tools found in the SST® Sirrus™ platform. This course re-affirms the comprehensive framework from previous lessons and begins to develop the practical

knowledge necessary to succeed in developing and implementing these strategies on the farm or in industry.

**AB 146 Aerial Systems Management ^ (2)**
This course introduces Unmanned Aerial Systems (UAS) platforms, their history, and commercial applications, with special emphasis in Precision Agriculture, Federal Aviation Administration (FAA) regulatory framework, data collection, privacy issues, and navigation concepts. Although instruction will cover content that is needed to pass the certification test for flying drones, no certification will be awarded as part of this class in the actual flight of unmanned aerial vehicles. Further training and instruction will be required for students wishing to acquire and/or pilot aerial vehicles, and students will be responsible for pursuing that certification through testing.

**AB 148 Positioning Systems Management ^ (3)**
The Global Navigation Satellite System (GNSS) is a worldwide, satellite-based navigation system used for aviation, remote sensing, shipping, vehicle tracking, surveying, time transfer, search and rescue operations, and personal communications via satellite. This course provides an introduction to this rapidly growing field, covering both applications and the technology that makes satellite navigation possible. It is by nature an interdisciplinary course, covering subject material in orbit prediction, satellite systems, signal processing, error modeling, computer programming, digital and microwave electronics.

**AB 202 Agriculture Economics (3)**
This course provides an introduction to the field of agricultural economics as well as some of the basic tools and concepts of decision making. Concepts are illustrated in terms of selected contemporary social and economic issues, including the role of agriculture in both the national and international dimensions. Topics will include the structure of U.S. agriculture, consumer food issues, world food problems, agribusiness, and rural development.

**AB 203 Soils and Soils Lab (4)**
This course will provide a study of the physical, chemical, and biological properties of soils and how these properties determine the nature of each soil and its crop productivity. The course will also cover soil management practices. Prerequisite: AB 210 and PS 111 or 2 years high school chemistry or Instructor Permission.

**AB 207 Fundamentals of Animal Nutrition (3)**
This course covers the role of carbohydrates, proteins, lipids, minerals. vitamins, and water in animal nutrition. The course will emphasize digestion, absorption, metabolism, and excretion of nutrients and their metabolites. Prerequisite: AB 108 or Instructor Permission

**AB 208 Applied Animal Nutrition (3)**
This advanced course will cover various techniques involved in the formulation, preparation, and construction of animal nutrient rations. Prerequisite: AB 207 or Instructor Permission

**AB 210 Crop Science (4)**
This course will examine plant morphology and anatomy and will also provide a history of plant agriculture. The course will emphasize plant structures and systems related to the five major field crops found in the local region: corn, sorghum, wheat, soy- beans, and alfalfa. Growth stages, critical periods of development, plant nutrition, mineral elements involved in physiology, and grain grading and marketing will also be covered. Prerequisite: PS 107, PS 111, or Instructor Permission

**AB 212 Livestock Production (3)**
This advanced animal science course is designed so students can expand their expertise working with livestock. The course will cover lactation, genetic applications, physiology of reproduction, animal

ecology, and the impact of livestock production on the quality of life. Prerequisite: AB 108 or Instructor Permission

**AB 216 Farm Marketing (3)**
This introductory course will cover operations involved in the movement of agricultural commodities from the farmer to the consumer. The course will focus on the essential marketing functions of buying, selling, transportation, storage, financing, standardization, pricing, and risk bearing. Prerequisite: AB 202 or Instructor Permission

**AB 220 Beef Production (3)**
This course will cover the basic husbandry practices used in modern beef production. The course will focus on the latest advancements in technology as they apply to cattle production. Special emphasis will be placed on genetics, physiology of reproduction, beef nutrition, health programs, management methods, use of electronic ID systems, ID databases, and marketing methods. Prerequisite: AB 108 or Instructor Permission

**AB 222 Sheep Production (3)**
This course is designed to introduce the technology required for modern sheep production. The course will focus on genetics, reproduction, health, nutrition, management concepts, marketing, budgets, and the proper care and handling of wool. Prerequisite: AB 108 or Instructor Permission

**AB 224 Range Management (3)**
This course is designed to give students knowledge about forage and range management. The course will cover principles of plant species selection, establishment, fertilization, and weed control. Utilization and grazing of natural grasses will also be covered, as well as improved cultivators. The course will include discussion of intensive grazing design and temporary forage systems, silage, and haying methods. Prerequisite: AB 210 or Instructor Permission

**AB 225 Animal Diseases and Health (3)**
This course will cover general concepts and applications for de- signing and developing an effective flock or herd health program. The course will emphasize effective sanitation, disease prevention, control of ectoparasites and endoparasites, disease identification, and methods of effective chemotherapy. Prerequisite: AB 108 or Instructor Permission

**AB 227 Ag Microcomputer (3)**
This course is designed for students who have had some experience with computers. The course will cover the start-up dialogue, care and maintenance of software and hardware, and what to look for when purchasing a farm computer system. The course will also emphasize the use of integrated software packages and their agricultural applications. Prerequisite: 2 years high school math or Instructor Permission

**AB 244 Precision Agriculture Capstone ^ (3)**
The primary goal and function of this capstone course is to assist students in combining the knowledge and skills acquired throughout the program to form a coherent problem solving resource. The effectiveness of this resource is exhibited in the ability of the student to employ multiple tools found within the discipline to make sound decisions independently in the field. To do this, students will first be exposed to multiple facets of the industry through a multi lecture series on agribusiness management and strategy. Secondly, to complete the course and the Precision Agriculture curriculum, students will present an original project to an industry panel demonstrating their ability to integrate and communicate their knowledge across the discipline.

**ACR105 Painting & Refinishing I ^ (3)**
This course is the first in a four-course sequence covering all aspects of painting and refinishing auto body surfaces. The course will cover safety and health issues, surface preparation, metal treatments, equipment, and paint specifics.

**ACR115 Non-Structural Analysis & Damage Repair I ^ (4)**
This course is the first in a four-course sequence covering all aspects of non-structural analysis and damage repair for automobiles. The course will cover safety issues, vehicle construction, industry opportunities, and auto body repair techniques and materials.

**ACR125 Structural Analysis & Damage Repair I ^ (2)**
This course is the first in a four-course sequence covering all aspects of structural analysis and damage repair for automobiles. The course will cover measuring, damage analysis, safety, frame repair, unibody analysis and welding.

**ACR135 Airbrush, Fiberglass, and Pin Striping ^ (3)**
This course is designed to enhance skills in auto collision repair through creating detail and unique products using airbrush and pin striping techniques and fiberglass fabrication.

**ACR155 Painting & Refinishing II ^ (3)**
This course is the second in a four-course sequence covering all aspects of painting and refinishing auto body surfaces. The course will cover protective equipment, shop operations, and specific painting principles and procedures. Prerequisite: ACR105

**ACR165 Non-Structural Analysis & Damage Repair II ^ (4)**
This course is the second in a four-course sequence covering all aspects of non structural analysis and damage repair for auto- mobiles. The course will cover trim and hardware protection, glass, outer body, metal work, welding, safety, cutting, plastics, and adhesives. Prerequisite: ACR115

**ACR175 Structural Analysis & Damage Repair II ^ (2)**
This course is the second in a four-course sequence covering
all aspects of structural analysis and damage repair for automobiles. The course will cover safety, frame inspection and repair, structural damage, unibody repair, welding techniques, and cutting procedures. Prerequisite: ACR125

**ACR185 Panel Fabrication ^ (3)**
This course is designed to give students the skills needed to fabricate panels using sheet metal in order to create a finished product by replacing or repairing existing parts. Prerequisite: ACR 125

**ACR205 Painting & Refinishing III ^ (3)**
This course is the third in a four-course sequence covering all aspects of painting and refinishing auto body surfaces. This more advanced course will focus on application procedures and techniques for auto body painting. Prerequisite: ACR 155

**ACR215 Non-Structural Analysis & Damage Repair III ^ (4)**
This course is the third in a four-course sequence covering all aspects of non-structural analysis and damage repair for automobiles. This advanced course will cover trim and hardware, glass repair, outer body, mechanical and electrical components, safety protocol, intermediate welding skills, and plastic and adhesive repairs. Prerequisite: ACR 165

**ACR220 Introduction to Estimating ^ (3)**
Damage analysis and estimating covers the process of analyzing the vehicle following a collision event looking at preexisting conditions as well as collision related damage. The process of gathering customer

information, vehicle information, insurance coverage information, vehicle damage, parts options, parts pricing, labor operation pricing, and other related charges and arriving at cost of repairs is the core of the course.

**ACR225 Structural Analysis & Damage Repair III ^ (3)**
This course is the third in a four-course sequence covering all aspects of structural analysis and damage repair for automobiles. This advanced course will cover safety, welding and cutting techniques, unibody damage and repair, frame procedures, and fixed glass. Prerequisite: ACR 175

**ACR235 Fleet and Commercial Vehicles ^ (3)**
This course is designed to allow students to use knowledge gained in sheet metal repair, welding, plastic repair, and painting to obtain skills in working on fleet and commercial vehicles, using tools and paint specific to the industrial field of collision repair. Prerequisite: ACR 175

**ACR255 Painting and Refinishing IV ^ (4)**
This course is the final one in a four-course sequence covering all aspects of painting and refinishing auto body surfaces. This course will focus on advanced aspects, techniques, and procedures for a variety of auto body painting and refinishing applications. Prerequisite: ACR 205

**ACR265 Non-Structural Analysis & Damage Repair IV ^ (5)**
This course is the final one in a four-course sequence covering all aspects of non-structural analysis and damage repair for automobiles. This course will focus on advanced aspects, techniques, and procedures for non-structural damage repair. Prerequisite: ACR 215

**ACR270 Advanced Estimating & Blueprinting ^ (3)**
This course teaches systematic approaches to determining the extent of collision damage to all areas of the vehicle. After analyzing the damage, the process of converting it into an estimated cost of repair is presented in principle along with hands-on practice and application. This course will use a computer database to complete the estimate. In addition, to completing estimates students will learn to communicate with customers as well as insurance companies.

**ACR275 Structural Analysis & Damage Repair IV ^ (3)**
This course is the final one in a four-course sequence covering all aspects of structural analysis and damage repair for automobiles. The course will focus on advanced welding and cutting techniques, unibody repair, frame repair and fixed glass removal and installation. Prerequisite: ACR 225

**ACR285 Mechanical & Electrical ^ (3)**
This course will focus specifically on auto mechanical and electrical systems and will cover inspection, diagnosis, service, and repair of system problems or damage. Prerequisite: ACR 225

**ACR295 Occupational Work Experience ^ (0)**
Occupational Work Experiences are available to students who have completed 85% of their required course hours. This is an optional course for automotive collision repair students who wish to gain further “real life” experiences at local businesses and/or approved sites.

**ADM115 Administrative Procedures I ^ (3)**
This course provides for an understanding of the concepts, terminology, skills and procedures needed for employment in an office. This course covers such topics as basic filing, office design, computer and office technology, business writing and presentations.

**ADM116 Office Simulations I ^ (3)**
This course is designed to give students simulated practice with real world application of various office skills. The course is designed to give the student a working knowledge of the administrative assistant's duties and responsibilities. The students follow a self-directed, individualized set of instructions.

**ADM121 Proofreading and Editing ^ (3)**
This course is designed to assist students in identifying and correcting errors in abbreviations, formats, grammar, punctuation, word division, capitalization, and number expression. The course also covers reviewing and applying the rules of written language to business documents, such as letters, memos, reports, resumes, agendas, and itineraries.

**ADM131 Microcomputer Applications I ^ (3)**
This course is designed to examine and apply the skills, tools, and information necessary to perform basic software applications used with microcomputers. The course will cover Microsoft Word, Outlook, PowerPoint, and Desktop Publisher.

**ADM135 Business Finance ^ (3)**
This course is designed to reinforce an understanding of business math/finance that provides the necessary foundation for students interested in business careers. Business math/finance concepts included are: fractions, percentages, bank services, payroll, taxes, insurance, purchasing merchandise, markup and markdown, interest, consumer credit and mortgages, metrics and currency, invoicing, depreciation, amortization and present value/future value. Students will develop a working knowledge of the 10-key desk calculator using the touch system to solve mathematical problems related to business situations.

**ADM138 Project Management I ^ (2)**
This course aims to develop a foundation base of the concepts and solutions a student would need for successful project management. Focus areas for this course combine project management with technology skills to complete realistic assignments. Involving tasks that support the planning, scheduling, time management, decision making, communication, teamwork and performance activities for successful project completion.

**ADM141 Applied Media Technology ^ (3)**
This course offers an overview of the role that media play in modern society, with emphasis on the ethics, technology, social obligations, and technical skills needed by modern communicators. Course work will include digital photography, electronic publishing, and current office technology. As new technology emerges, it will be incorporated into this course.

**ADM152 Office Simulations II ^ (3)**
This course is a continuation of material presented in ADM116. This course is designed to give students simulated practice with real world application of various office skills. The course is designed to give the student a working knowledge of the administrative assistant's duties and responsibilities. The students follow a self-directed, individualized set of instructions. Prerequisite: ADM 116.

**ADM161 Administrative Procedures II ^ (3)**
This course provides additional information on mail and shipping services, career development, effective leadership skills, stress and time management, telephone and teleconference techniques, and travel arrangements. Prerequisite: ADM 115

**ADM171 Microcomputer Applications II ^ (3)**
This course provides advanced instruction on how to use database and spreadsheet software programs. The course is designed to give students in-depth knowledge for using Microsoft Excel and Access.

Students will create and manage databases and spreadsheets along with exploring the Internet as a valuable tool in today's business.

**ADM180 Accounting I ^ (3)**
This course gives students a broad overview of business operations and the basic skills needed to keep better financial records. Simulations provide the student the opportunity to combine individual tasks in a hands-on activity.

**ADM182 Project Management II ^ (2)**
This course aims to develop a foundation base of the concepts and solutions a student would need for successful project management. Focus areas for this course combine project management with technology skills to complete realistic assignments. Involving tasks that support the planning, scheduling, time management, decision making, communication, teamwork and performance activities for successful project completion.

**ANT112 General Anthropology ▶ GE (3)**
This survey course will cover the biological and cultural evolution of humans and will emphasize culture as an adaptive and learned behavior necessary for survival. The four fields of anthropology will be introduced as well as perspectives on anthropo- logical culture, cultural diversity, and the value of multiculturalism. The course will also focus on race, emergence of civilizations, survival needs and skills, agriculture, horticulture, contraception, economic development, language, marriage and family, kinship and descent, sex and gender, political organization, civilization, social control, social stratification, supernatural beliefs, art, globalization, and cultural change.

**AUT101 Electrical I ^ (3)**
This course is designed for the study of automotive electrical and electronic systems. The course takes a practical look at electricity and electronics. Topics include completing work orders, describing basic electrical relationships, identifying electrical system faults, and describing basic circuit characteristics. These topics will be covered using a variety of classroom and shop learning and assessment activities.

**AUT121 Auto Electricity and Electronics ^ (2)**
This course deals with the operation, diagnosis, and service of electrical and computer systems found on modern automobiles and light trucks. The course will focus on the latest developments in the field.

**AUT122 Brakes I ^ (3)**
This course is designed to provide students with an understanding of how various basic and antilock brake systems work.

**AUT126 Underhood Maintenance ^ (3)**
In this course students will study and perform tasks from the National Automotive Technicians Education Foundation's (NA- TEF) Maintenance and Light Repair (MLR) Program. Covers major vehicle operations; basic maintenance, lubrication, cooling, lighting, brakes, tires, ignition systems, and electrical/electronics. After completion of this course, students will have a basic understanding of vehicle service requirements and safety procedures.

**AUT132 Engine Performance I ^ (3)**
This course provides current information to develop the skills needed to diagnose and fix drivability problems. The course will cover OBD I and OBD II diagnosis as well as computerized power-train systems.

**AUT142 Automotive Technology Lab I ^ (5)**
This lab course is designed to give students practical work experience in diagnosing, repairing, and understanding the components of engine repair, auto transmission/transaxles, and auto service management. Corequisites: AUT101, AUT121, and AUT122.

**AUT151 Heating and Air Conditioning ^ (2)**
This course is designed provide knowledge of basic heating and air conditioning systems. The course will cover theory and operation as well as proper maintenance and service procedures. Emphasis will also be on safety and correct use of air conditioning tools. Prerequisite: AUT 142

**AUT161 Steering and Suspension I ^ (3)**
The suspension and steering systems course is a lecture course designed for students to increase their knowledge of various parts of chassis work, such as wheel alignment, wheel balancing, and suspension system operation and repair.

**AUT192 Automotive Technology Lab II ^ (5)**
This course is a lab course designed to give students practical work experience to diagnose, repair, and understand the components of engine repair auto transmission/transaxles, and auto service management. Corequisites: AUT132, AUT151, and AUT161. Prerequisite: AUT 142

**AUT193 Hybrid and Fuel Cell Vehicles ^ (1)**
This course is designed to give students an introduction to the various types of hybrid electric vehicles (HEV). Topic areas include improvement of fuel economy, hybrid designs, HEV components, and the operation of the typical HEV.

**AUT201 Manual Drive Trains and Axles ^ (2)**
This course is designed to provide an in-depth study of torque delivery. The course will cover clutches, drivelines, drive axles, transfer case, and manual transmissions and transaxles. Prerequisite: AUT 192

**AUT211 Automatic Transmissions/Transaxles I ^ (2)**
This course provides an in-depth study of torque delivery and planetary gear sets. Instruction areas include operation, service, diagnosis, and repair of automatic transmission and transaxle functions, including electronic controls. Prerequisite: AUT 192

**AUT221 Engine Performance/Drivability II ^ (2)**
This course provides current information to develop more advanced skills needed to diagnose and fix more complex drivability problems. The course will cover analyzing, servicing, and diagnosing a variety of fuel, exhaust, and induction systems. Prerequisite: AUT 192

**AUT242 Automotive Technology Lab III ^ (7)**
This lab course is designed to give students practical work experience in diagnosing, repairing, and understanding the components of engine repair, auto transmission/transaxles, and auto service management. Corequisites: AUT193, AUT201, AUT211, and AUT221. Prerequisite: AUT 192

**AUT251 Engine Repair I ^ (2)**
This course begins with basic engine diagnostics and progresses through engine removal, tear down, short block repair, and cylinder head repair. The course will also emphasize correct engine repair techniques. Prerequisite: AUT 242

**AUT255 Automatic Transmission/Transaxle II ^ (1)**
This course continues the study of automatic transmissions and transaxles and their electronic control circuits, including trouble diagnosis and service procedures. Prerequisite: AUT 242

**AUT261 Auto Service Management ^ (2)**
This interactive course covers the essentials and rationale for service management. The course covers shop safety, safety planning, personal planning, supervising, and customer and staff relations. Prerequisite: AUT 242

**AUT281 Automotive Technology Lab IV ^ (7)**
This lab course is designed to give students practical work experience in diagnosing, repairing, and understanding the components of engine repair, auto transmission/transaxles, and auto service management. Corequisites: AUT 251, AUT 255, AUT 261, and AUT 291. Prerequisite: AUT 242

**AUT291 Service Management Practicum ^ (1)**
This course is a continuation of the AUT261 Auto Service Management course intended to develop skills to assist the student in growing professionally and personally. Emphasis will be placed on attendance, professional attitude and laboratory behavior for the fourth semester of the program. Prerequisite: AUT 242

**AUT295 Occupational Work Experience ^ (0)**
Occupational Work Experiences are available to students who have completed 85% of their required course hours. This is an optional course for automotive technology students who wish to gain further “real life” experiences at local businesses and/or approved sites.

**BS 101 College Biology ▸ GE (5)**
This general education course will examine the plant and animal kingdoms, their fundamental principles and processes of life, and their relationship to everyday life. The course consists of three hours of lecture plus three hours of laboratory work per week. Prerequisite: MAT 090 , ENG 095, or Assessment

**BS 104 Human Anatomy ▸ GE (4)**
This course is an anatomical study of the systems forming the human body. Emphasis is placed on the organs forming each system, the embryonic development of the system, and the functions of the tissues and organs of each system. The course includes a brief physiological review with each system and will consist of three hours lecture and one and one half hours of laboratory work per week.

**BS 105 Human Physiology ▸ GE (4)**
This course provides a physio-chemical study of the systems forming the human body. The course will focus on the relationships between the systems and the maintenance of a homeostatic condition within the body. Diseases, defects, and abnormalities are covered with each system. The course will consist of 3 hours of lecture and 1.5 hours of laboratory per week.

**BS 107 Introduction to Environmental Science ▸ GE (4)**
This interdisciplinary science course is designed to stimulate interest in environmental science, increase awareness of environmental problems, and improve understanding of environmental issues. The focus is on contemporary issues relating to biodiversity and sustainability. Topics include air and water quality, global climate change, environmental toxicants, energy resources, deforestation, overfishing, and endangered species. The course will also examine political and ethical concerns, sociological consequences, and economic impacts. A weekly lab session will offer a variety of experiences that demonstrate the principles, processes, techniques, and technologies of natural environmental systems and solutions.

**BS 109 Medical Terminology ▸ (3)**
This course is designed to teach basic competency in the vocabulary and comprehension of medical terms. The course will focus on word attack skills for medical terms. The course can serve as preparation for academic success in Human Anatomy.

**BS 110 Nutrition (3)**
This course is a study of the fundamentals of human nutrition and the relationship of nutrition to health, well-being, and personal food choices. The course will examine human growth and development, scientific research in nutrition, and how nutrition affects human disease. The course will also include the application of basic nutritional science to the requirements of life cycle stages, activity and exercise, and various states of health. This course is appropriate for Biology, Nursing, and Pre-Med students.

**BS 111 Nutrition for Health, Fitness, Sports (3)**
This course will provide a study of food and the effect nutrition has on health, growth and development, and physical performance. The course topics include: calorie expenditures and the nutritional value of foods, including related calculations; human metabolism and metabolic pathways for carbohydrates, fat, and protein; methods for determining body composition, general fitness levels, and exercise intensity; nutritional health research data and statistics; and scientific data concerning the effects of nutrition on health, fitness, and sports activity.

