State Fair Community College

2010-2012

Course Catalog

Where are you going?

We'll help get you there.

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Table of Contents

This catalog is a publication of the Academic Records and Registrar's Office at State Fair Community College. Every effort has been made for it to contain accurate information at the time of publication. This catalog is not intended to be a contract between you and SFCC. The college reserves the right to make changes in the calendar, the curricula, the faculty, the fees, and to otherwise alter policies and regulations without notice.

An Equal Opportunity Institution

It is the policy of State Fair Community College not to discriminate on the basis of race, color, religion, gender, sexual orientation, age, disability, ancestry, national origin, or veteran status in its educational programs, activities or employment as required by law. SFCC is an equal opportunity employer.

For questions or issues related to this policy, please contact the SFCC Compliance Officer, Business Office, Hopkins Student Services Center, Room 730, 3201 W. 16th Street, Sedalia, MO 65301.

As required by the Americans with Disabilities Act, Section 504 and Title II, accommodations are provided to ensure equal opportunity for students with documented disabilities. If you have a disability that needs accommodations, contact the Access Counselor located in the Hopkins Student Services Center, Room 751 or call (660) 530-5832 for an appointment.

A Tobacco-Free Campus

State Fair Community College limits smoking and the use of tobacco products to vehicles parked or driven on designated college parking areas and roads.

For more information, refer to Policy and Regulation 5250.

State Fair Community College
3201 West 16th Street | Sedalia, MO 65301-2199
(660) 530-5800 | (877) 311-7322 (toll free in Missouri)
www.sfccmo.edu

2010-2012 Calendar

FALL 2010

Aug. 23	Semester starts
Sept. 6	Labor Day
Nov. 23	Campus closes at 5 p.m.
Nov. 24-26	Thanksgiving break
Dec. 13-16	Evening finals
Dec.13-16	Day finals
Dec. 16	Semester ends
Dec. 22	Campus closes at noon until Jan. 3

SPRING 2011

Jan. 17	Martin Luther King, Jr. Day
Jan. 19	Semester starts
Feb. 21	Presidents' Day
March 21-25	Spring break
April 22	Spring holiday
May 11-17	Evening finals
May 16-19	Day finals
May 19	Semester ends
May 20	Commencement

SUMMER 2011

June 1	Term starts
July 4	Independence Day
July 26-27	Day and evening finals
July 27	Term ends

FALL 2011

Aug. 22	Semester starts
Sept. 5	Labor Day
Nov. 22	Campus closes at 5 p.m.
Nov. 23-25	Thanksgiving break
Dec. 12-15	Evening finals
Dec. 12-15	Day finals
Dec. 15	Semester ends
Dec. 21	Campus closes at noon until Jan. 2

SPRING 2012

Jan. 16	Martin Luther King, Jr. Day
Jan. 18	Semester starts
Feb. 20	Presidents' Day
March 19-23	Spring break
April 6	Spring holiday
May 9-15	Evening finals
May 14-17	Day finals
May 17	Semester ends
May 18	Commencement

SUMMER 2012

June 4	Term starts
July 4	Independence Day
July 26, 30	Day and evening finals
July 30	Term ends

Find the complete academic calendar online at www.sfccmo.edu.

From the President

Dear Students, Prospective Students and Parents,

Welcome to State Fair Community College! We look forward to serving you and exceeding your expectations in all that we do to meet your educational and professional goals and objectives.

SFCC's educational programs are designed to meet a variety of academic, career and personal educational goals for students of all ages and educational backgrounds. Programs and services are offered on the Sedalia campus, at extended campus locations in Clinton, Lake of the Ozarks, Warsaw, Whiteman Air Force Base, and online.

Educational and training programs are provided in the following areas: general education and transfer— the Associate of Arts, Associate of Science and Associate of Arts in Teaching degrees; career programs in technical, vocational and professional fields—the Associate of Applied Science degrees and Professional Certificates; college-readiness classes; and a variety of noncredit courses, workshops and training that includes Lifelong Learning classes, GED test preparation, ESL classes, and customized training for business and industry. Many programs and courses are offered on ground or online; some are offered as a hybrid, which combines on ground and online instruction.