**BS 112 Nutrition for Health, Fitness, Sport w/ Lab (5)**
This course will provide a study of food and the effect nutrition has on health, growth and development, and physical performance. The course topics include: calorie expenditures and the nutritional value of foods, including related calculations; human metabolism and metabolic pathways for carbohydrates, fat, and protein; methods for determining body composition, general fitness levels, and exercise intensity; nutritional health research data and statistics; and scientific data concerning the effects of nutrition on health, fitness, and sports activity.

**BS 201 General Zoology (5)**
This course covers the anatomy and physiology of representative species of each phylum of the animal kingdom. The evolutionary connection between the phyla of the phylogenetic tree is covered with each phylum. Prerequisite: BS 101 or Instructor Permission

**BS 202 General Botany (5)**
This course provides a study of the structure of plants and how they live, grow, and reproduce. The course will emphasize function as a basis of life and how it is related to human problems such as population, food supply, and conservation. Prerequisite: BS 101 or Instructor Permission

**BS 203 Microbiology (5)**
This course will provide a study of the morphology, physiology, and classification of microorganisms associated with disease. The course will also focus on methods of disease prevention through sanitation, disinfection and sterilization, sources and means of infection, and body defenses. Prerequisite: BS 101 or BS 105 or 5 Credit Hour Anatomy and Physiology with lab

**BS 220 Pathophysiology (4)**
An introduction to the basic concepts of pathophysiology as it relates to nursing and pre professional students. This course is organized in a manner that brings the principles of pathophysiology to the forefront with a focus on the relatively few patterns of disease, rather than asking students to memorize extensive catalogs of specific diseases and this conceptual approach is more suited to these types of students. Laboratories will be used to support and supplement the information presented in lecture. Prerequisite: BS 104 and BS 105

**BS 240 Emergency Medical Training – Basic ^ (12)**
This course is designed to provide training for giving medical care to patients in the pre-hospital setting. The course will offer instruction and practical experience for students to develop the knowledge, skills, and attitudes needed for certification and practice as an Emergency Medical Technician-Basic (EMT-B) in Kansas.

**BS 241 CPR Basic (1)**
This course is designed to give students the knowledge and skills needed to provide emergency care using cardiopulmonary resus- citation (CPR) and automated external defibrillation (AED).

**BS 244 Emergency Medical Training - Intermediate ^ (6)**
This course is designed to provide advanced training for giving medical care to patients in the pre-hospital setting. The course will offer instruction and practical experience for students to develop the knowledge, skills, and attitudes needed for certification and practice as an Emergency Medical Technician-Intermediate (EMT-I) in Kansas. Prerequisite: EMT-B Certification

**BS 246 Advance Emergency Medical Technician ^ (13)**
This course is designed to provide advanced training for giving medical care to patients in the pre-hospital setting. The course will offer instruction and practical experience for students to develop the knowledge, skills, and attitudes needed for certification and practice as an Advance Emergency Medical Technician (AEMT) in Kansas. Prerequisite: EMT-B Certification

**BTT105 Safety & Orientation (OSHA 10) ^ (1)**
This course covers the tools and materials required for the Building Trades. Students will be introduced to wood and lumber, engineered panels, and engineered lumber products, fasteners, hand tools, portable power tools, and stationary power tools. Students will begin to safely operate hand and power tools. This course covers the safety and job hazards for the building trades industry. Students will identify types of job hazards, accident prevention measures, lists classes of fires, be familiar with a fire extinguisher, demonstrate proper methods of lifting, list forms of eye protection, learn ways to protect hands when working with a table saw.

**BTT106 Introductory Craft Skills ^ (3)**
This course includes the general and specific introduction into the construction business. The study of the Occupational Outlook and the various types of jobs available is also included. Students will need to pass a safety test on hand and power tools and equipment operations. The course also presents basic mathematics and its applications to the construction industry.

**BTT109 Carpentry Basics ^ (4)**
This is a step by step class that teaches the student how to use equipment, tools and fasteners; measure, cut, drill, join, fasten and finish various types of hardwoods and softwoods. The student will read, and interpret plans, elevations, schedules, sections, and details contained in basic construction drawings. Students master a variety of construction skills by applying knowledge through their participation in a ‘student design-built’ house project.

**BTT111 Roof & Framing ^ (3)**
A practical study of roof styles including gambrel, gamble, shed, hips, and trusses. The course covers rafter/truss design, lay-out, and framing. Students will also learn about cornice, soffits, and gable end construction.

**BTT119 Floors, Walls, & Ceiling Framing ^ (4)**
This course provides experience in construction of the sub-floor system in a residential house according to the Uniform Building Code. The course also offers experience in constructing and installing exterior and interior walls, as well as a practical study of sheet rock materials and finishing techniques. Prerequisite: BTT111

**BTT120 Carpentry I ^ (4)**
The Carpentry I course helps learners to build general carpentry skills through NCCER General Carpentry curriculum. The included NCCER General Carpentry modules prepare individuals for entry-level positions

on project sites by providing instruction and hands-on training for an orientation to the carpentry trade, building materials and fasteners, construction plans & documents, and site and building layout. Students taking this course, combined with the Carpentry II course, will be prepared to take and pass the General Carpentry exam to earn the NCCER General Carpentry credential. All content from NCCER General Carpentry 6th edition modules

**BTT121 Residential Concrete Construction ^ (3)**
Though the finishing of footings, foundations, and floor slabs is typically done by subcontractors, there are occasions when the residential carpenter is called on to build basic forms and place reinforcing materials in the structure. This course is a study of the reinforcing materials, concrete and basic formwork used in construction. Student will learn how to perform several masonry and concrete finishing tasks, such as mixing concrete, building footings, edges and wall forms and using concrete reinforcing materials.

**BTT125 Carpentry II ^ (5)**
The Carpentry II course helps learners to build general carpentry skills through NCCER General Carpentry curriculum. The included NCCER General Carpentry modules prepare individuals for positions on project sites by providing instruction and hands-on training on the components and construction systems for floors, walls, roof framing, stairs, and building envelope. Students taking this course, combined with the Carpentry I course, will be prepared to take and pass the General Carpentry exam to earn the NCCER General Carpentry credential. All content from NCCER General Carpentry 6th edition modules.

**BTT155 Residential Interior Finish Carpentry ^ (5)**
The attractiveness of a home is often determined by the quality of its finish. Care needs to be taken in selecting the materials to finish the interior of the home. This courses describes the various materials used for insulating the home, finishing the walls and ceilings, and cabinetry. Prerequisite: BTT 121

**BTT159 Windows, Doors, & Stairs ^ (3)**
This course is a study of the exterior sheathings, windows, doors, siding, eave, and fascia. It includes installation, finish, and maintenance. The design style and installation of various types of windows and doors is covered. Experience in installing thresholds, weather stripping, locksets and overhead garage doors is included.

**BTT160 Advanced Interior Carpentry ^ (3)**
This course is a study of the doors and door hardware and window, door, floor, and ceiling trim, and finish flooring. It includes installation, finish, and maintenance. The design style and installation of various types of trim. Experience in installing doors, trim, and flooring is included.

**BTT162 Commercial Carpentry ^ (2)**
While there are many similarities between residential and commercial carpentry, there are often important differences including plans, materials and procedures required to meet the needs and standards of commercial projects. In this class we will study the different types of commercial drawings, the tools and procedures used in steel framing, and study how to estimate and install suspended ceiling systems.

**BTT164 Introduction to Mechanical Systems ^ (3)**
This Course includes a study of the basic principles and practices of the electrical, HVAC, and plumbing trades. It will serve as an introduction to the various materials, tools and techniques used in these trades.

**BTT170 Painting, Finishing, & Decorating ^ (4)**
Wood and certain other covering material used on inside and outside of the home require protective coatings against soiling, rot and other types of deterioration caused by the environment. Unfinished woods discolor, shrink, sell, check and warp if left unprotected. This course describes the various materials used for coatings that cover all types of finishes whether designed for wood or other materials

such as metals and drywall. Coatings include paints, stains, varnishes and various synthetic materials both clear and colored. Prerequisite: BTT 159

**BUS101 Introduction to Business (3)**
This course provides a preview of business which includes business organization and management, the financing of business operation, the marketing of the product or service, the accounting of business transactions, and career information.

**BUS102 Personal Finance (3)**
For non-business as well as for business majors. The course is primarily concerned with the management of money from the viewpoint of the individual. Topics to be covered include the consumer's credit buying, borrowing, saving, and investments; purchase of insurance, real estate and other major items; the problem of taxation and wills, and controlling expenditures through the use of a budget.

**BUS103 Accounting I (3)**
The recording, classification, and analysis of economic transactions of the sole proprietorship form of business ownership are the focus of the course. The student will analyze transactions, use journals and ledgers, prepare financial statements, and summarize results at the close of the fiscal period.

**BUS105 Accounting II (3)**
This course is a continuation of Accounting I. The focus of the course will be on recording, classification, and analysis of economic transactions of the corporation. Students will analyze transactions, use journals and ledgers, prepare financial statements, and summarize results at the close of the fiscal period. Students will be introduced to decision-making and financial analysis. Prerequisite: BUS 103 with a C or higher

**BUS112 The Business of Personal Training (3)**
This course will provide a study of the entrepreneurial process specifically focused on the business of personal training. The course will cover topics such as opportunity recognition, entry strategies, market opportunities and marketing, business plan, financial projections, venture capital, financing, external assistance for startups and small businesses, legal and tax issues, intellectual property, franchising, and entrepreneurship economics.

**BUS115 Business Math Using Calculators ^ (3)**
This course covers basic business math operations and focuses on the development of speed and accuracy on the calculator. The course will emphasize business and consumer applications using both mechanical and computerized 10-key calculators.

**BUS116 Introduction to Accounting (3)**
This course provides an introduction to the fundamental principles of accounting as applied to business enterprises. The entire accounting cycle is covered.

**BUS117 Computerized Accounting ^ (3)**
This course provides an introduction to computerized accounting. This course will offer practical experience in establishing maintaining accounting systems and records for single proprietorships and corporations. Prerequisite: BUS116 and Instructor Permission

**BUS125 Human Resources (3)**
This course will examine the development and role of human resources management in an organization. The course will focus on legal and ethical contexts, administration of wages and benefits, job design and analysis, performance management systems, and recruitment, hiring, and training.

**BUS127 Principles of Entrepreneurship I (3)**
This course emphasizes the major issues confronting entrepreneurs and those in small businesses. It provides guidance regarding the legal considerations of which entrepreneurs should be aware when launching a new enterprise. It serves as a source and reference to those who either aspire or are currently active in the entrepreneurial world.

**BUS130 Microcomputer Applications I: Word Processing, Spreadsheet, Database, Presentation (3)**
This course is designed to give students knowledge and practice which will enable them to feel comfortable with the computer. Emphasis will be placed on problem solving with the use of word processing, spreadsheet, database management, and presentation software.

**BUS133 Microcomputer Applications I: Spreadsheet (3)**
This course focuses on Microsoft Excel spreadsheet concepts and applications and using the spreadsheet as a tool in processing information.

**BUS139 Microcomputer Apps I: Word Processing (3)**
This course is designed to provide students instruction on word processing concepts, systems, equipment, and career opportunities.

**BUS181 Microcomputer Apps I: Word Processing (1)**
This course is designed to provide instruction in using word processing software. (Note: Students who have already completed BUS 139 cannot take this course.)

**BUS183 Microcomputer Applications I: Spreadsheet (1)**
This course focuses on Microsoft Excel spreadsheet concepts and applications and using the spreadsheet as a tool in processing information. (Note: Students who have already completed BUS 133 cannot take this course.)

**BUS189 Microcomputer Apps I: Electronic Business Presentation (1)**
This course focuses on using Microsoft PowerPoint to create visually effective business presentations. The course will include organizational charts, business graphs, and other visual materials incorporated in a presentation. In addition, the course will cover how to enhance presentations by using special features, such as animation, slides, templates, note pages, transition effects, and others. (Note: Students who have already completed BUS 151 cannot take this course.)

**BUS200 Financial Accounting (4)**
This course covers the basic accounting mode, the measurement process involved, and the data classification that are essential to the interpretation and effective use of financial statements by shareholders, creditors, auditors, and managers. The course will focus on the communication of financial information. Prerequisite: BUS 116 or Instructor Permission

**BUS201 Principles of Management (3)**
This course presents a basic understanding of the field of management and management practices. Management functions of planning, organizing, leading, and controlling are covered while exploring leadership, values and culture, ethics and diversity, globalization, social responsibility, quality, productivity, and participative management topics.

**BUS203 Macroeconomics GE (3)**
This course provides a study of basic macroeconomic concepts, principles, and terminology. Attention is given to supply and demand, national income, unemployment, money and banking, international trade, and finance. Prerequisite: MAT 100

**BUS204 Microeconomics ▸ GE (3)**
This course provides a study of basic microeconomic theory applied to the analysis of prices, markets, production, profits, rents, interest, and wages. Prerequisite: MAT 100

**BUS205 Business Law ▸ (3)**
This course provides a basic study of law related to business. Emphasis will be on contracts, law of sale, negotiable instruments, consumer protection, and the Uniform Commercial Code (UCC).

**BUS210 Marketing ▸ (3)**
Introduces the role and importance of marketing techniques to the success of modern organizations. The course focuses on the four basic elements of marketing; product, price, promotion, and place. Topics of study include the marketing concept; marketing research, consumer behavior, the product life cycle, channels of distribution, physical distribution, advertising, personal selling, pricing objectives and strategies, and social responsibilities of marketers.

**BUS213 Business Communications (3)**
This course covers both traditional and innovative communication skills. The primary focus will be on writing employment documents and business letters for specific situations. Prerequisite: ENG 101

**BUS216 Managerial Accounting ▸ (3)**
This course covers the concepts of materials, labor, and overhead control. The course also examines budget administration, cost accounting systems including standard costing, full costing and direct costing, break-even analysis, accounting statement analysis, and use of return on investment as a basis for management decisions. Prerequisite: BUS 105 or BUS 200 with a C or higher

**BUS230 Principles of Entrepreneurship II (3)**
This course will provide a study of the basic entrepreneurial process. The course will cover opportunity recognition, entry strategies, market opportunities and marketing, creation of a successful business plan, financial projections, venture capital, debt and other forms of financing, external assistance for startups and small businesses, legal and tax issues, intellectual property, franchising, and entrepreneurship economics. Prerequisites: BUS127, BUS103, BUS210, and BUS101 or BUS201

**CAD101 Technical Drawing I ^ (3)**
This course teaches the basic concepts of drafting communication. Subjects include line types, orthographic projections, sectioning, language, auxiliary views, pictorial drawings, and scale.

**CAD131 Computer Graphics I ^ (5)**
This course is designed to provide students with a basic understanding of the uses and applications of computer drafting hardware and software. The course will also explore and develop drawing, editing, and coordinate input skills.

**CAD151 Technical Drawing II ^ (4)**
This course is a continuation of Technical Drawing I and teaches the basic concepts of drafting communication. Subjects include line types, orthographic projections, sectioning, language, auxiliary views, pictorial drawings, and scale. Prerequisite: CAD101

**CAD182 Computer Graphics II ^ (5)**
This course is designed to provide students with an advanced understanding of the uses and applications of computer drafting hardware and software. The course will also explore and develop drawing, editing, and coordinate input skills. Prerequisite: CAD131

**CAD201 Technical Drawing III ^ (4)**
This course covers advanced concepts of drafting communication pertaining to mechanical engineering.

Subjects include line types, orthographic projections, sectioning, language, auxiliary views, pictorial drawings, and scale. Prerequisite: CAD151

**CAD211 Spreadsheets ^ (3)**
This spreadsheet application course is designed to show students how to organize data, complete calculations, make decisions, graph data, and develop professional-looking worksheets. The course will also cover Microsoft Windows concepts and terminology.

**CAD221 Geometry ^ (2)**
This course covers the principles of basic geometric construction: lines, arcs, circles, angles, and the relationships between geo- metric forms. The course will focus how these principles apply to graphic construction.

**CAD232 Computer Graphics III ^ (5)**
This advanced course will cover hardware, networking, and Internet concepts. The course will cover how to install hardware devices, interrupts, jumpers, and switches, as well as troubleshooting. Network protocol, operations, and concepts will also be covered. The course will also focus on accessing information on the Internet and using e-mail and news groups. Prerequisite: CAD182

**CAD232B Computer Graphics III ^ (2)**
This advanced course will cover hardware, networking, and Internet concepts. The course will cover how to install hardware devices, interrupts, jumpers, and switches, as well as trouble- shooting. Network protocol, operations, and concepts will also be covered. The course will also focus on accessing information on the Internet and using e-mail and news groups. Prerequisite: CAD182

**CAD251 Technical Drawing IV ^ (4)**
This course covers advanced concepts of drafting communication pertaining to mechanical engineering. Subjects include line types, orthographic projections, sectioning, language, auxiliary views, pictorial drawings, and scale. Prerequisite: CAD201

**CAD261 Database ^ (4)**
This database application course is designed to show students how to create, store, sort, and retrieve data. The course will also cover Microsoft Windows concepts and terminology.

**CAD271 Trigonometry ^ (2)**
This course covers trigonometric functions, solution of triangles, vectors, and complex numbers. Application of trigonometric functions in the solution of triangles will be stressed.

**CAD282 Computer Graphics IV ^ (5)**
This course covers advanced parametric modeling. Working with CAD software students will work in three dimensions through shape description, sketching, and multi-view projection exercises. Students will work with mechanical drawings and specifications to assemble three-dimensional digital prototypes. Prerequisite: CAD232

**CAD295 Occupational Work Experience ^ (0)**
Occupational Work Experiences are available to students who have completed at least 85% of their required course hours. This is an optional course for students wanting practical experience at local businesses or other approved sites.

**CHM107 General Chemistry (5)**
This course provides a basic introduction to chemistry, with special emphasis on solution chemistry, acid-base chemistry, organic and biochemistry. The course is recommended for students pursuing non-

science and allied health degrees. Students pursuing degrees which require more than one semester in Chemistry should take CHM111.

**CHM111 College Chemistry I ▸ GE (5)**
This course provides a college-level introduction to chemistry and is intended for students going into technological, scientific, or medical fields. The course will focus on chemical compounds, their properties and reactions, and the scientific laws that determine their behavior. Course topics will include basic chemical concepts, calculations with chemical formulas and equations, chemical reactions, thermochemistry, modern theories of the atom and electronic structure, chemical periodicity, and chemical bonds. Prerequisite: MAT 103 or Assessment.

**CHM112 College Chemistry II ▸ GE (5)**
This course continues the study begun in PS 111 and is intended for students going into technological, scientific, engineering, or medical fields. The course is required in certain pre-professional programs, such as pre-medicine, pre-veterinary medicine, pre-dentistry, etc. Course topics will include crystals and solids, reaction kinetics, chemical equilibrium, solution chemistry including acid-base and complex-ion equlilbria, thermodynamics, and electrochemistry. The course will also include a brief discussion of organic chemistry, biochemistry, and nuclear chemistry. Pre-requisite: CHM111.

**CHM211 Organic Chemistry I with Lab (5)**
This course is the first in a two-sequence semester. The course will focus on hybridization, bond and molecular orbitals, stereo- chemistry, acids and bases, chemical radicals, kinetics, thermodynamics, conformational analysis, and molecular structure. These topics will be applied to alkanes, haloalkanes, alkenes, and alcohols. The course will also include spectroscopic techniques such as NMR, IR, and mass spec, applied to structure determination of organic molecules. Prerequisite: CHM111, CHM112, or Instructor permission.

**CHM212 Organic Chemistry II with Lab (5)**
This course is the second in a two-sequence semester. The course will continue to focus on topics presented in PS 210 and how they apply to chemical synthesis and structure determination. The topics will be applied to aldehydes and ketones, carboxylic acids and their derivatives, amines, aromaticity, benzene and its derivatives, organometallic compounds, conjugated and unconjugated unsaturated systems, and pericyclic reactions. Selected applications to biochemistry, medicinal and pharmaceutical chemistry, and industrial chemistry will also be discussed. Prerequisite: CHM210 and Instructor permission

**CJ 100 Introduction to Criminal Justice ▸ GE (3)**
This is an introductory course in the field of criminal justice. The course will provide a short historical background of law enforcement, constitutional limits of law enforcement, 4th, 5th, 6th and 14$^{th}$ amendment safeguards, court room processes, and court processes from pre-arrest through verdict. This course will give students a general knowledge about the scope of crime, measurement of crime, and causes of crime.

**CJ 105 Introduction to Corrections (3)**
This course is an introductory study of the entire field of corrections, beginning with conviction. The course will cover the sentencing grid from the state of Kansas, including mitigating and aggravating factors, post-conviction remedies, and appeal processes. The course also examines alternatives to confinement, probation and parole practices and current trends in incarceration.

**CJ 110 Criminal Investigation (3)**
This course explores issues including the effective interview and interrogation techniques, crime scene management and lab processes, crime scene documentation methods, case preparation and court Presentation.

**CJ 116 Criminal Justice Interview and Report Writing (3)**
Focuses on the unique types of writing required in a criminal justice career. Students are required to gather pertinent information and then record that information by writing a variety of report narratives representative of those prepared by individuals working in a profession within the criminal justice system.

**CJ 120 Juvenile Delinquency & Justice GE (3)**
This course examines the historical precedents and philosophical reasons for treating juveniles differently from adults. The course reviews empirical evidence about child development that can illuminate the reasons for their special status within the system. It will study the major theories that have been proposed as explanations of delinquent behavior. The course will also provide a detailed overview of the juvenile justice system, from its beginnings to the current state of the institution.

**CJ 140 Criminal Procedures (3)**
This course introduces basic court system procedures and the jurisdiction of the courts. It also focuses on the constitutional and other legal requirements that affect law enforcement practices and procedures. Specific topics include confessions and interrogations, identification procedures, arrest, search and seizure, and admissibility of evidence.

**CJ 201 Criminal Law (3)**
This course examines the history, scope, and nature of law. It focuses on the parties to a crime, classification of offenses, criminal acts and intent, the capacity to commit crime, and criminal defenses. It will cover the elements of misdemeanor and felony crimes. Prerequisite: CJ 100 or Instructor Permission

**CJ 204 Professional Responsibility in Criminal Justice (3)**
Explores the major components involved in the study of ethics, particularly as it applies to the field of criminal justice. Focus is placed on the code of conduct and ethics of the criminal justice profession and the standards held to in their professional role. The aim of the course is to produce professionals who are not only critical thinkers, but who have the skills necessary to pursue sound ethics in their day-to-day decisions and activities. Prerequisite: CJ 100

**CJ 205 Law Enforcement Operations and Procedures (3)**
Examines the role of police in society and the application of key concepts to policing scenarios. Students identify, discuss and assess critical police practices and processes to include deployment, arrest procedures, search strategies and other operational considerations. Prerequisite: CJ 100

**CJ 212 Agency Administration (3)**
Conducts a practical analysis of modern administration theory and supervisory, management principles and their application to the unique operating problems of criminal justice organizations.

**CJ 220 Practicum in Administration of Justice (3)**
The focus of this course is hands-on practical experience and observation in a field directly related to the student's academic preparation and career objectives. Periodic meetings between the instructor and the student will be held to review the progress and success of the student's experiences. Upon completion of the practicum, the student will demonstrate key criminal justice competencies by creating a presentation as directed by the instructor.

**COL 103 College Success GE (1)**
This course is an introduction to the world of college. The course will include preparation of an academic plan to obtain an associate degree in a selected major. The course will also cover curriculum structure, college success skills, transferring to a four-year institution, decision making, and career planning.

**COL 162 Careers in Sports and Fitness (2)**
The purpose of this course is to make students aware of the variety of careers related to sports and fitness. The course will provide students a realistic look at personal abilities, level of commitment, and work ethic. The course will examine various sports and fitness careers as well as preparation, expectations, and employment opportunities. Guest speakers currently engaged in sports or fitness careers will also provide information and insight. The focus of the course is to help students make an informed choice and develop a plan to achieve personal goals in a sports or fitness career.

**COL170A-170D Leadership Organization & Goals (5)**
This course will provide practical instruction and experience in student government and leadership. The course will cover leadership qualities, parliamentary procedures, time management, conflict resolution, budgeting, and team building. Students will be actively involved in student government, as well as fundraising, community projects, student activities, entertainment, and programs. This course is designed for individuals with little or no background in student government. Prerequisite: Instructor Permission

**COL182 Student Success Seminar (1)**
This course is designed to enhance student success and retention as well as create a greater understanding of what it takes to be successful in college and in life. This course will explore topics such as career planning and exploration, the scholarship application process, resume writing, transfer assistance, and financial literacy. In this course, students will learn various strategies for creating academic, professional, and personal success. Prerequisite: Instructor Permission

**CRT190 Certification Training Lab ^ (1)**
This class is designed to give the second semester student supervised practice with computerized testing. Students will apply previously learned skills and concepts in preparation for the CompTIA A+ Examinations. Practice test banks will be used to simulate the exams. Students will take practice tests, review answers, research any incorrect answers, and research and obtain correct answers.

**CST103 Operating Systems ^ (2)**
This course provides instruction on the most commonly used major operating systems. Components covered will be installation, configuration, maintenance, file management, and batch files.

**CST105 Industrial Computer Applications ^ (2)**
This is an introductory course appropriate for all technical and skilled trade students. This course is designed to provide computer familiarity, not proficiency. Industrial applications of computers will be stressed. Computer software, storage/input/output devices, and controls as they apply to industry will be explored. The course is competency based and will provide the student with experiences and demonstrations in keyboarding, Windows programs, word processing, spreadsheets, computer graphics, and email. The student will learn the basic features and functions of the Internet, Outlook, Word, and Excel. The student will also learn about basic computer concepts and Internet skills.

**CST106 Introduction to Networking: CCNA ^ (1)**
This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. It uses the Open System Interconnection (OSI) and Transmission Control Protocol (TCP) layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. The principles and structure of Internet Protocol (IP) addressing the fundamentals of Ethernet concepts, media and operations are introduced to provide a foundation for the curriculum.

**CST107 Introduction to Computers & Applications ^ (3)**
This course is designed to examine and apply the skills, tools and information necessary to perform basic software applications used with microcomputers. Students will be introduced to fundamental computer concepts pertaining to operating systems, hardware, software, security, word-processors, spreadsheets,

database, presentation and web-page development software applications. With this knowledge students perform fundamental applications, format and print queries and reports.

**CST115 PC Troubleshooting Lab ^ (1)**
This course is intended to introduce the student to various computer components, business systems and the basics of troubleshooting the Personal Computer (PC) Safety and proper tool usage will be reinforced. The student will be introduced the techniques used to isolate and resolve computer problems, multimedia technology, input-output devices including monitors and video cards. Instruction will be given on basic electrical principles and PC power supplies.

**CST118 Linux Essentials ^ (2)**
The course is designed to introduce students to the Linux operating system basics. Major topics include discussions on Open- Source software, the Linux file system, command line syntax, basic scripting in Linux, and how to manage users on a Linux system. The course content is aligned with the Linux Professional Institute's Linux Essentials certification exam.

**CST124 PC Troubleshooting Essentials ^ (2)**
This course is intended to introduce the student to various computer components, business systems, and the basics of troubleshooting the Personal Computer (PC) Safety and proper tool usage will be reinforced. The student will be introduced to the techniques used to isolate and resolve computer problems, multimedia technology, input-output devices including monitors and video cards. Instruction will be given on basic electrical principles and PC power supplies.

**CST125 Web Design ^ (2)**
This course is designed to introduce students to web design using HTML5 and CSS3. Concepts discussed include understanding HTML/HTML5, responsive web design, how to structure web pages using both HTML and CSS, how to use elements such as tables and forms, and how to add multimedia to create dynamic and engaging web pages.

**CST154 CompTIA A+ Essentials ^ (3)**
This course is designed to give the student instruction on complex hardware installation and prevention ofand recovery from data loss. It will introduce the student to telephone communications, printers, notebook PCs, virus infection, and data recovery.

**CST158 CompTIA A+ Practical Applications ^ (3)**
This course is designed to give the Computer Support Technology student instruction on how to troubleshoot and resolve operating system issues. The student will be using tools within the operating systems as well as third-party software to resolve problems. This course will examine common operating system problems and problems that are specific to individual operating systems. The differences, advantages, and disadvantages of several popular Windows operating systems will be considered.

**CST159 Routers and Routing: CCNA2 ^ (4)**
This course describes the architecture, components, and operation of routers, and explains the principles of routing and routing protocols. Students analyze, configure, verify, and troubleshoot the primary routing protocols Routing Information Protocol Version 1 (RIPv1), Routing Information Protocol Version 2 (RIPv2), Enhanced Interior Gateway Routing Protocol (EIGRP), and Open Shortest Path First (OSPF). By the end of this course students will be able to recognize and correct common routing issues and problems. Students complete a basic procedural lab, followed by basic configuration, implementation, and troubleshooting labs in each chapter. Packet Tracer activities reinforce new concepts, and allow students to model and analyze routing processes that may be difficult to visualize or understand. This is the second class in a series of four offerings to prepare for the Cisco Certified Network Associate (CCNA) certification.
Prerequisite: CST106

**CST201 Advanced Operating Systems ^ (3)**
This course is designed to provide advanced instruction on the most commonly used operating systems. The course will cover installation and configuration of dual boot operating systems, system file configuration and editing, system files, and system conflict resolution.

**CST206 Programming ^ (2)**
This course is designed as an introduction to computer programming. The course will cover basic programming skills such as form and menu creation, decision making, looping arrays and subroutines, and database interfacing. The course will introduce students to programming in a windows environment using Python.

**CST207Tech Support Lab I ^ (2)**
This course is designed for second-year students who are enrolled in the Computer Support Technology and/or the AAS Degree Program. The course will provide advanced classroom instruction as well as practical experience with service calls and help desk situations. Students will be repairing PCs and resolving networking problems during class time, working directly with instructors and students from other departments on campus. The course will also cover advanced techniques to develop and improve workplace skills.

**CST212 LAN Switching and Wireless: CCNA3 ^ (3)**
This course provides a comprehensive, theoretical, and practical approach to learning the technologies and protocols needed to design and implement a converged switched network. Students learn about the hierarchical network design model and how to select services for each layer. The course explains how to configure a switch for basic functionality and how to implement Virtual Local Area Network (VLANs), VLAN Trunking Protocol (VTP), and Inter-VLAN routing in a different implementations of Spanning Tree Protocol in a converged network are presented and students develop the knowledge and skills necessary to implement a Wireless Local Area Network (WLAN) in a small-to-medium network. This is the third class in a series of four offerings to prepare for the Cisco Certified Network Associate (CCNA) certification. Prerequisite: CST159

**CST218 Linux ^ (2)**
The course is designed to introduce students to the Linux operating systems. Major topics will include installing software, accessing a network, troubleshooting hardware and software problems, and interacting with Windows installations/networks.

**CST219 Server Operations Systems & Virtualization (3)**
This course is designed as an introduction to server operating systems and virtualization. The course will examine typical network hardware, network architectures, data transmission, and popular network technologies as well as how communication layers and their protocols are used on a network. The course will introduce students to working with various server operating systems and hypervisors, and the installation of various client operating systems in a virtualized environment.

**CST223 Server Administration ^ (3)**
This course is designed to introduce students to various aspects of server administration. Key concepts that will be discussed include server architecture, administration, storage, security, networking, disaster recovery, and troubleshooting.

**CST224 Computer & Network Security ^ (2)**
This course is designed as an introduction to computer networking administration and maintenance. The course will examine typical network hardware, network architectures, data transmission and popular network technologies as well as how communication layers and their protocols are used on a network. The course will introduce students to installing Windows Server and Linux Server troubleshooting of network problems, and ensuring integrity and stability of a network.

**CST225 Web Development ^ (3)**
This course is designed to introduce students to web development using PHP and MySQL. Concepts discussed include Apache server set up, PHP applications and forms, and the creation, use, and maintenance of a MySQL database.

**CST295 Occupational Work Experience ^ (0)**
This course is designed to finish students' preparation for employment in the Information Technology industry. Students will complete a resume to present to potential employers and may also participate in on-the-job-training opportunities.

**DSL102 OSHA 10 ^ (1)**
This course will: explain job/site safety and precautions for jobsite hazards; determine the uses of personal protective equipment (PPE); identify the safety equipment and procedures related to safe work practices and environment; identify fire prevention and protection techniques; explore Hazardous Communications (HazCom) including Material Safety Data Sheets (MSDA).

**DSL111 Fundamentals of Operating Principles ^ (4)**
This course teaches the history of the diesel engine from the time of its invention to the present date and difference and advantages over other types of engines.

**DSL121 Engine Maintenance ^ (2)**
This course covers standard DB, DB@ and DM pump disassemble inspection and overhaul. It teaches removal, installation and timing procedures on the above injection pumps. This course also teaches test stand operation, pump installation on the test stand and proper calibration of the injection pump.

**DSL133 Diesel Engines I ^ (5)**
This course teaches the three major engine companies products. Training engines are provided for all classes to ensure the student's knowledge of troubleshooting maintenance, disassembly, overhaul, and reassembly techniques. Training is further enhanced by class discussion and visual media.

**DSL141Welding & Fabrication Lab ^ (1)**
This course includes basic principles and fundamentals of arc welding and acetylene cutting as applied to heavy equipment and diesel repairs. It also covers basic welding and acetylene safety.

**DSL152 Fuel System Diagnosis/Repair ^ (4)**
This course teaches the operating of fuel systems used on most modern diesel engines, how they differ from one another, and service and adjustment of each system.

**DSL162 Electrical/Electronic Systems ^ (5)**
This course of basic electrical systems on the diesel engine teaches troubleshooting and component testing using volt ohm meter and volt 33 testers.

**DSL172 Brakes ^ (3)**
This course teaches disassembly, inspection, and troubleshooting of the three major types of clutch systems used by present engine manufacturers. The course also teaches installation techniques and adjustments.

**DSL182 Introduction to Hydraulics ^ (3)**
This course gives a student a short introduction to hydraulic systems. It covers major component identifications, their functions and how each component operates in the system.

**DSL192 Advanced Engine Maintenance ^ (2)**
This course covers standard Db, DB2, and DM pump disassemble inspection and overhaul. It teaches removal, installation, and timing procedures on the above injection pumps. This course also teaches test stand operation, pump installation on the test stand, and proper calibration of the injection pump.

**DSL201 Shop Safety II ^ (1)**
This course is continuation of Shop Safety I and is designed to identify safety hazards associated with working around heavy equipment and to establish procedures that will prevent accidents. Avoidance to actions that may result in damage to personal or equipment is stressed

**DSL212 Advanced Engine Overhaul ^ (3)**
This is an advanced training course in engine overhaul. Advanced training is provided to ensure the student's knowledge of troubleshooting maintenance, disassembly, overhaul, and reassembly Techniques.

**DSL222 Advanced Electrical/Electronic Systems ^ (5)**
Students will become proficient in the diagnosis and repair of electrical circuits including testing, repairing, and /or replacing of components.

**DSL232 Hydraulic Diagnosis/Repair ^ (3)**
This course teaches the theory of both open and closed center hydraulic systems. It covers pump overhaul and testing procedures. It also covers the use of hydraulic flow meter and testing Procedures.

**DSL251 Electronic Computer Diagnosis/Repair ^ (3)**
This course covers the study of the electrical and electronic control system used on diesel powered equipment. This course also teaches the student how to use service tools, system operations, monitoring attachments, fault codes, and injection timing sensor and actuator principles to diagnose computer related problems.

**DSL261 Air Conditioning Diagnosis/Repair ^ (2)**
This course covers refrigeration theory, operation, testing, and repair of air conditioning systems. Students will also discuss the use of refrigerant recovery methods.

**DSL272 Suspension and Steering ^ (3)**
This course teaches troubleshooting disassembly, inspection, and adjustments of both hydraulic and air brake systems with the advantages and disadvantages of both systems. The course also covers the two air systems, their components, and function in the brake system.

**DSL275 Diesel Management ^ (3)**
This course introduces the concepts and principles of effective business management as they apply to diesel technology and includes forms of business ownership, typical business organizational structures, relationship of business to the community and the effect of government regulations on businesses.

**DSL281Transmission Overhaul/Diagnosis ^ (3)**
After completion of this course the student should be able to identify types of mechanical and auto transmissions they should be able to dissemble and reassemble transmissions correctly and be able to identify parts and why they have failed.

**DSL291 Advanced Clutch & PowerTrain ^ (3)**
Students will become proficient in the diagnosis and repair of power trains, clutches, transmissions, and differentials.

**ECH100 Early Childhood Fundamentals ^ (3)**
Students will develop baseline knowledge and skills needed to work with young children in an Early Care and Education Program in Northeast Kansas. Students will complete a Kansas Bureau of Investigation (KBI) background check, and provide a copy of a current physical and TB test. Information covered will serve as the foundation for decisions and practices carried out by professionals in all settings and programs. Students set up their Child Developing Associate (CDA) Professional Portfolio. In addition students will identify the steps involved in preparing for National Child Development Associate (CDA) credentialing. Students unable to pass the KBI inspection, the physical, and the TB test are unable to work with young children. Talk to an advisor about other career options.

**ECH101 Recognizing Child Abuse, Neglect, & Head Trauma ^ (1)**
Participants enrolled in this course will be able to define the various types of abuse and neglect, and identify signs and symptoms of the different types of abuse and neglect. Participants will also learn to identify the signs and symptoms of head trauma. This course is specifically geared toward childcare providers in the state of Kansas. This course is instructor-led and interactive through discussions and assignments in course discussion boards.

**ECH102 Understanding Multiple Intelligences and Children's Learning Styles ^ (1)**
This course will focus on Howard Gardner's theory of multiple intelligences and how different learning styles are affected by the environment, physiology, processing, emotions, and social choices. Practical information will be given on how to create educational environments by applying activities that use different learning styles. Students will also examine their own personal teaching style as applied to teaching multiple intelligences to a variety of students. This course is instructor-led and interactive through discussions and assignments in course discussion boards.

**ECH104 Early Childhood Curriculum Planning ^ (3)**
Students will discover what professionals need to know and be able to do to provide quality programming for young children. Using the Kansas Department of Health and Environment (KDHE) Childcare licensing regulations, the Kansas Early Learning Standards (KELS), and research based curriculums, students will learn what a quality curriculum looks like and how to achieve it. The course will a strengths based model that defines developmentally appropriate practices for young children, and the role of the curriculum. Prerequisite: Instructor Permission

**ECH105 Early Childhood Cultural Competency ^ (1)**
This course will examine cultural competency when working with children and families. The course will focus on cultural norms, values, codes of conduct, traditions, and child rearing practices of ethnic, cultural, and other groups served by social programs. The course will also consider how racism, sexism, ageism, homophobia, and other forms of discrimination can affect individual and family development and functioning. This course is instructor-led and interactive through discussion boards and assignments.

**ECH106 Understanding Children's Temperament ^ (1)**
This course provides an overview of temperament traits and the variety of influences on temperament styles. The course will examine challenging temperaments, such as flexible, fearful, and feisty, and will include personal assessment as well as evaluation of children. This course is instructor-led and interactive through discussion boards and assignments.

**ECH107 Supporting Children's Learning Through Play ^ (1)**
This course will examine the nature and characteristics of play and why play is important in a child's development. The course will cover the development domains and milestones that affect children's learning through play, as well as the social and cognitive stages of play and the behavior children exhibit in those stages. The course is instructor-led and interactive through discussions and assignments in course discussion boards.

**ECH108 Childhood Obesity and Good Nutrition ^ (1)**
This course will examine the common reasons for childhood obesity and the complications of being overweight or obese. The course will focus on the new food pyramid, My Plate, and will look at ways to encourage healthy eating habits and ways to integrate learning activities about healthy eating into daily routines. The course will also cover movement activities that encourage and support development and learning in children, as well as ways to share information on healthy eating and active living with parents and families. This course is instructor-led and interactive through discussions and assignments in course discussion boards.

**ECH109 Bullying Prevention and Response ^ (1)**
This course will examine types of bullying and consequences for bullying behaviors. The course will cover the dynamics of bullying behaviors and the roles of targets, bullies, and witnesses. Emphasis will be placed on intervention strategies for dealing with bullying behaviors, as well as strategies to prevent bullying behaviors. This course is instructor-led and interactive through discussions and assignments in course discussion boards.

**ECH110 Early Childhood Credential Portfolio I ^ (3)**
Students will acquire the skills and knowledge associated with safe, healthy learning environments for infants, toddlers and/or preschoolers; which includes recognizing and reporting child abuse and neglect and developing a childcare food program approved menu. Students will develop written lesson plans including learning experiences for science/sensory, language and literacy, creative arts, fine motor, gross motor, self-concept, emotional skills regulation, social studies, and mathematics. Students will complete a child observation form, as well as collect additional record keeping forms. Student will conduct observations in an approved Early Care and Education Program in Northeast Kansas. Students will complete additional steps involved in preparing for their Child Development Associate (CDA) Credential. Prerequisite: ECH100

**ECH112 Introduction to Early Childhood Education** (3)
This course will provide you with the opportunity to explore the diversity in contemporary early childhood roles and settings, and consider your professional goals, current and future. Professional competencies, standards of practice, programs for young children, and philosophical, theoretical, and historical foundations of early childhood education will examined. Program models as well as related issues and research will be compared and evaluated.

**ECH115 Early Childhood Credential Portfolio II ^ (3)**
Students will learn ways to establish positive relationships with parents and families with young children. They will develop a small Resource Guide for Families. Students will describe how they demonstrate appropriate practices. Students will complete the final steps necessary for requesting national Child Development Associate (CDA) Credentialing. Students will conduct classroom observations and complete the Direst Assessment Application. They will compile data from a family questionnaire. Students will explain the key concepts in the code of ethical conduct for Early Educators. Students will summarize their knowledge about children's learning and the role Early Educators play in the lives of children and families. Prerequisite: ECH110

**ECH150 Creative Experiences with Young Children ^ (3)**
This course is a core requirement for the Early Childhood Program. This course is designed for early childhood classroom practitioners. Students will learn to create interesting and secure environments that encourage play, exploration and learning. Students will develop a comprehensive file of curriculum ideas and activities that promote creative expression.