SFCC also delivers dual credit courses to more than 490 high school juniors and seniors at 15 locations throughout the college's 14-county service area. Additionally, the State Fair Career and Technology Center (SFCTC) is located on the SFCC campus. The SFCTC offers training to high school juniors and seniors in nine technical program areas.

SFCC is known for the "personal touch" and students are our first priority and part of our extended family. Every employee is committed to providing quality services and programs for all students and knowing our students personally both in and out of the classroom. We look forward to serving you!

With warmest regards,

Marsha K. Drennon, Ed.D.
President

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Rhonda Hutton, Allied Health and Science
Joel Kazy, Business and Computer Technology
Jim Page, Humanities, Social Sciences, and Fine and Performing Arts

An Introduction to State Fair Community College

Welcome to State Fair Community College!

This catalog is designed to help you with planning your educational program. It contains information about programs, admission and enrollment. Descriptions of all current courses that are part of the regular curriculum also are included. This includes courses required for general education credits for the Associate of Arts, Associate of Arts in Teaching, Associate of Science, and Associate of Applied Science degrees awarded by the college and career courses that apply to the Professional Certificates.

MISSION

State Fair Community College is an accessible, learning-centered institution, enriching its students and community by providing skills, knowledge, and perspectives essential for a changing world.

VISION

State Fair Community College will be an exemplary college dedicated to institutional effectiveness, strengthening communities and partnerships, ensuring student success, valuing people, and practicing continuous quality improvement.

CORE VALUES

We, at State Fair Community College value:

- A student-centered learning environment;
- Administration, faculty and staff who are committed to excellence;
- The communities and partners we serve;
- Professional development that strengthens the individual and the college community;
- Diversity;
- Communication that is open, thoughtful, and respectful of others' opinions;
- Honesty and integrity;
- Exemplary stewardship of resources;
- Facilities, equipment, and technology that enhances student learning;
- Measuring outcomes that support continuous quality improvement; and
- Having fun and enjoying the work we do on behalf of the students we serve.

INSTITUTIONAL LEARNING OUTCOMES

State Fair Community College students, regardless of their status or particular program of study, will, upon the completion of their general and specialized studies, be able to:

Think critically

- Gather information by listening to and reading from varied sources
- Evaluate information as a guide to belief and action

Apply information to the solving of problems and decision making

- Broaden awareness and formulate new ideas

Communicate effectively

- Apply Standard English in speaking and writing to clearly express ideas
- Use language with clarity, coherence, and persuasiveness
- Recognize the role of nonverbal signals in communication

Behave responsibly

- Demonstrate personal and professional integrity and ethics
- Understand the importance and benefits of service
- Exhibit responsible citizenship

An Introduction to State Fair Community College

Value others

- Work cooperatively as part of a team
- Appreciate cultural diversity and its benefits
- Cultivate tolerance, civility and respect for others

Develop life skills

- Manage time and finances effectively
- Value lifelong learning
- Utilize workforce readiness skills
- Incorporate principles of a healthy lifestyle into daily activities

Utilize technology

- Demonstrate ability to adapt available technology to workplace or personal life

Investigate world processes

- Distinguish qualities and characteristics of social, economic and political systems
- Appreciate the world's natural and physical processes
- Explore the roots and expressions of culture

GOVERNANCE

State Fair Community College is a publicly supported comprehensive community college dedicated to offering educational opportunities to the communities it serves. The taxing district is comprised of the school districts of Benton and Pettis counties and the R-VI School District of Cooper County, Missouri. The college's service area includes 14 counties: Benton, Camden, Carroll, Cole, Cooper, Henry, Hickory, Johnson, Miller, Moniteau, Morgan, Pettis, Saline, and St. Clair. The college is governed by a six-member Board of Trustees. Members are elected from the district for terms of six years with two members being elected each even-numbered year. The board meets the fourth Monday of each month. Meetings are open to the public.

ACCREDITATION

SFCC has been affiliated with the North Central Association (NCA) of Colleges and Schools, 30 North LaSalle Street, Suite 2400, Chicago, Illinois, 60602-2504, 800-621-7440, since it was founded. Correspondence status was granted in 1968. Full accreditation was granted in 1976, 1981, 1988, and 1999. SFCC became accredited through admission to the NCA/Higher Learning Commission's Academic Quality Improvement Program (AQIP) in August 2005 and continues to be accredited on an annual basis.