**ECH160 Observing & Interacting w/Young Children ^ (3)**
This course is designed for practitioners who work with children and families. Students will develop skills for quality observation and documentation associated with young children. Ethical considerations and

confidentiality are discussed. Students will conduct an in-depth child study. Students must identify a child,set up and conduct observations. Students will also conduct structured observations targeting specific developmental areas. Students will create a professional report illustrating the developmental level of the child. The child portfolio will include completed checklists, work samples, pictures, and interviews. Prerequisite: ECH100, ECH110, ECH115

**ECH180 ECH Literacy & Language Development ^ (3)**
This course will prepare current or future early childhood teachers to enhance the early literacy outcomes of young children by improving teachers' knowledge of early literacy development. Students will develop an in-depth understanding of language development and acquisition. Students will acquire skills and knowledge in facilitating early literacy to young children, and how to involve parents and families in the process. Prerequisite: 9 credit hours of Early Childhood

**ECH182 Early Childhood CDA Renewal ^ (3)**
This course is for students who have a current preschool or Infant/Toddler Child Development Associate (CDA) Credential and are interested in renewing their credential. Students will learn to act with specific goals in mind for all domains and children's development. This course provides specific ideas and strategies for interacting with children in key subject areas during both child-guided and adult-guided experiences. Students will complete all of the documentation and requirements for CDA renewal. Prerequisite: A Valid Preschool or Infant/Toddler Child

**ECH200 Program Planning and Development ^ (3)**
Students in this course will be introduced to the total range of administrative and curriculum demands in different types of early childhood education centers. The course will expose students to National, State and local Early Childhood Standards. Additional topics will include evaluating and hiring staff, program planning, and writing reports. The course will emphasize developing sound fiscal and program management skills with a focus in interpersonal relationships. Prerequisite: ECH100, ECH110, and ECH115

**ECH202 Early Childhood Mentoring ^ (3)**
This course is for the committed Early Childhood Professional. Early Childhood Professional Ethics and Standards will be infused throughout the course. Students will reflect on their personal and professional growth and leadership skills. Understanding the role of the mentor, effective mentoring practices, and the mentor as a change agent will be explored. This course will provide individuals working in the Early Childhood field the basic foundation needed for developing mentoring relationships, especially those with apprentices. Prerequisite: 12 credit hours of Early Childhood

**ECH210 Family Involvement in Education ^ (3)**
This course will provide a study of family involvement in education from an interdisciplinary approach. The course will cover history, current research, and diversity in families and will also present information, activities, and programs to enrich family-school partnerships and collaborations. Prerequisite: ECH100, ECH110, and ECH115 or equivalent

**ECH220 Principles of Inclusion ^ (3)**
This course explores the barriers to and influences on inclusive education settings for young children. Topics include instructional strategies, individualized instruction, and family perceptions of inclusion, collaborative relationships among adults, classroom ecology, social policy, and cultural and linguistic diversity. Prerequisite: ECH 100 and ECH 160 or Instructor Permission

**ECH250 Early Childhood Practicum ^ (3)**
This course is designed for students who are assuming teaching responsibility under guided supervision. Students must meet all state and national requirements for working in an Early Childhood facility. The purpose of the practicum is to put theory into practice. Students will spend 15 hours in classroom

activities and225 hours teaching in the Early Childhood classroom. The course will cover working with parents, classroom management, observation and assessment, values identification, trends and issues in Early Childhood, personal reflections, and educational philosophy. Prerequisite: Instructor Permission

**ED 101 Pre-Professional Lab I** (1)
This course is designed to provide an introductory hands-on experience for students majoring in education. The course will consist of direct experience observing a professional educator in the classroom as well as tutoring and participation in classroom activities. Prerequisite: Clean Criminal Background Screening within the past 12 months

**ED 102 Pre-Professional Lab II (1)**
This course is a continuation of ED 101 and is designed to provide additional hands-on experience for students majoring in education. The course will consist of direct experience observing a professional educator in the classroom as well as tutoring and participation in classroom activities. Prerequisite: ED 101 and Clean Criminal Background Screening within the past 12 months

**ED 105 Children`s Literature GE (3)**
This course is designed to introduce students to the field of children's literature. The course will cover the theories, history, and types of children's literature. Emphasis will be on giving students the ability to evaluate and select appropriate literature for various ages of children and share it in a creative, entertaining manner. The course is recommended for elementary education and library science majors, and, at some institutions, is a requirement for those majors. Course material will be broad enough to accommodate anyone with an interest in the field of children's Literature.

**ED 110 Intro to Elementary & Secondary Education (3)**
This course will cover the historical and sociological development of elementary and secondary American education, the role of public schools in American society, and the diverse nature of the American student population. The course will also look at professional opportunities in the field of elementary and secondary education.

**EGT106 Computer Numeric Control Concepts ^ (3)**
This introductory course the concepts and capabilities of Computer Numeric Control machine tools. Topics to include setup, operation, and basic applications. Upon completion students should be able to explain operator safety, machine operation, data input, program preparation, and program storage.

**EGT186 Engineering Graphics Application ^ (2)**
This course teaches the basic concepts of Computer Aided Drafting communication and various applications. Subjects include templates, line types, orthographic projections, sectioning, language, auxiliary views, 2 and 3 dimensional objects, scale, plotting, assembly files, and Design Intent.

**EGT206 Machining Processes ^ (3)**
This introductory course teaches basic machine shop operations. The student shall be able to understand and apply basic machining processes tolerancing symbols. Completion of this course the student shall be able to apply basic machining operations including, safety, calculations, metrology, blueprint reading, machining tooling, material science and other machine shop operations

**EGT 226 Computer CAD/CAM Operation ^ (4)**
This course instructs the concepts and capabilities of Computer Numeric Control machine tools. Topics to include Computer Aided Drafting and Computer Aided Machining (CAD/CAM) integration, tooling processes, machine setup, machine controller operation, and the basic applications. Upon completion students should be able to integrate Computer Aided Drafting to Computer Aided Machining in both 2D and 3D milling and lathe, generate geometry and setup Computer Numeric Control processes using

Mastercam software, apply tooling setup and operation, understand the Post Processor, and operate a Computer Numeric Control machine.

**ELE100A Electrical Continuing Education ^ (5)**
The State of Kansas requires electricians to complete 6 hours of continuing education to renew a journeyman or master electrician license. This course will cover code updates and practices used in the electrical industry.

**ELE102 Safety (OSHA 10) ^ (1)**
This course will: explain job/site safety and precautions for job/site hazards; determine the uses of personal protective equipment (PPE); identify the safety equipment and procedures related to safe work practices and environment; identify fire prevention and protection techniques; explore Hazardous Communications (HazCom) including Material Safety Data Sheets (MSDA).

**ELE112 AC/DC Circuits I ^ (4)**
The focus of this course is to give the student a ground level understanding of direct current (DC) and alternating current (AC) theory. The student will be introduced to electron theory and Ohms' law and see how these apply to direct current circuits. As the students progress, they will be introduced to series circuits and their equations, parallel circuits and their equations, and combination circuits and their equations.

**ELE115 Print Reading ^ (2)**
Students learn to read specification manuals and prints as applied to the residential, commercial, and industrial buildings.

**ELE122 Residential Wiring I ^ (4)**
An introductory course on residential wiring methods that includes practical application hand-on experience in implementing National Electrical Code (NEC) requirements.

**ELE125 Generators &Transformers ^ (3)**
Students will gain a working knowledge of the theory and practical application of single-phase and 3-phase electrical components. Upon successful completion of this course, the student should be able to interpret and apply the rules of the current National Electrical Code to wiring systems composed of these electrical components.

**ELE132 Commercial Wiring I ^ (4)**
An introductory course on commercial wiring methods that includes practical applications and hands-on experience in implementing code requirements. This course of instruction will introduce the student to an environment much different than that of residential construction. In commercial applications, students have to look at types of structures, location, types of equipment, and requirements of the National Electrical Code (NEC). The course introduces student to the high intensity lighting systems used in commercial and industrial locations. Students learn how to install, maintain, and troubleshoot each system. Students will also receive instruction on application of different lighting systems to suit the application encountered. The course also provides instruction about wiring methods such as conduit, cable trays, surface metal raceways, rigid non-metallic conduits, and those of other wiring methods used to meet certain locations in commercial applications.

**ELE135 Troubleshooting Techniques ^ (4)**
This course will provide troubleshooting and repair techniques. The student will learn how to identify faulty components, develop a repair plan, safely preform repairs, and prevent reoccurrence.

**ELE142 National Electrical Code I ^ (4)**
An introductory course on the use and interpretation of the current National Electric Code (NEC). This course of instruction is taught throughout the whole program but generally will be intensified during the latter part of the school term. The main focus is to introduce the student to the Block and Associates Exam. The course focuses on what makes up the tests, best use of time, highlighting important text in the codebook, and many other helpful testing ideas. The student will spend time taking sample exams and identifying weaknesses and improvements needed.

**ELE152 Industrial Construction Wiring & Design ^ (4)**
This course will take a look at what is required in the industrial wiring environment and the designs used in these locations. The study of transformers-single and three phases are begun, along with connection of these systems and voltages found. Some introduction into plant automation and their requirements are also discussed.

**ELE162 Electrical Motor Operations & Control ^ (5)**
In this course students will begin a study of electric motor operation and systems used to control their operation. Fundamentals of single and three phase motors along with their operational characteristics are covered. Students learn the language of control, ladder diagram, and the logical sequence in which things must happen in order for a machine or process to operate. Lab experience helps develop skills to operate, install, design, and troubleshoot AC electric motor control circuits for various applications. The current National Electrical Code (NEC) will be used in this course.

**ELE163 Electrical Motor Operations & Control II ^ (5)**
This course is a continuation of ELE162 Electrical Motor Operations & Control. Its purpose is to provide an understanding of reversing motor circuits, solid state devices and system integration, timing and counting functions, relays and solid state starters, sensing devices and controls. Students connect numerous types of control sequences in the shop, along with diagramming and troubleshooting equipment. The current National Electrical Code (NEC) will be used in this course.

**ELE165 Blueprints & Schematics ^ (3)**
This course prepares the student to interpret standard electrical schematics and construction blueprints. Students learn to read specification manuals and schematics as applied in the industrial field.

**ELE172 Fundamentals of Programmable Logic Controllers ^ (2)**
This course provides an introduction to programmable logic controllers (PLCs) and their industrial and commercial applications. The course will cover the fundamentals of operation, installation, and programming. This course is for students who have completed all the motor control requirements.

**ELE182 National Electrical Code II ^ (4)**
A continuation of the National Electrical Code I course on the use and interpretation of the current National Electrical Code (NEC). Its purpose is to prepare students for the Block and Associates exam. The course focuses on what makes up the tests, best use of time, highlighting important text in the codebook, and many other helpful testing ideas. Students will spend time taking sample exams and identifying weaknesses and improvements needed. Prerequisite: ELE142.

**ENG094 ESL Orientation (1)**
An English Second Language course which focuses on orientation into the American culture, academic success, and foundation of basic writing skills which includes introducing the writing process, strengthening vocabulary skills, basic reading skills, and speaking skills. This is a pass/fail graded course. Prerequisite: Instructor permission.

**ENG095 Fundamentals of Reading (2)**
This course is constructed to develop student proficiency in college reading. In this course students will apply analytical and critical reading skills to a variety of texts. Students should also improve critical thinking, enlarge working vocabulary, improve reading skills, and increase reading speed. Prerequisite: Assessment

**ENG096 Fundamentals of Reading & Writing-Advanced (3)**
This course is designed to develop student proficiency in college reading and writing. In this course students will apply critical thinking skills, critical reading skills, and writing skills to narrative and expository texts. In addition, students will develop skills in document design, researching, and documentation. Upon completion, students will be able to demonstrate effective skills in reading comprehension, analysis, and evaluation of college texts, as well as effective writing skills necessary to succeed in ENG 101 College English I and in the workforce. Prerequisite: Assessment

**ENG097 Fundamentals of English Accelerated Learning (3)**
This course is designed as intensive instruction and practice in Personal Development Skills, Analytical Thinking Skills, Communication Skills, and Technological Skills through the writing of coherent paragraphs and essays for specific audiences that demonstrate grammatical, organizational, and analytical competence for enrollment in English Composition I. This course includes the drafting, revision, and editing processes, as well as the application of critical thinking skills, critical reading skills, and writing skills. In addition, students will develop skills in document design, researching, and documentation. Upon completion, students will be able to demonstrate effective skills in reading comprehension, analysis, and evaluation of college level texts and scholarly sources, as well as effective writing skills. Prerequisite: Assessment.

**ENG098 English Language Learner Success (3)**
An English Second Language course which focuses on the foundation of grammar structures, sentence patterns, further development of vocabulary, basic reading and writing skills, and notetaking. This is a pass/fail graded course. Prerequisite: Instructor permission.

**ENG101 Composition I GE (3)**
This course provides instruction and practice in the principles of written composition. The major emphasis is on improving the ability to organize and express thoughts clearly and effectively. Students will be expected to write coherent essays that declare and support a thesis, as well as use and document research material. A reading text is used for criticism and discussion. This course is required for all degree programs. Prerequisite: Assessment

**ENG102 Composition II: Literature and Research GE (3)**
This is the second of a two-course sequence in college English composition. The course will continue to emphasize improving the ability to organize and express thoughts in clear, effective writing. The course will use literature study as a basis for improving and extending research, critical analysis, and writing skills. The forms, elements, and techniques of literature will be examined in terms of how literature affects readers. Prerequisite: ENG101 AND ENG097(if enrolled).

**ENG103 Composition II: Rhetoric and Research GE (3)**
This is the second of a two-course sequence in college English composition. The course will continue to emphasize improving the ability to organize and express thoughts in clear, effective writing. The course will also place emphasis on writing practices/processes (pre-writing, drafting, revision) as well as reinforcement of rhetoric as the art of persuasion. Critical thinking skills are developed in many areas (identifying and understanding scholarly or credible sources, integrating others' perspectives into one's own argument, analyzing audience). Prerequisite: ENG101

**ENG104 Introduction to Literature GE (3)**
This course will enable the student to discuss and interpret representative English-language literary works in a variety of genres. The student will identify the use of literary elements; recognize relationships between writers, works, and socio-cultural contexts; and arrive at informed personal and critical interpretations. Various thematic approaches may be offered.

**ENG110Technical Composition (3)**
Offers intensive drill in using rhetorical writing methods applied to technical fields. Students will practice organizing technical subject matter and arranging and supporting writing with facts. Analysis and explanation, advocacy and argument, and academic and professional discourse will be explored. The course stresses understanding key communication principles and then applying those principles to the most common types of professional documents. Prerequisite: ENG 096 or Assessment

**ENG202 American Literature: Pre-Colonial-Civil War GE (3)**
The purpose of this course is to provide a survey study of significant writers, works, and developments in American literature from its beginnings to 1865.

**ENG205 Old Testament Literature (3)**
This course provides a survey of the Old Testament as a literary work. The course will emphasize literary characteristics and the cultural and historical contexts of various books of the Old Testament and Apocrypha.

**ENG208 Introduction to the Short Story GE (3)**
The purpose of this course is to provide a study of the literary genre of the short story, with emphasis on critical analysis and appreciation. The basic elements of short fiction, such as point of view, plot, character, and theme will be discussed and analyzed in terms of how they are applied in individual stories by major writers from various periods and countries. The purpose of such analysis will be to help students understand, appreciate, and enjoy more fully the reading of short fiction.

**ENG209 American Literature: Reconstruction-Present GE (3)**
This course provides a survey of the significant writers, works, and developments in American literature from roughly 1865 to the present.

**ENG210 World Literature: Beginnings to Renaissance GE (3)**
This course focuses on the scope of world literature with selections generally regarded as masterpieces. The time range represented by the selections is roughly from 2000 BCE to 1650 CE.

**ENG211 World Literature: Enlightenment to Present GE (3)**
This course focuses on the scope of world literature with selections generally regarded as masterpieces. The time range represented by the selections is roughly from 1650 CE to the present.

**ENG212 British Literature: Middle Ages to 1800 GE (3)**
This course provides a survey of the significant writers, works, and developments in British literature from the Middle Ages through the Eighteenth Century.

**ENG213 British Literature: 1800 to Present (3)**
This course provides a survey of the significant writers, works, and developments in British literature from the Nineteenth Century Romantic writers through the Twentieth Century.

**ENG215 Diverse Voices in Literature GE (3)**
This course explores significant topics, themes, and genres over a range of historical periods through the various lenses of literary criticism. Particular emphasis will be placed on literature created by and/or about

traditionally marginalized populations who have encountered discrimination and exclusion in social, cultural, political, and economic spheres.

**ENG223 Creative Writing (3)**
This course is designed to give students an opportunity to write and develop skills in various genres of creative writing, such as fiction, poetry, and drama. Students may do some work in each area but will be able to focus on the genre of their choice. Basic elements of creative writing will be discussed, and students will work on several creative projects in a workshop format. In addition to the instructor providing evaluation and guidance, students themselves will be an audience for the writing done in the class and will give feedback, interaction, and critiques of other students' work.

**ENO116 Introduction to Enology ^ (3)**
This introductory course is designed to provide students with an understanding of winemaking principles, including history, grape growing, chemistry, wine microorganisms, fermentation, and winery operations. It is intended for entrepreneurs to explore business opportunities and winery employees to gain career development. Coursework is expected to integrate lecture discussion, guest presenters and field trips to operating vineyards and wineries. Students will make wine at home from a kit, track fermentation, make various chemical measurements, and provide one bottle of finished wine to the instructor at the conclusion of the course.

**ENO130 Intermediate Enology ^ (3)**
This intermediate course is built on the fundamentals of science and technology in winemaking practices taught in Introduction to Enology. During this course, students will understand how the whole winemaking practice works and learn the scientific background for any decisions made during the process of winemaking. At the completion of the course, students will understand winemaking calculations necessary for accurate, precise and safe additions to the wine. This class emphasizes the practical aspects to growing grapes and making wine. Prerequisite: ENO116

**ENO147 Fruit Wine Production ^ (2)**
This course will cover the history of fruit wine making, starting a fruit winery, production processes, quality control, faults and flaws, stability tests, marketing and sales, and legal regulations. Students will get an understanding of the special idiosyncrasies of the various fruits available to make commercial grade fruit wine. Prerequisite: ENO116 or Instructor Permission

**ENO148 Winery Sanitation ^ (3)**
This is a course in the basic science and technology of winery sanitation. The course serves as an introduction to wine microbiology and covers all methods used for winery sanitation, including but not limited to premises, tanks, pumps, filters, oak barrels and sampling equipment, chemical agents, reagents, and thermal treatments leading to sterile bottling. Environmental issues and compliance are also addressed. Prerequisite: ENO116 or Instructor Permission

**ENO160Winery Equipment Operations ^ (2)**
This course covers process technologies and process systems that are used in modern commercial wineries. The course will include lectures, demonstrations and two-day workshops and will provide an overview of winemaking systems, including winemaking operations and equipment, barrel aging and barrel management, membrane separation processes, specialized contacting systems, cleaning and sanitation systems, process control systems, refrigeration systems, air conditioning and humidity systems, electrical systems, waste water systems, solid waste handling, and work place safety. Prerequisite: ENO116 or Instructor Permission

**ENO210 Introduction to Wine Microorganisms ^ (2)**
This course is an introduction to the variety of both beneficial and harmful microorganisms frequently encountered in the winemaking process. Topics include identification, physiology, morphology and biochemistry of various wine microorganisms. Prerequisite: ENO116 or Instructor Permission

**ENO250 Equipment Technology for the Wine Business Entrepreneur ^ (3)**
This course covers equipment and technologies used in vineyard, winery, and management systems for the wine business entrepreneur. An overview of technologies will include equipment for all aspects of grape and wine production including preparing vineyard location and site; appropriate pre-plant equipment; receive, sort, destem, crush and press fruit; commercial wine production; and bottling and packaging. Prerequisite: VIN111 or ENO116 or Instructor Permission

**ENO257 Fall Winery Production Technology ^ (3)**
This course is designed for the individual anticipating a career in the wine industry. This course (practicum) is designed to provide a student who has completed major course sequences with an intense level of practical and realistic winery operation experiences sufficient to equip him/her with sufficient skills and work experience for an entry-level position in the wine industry. Students involved in this program will participate in a full time Crush Season practicum at a supporting winery and are expected to use the time and opportunities to further their understanding of the winemaking process and common winery operations. A minimum of 120 hours of field practicum are required along with a daily journal of practicum experiences. Prerequisite: ENO130, ENO148, and ENO160, or Instructor Permission

**ENO259 Cellar Operation Technology ^ (2)**
This course is designed to provide students initiated in the field of enology with actual and practical exposure to the technology of winemaking as it is performed during the passive vineyard periods associated with winter. The student is expected to improve his/her understanding of the methods and science involved by on-site participation in each of the various activities associated with finished wine production. The course may qualify as experience for those seeking employment in commercial enology. A minimum of 80 hours of field practicum are required along with a daily journal of practicum experiences. Prerequisite: ENO257 or Instructor Permission

**ENO266 Sensory Evaluation ^ (3)**
This course is intended for students who need to develop an understanding of the principles of sensory evaluation used in commercial winemaking. It will also be of benefit to the wine enthusiast who is interested in reaching advanced levels of appreciation as well as to the producer, the wine merchant, and ultimately the enologist, who by the nature of their profession need to discern flavors and establish tasting benchmarks. Students will utilize sensory kits and workshops to further their sensory evaluation skills and techniques. Students must be at least 21 years old to enroll in this class. Prerequisite: ENO116 or Instructor Permission

**ENO 268 Wine and Must Analysis ^ (3)**
This course is designed to provide students with an understanding of the principles of grape juice and wine analysis and the reasons for use of each analysis. Analyses of a practical and useful nature are chosen for the laboratory exercises demonstrating various chemical, physical and biochemical methods. Students will participate in workshops and hands-on experiences at participating wineries. Prerequisite: ENO116 and PS 107 or Instructor Permission

**ENO280 Winery Establishment & Design ^ (2)**
This course will discuss the major aspects of winery establishment and design, including the legal and regulatory process, layout, and design and those effects on winery economics, cash flow, marketing, and investment generation. Prerequisite: ENO116

**GEO212 World Regional Geography GE (3)**
This course provides a general survey of the distinguishing geographic characteristics of the major regions of the world. Emphasis is placed on the physical, cultural, historic, and economic aspects of each region. The course is designed to meet the needs of students majoring in education, social science, or geography, as well as students interested in attaining a global perspective.

**HIS101 United States History I to 1877 GE (3)**
This course provides a survey of United States history from European beginnings through the Reconstruction period after the Civil War. The course considers the changing configurations of American culture and its modes of expression, religion, politics, and literature. Also covered are the rise of the Federalists, the War of 1812, the emergence of the Jacksonian Movement, westward expansion, war with Mexico, and the Civil War. Special emphasis will be placed on economic, political, and social forces from colonial times to the Civil War.

**HIS102 United States History II since 1877 GE (3)**
This course provides a survey of United States history from post-Civil War Reconstruction to the present. The course considers the changing configurations of American culture and its modes of expression, religion, politics, and literature. Emphasis will be placed on the changing role of the government in the lives of people and on the changing position of the United States in world affairs. The course will also cover the impact of industrialism, imperialism, two world wars, and the cold war on the policies of the United States.

**HIS103 History of Western Civilization I GE (3)**
This course provides a survey of the development of western culture and institutions from the ancient world to the time of the European Renaissance and Reformation. The course will cover the civilizations of the Ancient Near East, Greece, and Rome, as well as the development of European nations from the early Middle Ages to the High Middle Ages. Emphasis will be on political, social, religious, and cultural life. The course will also cover the rise of Christianity and its importance from the end of the Roman Empire through the rise of European civilization in the Middle Ages.

**HIS104 History of Western Civilization II GE (3)**
This course provides a survey of the history of Europe from the Reformation and Renaissance to the present. The spiritual, intellectual, social, political, and economic foundations will be covered, with emphasis on the religious wars of the 16th century, the Age of Absolutism of the 17th and 18th centuries, and the American and French Revolutions of the 18th century and the many European revolutions of the first half of the 19th century. The course will also cover the breakdown of order in the early 20th century which led to World War I and World War II, the aftermath of World War II, the Cold War, and the fall of the Soviet Union.

**HMS100 Fundamentals of Human Services (3)**
This course provides an overview of the field of human services. The course will cover the history of human services as well as agencies, jobs, workers, and populations served. The course will also examine the major theories of causality and other relevant topics, such as ethics and stress management. Class presentations will be enhanced by actively engaging students in the subject matter.

**HMS105 Case Management in Human Services (3)**
This course provides a foundation in effective case management skills. The course covers interviewing strategies, data collection methods, documentation, and making appropriate referrals for service coordination. The course also examines ethical principles and multi-cultural issues directly related to effective case management. Prerequisite: HMS100 or SOC104

**HMS110 Health and Physical Aspects of Aging (3)**
This course examines the physical changes in the human body and its functions that take place during the aging process. The course will also focus on recognizing the differences between normal aging processes and pathological processes. Prerequisite: PSY205

**HMS112 Home Visitor I ECH (3)**
This course will cover all areas of child development and will focus on the skills and knowledge professionals need to help parents meet the changing needs of their infants, toddlers and preschoolers. The course will emphasize getting to know and being sensitive to the community where families live. In the course, students will complete a Home Visitor Child Development Associate (CDA) professional resource file and will also observe a program director, advisor, and a parent community representative in preparation for CDA credentialing. Prerequisite: HMS100

**HMS115 Home Visitor II ECH (3)**
This course will cover the final steps necessary for requesting national Home Visitor Child Development Associate (CDA) credentialing. The course will include working cooperatively with community agencies providing family services, such as health care, mental health, nutrition, and social services. During the course, students will be observed conducting home visits and will complete parent opinion questionnaires, reflect on their professional development, and complete the direct assessment application for the Home Visitor CDA credential. Prerequisite: HMS100 and HMS112

**HMS118 Ethics in Helping Professions (3)**
This course provides an analysis of ethics in the helping professions, application of professional ethical codes, and decision-making models when standards are in conflict. The course will present ethical problems faced by professionals and will critically examine the decision making process. Prerequisite: HMS100 or SOC104

**HMS 250 Human Services Practicum I (3)**
This course is designed to provide the student with a hands-on experience in an approved human services agency. Students will review the process for setting up a placement, understanding professional requirements for an interview, and complete a series of critical thinking and reflective assignments. The student will complete 225 hours under the supervision of an agency professional and a college faculty member. The classroom component will include small group discussion and analysis of the practicum experience. Prerequisite: Instructor permission.

**HS 101 Introduction to Health Information ^ (4)**
This course provides an introduction to health information management and healthcare delivery systems in the United States. The course will focus on the roles of health professionals, types of healthcare organizations, types and levels of healthcare delivery systems, and healthcare governing bodies and content and structure of the health record, and documentation requirements for health records in various healthcare settings. To ensure clinical coders are familiar with basic health data structure, content and standards, healthcare delivery systems, and information technology & systems.

**HS 103 Legal and Ethical Issues in Healthcare ^ (3)**
This course introduces the U.S. legal system, laws and ethical issues and how they relate to health care. Emphasis is placed on legal and compliance issues faced by clinical coders in the workplace setting.

**HS 105 Insurance & Health Information Compliance ^ (3)**
This course introduces the study of the uses of coded data and health information in reimbursement and payment systems appropriate to all healthcare settings and managed care. Topics will include contemporary prospective payment systems and key health plans, charge master maintenance, and evaluation of fraudulent billing practices.

**HS 110 Patho Pharmacology for Health Science ^ (4)**
This course is designed for the Health Science student to study diseases and disorders that affect the various body systems and the principles of pharmacology, drug classifications, and the effects of selected medication on the human body. This course will focus on diseases of each body system including cause, diagnosis, and treatment. Emphasis is also placed on understanding the actions of the drugs, such as absorption, distribution, metabolism, and excretion of drugs by the body, and matching drugs to common conditions and laboratory findings. This course does not meet the current requirements for nursing.

**HS 115 International Classification of Disease (ICD) Coding I ^ (3)**
This course helps the student develop an understanding of coding and classification systems in order to assign valid diagnostic and/or procedure codes. It will include the validation of coded clinical information, and case mix/severity of illness data. The course will focus on basic diagnosis coding skill and guidelines associated with International Classification of Diseases, Clinical Modification (ICD-CM). Prerequisite: BS 104, BS 105, and BS 109 with a C or higher

**HS 118 Current Procedural Terminology (CPT) Coding I ^ (3)**
This course helps the student develop an understanding of coding and classification systems in order to assign valid diagnostic and/or procedure codes. It will include the validation of coded clinical information, and case mix/severity of illness data. The course will focus on basic diagnosis coding skill and guidelines associated with Current Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS). Prerequisite: BS 104, BS 105, and BS 109 with a C or higher

**HS 120 Healthcare Computer Applications & Electronic Encoder ^ (3)**
This course provides an introduction to software applications in healthcare.

**HS 125 International Classification of Disease (ICD) Procedural Coding Systems ^ (3)**
This course helps the student develop an understanding of coding and classification systems in order to assign valid diagnostic and/or procedure codes. It will include the validation of coded clinical information, and case mix/severity of illness data. The course will focus on diagnosis coding skill and guidelines associated with International Classification of Diseases Procedural Coding System (ICD/PCS). Prerequisite: HS 115 with a C or higher or Program Director Permission

**HS 130 Reimbursement Methodologies (Physician) ^ (3)**
This course studies the uses of coded data and health information in reimbursement and payment systems appropriate to all healthcare settings and managed care. Systems include contemporary prospective payment systems and key health plans, charge master maintenance, and evaluation of fraudulent billing practices.

**HS 210 International Classification of Disease (ICD) Coding II ^ (3)**
This course helps the student develop an understanding of coding and classification systems in order to assign valid diagnostic and/or procedure codes. It will include the validation of coded clinical information, and case mix/severity of illness data. The course will focus on more advanced diagnosis coding skill and guidelines associated with International Classification of Diseases, Clinical Modification (ICD-CM). Prerequisite: HS 115 with a C or higher

**HS 218 Current Procedural Terminology (CPT) Coding II ^ (3)**
This course helps the student develop an understanding of coding and classification systems in order to assign valid diagnostic and/or procedure codes. It will include the validation of coded clinical information, and case mix/severity of illness data. The course will focus on more advanced diagnosis coding skill and guidelines associated with Current Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS). Prerequisite: HS 118 with a C or higher

**HS 225 Healthcare Coding Practicum ^ (3)**
To provide the student with coding practices in a hospital, physician's office, clinical, or other healthcare setting, with directed projects common to a clinical coding specialist on the job. This course will reinforce skills developed in the medical coding program and provide an opportunity to perform these skills in the workplace. Prerequisite: Instructor Permission

**HVA102 Blueprint Reading and Sketching ^ (2)**
This course will introduce students to a basic set of house plans, including the plan views, elevations, framing, wall section, and details. Students will be able to read these prints and sketch details and layouts of specific items that relate to their occupational area.

**HVA103 Hand and Power Tools ^ (1)**
This course will introduce students to the various hand and power tools used in the construction industry, specifically related to those in the HVAC occupational area. The correct and safe use of hand and power tools will be emphasized. Students will be required to pass a written and performance safety test on all power equipment used in their program area.

**HVA104 Safety Orientation/OHSA 10 ^ (1)**
This course will: explain job/site safety and precautions for job/site hazards; determine the uses of personal protective equipment (PPE); identify the safety equipment and procedures related to safe work practices and environment; identify fire prevention and protection techniques; explore Hazardous Communications (HazCom) including Material Safety Data Sheets (MSDA).

**HVA106 Technical Math ^ (2)**
This course is designed to provide students a review of the basic principles of math, which include whole numbers, common and decimal fractions, ratio proportions and percent algebra, the metric system, and basic geometric shapes and graphs.

**HVA112 EPA 608 ^ (1)**
Students will be certified in federal regulations of safe refrigerant handling practices. Successful completion of the certification course is required for technicians to work with and purchase refrigerants.

**HVA118 Electrical Fundamentals ^ (4)**
This unit covers generating electricity, types of electricity direct (DC) and alternating (AC) current circuit fundamentals, magnetism, and electrical components.

**HVA121 Domestic Refrigeration ^ (3)**
This course includes terminology associated with domestic refrigeration, identification of types of domestic refrigeration, location of data plates and their purpose. Also covered will be sealed system components, what their function is and how they operate, as well as locating and solving programs in a domestic refrigeration system in a safe manner.

**HVA126 Plumbing I ^ (3)**
This course is designed to provide an understanding of the plumbing system of a structure including water supply distribution pipes; fixtures and fixture traps; soil, waste and vent pipes; building drains and building sewers; storm water drainage and their devices; appurtenances and connections within the building and outside the building within the property lines. All plumbing is taught to specifications of the Uniform Plumbing Code.

**HVA136 Electric Circuits & Controls ^ (3)**
This course includes electric control circuits in ladder diagram and pictorial form. Also covered will be icemaker diagrams, comfort cooling controls, central air-conditioning controls, pressure motor controls, motor safety controls, defrost controls, and humidity controls. Prerequisite: HVA115

**HVA140 Workplace Skills ^ (1)**
Upon successful completion of this course, the student should be able to identify the job skills necessary to have a successful career in the field of their choice. Topics included listening skills, oral communication, human relations, decision making/problem solving, how to work as a team, time and resource management, work ethics, career planning and resume building.

**HVA145 Sheet Metal ^ (3)**
This course introduces the student to pattern development and fabrication of fittings used in the heating/air conditioning industry. Installation in a safe and proper manner is covered.

**HVA158 Heating System Fundamentals ^ (3)**
This course is designed to introduce the student to terminology associated with heating and humidification. Gas/electric heating systems and heat pumps will be covered. Also covered will be the installation, operation, and service procedures need to safely operate heating equipment.

**HVA170 Air Conditioning Control Systems ^ (3)**
This course is designed to help students to understand the operation of the control systems in heating and cooling equipment as well as heat pump control systems. Sequence of operation of the controls will be covered.

**HVA175 Commercial Refrigeration ^ (3)**
This course includes the study of condensing units, condensers, refrigerant controls, evaporators, and other components used in commercial refrigeration systems, as well as diagnosing, testing, servicing and repair of commercial equipment. Safety for the technician, customer, and equipment is also covered.

**HVA181 Plumbing II ^ (2)**
This course is a continuation of Plumbing I dealing with the development of technical skills and knowledge of the trade. Prerequisite: HVA 126

**IDS110 Contemporary Issues in Sustainability**
This interdisciplinary course is designed to introduce students to diverse global perspectives and practical personal solutions related to long-term sustainability. The course focuses on the impact personal and professional decisions have on the global condition and how those decisions can support the objectives of sustainability: economic viability, environmental integrity, and social equity. Topics covered will include energy, food, land use, water, air, waste, housing, personal health, and community. Instruction will be provided by team of faculty, staff, and practitioners of sustainable living.

**IDS120 Introduction to Leadership Concepts (3)**
This interdisciplinary course is designed to provide an introduction to the academic discipline of leadership. The course focuses on the study of leadership development through the examination of leadership theory and research, identity development, self-awareness, awareness of others, and the application of leadership theories, concepts and skills.

**IDS130 Culture and Context (3)**
This interdisciplinary leadership course is designed to discover and examine personal cultural identity from a values based perspective. The course will focus on strategies and skills needed to analyze intercultural experiences, events, and dilemmas. The concepts of power and privilege will be discussed as psychological constructs operating across all cultures and contexts. Prerequisite: IDS120 and Sophomore Standing

**IDS140 Creativity Across the Disciplines (3)**
This interdisciplinary course is designed to explore human creativity from psychological and practical angles. Students work independently and collaboratively to create, and to understand creativity both as an expression of freedom and as a way to improve their flexibility of thinking. A significant benefit will be the opportunity to share their work with a wider audience through publication, exhibition, or performance, and to receive valuable feedback to improve their creative work.

**IWT105 Welding Safety/OSHA 10 ^ (1)**
Through a variety of classroom and /or lab learning and assessment activities, students in this course will: explain job/site safety and precaution for job/site hazards; determine the uses of personal protective equipment (PPE); identify the safety equipment and procedures related to safe work practices and environment; identify fire prevention and protection techniques; explore Hazardous Communications (HazCom) including Material Safety Data Sheets (MSDS).

**IWT115 Cutting Processes ^ (3)**
Through classroom and/or shop/lab fearing and assessment activities, students in this course will: distinguish several types of mechanical and thermal cutting equipment and processes used in the welding trade; demonstrate the safe and correct set up, operation and shut down of the Oxy-fuel (OFC) workstation; demonstrate the safe and correct set up, operation and shut down of the Plasma Arc (PAC) workstation; demonstrate the safe and correct set up, operation and shut down of the Carbon Arc Cutting with Air (CAC-A) workstation; Demonstrate safe and proper operation of several types of mechanical cutting equipment; and inspect quality and tolerance of cuts according to industry standards.

**IWT125 Shielded Metal Arc Welding (SMAW) ^ (3)**
Through classroom and /or lab/shop learning and assessment activities, students in this course will: describe the Shielded Metal Arc Welding process (SMAW); demonstrate the safe and correct set up of the SMAW workstation; associate SMAW electrode classification with base metals and joint criteria; demonstrate proper electrode selection and use based on metal types and thicknesses; build pads of weld beads with selected electrode in the flat position; build pads of weld beads with selected electrode in the horizontal position; perform basic SMAW welds on selected weld joints; and perform visual inspection of welds.

**IWT135 Gas Metal Arc Welding (GMAW) ^ (3)**
Through classroom and /or lab/shop learning and assessment activities, students in this course will: explain Gas Metal Arc Welding process (GMAW); demonstrate the safe and correct set up of the GMAW workstation; correlate GMAW electrode classifications with base metals and joint criteria; demonstrate proper electrode selection and use based on metal types and thicknesses; build pads of weld beads with selected electrode in the flat position; build pads of weld beads with selected electrode in the horizontal position; perform basic GMAW welds on selected weld joints; and perform visual inspection of GMAW Welds.

**IWT145 Gas Tungsten Arc Welding (GTAW) ^ (3)**
Through classroom and /or lab/shop learning and assessment activities, students in this course will: describe the Gas Tungsten Arc Welding process (GTAW); demonstrate the safe and correct set up of the GTAW workstation; relate GTAW electrode classification with base metals and joint criteria; build proper electrode selection and filler metal selection use based on metal types and thicknesses; build pads of weld beads with selected electrode and filler material in the flat position; build pads of weld beads with selected electrode and filler material in the horizontal position; perform basic GTAW welds on selected weld joints; and perform visual inspection of GTAW welds.

**IWT162 Blueprint Reading ^ (4)**
Through a variety of classroom and/or shop/lab learning and assessment activities, the students in this course will: identify basic lines, views, and abbreviation used in blueprints; interpret basic 3D sketches

using orthographic projection and blueprints; solve applicable mathematical equation; use basic measuring tools; interpret scale ratios on a blueprint; identify basic welding joints and structural shapes; interpret a Bill of Materials; identify standard AWS weld symbols.

**IWT175 Shielded Metal Arc Welding II (SMAW II) ^ (5)**
Through classroom and /or lab/shop learning and assessment activities, students in this course will: perform safety inspections of equipment; make minor external repairs to equipment; set up components and accessories of a complete Shielded Metal Arc Welding (SMAW) system; set up for SMAW operations; operate SMAW equipment; execute corrective actions to repair surface flaws on welds and base metals; make 2G, 5G, and 6G groove welds on carbon and stainless steel pipe; perform a 6G unlimited thickness qualification test on carbon and stainless steel pipe. Prerequisite: IWT125

**IWT180 Gas Metal Arc Welding II (GMAW II) ^ (5)**
Through classroom and /or lab/shop learning and assessment activities, students in this course will: perform safety inspections of equipment; make minor external repairs to equipment; set up components and accessories of a complete Gas Metal Arc Welding (GMAW) system; set up for GMAW operations; operate GMAW equipment; execute corrective actions to repair surface flaws on welds and base metals; make 2G, and 5G groove welds on carbon steel pipe; perform a qualification test on carbon steel pipe and plate. Prerequisite: IWT135

**IWT185 Gas Tungsten Arc Welding II (GTAW II) ^ (5)**
Through classroom and /or lab/shop learning and assessment activities, students in this course will: perform safety inspections of equipment; make minor external repairs to equipment; set up components and accessories of a complete Gas Tungsten Arc Welding (GTAW) system; set up for GTAW operations; operate GTAW equipment; execute corrective actions to repair surface flaws on welds and base metals; make 5G welds on carbon steel pipe with carbon and stainless filler material; perform 6G qualification test on carbon steel pipe with carbon and stainless filler material. Prerequisite: IWT145

**IWT190 Blueprint Reading II ^ (3)**
Through a variety of classroom and/or shop/lab learning and assessment activities, the students in this course will: identify threaded fasteners; distinguish screw thread series, classes, and designation; identify non-threaded fasteners; interpret structural steel shapes and symbols; identify pipe representation on prints; distinguish metal identification. Prerequisite: IWT162

**IWT202 GasTungsten ArcWelding (Pipe) ^ (6)**
Through classroom and/or lab/shop learning and assessment activities, students in this course will: perform safety inspections of equipment; Interpret welding, nondestructive examination and piping symbols; Apply principles of welding applications to welding, fabrication and inspection; Apply principles of weld quality and repairs to welding; Execute corrective action to repair surface flaws on welds and base metals; Perform a 6G limited thickness performance qualification test on carbon and stainless steels using the Gas Tungsten Arc Welding (GTAW) process. Prerequisite: IWT185

**IWT 212 Combination Pipe Welding ^ (6)**
Through classroom and/or lab/shop learning and assessment activities, students in this course will: perform safety inspections of equipment; Interpret welding, nondestructive examination and piping symbols; Apply principles of welding applications to welding, fabrication and inspection; Apply principles of weld quality and repairs to welding; Execute corrective action to repair surface flaws on welds and base metals; Perform a 6G limited thickness performance qualification test on carbon and stainless steels using the Gas Tungsten Arc Welding (GTAW) process and Shielded Metal Arc Welding (SMAW) process. Prerequisite: IWT175 and IWT185

**LG 100 Conversational Spanish (2)**
This course emphasizes the development of basic Spanish communications skills through practice in listening, speaking, reading, and writing. It is designed to introduce students to skills necessary for casual conversation and career specific situations.

**LG 101 Spanish I GE (5)**
This course covers the fundamentals of Spanish pronunciation, vocabulary building, conjugation of the present tense, and introduction of two past tenses. The course will provide practice in understanding and speaking simple phrases, elementary reading and writing, and some study of the culture of people in countries where Spanish is spoken.

**LG 102 Spanish II GE (5)**
This course builds on Spanish I and provides continued emphasis on pronunciation, vocabulary building, speaking, and understanding modern Spanish. Focus will be on elementary reading and basic writing skills as well as the study of the culture of Latin America and Spain. Review of the present tense is continued. The course will introduce the preterit tense and irregulars, the future, conditional, and perfect tenses, and subjunctive-introduction to present. Direct and indirect object pronouns, reflexive pronouns, command forms, sequencing, and storytelling will also be covered. Prerequisite: LG 101

**LG 105 American Sign Language I (3)**
This is a first course of study of the American Sign Language (ASL), the language used by the deaf community in the United States. This course covers the fundamentals of the basic structure of ASL grammar, vocabulary, fingerspelling/numbers, visual-gestural communication, and information related to deaf culture.

**LG 106 American Sign Language II (3)**
This course continues study begun in LG 105 and will focus on continued development of American Sign Language (ASL) skills, concentrating on comprehension and production. The course will also provide information about the linguistic and cultural features relevant to language learning. Prerequisite: LG 105

**LG 201 Spanish III GE (3)**
This course builds on Spanish II and provides continued emphasis on pronunciation, vocabulary building, speaking, and understanding modern Spanish. Focus will be on intermediate listening, speaking, reading, and writing skills, using a variety of tenses and moods, as well as the continued study of the culture of Latin America and Spain. Expanded review and practice using the present, preterit, imperfect, future, and conditional tenses and the imperative, indicative, and subjunctive moods will be continued. Sequencing and storytelling will also be continued. Por and para, comparatives and superlatives, prepositions, and the subjunctive in noun, adjective, and adverbial clauses will be covered and incorporated in the demonstration of appropriate interpretation and response to Spanish language input. Prerequisite: LG 102 or permission

**M 101 Music Fundamentals (3)**
This course covers the basics of music, including symbols, rhythm, and scale construction. The course also introduces reading and dictation in two or three parts, the minor modes and chromatics, eye and ear study through the simple modulations, and transpositions.

**M 103 Music History and Appreciation (3)**
This course provides an introduction to music as an art form. The course will cover the basic elements of music and historically significant style periods and composers. The course will also emphasize the concept of music as self-expression.