POLICIES AND REGULATIONS

When appropriate, entire policies and regulations are listed in the catalog; however, in some instances, not all are printed in their entirety.

For complete and up-to-date policies and regulations, visit www.sfccmo.edu; select About SFCC and then Policies and Regulations.

NON-DISCRIMINATION

It is the policy of State Fair Community College not to discriminate on the basis of race, color, religion, gender, sexual orientation, age, disability, ancestry, national origin, or veteran status in its educational programs, activities or employment as required by law. SFCC is an equal opportunity employer. For questions or issues related to this policy please contact the SFCC Compliance Officer.

ACCESSIBILITY AND ACCOMMODATIONS

State Fair Community College welcomes participants with documented disabilities. The buildings on the campus are handicapped accessible. In order to accommodate special needs, the college requests a two-week notification by the participant in order to make necessary arrangements. If special accommodations are needed, a longer lead time can be required.

As required by the Americans with Disabilities Act, Section 504 and Title II, accommodations are provided to ensure equal opportunity for students with documented disabilities. If you have a disability that needs accommodations, contact the Access Counselor located in the Hopkins Student Services Center, Room 751 on the Sedalia campus or call (660) 530-5832 for an appointment. *(Taken from Policy 2100, 2110 and Regulations 2110, 2111, 2113 and 2114)*

SFCC IS SMOKE-FREE

State Fair Community College limits smoking and the use of tobacco products to personal vehicles parked or driven on designated college parking areas and roads. *(Taken from Policy and Regulation 5250)*

SFCC LOCATIONS and SITES

Sedalia
3201 W. 16th St., Sedalia, MO 65301
(660) 530-5800
www.sfccmo.edu

Clinton
1701 N. 2nd St., Clinton, MO 64735
(660) 383-1600
www.sfccmo.edu/clinton

Lake of the Ozarks
3797 Osage Beach Parkway, Osage Beach, MO 65065
(573) 348-0888
www.sfccmo.edu/lake

Whiteman Air Force Base
511 Spirit Blvd., Whiteman AFB, MO 65305
(660) 563-3358
www.sfccmo.edu/wafb

Warsaw
Warsaw High School
20363 Lane of Champions, Warsaw, MO 65355
(660) 438-7149

Admission and Enrollment

State Fair Community College is committed to providing a safe learning-centered environment for its students, employees and visitors. In order to implement the board's commitment to the open enrollment policy, the college will apply the following provisions in the admission of students.

First-time students
First-time students are legal residents of the United States and are beyond the age of compulsory attendance or at least 18 years old and no longer enrolled in high school. First-time students may apply for admission by submitting the following:

- Application for admission using the SFCC Web site, by contacting a site coordinator or visiting the Student Services Office at the Sedalia campus
- Application fee
- High school transcript showing date of graduation or GED certificate
- Placement test scores from an ACT, SAT, COMPASS or ASSET test taken within the past five years

Students who do not have a high school diploma or GED certificate may be eligible to participate in the Ability-to-Benefit program. Detailed information about this program is available from the Student Services Office. (*Taken from Regulation 2210*)

Transfer students
Transfer students have attended another college after high school. Transfer students in good academic standing with the college or university they last attended are eligible for admission with advanced standing. Transfer students admitted with a cumulative GPA that does not meet SFCC satisfactory academic progress requirements will enter on probation. Students suspended for disciplinary reasons from another college need to obtain an interview with the Vice President for Educational and Student Support Services prior to submitting an application. Transfer students may apply for admission by submitting the following:

- Application for admission using the SFCC Web site, by contacting a site coordinator or visiting the Student Services Office at the Sedalia campus
- Application fee
- High school transcript showing date of graduation or GED certificate unless you have a college degree
- Official transcripts from all colleges attended
    - All college credit earned from a country other than the United States must be translated into English on a course-by-course basis. Translation information is available in the Academic Records and Registrar's Office
- Placement test scores from an ACT, SAT, COMPASS or ASSET test unless you have completed 15 semester hours of college-level courses including completion of English Composition I and Intermediate Algebra with grades of C of higher (*Taken from Regulation 2210*)