**M 105 Applied Keyboard I (1)**
This course provides private lessons in developing keyboard performance skills. Prerequisite: Instructor Permission

**M 106 Applied Keyboard II (1)**
This course provides private lessons in developing keyboard performance skills. Prerequisite: M 105 or Instructor Permission

**M 107 Applied Music I (Vocal) (1)**
This course provides private lessons in developing vocal performance skills.

**M 108 Applied Music II (Vocal) (1)**
This course provides private lessons in developing vocal performance skills. Prerequisite: M 107

**M 113 Vocal Ensemble Lads and Lassies I (1)**
This course is designed for both music majors and other students interested in performing with a stage vocal ensemble that features various styles of music along with choreography and props. The ensemble also travels within the college service area to perform. This course provides an opportunity for musical self-expression and continued development of individual and ensemble music skills. Prerequisite: Instructor Audition

**M 114Vocal Ensemble - Lads and Lassies II (1)**
This course is designed for both music majors and other students interested in performing with a stage vocal ensemble that features various styles of music along with choreography and props. The ensemble also travels within the college service area to perform. This course provides an opportunity for musical self-expression and continued development of individual and ensemble music skills. Prerequisite: M 113 or Instructor Permission

**M 115 Chorus I (1)**
This course is designed for both music majors and other students interested in performing with a stage chorus that features various styles of music. The chorus also travels within the college service area to perform. This course provides an opportunity for musical self-expression and continued development of individual and choral music skills.

**M 116 Chorus II (1)**
This course is designed for both music majors and other students interested in performing with a stage chorus that features various styles of music. The chorus also travels within the college service area to perform. This course provides an opportunity for musical self-expression and continued development of individual and choral music skills. Prerequisite: M 115

**M 135 Aural Skills I (2)**
This course provides an aural study of melodies, intervals, harmonies, rhythms, and meters. Corequisite: M 200

**M 145 Aural Skills II (2)**
This course provides an aural study of melodies, intervals, harmonies, rhythms, and meters. Corequisite: M 201, Prerequisite: M 135

**M 146 Music Theatre History (3)**
This course provides a survey of American musical theatre. The course will cover the historical development of musical theatre, significant style periods, and significant composers. The course will emphasize music theatre as social, political, and cultural expression. NOTE: This course is the same as TH

146. Students may enroll in and receive credit for either M 146 or TH 146 but cannot enroll in or receive credit for both courses.

**M 152 Opera Production I (1)**
This course is designed for both music majors and other students interested in performing with a stage vocal ensemble that prepares and performs as the chorus with a professional opera company. This course provides an opportunity for musical self-expression and continued development of individual and ensemble skills and also offers exposure to the performing arts as a profession. Prerequisite: Audition

**M 153 Opera Production II (1)**
This course is designed for both music majors and other students interested in performing with a stage vocal ensemble that prepares and performs as the chorus with a professional opera company. This course provides an opportunity for musical self-expression and continued development of individual and ensemble skills and also offers exposure to the performing arts as a profession. Prerequisite: M 152

**M 154 Group Piano I (1)**
This course provides instruction in functional keyboard skills needed to succeed in the music classroom or play the piano for personal enjoyment. Prerequisite: Instructor Permission

**M 155 Group Piano II (1)**
This course provides additional instruction in functional keyboard skills needed to succeed in the music classroom or play the piano for personal enjoyment. Prerequisite: M 154

**M 162 Introduction to World Music (3)**
This course will provide an introduction to music across the world. The basic elements of music and musical style from specific regions will be studied. The course will also emphasize music as self-expression.

**M 200 Music Theory I (3)**
This course will provide a study of the harmonic systems used in musical composition from approximately 1650 to 1900, including mastery of scales, keys, intervals, rhythms, and basic triads. The course will cover simple four-part writing, triad inversions, monochord tones, secondary chords, and dominant seventh chords. Students will also analyze chorales, hymns, and representative literature from recognized style periods. Prerequisite: M 101 with a C or higher or Instructor Permission, Corequisite: M 135

**M 201 Music Theory II (3)**
This course will provide more advanced study of the harmonic systems used in musical composition from approximately 1650 to 1900, including mastery of scales, keys, intervals, rhythms, and basic triads. The course will cover simple four-part writing, triad inversions, non-chord tones, secondary chords, and dominant seventh chords. Students will also analyze chorales, hymns, and representative literature from recognized style periods. Prerequisite: M 200 with a C or higher or Instructor Permission, Corequisite: M 145

**M 207 Applied Music III (Vocal) (1)**
This course provides private lessons in developing vocal performance skills. Prerequisite: M 108

**M 208 Applied Music IV (Vocal) (1)**
This course provides private lessons in developing vocal performance skills. Prerequisite: M 207

**M 213 Vocal Ensemble Lads and Lassies III (1)**
This course is designed for both music majors and other students interested in performing with a stage vocal ensemble that features various styles of music along with choreography and props. The ensemble also travels within the college service area to perform. This course provides an opportunity for musical

self-expression and continued development of individual and ensemble music skills. Prerequisite: M 114 or Instructor Permission

**M 214 Vocal Ensemble Lads and Lassies IV (1)**
This course is designed for both music majors and other students interested in performing with a stage vocal ensemble that features various styles of music along with choreography and props. The ensemble also travels within the college service area to perform. This course provides an opportunity for musical self-expression and continued development of individual and ensemble music skills. Prerequisite: M 213 or Instructor Permission

**M 215 Chorus III (1)**
This course is designed for both music majors and other students interested in performing with a stage chorus that features various styles of music. The chorus also travels within the college service area to perform. This course provides an opportunity for musical self-expression and continued development of individual and choral music skills. Prerequisite: M 116

**M 216 Chorus IV (1)**
This course is designed for both music majors and other students interested in performing with a stage chorus that features various styles of music. The chorus also travels within the college service area to perform. This course provides an opportunity for musical self-expression and continued development of individual and choral music skills. Prerequisite: M 215

**M 223 History of Jazz (3)**
This course provides a listening-based approach to the evolutionary development of America's unique jazz art form. The course will cover the American roots of jazz and its early figures, the development of various jazz styles, significant jazz musicians, and the place of jazz in modern music.

**M 225 Applied Keyboard III (1)**
This course provides private lessons in developing keyboard performance skills. Prerequisite: M 106

**M 226 Applied Keyboard IV (1)**
This course provides private lessons in developing keyboard performance skills. Prerequisite: M 225

**M 229 Aural Skills III (2)**
This course provides aural study of melodies, intervals, harmonies, rhythms, and meters. Prerequisite: M 145 with a C or higher, Corequisite: M 233

**M 230 Aural Skills IV (2)**
This course provides aural study of melodies, intervals, harmonies, rhythms, and meters. Prerequisite: M 229 with a C or higher, Corequisite: M 234

**M 233 Music Theory III (3)**
This course continues work with harmony and composition. The course will also introduce the use of 20th century techniques with melody, rhythm, form, and harmony. Prerequisite: M 201 with a C or higher, Corequisite: M 229

**M 234 Music Theory IV (3)**
This course continues work with harmony and composition. The course will also introduce the use of 20th century techniques with melody, rhythm, form, and harmony. Prerequisite: M 233 with a C or higher, Corequisite: M 230

**M 252 Opera Production III (1)**
This course is designed for both music majors and other students interested in performing with a stage vocal ensemble that prepares and performs as the chorus with a professional opera company. This course provides an opportunity for musical self-expression and continued development of individual and ensemble skills and also offers exposure to the performing arts as a profession. Prerequisite: M 153

**M 253 Opera Production IV (1)**
This course is designed for both music majors and other students interested in performing with a stage vocal ensemble that prepares and performs as the chorus with a professional opera company. This course provides an opportunity for musical self-expression and continued development of individual and ensemble skills and also offers exposure to the performing arts as a profession. Prerequisite: M 252

**MAT090 Fundamentals of Math (3)**
Fundamentals of Math precedes the algebra sequence of courses. This course is designed to develop skills in the four fundamental mathematical operations using whole numbers, fractions, decimal fractions, ratio, proportion, and percent. Business and consumer applications are also included. If time permits, applied geometry and an introduction to algebra will be included.

**MAT100 Beginning Algebra (3)**
This course focuses on basic algebra fundamentals and is designed to prepare students for the Intermediate Algebra course. Prerequisite: MAT090 or Assessment

**MAT 102 Technical Math (3)**
Technical math focuses on measurement, algebraic operations, formulas, geometry, and basic statistics, scientific notation, number systems, algebra (equations and formulas, factoring, and systems), geometry, and trigonometry. These concepts are supported by practical applications to a variety of career and technical vocations, including manufacturing, automotive, allied health, welding, building trades, and heating, ventilation, air conditioning and plumbing. Prerequisite: MAT090 or Assessment

**MAT103 Intermediate Algebra (3)**
Intermediate Algebra is a thorough study of the fundamental laws of algebra, including adding, subtracting, multiplying, dividing, factoring, and simplifying polynomial, rational, and radical expressions. The course also will cover solving linear, quadratic, rational, and radical equations, including non-real complex solutions, as well as solving linear, compound, and absolute value inequalities. In addition, graphing linear equations, inequalities, and quadratic functions, solving systems of two equations in two variables, and using function notation will be covered, as well as applications of many of these algebraic concepts. Other topics will be included as time permits. A scientific calculator is required for this course. Prerequisite: MAT100 with a C or higher or Assessment

**MAT104 College Algebra GE (3)**
College Algebra is a comprehensive study of the fundamental laws of algebra, including exponents, linear and quadratic equations, polynomial and rational inequalities, system of equations, radicals and radical equations, functions and graphing, polynomials and polynomial equations, modeling, logarithms, complex numbers, augmented matrices, determinants, and regression. The course will provide analysis of graphs and linear systems in two or three variables, as well as applications of most of the topics listed above and others as time permits. A graphing calculator is required for this course. Prerequisite: MAT103 with a C or higher or Assessment

**MAT 105 Trigonometry GE (3)**
This course includes the study of circular functions and their graphs, working with the right triangle, unit circle, inverse circular functions, identities, conditional equations, the Law of Sines, the Law of Cosines, and other topics as time permits. Prerequisite: MAT104 with a C or higher or Assessment

**MAT106 Calculus I GE (5)**
Calculus I is the first in a three-semester sequence of calculus courses. This course consists of the study of algebraic functions of one variable, the use of modern technology to enhance calculus knowledge, limits including the study of L'Hopital's Rule, differentiation and its various techniques, definite and indefinite integrals, including integration by substitution and logarithmic functions, and applications of the derivative and definite integral in geometry, science, engineering, business, medicine, and other fields. Other topics will be covered as time permits. Prerequisite: MAT105 with a C or higher, or high school Trigonometry and Assessment

**MAT107 General Calculus and Linear Algebra (3)**
This course provides an introduction to calculus and linear algebra concepts that are particularly useful in the study of economics and business administration. The course will cover the basic theorems and concepts of differential and integral calculus and linear algebra and will emphasize working problems with applications in economics and business. Prerequisite: MAT104 with a C or higher or Assessment

**MAT108 Contemporary Math GE (3)**
This course is designed to develop problem-solving skills by studying a wide range of contemporary applications of mathematics and to develop an appreciation of what mathematics is and how it is used today. The main goal of the course is to give an introduction to the power and variety of mathematical techniques that are available to an educated member of society. Some of the great ideas of mathematics and how they can be used in everyday life will be explored, including but not limited to: set theory, logic and syllogisms, graph theory, number theory, algebraic models, modeling systems for both linear equations and inequalities, voting methodology, consumer mathematics, and descriptive statistics. This course does not satisfy the graduation requirements for an Associate of Science degree. Prerequisite: MAT103 with a C or higher or Assessment

**MAT110 Calculus II GE (5)**
Calculus II is the second in a three-semester sequence of calculus courses. This course consists of working with logarithms and other exponential functions, hyperbolic functions, inverse and hyperbolic trigonometric functions, numerous integration techniques including using tables, integration by parts, substitutions, partial fractions, improper integrals, continued work with L'Hopital's rule, sequences and series, convergence and comparison tests, using formulas to estimate integrals, and differential Equations. The course also covers calculus involving three-dimensional space, vector operations including the dot product, projections, the cross product, parametric equations of lines, and three-dimensional plane operations with quadric surfaces, as well as selected topics in analytic geometry as time permits. Prerequisite: MAT106 with a C or higher

**MAT201 Calculus III GE (5)**
Calculus III is the final course in the three-semester sequence of calculus courses. This course is designed to prepare students to be successful in Differential Equations, Vector Analysis, Statics, Dynamics, and other upper-level mathematics, science, and engineering courses. The course consists of a thorough study of polar coordinates and parametric equations, vector analysis in calculus problems, vector-valued functions, partial derivatives, centroids, directional derivatives, gradients, and multiple integrals including double integrals, triple integrals, changing variables involving polar coordinates, center of mass and moments of inertia, and many applications. In addition, there will be a thorough study of multiple integrals and their applications, including in cylindrical and spherical coordinates and change of variables using Jacobians. Topics from the field of vector analysis, such as vector fields, line integrals, Green's Theorem applications, surface integrals including applications and flux, and the use of matrices in various operations will also be covered. Prerequisite: MAT110 with a C or higher

**MAT202 Differential Equations GE (5)**
Differential Equations covers standard types of ordinary differential equations of first and second order, linear equations solutions by series and Laplace transformations, systems of equations, numerical methods and applications to science and engineering. Prerequisite: MAT110 with a C or higher

**MAT203 Basic Statistics GE (3)**
This course is an introductory study of the fundamentals of modern statistics and probability. The course will cover descriptive methods, inductive statistics, probability, estimation, tests of hypotheses, correlation, regression and Chi-square, along with other topics as time allows. Prerequisite: MAT104 with a C or higher

**MFT110 Blueprint Reading & Geometric Dimensioning ^ (3)**
This course teaches the basic concepts of print reading for machine trades. The student shall be able to interpret blueprints, and shop drawings, including interpreting geometric dimensioning and tolerancing symbols. Completion of this course the student shall be able to solve a construction problem utilizing shop drawings or blueprints.

**MFT120 Precision Measurement ^ (2)**
The course provides for the study of basic measuring tools used in manufacturing industries. The course will allow students to gain proficiency in the use of basic manufacturing devices and an entry-level analysis of the results of these measurement techniques.

**MFT 240 Precision Measurement II ^ (2)**
The course provides for the study of measuring tools used in manufacturing industries. The course will allow students to gain proficiency in the use of manufacturing devices.

**MOA109 Emergency Preparedness ^ (1)**
This course is designed to provide health care professionals with an orientation for their possible future roles in disaster response. Focus will be on the importance of staying within the scope of practice of the profession. The course will also cover being prepared to meet the expectations of their employers, volunteering effectively, and being confident and safe responders.

**MOA110 Medical Administrative Aspects ^ (4)**
This course contains the administrative skills of the health care team member. These skills include The Medical Record, Patient Reception, Medical Office Computerization, Telephone Techniques, Scheduling Appointments, Medical Records Management, and Written Communications. It also includes an overview of Electronic Medical Records (EMR) and hands on skills associated with functioning within an EMR.

**MOA113 Clinical Externship I ^ (2)**
This course is designed to provide experience related to the skills and knowledge acquired in the Medical Assisting field by allowing students to apply classroom and lab knowledge in real medical arenas.

**MOA114 Patient Care I ^ (4)**
This course is the beginning of the student's journey to a successful internship by discussing the ability to apply the skills learned in the classroom and in the lab in the internship. This course also introduces the student to the basics of patient care which includes Medical Asepsis and Infection Control, preparing a patient for examination, acquiring vital signs (adult, child, infant) and assisting the physician with patient exams.

**MOA121 Principles of Pharmacology ^ (3)**
An introduction to the principles of pharmacology, including drug terminology; drug origins, forms, and actions; routes of administration; as well as the use of generic name drugs, trade name drugs, and categories of drugs to treat various body systems.

**MOA123 Insurance Billing and Coding ^ (3)**
This course is designed to educate the health care team member with the mechanics of submission of electronic/paper insurance claim forms and current industry coding for medical office treatments and procedures.

**MOA125 Medical Terminology ^ (3)**
The content of this course focuses on the introduction to medical terminology. Vocabulary is explored to structure of word, pre- fixes, suffixes and root words. Emphasis is based on proper usage, pronunciation, spelling and definition of each of the structures commonly used in the medical field.

**MOA128 Body Structures and Functions ^ (3)**
This course is designed to teach the basics of human structure and function. Emphasis is placed on how tissues, organs, and body systems work individual and together to carry out complex activities such as eating, learning, and responding to stress and interaction with other structures of the body.

**MOA133 Medical Administrative Aspects II ^ (3)**
This course covers the administrative skills needed as a health care team member managing specialized patient appointment scheduling, electronic medical records, and referrals. The course also examines the financial responsibilities of medical office assistants relating to posting of charges and payments and balancing of day sheets.

**MOA134 Patient Care II ^ (3)**
This course allows the student to advance their technical knowledge by introducing the students to cast application/removal, Understanding Medical Emergencies, patient teaching, conducting patient interviews, and assisting with physical exams.

**MOA135 Clinical Externship II ^ (2)**
This course is designed to provide experience related to the skills and knowledge acquired in the Medical Assisting field by allowing students to apply classroom and lab knowledge in real medical arenas. Prerequisite: All MOA course work complete

**MOA136 Clinical Laboratory Procedures ^ (4)**
This course is intended to introduce the student to various aspects of the Clinical Lab, including Introduction to Clinical Lab, Phlebotomy, Urinalysis, Hematology, and Medical Microbiology. The student will learn principles of laboratory safety, quality control, specimen handling, lab values, lab requisitions and lab reporting. Emphasis will be placed on working in a Physician Operated Laboratory and procedures and techniques for collecting specimens (phlebotomy, urine collection, pap smears, throat cultures) will be taught. Emphasis is placed on safe practices and knowing the responsibilities and limits of the Medical Assistant’s role in collecting, processing, and reporting labs. The student will be introduced to specific collection techniques and given time to practice these techniques as part of preparation for their extern- ship (Clinical I and II).

**MOA137 Medical Professional Issues ^ (2)**
The course focuses on the basic concept of professional practice of medicine and the role and function of the Medical Assistant. Students discuss the personal and professional characteristics and legal and ethical standards for the medical assistant and the importance of commitment to your job, working with others, career planning and employment and the practicum experience.

**MOA295 Occupational Work Experience ^ (0)**
This experience is designed to provide the student with purposeful occupational experience in the Medical Assistant field. Each experience is individualized. A training plan is created for each student in conjunction with the training site to provide experience related to the skills and knowledge acquired in the

program. Students must have completed 85% of their required course hours, be in good standing, and have instructor and administration approval.

**MT 110 Introduction to Mass Communications (3)**
This course examines the role of mass media in modern society, with emphasis on the ethics, technology, social obligation, technical skills, and historical knowledge needed by modern communicators. The course will emphasize analysis and criticism of media usage. Prerequisite: Instructor Permission

**NET125 Introduction to Net+ ^ (3)**
This course is intended to introduce the student to various networking concepts and technologies for students interested in becoming network administrators. Safety and proper tool usage will be reinforced. Key topics include protocols, topologies, hardware, client and server configuration, network services, and network security. In addition, the student will be given hands-on knowledge, requiring the student to thoroughly understand configuration, troubleshooting, and maintenance of networks.

**NET196 Certification Training Lab Net+ ^ (2)**
This class is designed to give the second semester student supervised practice with computerized testing. Students will apply previously learned skills and concepts in preparation for the CompTIA Network+ Examination. Practice test banks will be used to simulate the exams. Students will take practice tests, review answers, research any incorrect answers and research and obtain correct answers.