Home-schooled students
Home-schooled students who are at least 16 years old and have completed a program of home schooling may apply for admission by submitting the following:

- Application for admission using the SFCC Web site, by contacting a site coordinator or visiting the Student Services Office at the Sedalia campus
- Application fee
- Official home school transcript or documents from a parent showing courses/credits completed with the date of completion or an official score report from an ACT assessment with a minimum composite score of 19 or an official GED transcript or certificate or a transcript from an accredited college or university showing the completion of a minimum of 15 semester hours of college level courses with at least a 2.0 GPA.

For more information about home-school students, see Missouri Annotated Statute 167.031. (*Taken from Regulation 2210*)

International students
International students are individuals who are NOT legal residents of the United States and are beyond the age of compulsory attendance or are at least 18 years old and no longer enrolled in high school. International students desiring admission to the college must meet the federal government requirements through the Student Exchange and Visitor Information System (SEVIS) to be granted an I-20. International students may apply for admission by submitting the following:

- Application for admission using the SFCC Web site, by contacting a site coordinator or visiting the Student Services Office at the Sedalia campus
- Application fee
- Official secondary school (high school) transcript in English showing date of graduation
- Official Statement of Financial Support (U.S. dollars) in English from an approved financial institution dated within three months of the date of application
- TOEFL scores
- Valid VISA papers
- Proof of health insurance coverage equivalent to or better than coverage offered through the college-affiliated International Student Health Insurance plan. The student will receive information about the International Student Insurance package from the Student Services Office if he or she does not have insurance. A student who does not have sufficient insurance and does not want to purchase coverage must sign a waiver prior to attending class
- Placement test scores from an ACT or COMPASS test taken within the past five years

New international students and exchange visitors must pay the SEVIS I-901 fee (generally $100) to be eligible to enter the United States. (*Taken from Regulation 2240*)

Visiting students
Visiting students are taking classes to transfer back to their regular college or university. Visiting students must have a minimum grade point average of 2.0 at their home institution. Visiting students may apply for admission by submitting the following:

- Application for admission using the SFCC Web site, by contacting a site coordinator or visiting the Student Services Office at the Sedalia campus
- Application fee
- Visiting Student Form
- Official transcripts showing completion of any prerequisite courses
- Official transcript from the home institution showing a minimum GPA of 2.0
- Placement test scores from an ACT, SAT, COMPASS or ASSET test taken within the past five years if needed to meet prerequisites (*Taken from Regulation 2210*)

Non-degree seeking students
Non-degree seeking students do not wish to pursue a degree or certificate or transfer credits to another institution. Non-degree seeking students may apply for admission by submitting the following:

- Application for admission using the SFCC Web site, by contacting a site coordinator or visiting the Student Services Office at the Sedalia campus
- Application fee
- High school transcript showing date of graduation or GED certificate unless you have a college degree
- Official transcripts showing completion of any prerequisite courses
- Placement test scores from an ACT, SAT, COMPASS or ASSET test taken within the past five years if needed to meet prerequisites

Student may change to degree-seeking status by declaring a major. (*Taken from Regulation 2210*)

Admission and Enrollment

Students wishing to audit a course
Students may audit when they wish to review or preview a course. Audited classes do not count as part of the regular load for financial aid or veteran's certification nor as hours earned in determining satisfactory academic progress. Audit students may apply for admission by submitting the following:

- Application for admission using the SFCC Web site, by contacting a site coordinator or visiting the Student Services Office at the Sedalia campus
- Application fee
- High school transcript showing date of graduation or GED certificate unless you have a college degree
- Official transcripts showing completion of any prerequisite courses
- Placement test scores from an ACT, SAT, COMPASS or ASSET test taken within the past five years if needed to meet prerequisites
- Complete the Request to Audit form at the time of enrollment (*Taken from Regulation 2210*)

Students seeking articulation credit
Students seeking articulation credit may receive up to 15 hours of credit upon completion of high school courses in a program which the college has an articulation agreement. Students must have a grade of B or higher in articulated courses. Students seeking articulation may apply for admission by submitting the following:

- Application for admission using the SFCC Web site, by contacting a site coordinator or visiting the Student Services Office at the Sedalia campus
- Application fee
- High school transcript (*Taken from Regulation 2210*)

High school students seeking advanced credit
Advanced credit may be earned by high school students under 18 but at least 16 years of age who have completed their sophomore year. Students must be ranked in the upper 50 percent of their high school class, or have maintained a cumulative grade point average of 3.0 on a 4.0 scale and have written approval from the high school counselor or principal. Up to 10 semester hours may be taken during the summer session. During a regular semester, an advanced credit student may enroll in a variable amount of credit depending upon the high school principal or counselor's recommendation. Students are not eligible to receive financial aid. High school students seeking advanced credit may apply for admission by submitting:

- Application for admission using the SFCC Web site, by contacting a site coordinator or visiting the Student Services Office at the Sedalia campus
- Application fee
- High school transcript
- Placement test scores from an ACT, SAT, COMPASS or ASSET test taken within the past five years if needed to meet prerequisites (*Taken from Regulation 2210*)

High school students seeking dual credit
Dual credit students are earning high school and college credits at the same time. Dual credit may be earned by students who have completed their sophomore year, have a cumulative grade point average of 3.0 on a 4.0 scale (as required by the Missouri Department of Higher Education), and who have been recommended by a high school counselor or principal. Students are not eligible for financial aid while in high school. High school students seeking dual credit may apply for admission by submitting:

- Application for admission using the SFCC Web site, by contacting a site coordinator or visiting the Student Services Office at the Sedalia campus
- Application fee
- High school transcript
- Placement test scores from an ACT, SAT, COMPASS or ASSET test taken within the past five years if needed to meet prerequisites (*Taken from Regulation 2210*)

High school students seeking early college admission
High school students seeking early college admission may enroll as full-time students in the final semester of their senior year. Permission for early entry must be secured from the high school counselor or principal. High school students seeking early college admission may apply for admission by submitting:

- Application for admission using the SFCC Web site, by contacting a site coordinator or visiting the Student Services Office at the Sedalia campus
- Application fee
- High school transcript
- Placement test scores from an ACT, SAT, COMPASS or ASSET test taken within the past five years if needed to meet prerequisites (*Taken from Regulation 2210*)

Returning students
Returning students who have not been enrolled at the college for two or more years must be readmitted in the Student Services Office at the Sedalia campus or at a site coordinator's office. The admission files of students who have not attended within five years are destroyed. Transcripted grades earned at SFCC or from previous transfer credit are retained. Files of students who applied for admission but did not enroll within a year will be destroyed. Students will need to submit another application, GED or high school records, college transcripts, and other documents that were in the student's file.

Application deadlines
For students applying for admission to regular programs of study, it is recommended that application procedures be completed by March 1 prior to a fall semester start date. Applications from new students are accepted up to and through the first week of the semester or part of term.

Allied health programs are selective admission programs and have specific application deadlines. Check with the Student Services Office for applications and deadlines. Applicants for some programs may be required to enroll in and attend specific preparatory workshops or to complete required prerequisite courses.

ASSESSMENT TESTING AND PLACEMENT

In order to ensure the success of students, mandatory assessment and placement is implemented through the following procedures:

- All students are required to complete a placement test, submit ACT or SAT scores, or complete prerequisite courses before enrolling.
- Placement, ACT and SAT scores will be accepted if taken within the past five years.
- If a student has completed at another college English and math requirements that serve as prerequisites for subsequent courses, SFCC requires a copy of the student's transcript prior to enrolling in English or math.
- The ASSET test is a pencil and paper test administered when deemed necessary by the testing or counseling staff.
- The COMPASS test is a computerized test, available by appointment in the Testing and Career Center. Testing is also regularly conducted at extended campus sites at Whiteman Air Force Base, Lake of the Ozarks, Clinton, and Warsaw. Prospective students should contact those sites for schedules for placement testing.
- Students taking placement tests must begin those tests at least two hours before the test site closes.
- A student must submit photo identification and a student identification number or Social Security Number for all placement testing.
- A grade of C or better must be obtained in developmental courses to satisfy the requirement and advance to the next level. If a student starts the sequence of developmental classes, he or she cannot take a placement test to "test out" of that class and advance to the next level.