**NUR103 PN Success ^ (2)**
This course provides orientation to the program and promotes student success. Students are introduced to the student role, end-of-program student learning outcomes, college and program resources, learning and learning styles, test taking strategies, use of credible resources, wellness, and self-care strategies. Prerequisite: Admission to PN Program

**NUR106 KSPN Foundations of Nursing ^ (4)**
This course provides an introduction to practical nursing and roles of the practical nurse as well as profession and client related care concepts. Emphasis is placed on the knowledge and skills needed to provide safe, quality care. The theoretical foundation for basic data collection and nursing skills are presented and an introduction to the nursing process provides the student with a framework for decision making. Prerequisite: Admission to PN Program

**NUR109 KSPN Fundamentals of Pharmacology & Safe Medication Administration ^ (2)**
This course provides an introduction to the principles of pharmacology. Emphasis is placed on nursing care related to the safe calculation and administration of medications to clients across the life span. Prerequisite: Admission to PN Program

**NUR122 KSPN Nursing Care of Adults I ^ (5)**
This course focuses on the care of adult clients experiencing common medical/surgical health alterations with predictable outcomes. Emphasis is placed on the care of clients with alterations in cardiac output and tissue perfusion, oxygenation, regulation and metabolism, and integument. Principles of pre-and post-operative care, pharmacology and IV therapy are also addressed. Prerequisite: Admission to the PN Program

**NUR126 KSPN Foundations of Nursing Clinical ^ (1)**
This course provides an introduction to the skills required to practice nursing. The theoretical foundation for basic data collection and nursing skills are presented and the student is given an opportunity to demonstrate these skills in a clinical laboratory setting. Students are also given the opportunity to apply the nursing process to client-related situations. Prerequisite: Admission to the PN Program

**NUR127 KSPN Nursing Care of Adults I Clinical ^ (2)**
This course focuses on the care of adult clients with common medical/surgical health alterations. The clinical laboratory experience gives students the opportunity to apply theoretical concepts from Nursing Care of Adults I and implement safe client care in selected settings. Prerequisite: Admission to the PN Program

**NUR150 KSPN Care of Aging Adults ^ (2)**
This course is designed to explore issues related to aging adults. Course content addresses the impact of ageism, alterations in physiological and psychosocial functioning, and the role of the practical nurse in caring for older adult clients across a continuum of care. Prerequisite: Admission to the PN Program

**NUR156 KSPN Mental Health Nursing ^ (2)**
This course explores basic concepts and trends in mental health nursing. Therapeutic modalities and client behavior management are discussed. Emphasis is placed on using the nursing process and meeting the basic human needs of the client with a mental health disorder. Prerequisite: Admission to the PN Program

**NUR157 KSPN Maternal Child Nursing ^ (2)**
This course provides an integrative, family-centered approach to the care of childbearing women, newborns, and children. Emphasis is placed on care of the pregnant woman and newborn, normal growth and development, and common pediatric disorders. Prerequisite: Admission to the PN Program

**NUR159 KSPN Nursing Care of Adults II ^ (5)**
This course focuses on the care of adult clients experiencing common medical/surgical health alterations with predictable outcomes. Emphasis is placed on the care of clients with alterations in cognition and sensation, mobility, elimination, immunity and hematology, and reproduction. Principles related to pharmacology and emergency preparedness are also addressed. Prerequisite: Admission to the PN Program

**NUR163 KSPN Leadership, Roles, and Issues ^ (2)**
This course provides orientation to leadership roles of the LPN and related responsibilities. It also introduces issues to students that they will encounter in the workplace. Prerequisite: Admission to the PN Program

**NUR168 KSPN Maternal Child Nursing Clinical ^ (1)**
This course provides an integrative, family-centered approach to the care of childbearing women, newborns, and children. Students observe the uncomplicated birth process and practice postpartum care as well as care of the newborn in the clinical laboratory setting. Common pediatric diseases and the growth and development process is the focus of child-related clinical lab- oratory experiences. Prerequisite: Admission to the PN Program

**NUR170 KSPN Nursing Care of Adults II Clinical ^ (2)**
This course focuses on the care of adult clients with common medical/surgical health problems. The clinical laboratory experience gives students the opportunity to apply theoretical concepts from Nursing Care of Adults I and II and implement safe client care in selected settings. Students are also given the opportunity to practice leadership skills while managing a caseload of clients. Prerequisite: Admission to the PN Program

**NUR180 KSPN PN Concept Synthesis^ (2)**
This course provides a review of the NCLEX-PN blueprint, NEXGEN test items, and test taking strategies over the courses offered in the LPN program

**NUR201 Certified Nurse Aide ^ (6)**
This course is based on the Kansas Department of Health and Environment (KDHE) Certified Nurse Aide Curriculum Guidelines (90 Hours) and prepares individuals to take the state certification exam. The course focuses on the responsibilities of the nurse aide working as a member of the health team in caring for residents of long term care facilities. The course includes basic anatomy and physiology, communication skills, measurement of vital signs, and procedures to help meet the hygiene, nutrition, and rehabilitation needs of older individuals. Students who successfully complete this course and pass the state exam will be qualified to become a practicing Kansas Certified Nurse Aide (CNA). Prerequisite: Allied Health Coordinator Permission

**NUR202 Certified Medication Aide ^ (5)**
This course is based on the Kansas Department of Health and Environment (KDHE) Medication Aide Curriculum and prepares individuals to take the State certification exam. The course focuses on the responsibilities associated with medication administration, including drug dosage calculations. Upon successful completion of both the course and the State exam, the individual will be a Kansas Certified Medication Aide (CMA). Prerequisite: Kansas Certified Nurse Aide

**NUR203 Certified Med Aide Certification Update I ^ (1)**
Provides continued certification for the Certified Medication Aide. Prerequisite: Permission

**NUR220 LPN to RN Transition ^ (2)**
This hybrid course prepares the licensed practical nurse to articulate to the role of a registered nurse by expanding the LPN knowledge base and exploring the scope of practice of the RN. The course begins with a review of academic progression in nursing. It continues with an introduction to the curriculum and a discussion about preparing for success in school and excellence in practice. The end-of-program student learning outcomes and major program concepts are outlined. Program concepts include: nursing process, client-centered care, teamwork and collaboration, informatics, evidence-based practice, safety, quality improvement, leadership and professionalism. Higher levels of cognition including critical thinking, clinical reasoning and clinical judgment are explored. In addition, legal and ethical issues confronting the registered nurse are discussed. Prerequisite: Admission to LPN to RN Completion Program

**NUR221 Advanced Pharmacology ^ (3)**
This course will focus on therapeutic pharmacological methods and evidence-based practice used in patient care both in the acute and maintenance plan of the patient. Correct administration, dosage calculation, dosage verification and documentation will be emphasized. Differences between the LPN and the RN practice regarding administration, calculation, and routes (i.e. IV push) will also be discussed based on the applicable nurse practice act. Safe and ethical care, nursing process and QSEN will be topics of the class as well.

**NUR225 Health Assessment & Advanced Nursing Skills ^ (3)**
This course provides the framework for preparing students to perform comprehensive health assessments. Emphasis is placed on taking a thorough nursing history, performing physiological, psychological, sociological, cultural, and spiritual assessments. Laboratory experiences provide an opportunity to practice assessment and perform a head to toe assessment at a prescribed competency level. This course will also develop student's skills in relation to advanced nursing skills needed to provide client-centered care to individuals with complex and multisystem disorders. Prerequisite: Admission to LPN to RN Completion Program

**NUR231 Advanced Medical-Surgical Clinical ^ (2)**
This course focuses on the care of adult clients with complex medical/surgical health alterations. Concepts of pharmacology and parenteral therapy, health promotion and education, evidence-based practice, and inter-professional collaboration are integrated throughout the course. Emphasis is placed on enhancing time management, organizational, and priority-setting skills when providing care to clients with

complex needs. Clinical experiences provide the student an opportunity to apply theoretical concepts and implement safe, quality care to clients. Prerequisite: Admission to LPN to RN Completion Program

**NUR230 Advanced Medical-Surgical Nursing ^ (4)**
This course focuses on the care of adult clients with complex medical/surgical health alterations. Concepts of pharmacology and parenteral therapy, health promotion and education, evidence-based practice, and inter-professional collaboration are integrated throughout the course. Emphasis is placed on enhancing time management, organizational, and priority-setting skills when providing care to clients with complex needs. Clinical experiences provide the student an opportunity to apply theoretical concepts and implement safe, quality care to clients. Prerequisite: Admission to LPN to RN Completion Program

**NUR235 Advanced Mental Health Nursing ^ (2)**
This course focuses on the care of clients across the lifespan experiencing cognitive, mental and behavioral disorders. Emphasis is placed on management of clients facing emotional and psycho- logical stressors as well as promoting and maintaining the mental health of individuals and families. Concepts of crisis intervention, therapeutic communication, anger management, and coping skills are integrated throughout the course. The community as a site for care and support services is addressed. Clinical experiences provide the student an opportunity to apply theoretical concepts and implement safe client care in selected care settings. Prerequisite: Admission to LPN to RN Completion Program

**NUR236 Advanced Mental Health Nursing Clinical ^ (1)**
Clinical experiences provide the student with an opportunity to apply theoretical concepts and implement safe client care in selected care settings

**NUR240 Nurse as Leader ^ (2)**
This course facilitates the transition of the student to the role of a leadership nurse. Emphasis is placed on contemporary issues and management concepts, as well as quality improvement, conflict management, error mitigation, resource management, and leadership with a focus on prioritization and delegation. Legal and ethical issues are discussed with a focus on personal accountability and responsibility. Standards of practice and the significance of functioning according to state regulations and statutes are analyzed. Students are given the opportunity to conduct a needs assessment of a community, identify an issue, and develop a change project that they present back to the community and their peers. Prerequisite: Admission to LPN to RN Completion Program

**NUR245 High Risk Maternal-Child Nursing ^ (2)**
This course provides an integrative, family-centered approach to the care of mothers, newborns, and children. Emphasis is placed on family dynamics, high-risk pregnancies, neonatal disorders, pediatric disorders and the promotion of healthy behaviors in clients. Prerequisite: Admission to LPN to RN Completion Program

**NUR250 Professional Nursing Practicum ^ (3)**
This course provides the student the opportunity to function as a contributing member of the interprofessional team and apply the knowledge and skills acquired in previous courses. Students will provide care to clients with multisystem disorders in complex care settings. The focus is on promoting positive client outcomes through the provision of safe, evidence-based, client-centered care. Students will be expected to make clinical judgments using critical thinking and clinical reasoning skills. Emphasis is placed on demonstration of professional behaviors and communication, collaboration and conflict mediation, ethical comportment, and the application of leadership skills. Prerequisites: Admission to LPN to RN Completion Program

**NUR260 LPN-RN Concept Synthesis ^ (3)**
This course provides a review of the NCLEX-RN blueprint, NEXGEN test items, and test taking strategies over the courses offered in the LPN-RN program.

**PE 102 PE for Women (1)**
Strengthens and improves overall fitness through exercise. Individuals will gain an understanding of how to apply exercises to improve fitness.

**PE 103 Volleyball (WVA) (1)**
Deals with fundamental skills and strategies necessary to compete at the collegiate level.

**PE 104 Basketball (WVA) (1)**
Improves and enriches the individual's knowledge and skills in the area of basketball. A course for women to participate in an organized team sport on the collegiate level. Individuals will participate in basketball games and work to improve their skill and knowledge in the different areas of basketball.

**PE 105 Football (MVA) (1)**
Teaches the following aspects of football; punting, kicking, offensive line play, defensive line play, offensive back play, and defensive secondary play. The various techniques involved in each area, such as: different secondary coverages, different offensive plays from different offensive sets, and different blocking rules and blocking schemes are taught that will be encountered in different situations.

**PE 106 Basketball (MVA) (1)**
Improves and enriches the individual's knowledge and skills in the area of men's basketball. This course is a general education course for individuals to participate in an organized team sport on the collegiate level. The individuals will participate in basketball games and work to improve their skills and knowledge in the different areas of basketball.

**PE 107 Dance Team I (1)**
Emphasizes development of technical and chorographical skills for performance. This performance class is limited to members of the Classy Lassies. This group represents the college at athletic events and school activities. Auditions are required in the spring for the following school year.

**PE 108 Dance Team II (1)**
Continues Dance Team I.

**PE 110 Rules and Officiating I (2)**
This course introduces the general concepts of rules and officiating in football and volleyball. The course will include a brief history of the rules as well as fundamental officiating techniques.

**PE 111 History and Principals of PE (3)**
This is the foundation course for all physical education majors. The course will cover the historical development of exercise science and physical education. The course will also examine issues, opportunities, and challenges in the physical education field.

**PE 112 Personal and Community Health (3)**
This course provides an overview of the physical, mental, emotional, social, and spiritual components of health that affect the whole human being. The course will include an introduction to the interdependency and relationships between such topics as mental/emotional health, drug use, drug misuse, drug abuse, physical fitness, nutrition, consumer health, human sexuality, death and dying, community health, environmental health, and diseases.

**PE 113 First Aid and Safety (3)**
This course focuses on the knowledge and skills needed to give immediate care to an ill or injured person until more advanced medical care arrives. The course covers identifying and eliminating potentially hazardous conditions in personal or work environments, recognizing emergencies, and making appropriate decisions for first aid care.

**PE 114 Track (WVA) (1)**
Improves and enriches the individual's knowledge and skills in the area of track and field. A course for individuals to participate in an organized team sport on the collegiate level. The individuals will participate in track and field events and work to improve their skills and knowledge in the different areas of track and field.

**PE 115 Softball (WVA) (1)**
An activity class, open only to women athletes interested in participating in an organized sport at the collegiate level.

**PE 116 Track (MVA) (1)**
Improves and enriches the individual's knowledge and skills in the area of track and field. A course for individuals to participate in an organized team sport on the collegiate level. The individuals will participate in track and field events and work to improve their skills and knowledge in the different areas of track and field.

**PE 117 Baseball (MVA) (1)**
Improves and enriches the individual's knowledge and skills in the area of baseball. A course for individuals to participate in an organized team sport on the collegiate level. The individuals will participate in baseball games and work to improve their skills and knowledge in the different areas of baseball.

**PE 118 Cross Country I (MVA) (1)**
Improves and enriches the student's knowledge and techniques in the sport of cross country. A course for individuals to participate in an organized team sport on the collegiate level.

**PE 119 Tennis (1)**
This course provides instruction and practice in the basic skills, fundamentals, rules, and strategies of the game of tennis.

**PE 121 Volleyball I (1)**
This course is designed to provide instruction in the basic skills of volleyball, including the forearm pass, overhead set, spike, and overhand serve. Elementary offenses and defenses will also be covered in the course.

**PE 122 Archery (1)**
This course provides instruction in the basic skills, fundamentals, rules, safety practices, and techniques related to the leisure sport of target archery, with emphasis on the acquisition of skills.

**PE 123 Introduction to Physical Education (3)**
This course provides a survey study of the historical background, philosophy, and principles of the field of physical education.

**PE 124 Weightlifting I (1)**
This course provides a program and instruction in weightlifting with the purpose of increasing individual strength and muscle tone which will help increase overall physical health and well-being. The class may be general or designed for specific athletic activities.

**PE 125 Introduction to Recreation (3)**
This course is designed for the student interested in a career in recreation. Various recreational activities are included in this class along with opportunities for practical experience. The student is also given the opportunity to work in a recreational setting in the community.

**PE 126 Physical Fitness Management (1)**
This course is designed to provide each student the opportunity to develop the knowledge and skills essential for maintaining a fitness lifestyle.

**PE 127 Cheerleading I (1)**
Emphasizes the development of technical skills for performance at sporting events. Skills taught include jumps, stunting, cheers, chants, conditioning and safety guidelines. A spirit group at HCC is composed of cheerleaders, yell leaders, and mascots. These individuals will practice together to lead cheers and be involved in school spirit at athletic events and other school activities. This is a performance class.

**PE 128 Cheerleading II (1)**
Continues Cheerleading I. Prerequisite: PE 127

**PE 131 Soccer I (WVA) (1)**
Improves and enriches the individual's knowledge and skills in the area of soccer. A course for women to participate in an organized team sport on the collegiate level. Individuals will participate in soccer games and work to improve their skill and knowledge in the different areas of soccer.

**PE 134 Golf (1)**
Provides individualized instruction in the rules, fundamentals, and history of the sport. Proper use of clubs and courtesies of the game also will be covered.

**PE 135 Running Awareness (1)**
Covers the proper mechanics of running and training, exercise benefits, fitness programs, warm-ups, and cool downs. Cardiovascular fitness can be improved in this course.

**PE 136 Baseball Conditioning I (1)**
Improves the student's physical strength and endurance through a strength program and conditioning drills. Enrollment is limited to those enrolled in activities courses such as Baseball and/or Softball.

**PE 137 Basketball Conditioning I - Men (1)**
Provides weight training and conditioning for the men's basketball program. Enrollment is limited to those enrolled in basketball activity courses.

**PE 138 Basketball Conditioning I - Women (1)**
Provides weight training and conditioning program for the women's basketball program. Enrollment is limited to those enrolled in basketball activity courses.

**PE 139 Lifetime Fitness (2)**
This course is designed to provide an individual exercise and fitness evaluation and program. The course will focus on how to develop and maintain a fitness lifestyle.

**PE 139A Lifetime Fitness (3)**
This course is designed to provide each student pursuing the field of personal fitness training with the knowledge to build an individual exercise program including cardiovascular, strength, and flexibility that are essential for maintaining a fitness lifestyle. The course will provide knowledge for a sound nutritional base to expand into weight management and body composition. The course will provide students the opportunity to complete an Applied Science Degree and successfully complete the National Council of Strength and Fitness personal trainer exam. Prerequisite: Instructor Permission

**PE 140 Advanced Weightlifting and Conditioning (1)**
Contributes to the health and wellbeing of the individual through participation in the strength program, conditioning drills, and agility drills.

**PE 141 PE for Men (1)**
Strengthens and improves overall fitness through exercise. Individuals will gain an understanding of how to apply exercises to improve fitness.

**PE 143 Introduction to Athletic Training I (3)**
Provides the individual with an overview of the athletic training profession and the field of sports medicine. It is designed to show the individual the different aspects of an athletic trainer's job and give the individual an opportunity for practical experience and observation in this field.

**PE 147 Cross Country I (WVA) (1)**
Improves and enriches the individual's knowledge and techniques in the sport of cross-country. A general education for individuals to participate in an organized team sport on the collegiate level

**PE 149 Softball Conditioning I (1)**
The course will teach the following aspects of softball: hitting, pitching, fielding, and base running. This is accomplished by teaching the various techniques involved in each area. The course is designed to make the student a better athlete both mentally and physically.

**PE 150 Personal Trainer Field Experience I ^ (1)**
This introductory course provides practical experience for students pursuing a personal trainer degree. The course will focus on exercises associated with personal fitness training, setting up and explaining proper form for using fitness machines, and inter- acting with fitness trainees. The course will also provide preparation for the National Council of Strength and Fitness personal trainer exam.

**PE 150A Personal Trainer Field Experience II ^ (1)**
This course provides additional practical experience for students pursuing a personal trainer degree. The course will focus on exercises associated with personal fitness training, setting up and explaining proper form for using fitness machines, and interacting with fitness trainees. The course will also provide preparation for the National Council of Strength and Fitness personal trainer exam. Prerequisite: PE 150

**PE 150B Personal Trainer Field Experience III ^ (1)**
This course provides more advanced practical experience for students pursuing a personal trainer degree. The course will consist of designing a fitness training program for a selected individual for the duration of the course, instructing the trainee in specific exercises and use of fitness machines, and documenting the trainee's progress through the program. The course will continue to emphasize effective interaction with the fitness trainee. The course will also provide preparation for the National Council of Strength and Fitness personal trainer exam. Prerequisite: PE 150A

**PE 150C Personal Trainer Field Experience IV ^ (1)**
This course provides additional advanced practical experience for students pursuing a personal trainer degree. The course will con- sist of designing a fitness training program for a selected individual for the duration of the course, instructing the trainee in specific exercises and use of fitness machines, and documenting the trainee's progress through the program. The course will continue to emphasize effective interaction with the fitness trainee. The course will also provide preparation for the National Council of Strength and Fitness personal trainer exam. Prerequisite: PE 150B

**PE 151 Clinical Experience Athletic Training I (2)**
This course will provide students with an introduction to clinical experiences in the Highland Community College Athletic Training Education Program. There will be application of introductory skills through laboratory practice and clinical experiences in practical settings. Prerequisite: Instructor Permission

**PE 151B Clinical Experience Athletic Training II (2)**
This course will provide an intermediate level of clinical experiences in the Highland Community College Athletic Training Education Program. There will be application of intermediate skills through laboratory practice and clinical experiences in practical settings. Prerequisite: PE 151

**PE 151C Clinical Experience Athletic Train III (2)**
This course will provide an advanced level of clinical experiences in the Highland Community College Athletic Training Education Program. There will be application of advanced skill modules through laboratory practice and clinical experiences in practical settings. Prerequisite: PE 151B

**PE 151D Clinical Experience Athletic Training IV (2)**
This course will provide a professional level of clinical experiences in the Highland Community College Athletic Training Education Program. There will be application of professional skills through laboratory practice and clinical experiences in practical settings. Prerequisite: PE 151C

**PE 203 Volleyball II (WVA) (1)**
Continues Volleyball I.

**PE 204 Basketball II (WVA) (1)**
Continues Basketball I (Women).

**PE 205 Football II (MVA) (1)**
Continues Football I.

**PE 206 Basketball II (MVA) (1)**
Continues Basketball I (Men).

**PE 207 Dance Team III (1)**
Continues Dance Team II.

**PE 208 Dance Team IV (1)**
Continues Dance Team III. Prerequisite: PE 207

**PE 210 Advanced Concepts of Personal Training (5)**
Released by the National Council on Strength & Fitness (NCSF), this is an intensive cumulative core course designed to prepare students for the NCSF National Certified Personal Trainer Exam. The course covers all the areas required for the exam and will include lessons with textbook reviews, presentations, and study guide sessions, as well as lab activities for each lesson or chapter of the textbook. There will be three hours lecture and two hours lab per week. Prerequisite: Instructor Permission

**PE 214 Track II (WVA) (1)**
Continuation of Track I (Women).

**PE 215 Softball II (WVA) (1)**
Continues Softball II (Women).

**PE 216 Track II (MVA) (1)**
Continues Track I (Men).

**PE 218 Cross Country II (MVA) (1)**
A general education course for students to participate in an organized team sport on the collegiate level. This course is designed to improve and enrich the student’s knowledge and techniques in the sport of cross country.

**PE 220 Theory of Coaching Basketball (2)**
Presents all phases of the game of basketball to give students a foundation on which to build if interested in coaching basketball. The course will include developing a coaching philosophy, motivational techniques, offensive and defensive strategies, and an examination of the development of an all encompassing basketball program.

**PE 221 Theory of Coaching Track/Field (2)**
Presents to the student a history of the sport, theories of coaching, and shows fundamental coaching techniques in the area of track and field.

**PE 222 Theory of Coaching Football (2)**
Presents to the student a history of the sport, theories of coaching, and shows fundamental coaching techniques in the area of football.

**PE 223 Theory of Coaching Baseball (2)**
This course covers basic techniques for coaching the fundamentals of hitting, fielding, and throwing relative to baseball positions. The course will also focus on coaching players both individually and as a team.

**PE 224 Care and Prevention of Athletic Injuries (3)**
This course provides an introduction to athletic training techniques for trainers, coaches, athletes, and physical education teachers at all levels. The course covers identification, care, and prevention of common injuries occurring in physical education and athletic programs. The course also examines program administration concerns.

**PE 225 Theory of Coaching Volleyball (2)**
This course is designed to provide an understanding of the game of volleyball from a coaching perspective. The course will cover developing a personal coaching philosophy, organization of practices, teaching fundamentals, game strategies, working with individual athletes, team dynamics, team and program management, and professional development. The course will consider all levels of volleyball competition.

**PE 227 Cheerleading III (1)**
Continuation of PE 128.

**PE 228 Cheerleading IV (1)**
Continuation of PE 227.

**PE 231 Soccer II (WVA) (1)**
Continues Soccer I.

**PE 236 Baseball Conditioning II (1)**
The course will teach the following aspects of baseball: hitting, pitching, fielding, and base running. We do this by teaching the various techniques involved in each area. The course is designed to make the student a better athlete both mentally and physically.

**PE 237 Advanced Basketball Conditioning- Men (1)**
An introductory course designed to prepare the student with knowledge of preseason conditioning for Varsity Basketball. The class will focus on proper weight training techniques and running principles.