- A student may retake COMPASS for placement if that student has completed a sequence of developmental courses or to change his/her selected developmental sequence of courses. The student will be required to pay the COMPASS retest fee.
- The COMPASS or ASSET placement test is free for the initial assessment. Either test, or combination of tests, may be taken twice in any semester; however, the student must pay the placement retest fee to take another placement exam.
- A student must wait one week before retaking a placement test.
- Test accommodations are arranged for students who have documented disabilities. For special testing accommodations, students should contact (660) 530-5800, ext. 7293.
- Placement testing is not required for the following:
  - Visiting students with signed approval forms from their home institution except when lacking a prerequisite English or math score or course;
  - Students who have completed 15 semester hours of college-level courses which include English Composition I and Intermediate Algebra or higher math, and who have a minimum 2.0 grade point average;
  - Unclassified (non-degree seeking) students taking courses for personal enrichment; except when enrolling in English, math, or courses that require prerequisite in English or math; or
  - Students who have previously completed a four-year degree.
- Students may appeal their placement in writing to the Dean of Academic Affairs, detailing support for variance from normal procedures. The dean may require a re-assessment, using either the tools specified above or other tools designed by the dean. The decision of the dean is final. *(Taken from Regulation 6410)*

ENROLLMENT

Enrollment information is available prior to the start of each enrollment period for new, current and returning students on the college's Web site, from the Student Services Office at the Sedalia campus or from a site coordinator at one of the extended campus locations.

RESIDENCY

Residency status for tuition assessment is determined by a student's permanent legal address at the time of application for admission. For dependent students under 21, this is the same as their parents' address. There are four classes of residency: in-district resident; Missouri resident; resident of other states; and international.

The difference in tuition assessed is due to the college district taxes levied and paid by residents of school districts within the SFCC district. Some students (or spouses/parents/guardians) live outside the district but own property in the district. They are classified as a Missouri resident (out-of-district) but are allowed credit annually for taxes paid to the district.

Resident status does not change during the semester nor during the time a student is continuously enrolled even if the student moves into the district, as long as the primary purpose for the move is to attend SFCC.

The following school districts are in the SFCC district:

- Cole Camp R-I
- Otterville R-VI
- Green Ridge R-VIII
- Sedalia 200
- Pettis County R-V at Hughesville/Houstonia
- Pettis County R- 12 at Dresden
- Smithton R-VI
- LaMonte R-IV
- Warsaw R-IX
- Lincoln R-II

All full-time active duty military personnel stationed on a Missouri military base, their spouse, and dependent children, are considered residents of the district for purposes of tuition assessment. The residency status of recently discharged veterans will be based on legal residency at the time of induction into military service or on residency established during service.

Students who have Permanent Resident Alien status and present a valid identification card from the United States Citizenship and Immigration Services (USCIS) will be granted residency status according to their permanent legal address in the state. *(Taken from Regulation 2220)*

Change of resident status
In order to change resident status, students must submit a written request as well as sufficient evidence to substantiate the change to the Director of Admissions. The Director of Admissions will review the evidence and determine whether the request is justified. Students may appeal the Director of Admissions decision using the college's grievance process found in Regulation 2160. *(Taken from Regulation 2220)*

TUITION, FEES AND BOOKS

Three things determine the tuition and fees a student pays each semester: residency (permanent legal address), the number of credit hours enrolled and the courses selected. Tuition and fees are subject to change depending upon financial exigency; however, the college's goal is to keep costs as affordable as possible.

Tuition and fees
Tuition and fees are established by the college's Board of Trustees. They are charged per semester hour. A detailed current tuition and fees listing is available online at www.sfccmo.edu or from the college. Tuition and fees are subject to changes and additions.

Waiver for prime time learners
Students age 60 or over may enroll for credit courses and receive a tuition waiver. Payment for special services fees, applicable lab fees, and for supplies and books are required. An identification card may be obtained at the Sedalia campus at the Financial Aid Office. The card also provides free admission to performances, dramatic presentations and athletic contests.