**PE 238 Advanced Basketball Conditioning - Women (1)**
An introductory course designed to prepare the student with knowledge of preseason conditioning for Varsity Basketball. The class will focus on proper weight training techniques and running principles. Prerequisite: PE 138

**PE 240 Advanced Weightlifting & Conditioning II (1)**
This course is designed to contribute to the health and wellbeing of the student through the participation in the strength program, conditioning skills, and agility drills.

**PE 241 Weightlifting II (1)**
This course contributes to the health and well-being of the students through a weight program which will help increase the student's overall physical health and knowledge of the benefits of strength training. Prerequisite: PE 124

**PE 243 Introduction to Athletic Training II (3)**
This course covers documentation of athletic injuries, principles of therapeutic modalities, and methods of therapeutic exercise. Prerequisite: PE 143 and permission

**PE 245 Baseball II (MVA) (1)**
The course will teach the following aspects of baseball: hitting, pitching, fielding, and base running. We do this by teaching the various techniques involved in each area. The course is designed to make the student a better athlete both mentally and physically.

**PE 247 Cross Country II (WVA) (1)**
Continues Cross Country I (Women).

**PE 249 Softball Conditioning II (1)**
The course will teach the following aspects of softball: hitting, pitching, fielding, and base running. This is accomplished by teaching the various techniques involved in each area. The course is designed to make the student a better athlete both mentally and physically.

**PE 250 Exercise Physiology (3)**
This course investigates the fundamental physiological processes that operate during exercise. Emphasis will be placed on integrating systems and organs into a functional whole. Laboratories provide experience in evaluating exercise stress by motion methods and equipment. Prerequisite: BS 105

**PHI101 Introduction to Philosophy GE (3)**
This course provides a study of major philosophical ideas of the
Western world from the time of Plato to the present. The course will present a broad overview of the history of philosophy and the thoughts of major philosophers. Emphasis will be placed on showing relationships between current societies and significant philosophical ideas.

**PHI102 Introduction to Ethics GE (3)**
An introduction to ethical theory focusing on the major traditions of Western philosophical ethics and their practical application to contemporary moral issues.

**PHI103 Logic and Critical Thinking GE (3)**
The study of critical thinking and logic allows the student to practice skills in clear and logical thinking, analysis of information, and effective argumentation. The student will formulate and deliver arguments in written and oral form, supported by evidence and valid underlying assumptions.

**PHI105 Religions of the World GE (3)**
This course provides an objective and impartial survey of the major religious systems of the world, including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam.

**POL100 United States Government (3)**
This course focuses on the political arena and public affairs of the national government of the United States. The course will examine the development of constitutional principles and issues, such as civil liberties, the role of political parties, and the structure and function of the legislative, executive, and judicial branches of the United States government.

**POL101 Introduction to Political Science GE (3)**
This course provides an introduction to the field of political science. The course will examine the nature of politics and political power, the institutions of government, and how governments operate to make decisions, enforce rules, and resolve conflicts. The course will also cover the nature of public opinion and political participation, major political ideologies and philosophers, and international politics. The course will focus on American politics but will also provide some comparison with other nations.

**POL115 State and Local Government GE (3)**
This course examines the interrelationships between the federal, state, and local branches of the United States government. Current events will be discussed as they relate to state and local governmental entities. The course will also emphasize the impact of government on daily life.

**PS 101 College Physical Science GE (5)**
This course provides an introduction to the major concepts in modern science. The course will focus on physics, chemistry, meteorology, astronomy, energy, and the environment. The course will include laboratory experiments and work with lab equipment and techniques. Prerequisite: MAT 100 or Assessment

**PS 102 Concepts of Physics (4)**
This course provides a qualitative introduction to the science of physics. The course will cover principles from classic, relativity, and quantum theories, including motion, forces, energy, thermo- dynamics, waves, electromagnetism, atomic physics, and special and general relativity. The course is intended as a broad-based introduction to physics for students who are not majoring in science. Prerequisite: MAT100 or Assessment

**PS 104 Physical Geology GE (4)**
This course provides an introduction to the basic principles of geology. The course covers geological measuring techniques, minerals and rocks, internal processes such as plate tectonics, earthquakes, and volcanoes, and surface processes such as streams, coasts, mass movements, and glaciers. The course is intended as a broad-based introduction to geology for students who are not majoring in science.

**PS 108 Astronomy GE (4)**
Provides a qualitative introduction to the nature of the solar system and beyond. The topics include: the celestial sphere, astronomical observation techniques, the planets and moons, asteroids and comets, the Sun, the lives and evolutions of starts, pulsars, black holes, galaxies and dark matter. This course is intended as a broad-based introduction to astronomy for students who are not majoring in science. Three hours of lecture and one and a half hours of lab per week. Prerequisite: MAT 100 or Assessment

**PS 203 General Physics I (5)**
This course provides a study of units, physical quantities and vectors, motion, forces and equilibrium, oscillations and waves, gravitation, work, energy, and thermodynamics. This is the introductory course for those who require algebra-based physics. Prerequisite: MAT 104 (or MAT 106 placement)

**PS 216 College Physics II GE (5)**
This course includes the study of electricity, magnetism, electromagnetic induction, electromagnetic waves, optics, and atomic and nuclear physics. This is a second semester course for students who require calculus-based physics. Prerequisite: PS 215

**PSY101 General Psychology GE (3)**
This general survey course provides a broad background in the principles and applications of scientific psychology. The course will focus on the principles and proponents of psychological theories and methods of scientific inquiry, as well as the biological basis of behavior, including physiology of the brain and nervous system and the accompanying sensory systems and perceptual
Processes. The course also covers learning theories and cognitive processes, theories and applications of motivation and emotion, the major phases of human life span development, and the major theories of personality, including disorders, treatments, therapies and how human interaction is influenced by the individual, group, and environment.

**PSY105 Industrial/Organizational Psychology (3)**
This course provides a survey of industrial and organizational (I/O) psychology, which combines research and practical workplace applications. Students will develop an understanding of the psychological basis of behavior in the workplace and the organizational practices which create a good fit between an employee's skills, abilities and interests and workplace demands. Students will explore topics as staffing, training, motivation, job satisfaction, leadership, teamwork, and work-life balance and will apply course content to case studies.

**PSY202 Child Psychology (3)**
This course is a study of child development from conception to adolescence. The course will cover the physical, intellectual, emotional, and social aspects of personality. Genetic predisposition and environmental influences will also be reviewed. Prerequisite: PSY 101

**PSY205 Human Growth and Development GE (3)**
This course focuses on human development using normative scales for physical, intellectual, emotional, language, social, and personality development. The process of human growth and development across biological beginnings, infancy, childhood, adolescence, adulthood, and end of life will be presented. Environ-mental and biological influences that affect development are also reviewed.

**PSY206 Social Psychology (3)**
This course provides a psychological perspective on social behavior and the processes involved in being a member of a social group. Social psychology is the scientific study of how people think about, influence, and relate to one another. Topics include self-concept, perception, attitude, social influence, conformity, persuasion, prejudice, group influence, and pro-social behavior. The individual as a member of a group and society is a central component of this course. Prerequisite: PSY 101

**PSY280 Health Psychology (3)**
This course examines multiple, interactive factors relevant to human health using a biopsychosocial approach. The course will cover the contributions of psychological theory to promoting and maintaining health and preventing and treating illness. Course topics include health behaviors, theories of health behavior change, stress, pain, chronic and terminal illness, and health related research. Prerequisite: PSY 101

**PSY290 Abnormal Psychology (3)**
This course is a study of emotional and behavioral disorders. Abnormal Psychology focuses on the description, causes, and treatment of abnormal behavior patterns. Classifications of disorders according to the DSM-V, such as mood disorders, anxiety disorders, psychotic disorders, and personality disorders,

will be presented. Methods of treatment, specifically psychotherapies and biomedical therapies, will be discussed. Prerequisite: PSY 101

**SOC100 Creating Positive Settings for Child/Families (1)**
This course will examine how children's mental health and wellness is affected by life events, culture, environment, biology, and relationships. The course will focus on how to create safe and nurturing learning environments and will study the impact that room arrangements, labeling, and comfortable settings have on children and caregivers. The course will explore strategies for working with families to create a healthy atmosphere for children and positive settings for children and families in childcare.

**SOC101 General Sociology GE (3)**
This course provides an introduction to sociology and the basic principles of sociological perspectives, theories, and research methods. The course will focus on the way culture patterns societies and social interaction and how these patterns are transmitted through socialization and social interaction. The course will also cover social stratification systems, social institutions, collective behaviors, social change, and perspectives on how social forces influence human activity and how human activity creates social forces.

**SOC102 Marriage and Family GE (3)**
This course examines the nature, development, functions, and norms of the family in American society as well as in other cultures. The course will focus on courtship, marriage, sexual relations, birth control, male and female roles, kinship, child rearing, divorce, and death in the family.

**SOC104 Introduction to Social Work GE (3)**
This course provides an introduction to the field of social work. The course will cover the history, mission, values, and activities of social work practice. The course will focus on how social workers interact with a diverse client population and contribute to solving social problems. The knowledge and value base of the profession will also be examined.

**SOC105 Death, Loss, and Grief (3)**
This course will examine aspects of death and dying. The course will cover the stages of dying and grief and will look at grief from a lifespan perspective. The course will also examine social issues, cultural differences, and legal and ethical issues related to death and dying.

**SOC106 Diversity & Inclusiveness (3)**
This course examines human diversity and integrates person- al and organizational perspectives, research, and theories. The course will focus on diversity in terms of teamwork, communication, leadership, conflict, social networking, and other issues in the workplace, school, and community.

**SOC108 Social Gerontology (3)**
This course examines how historical, psychological, cultural, social, and biological factors affect the aging process. The course also considers the perceptions that society has of aging, especially successful aging.

**SOC110 Crisis Intervention (3)**
This course will provide an introduction to the basic theories, models, and strategies in crisis intervention when working with individuals, families, and communities. The course will also focus on the integration of ethics and cultural sensitivity strategies in crisis intervention. Prerequisite: SOC104 with a C or higher

**SOC114 Alcohol & Substance Disorders (3)**
This course will examine the use and misuse of drugs and alcohol. The course will cover the biological and psychological effects of drug and alcohol use, the social and legal impact of substance abuse, and the challenges and issues faced by family members. Personal values and beliefs regarding substance use and misuse, current trends, and methods of prevention, intervention, and recovery will also be examined in this course.

**SOC150 Community Leadership (3)**
This course will focus on leadership skills and community leadership procedures and techniques. The course will emphasize the principles of project management, including design, planning, follow-up, and closure, as well as problem solving, community diversity, and long-range planning.

**SOC200 Sociology through Film (3)**
Students will be exposed to an array of films and study the major substantive areas of sociology. They will be encouraged to critically think, communicate, and write about their social world by utilizing film as not only a reflection of society, but also learning how cinema actually shapes social trends and values. This course is designed to teach key sociological concepts and topics through film. Through these films, students will explore the ways social life is presented, distorted, magnified, or politicized Prerequisite: ENG101 with a B or higher and SOC101, SOC102, or ANT112 with a C or higher

**SOC210 Social Problems (3)**
This course will examine a wide variety of social problems, including crime, racial discrimination, poverty, drug abuse, dis- organization of social institutions, and rapid social change. The course will apply sociological theories to explain social problems and will focus on approaches used to address these problems. Prerequisite: SOC101

**SP 101 Oral Communications GE (3)**
The purpose of this course is to develop the knowledge and skills necessary for meaning-oriented oral communications. The course also covers becoming a more effective critical listener. Emphasis will be placed on interpersonal and public communication.

**SP 103 Oral Interpretation GE (3)**
The purpose of this course is to study and practice the techniques of effective oral reading and performance. The focus will be on the careful reading, analysis, discussion, rehearsal, and performance of selections taken from various forms of literature, including poetry, essay, novel, short story, and drama.

**SP 105 Interpersonal Communication GE (3)**
This course is designed to improve student effectiveness in small group and one-to-one communication.

**SP 106 Public Speaking GE (3)**
The purpose of this course is to increase student understanding of the principles and applications of public speaking through analysis and practice in communication theory, topic selection, audience analysis, research, use of support materials, content organization, presentation, and evaluation.

**TCH100 OSHA 10 (1)**
This course will explain job/site safety and precautions for job/site hazards; determine the uses of personal protective equipment (PPE); identify the safety equipment and procedures related to safe work practices and environment; identify fire prevention and protection techniques; explore Hazardous Communications (HazCom) including Material Safety Data Sheets (MSDA).

**TH 105 Introduction to Dramatics GE (3)**
This course will provide a thorough survey of the basic elements of theatre and the dramatic arts.

**TH 106 Play Production (3)**
This course provides an introduction to the elements of play production. The course will cover planning, management, and technical aspects of play production and will include practical experience working with college productions.

**TH 108 History and Appreciation of Theatre Art GE (3)**
This course is designed to provide an introduction to the development of theatrical presentation from antiquity to the modern stage. The course will examine direction, management, design, and performance. Representative dramatic productions will be viewed to provide insight into the historical development and artistic values of theatre.

**TH 109 Fundamental Style and Principles of Acting (3)**
This course provides an introduction to the basics of acting and is geared towards students with little or no performance experience. The course will focus on rehearsal procedures and techniques, terminology, actor discipline, and public performance.

**TH 110 Acting I (3)**
This course continues TH 109 and provides additional experience in the basics of acting. The course is geared towards students with limited performance experience. The course will focus on rehearsal procedures and techniques, terminology, actor discipline, and public performance. Prerequisite: TH 109

**TH 146 Musical Theatre History GE (3)**
This course provides a survey of American musical theatre. The course will cover the historical development of musical theatre, significant style periods, and significant composers. The course will emphasize music theatre as social, political, and cultural expression. NOTE: This course is the same as M 146. Students may enroll in and receive credit for either TH 146 or M 146 but cannot enroll in or receive credit for both courses.

**TH 152 Stagecraft I (3)**
This course provides an introduction to the basic tools and principles of stagecraft. The course will focus on basic tools and their uses, shop organization and maintenance, construction, rigging, and painting. Course participants will be responsible for building, maintaining, and striking sets used in performances.

**TH 203 Theatre Practicum III (1)**
This course continues TH 104 and is designed to provide additional practical experience for both theatre majors and other students interested in performing onstage or working backstage to provide practical experience as a member of a theatre production crew. Students will have the opportunity to perform onstage, or serve as crew members, who may work in several technical or production areas, including stage management, costumes, set design and construction, lighting, sound, properties, house management, and publicity. This course provides an opportunity for performance self-expression and continued development of individual and ensemble skills and also offers exposure to the performing arts as a profession. Prerequisite: TH 104

**TH 204 Theatre Practicum IV (1)**
This course continues TH 203 and is designed to provide additional practical experience for both theatre majors and other students interested in performing onstage or working backstage to provide practical experience as a member of a theatre production crew. Students will have the opportunity to perform onstage, or serve as crew members, who may work in several technical or production areas, including stage management, costumes, set design and construction, lighting, sound, properties, house management, and publicity. This course provides an opportunity for performance self-expression and continued development of individual and ensemble skills and also offers exposure to the performing arts as a profession. Prerequisite: TH 203

**TH 206 Acting II (3)**
This course continues TH 110 and provides additional experience in the basics of acting. The course is geared towards students with some performance experience. The course will focus on rehearsal procedures and techniques, terminology, actor discipline, and public performance. Prerequisite: TH 110

**TH 207 Acting III (3)**
This course continues TH 206 and provides additional experience in acting. The course is geared towards students with some performance experience. The course will focus on rehearsal procedures and techniques, terminology, actor discipline, and public performance. Prerequisite: TH 206

**TH 208 Film Appreciation GE (3)**
This course is designed to provide an introduction to the history and conventions of narrative film. The focus of the course will be on the narrative form of film's story-telling techniques, and the art of film, including the historical development of the medium and the sociological impact of film as art.

**TH 211 Stagecraft II (3)**
This course continues TH 152 and provides additional experience in the use of basic tools and principles of stagecraft. The course will focus on basic tools and their uses, shop organization and maintenance, construction, rigging, and painting. Course participants will be responsible for building, maintaining, and striking sets used in performances. Prerequisite: TH 152

**VIN111 Intro to Viticulture/Vineyard Establishment ^ (3)**
This course is designed to introduce students to current practices for establishing a commercial vineyard and maintaining its health and productivity. Topics include varietal selection, site selection, site preparation, equipment, first season establishment, vine growth development and training, trellis systems, vine propagation, weed control, and vine disease control. Field practicum sessions consisting of 16 hours of hands-on experience will be scheduled in area vineyards.

**VIN117 Cold Climate Viticulture & Enology ^ (1)**
This course offers a practical understanding of the obstacles and promise of growing grapes and making wine in cold climates. Topics relating to cold climate production include history, physical limits of grapes, successful varieties, viticulture and enology methods for producing quality cold climate wine, the state of cold climate research, a review of resources, and marketing strategies in cold climate regions. Prerequisite: VIN111 or ENO116

**VIN211 Integrated Pest Management ^ (2)**
This course focuses on how effective grape production depends on the grower developing a system of grape management that is appropriate for each vineyard. The course will also examine the decisions that need to be made for managing all the normal cultural practices, such as planting, fertility, harvesting, and pruning, as well as managing the insect, disease, and weed problems that occur either regularly or sporadically. The information in this course will address management issues related to common, expected pest problems as well as the occasional appearance of minor pest problems.

**VIN212 Winter Viticulture Technology ^ (2)**
This course is designed to provide practical experience in winter vineyard operations for students already initiated in the field of viticulture. Students are required to partner with an approved vineyard to participate in the required field experience portion of the course which will serve as work experience for those seeking employment in commercial viticulture. A minimum of 30 hours of field practicum are required along with a daily journal of practical experiences. Prerequisite: VIN111 or Instructor Permission

**VIN213 Midwest Vineyard Management ^ (2)**
This course is a study of commercial grape growing in the Midwest United States. Topics include cultivars, vine nutrition, irrigation, canopy management, pests, maturity sampling and harvest, balanced pruning/cropping, and cold injury.

**VIN214 Spring Viticulture Technology ^ (2)**
This course is designed to provide practical experience in spring viticulture operations for students already initiated in the field of viticulture. Students are required to partner with an approved vineyard to

participate in the required field experience portion of the course, which will serve as work experience for those seeking employment in commercial viticulture. A minimum of 30 hours of field practicum are required along with a daily journal of practicum experiences. Prerequisite: VIN111 or Instructor Permission

**VIN215 Summer-Fall Viticulture Technology ^ (2)**
This course is designed to provide practical experience in summer/fall vineyard operations for students already initiated in the field of viticulture. Students are required to partner with an approved vineyard to participate in the required field experience portion of the course, which will serve as work experience for those seeking employment in commercial viticulture. A minimum of 30 hours of field practicum are required along with a daily journal of practicum experiences. Prerequisite: VIN111 or Instructor Permission

**VIN293 Soils for Viticulture ^ (3)**
This course will explore soil properties and behavior and their influence on wines. The course focuses not only on growth and production, but also on the long-term effects of viticulture on soil quality and the wider environment.

# GLOSSARY

**Academic Interest Area:**
The subject or subject areas upon which a student chooses to place principal academic emphasis.

**Academic Load:**
The total number of credit hours enrolled in during one semester.

**Advisor:**
A faculty or staff person who helps students achieve their educational goals by providing guidance on courses, program requirements, prerequisites, programs of recommendations, policies and procedures, and resources.

**Associate in Applied Science degree (AAS):**
A degree for students who desire to enter into employment after two years of college.

**Associate in Arts degree (AA):**
A degree intended to enable students to satisfy equivalent lower-division college credit course requirements and to transfer into a comparable discipline Bachelor of Arts degree program.

**Associate in General Studies degree (AGS):**
A degree program intended to recognize the attainment of a broad general education at a lower-division level. The degree does not meet all lower-division requirements at Kansas Regent universities.

**Associate in Science degree (AS):**
A degree program intended to enable students to satisfy equivalent lower-division college credit course requirements and to transfer into a comparable discipline Bachelor of Science degree program.

**Co-requisite:**
A course required to be taken simultaneously with another.

**Credit by examination:**
Credit received when a student takes an oral or written examination in lieu of taking a course.

**Credit hour:**
A unit of measurement used in determining the quantity of work taken. Each credit hour is roughly equivalent to one hour of class time per week.

**Curriculum:**
A program of courses that meets the requirements for a degree in a particular field of study also referred to as a major.

**Degree program:**
Courses required for completion of a particular degree.

**Drop/Add:**
Changing the student's course schedule by adding and/or dropping courses to increase or decrease the credit hours.

**Electives:**
Courses chosen by a student that are not required for the major or minor. The number of hours of electives required varies according to the student's major.

**Enrollment:**
The process of selecting courses and scheduling courses.

**Extracurricular:**
Activities such as band or athletics for which a student may earn credit toward graduation. Extracurricular activities are counted as electives.

**Financial aid:**
Money that is given or lent to students in order to help pay for their education. Aid is available from grants, loans, scholarships, and work study employment.

**Grade Point Average (GPA):**
A measure of scholastic performance. A GPA is obtained by dividing the number of grade points by the hours of work attempted. An A=4 points, a B=3 points, a C=2 points, a D=l point, and a F=O points.

**Intersession:**
Courses offered between fall and spring semesters.

**Orientation:**
Activities designed to help the new student become acquainted with the college.

**Prerequisite:**
A requirement, usually credit in another course, which must be met before a particular course can be taken.

**Regionally Accredited:**
The most highly regarded form of institutional accreditation. Regional accrediting commissions are among the oldest accrediting organizations in the country. All regional accrediting commissions review entire institutions, as opposed to programs or schools within institutions. The HCC Registrar will only accept coursework from institutions accredited by the agencies listed.

**Scholastic honors:**
An award an undergraduate receives based on excellence of academic work.

**Transcript:**
An official copy of a student's permanent academic record.