Book costs
Most courses will require purchasing textbooks. In addition, workbooks, study guides, and other extras may need to be purchased.

Refund of tuition, fees and laboratory fees
Tuition and fees will be credited to the student's account in full, if the student officially withdraws before the published obligation date.

The petition to withdraw from classes is available in the Student Services Office at the Sedalia campus, at a site coordinator's office or on mySTAR. All requests for refunds or credits after the refund period has ended must be made in writing. If due a refund, a check will be mailed to the student; however, deductions may be made from the refund for any financial obligation due to the college. Students may make refund appeals through the Student Grievance and Appellate Process as described in Regulation 2160.

Admission and Enrollment

FINANCIAL AID

The college offers a comprehensive financial aid program funded by federal and state agencies and private organizations. The aid programs include scholarships, grants, loans, and part-time employment. All students receiving federal financial aid must enroll in courses which lead to the completion of the specific degree or major they are pursuing.

Applying for financial aid

For scholarships students will need to complete the SFCC Scholarship Application by March 1 for the following fall award. For most state programs application must be made before April 1 for the fall semester. For federal grants, student loans and the work-study program the Free Application for Federal Student Aid (FAFSA) will need to be completed. This should be completed before June 1 to ensure all processing is completed before the fall semester starts.

For more information on applying for financial aid, visit the SFCC Web site or review information in the SFCC Financial Aid pamphlet. *(Taken from Regulations 2710, 2720, 2730, 2740, and 2760)*

Department of veterans affairs

State Fair Community College is approved for the enrollment of veterans, survivors, and dependents under Title 38 of the U.S. Code, and selected reservists under Title 10 of the U.S. Code. Students who qualify may receive additional information and assistance from the veteran's representative located in the Financial Aid Office. Enrolled veterans receiving benefits are certified to Veterans Affairs on a credit hour basis and rates of payment may vary. All persons seeking Veterans Affairs education benefits are required to comply with SFCC's satisfactory academic progress standards. *(Taken from Regulation 2750)*

ATTENDANCE

Regular student attendance is essential for college success. Although students are expected to attend all class sessions and report punctually, the instructor determines the attendance requirements for each class. These requirements will be included in the course syllabus. Students who enroll late may have missed classes which may be treated as absences. Failure to comply with the course attendance requirements as stated in the syllabus may result in a lower grade or administrative removal from the class. *(Regulation 2310)*

BASIC SKILLS/DEVELOPMENTAL COURSES

Although required of students to prepare them for entering college-level courses, basic skills (BSKL) courses do not apply as credit nor as hours earned toward a degree or certificate. Courses numbered below the 100 level (such as BSKL 064 Elementary Algebra) are called "developmental" because they focus on skills that need to be developed to achieve success in the classroom. Based on the results of placement testing, a developmental course may be a prerequisite for a college level course and must be completed with a grade of C or higher to advance to the next course in the sequence.

CREDIT BY EXAMINATION AND NON-TRADITIONAL EDUCATION

Students planning to transfer should check with the receiving institution regarding policy for accepting transfer of non-traditional education credit. College credit may be awarded by State Fair Community College for non-traditional education under the following conditions:

1. All courses for which credit by examination and non-traditional education is awarded must have equivalent courses in the college curriculum. Partial credit will not be awarded.
2. Students must submit the required documentation as defined by each department.
3. General education course credit will be awarded for credit by examination but not for non-traditional education.
4. Students must have been granted admission to the college prior to the evaluation of credits.
5. A maximum of 21 hours may be earned and applied for work experience. The total of all credit by examination and non-traditional education cannot exceed 30 hours earned and applied toward a degree.
6. The Registrar is responsible for final approval or disapproval.

Credit by examination
College Level Examination Program (CLEP) and Dantes Subject Standardized Tests (DSST) provide opportunity to earn academic credit for knowledge equivalent to that learned in the college classroom. These tests include general and subject examinations. SFCC uses American Council of Education (ACE) recommended scores for granting credit. SFCC does not accept CLEP or DSST credit to fulfill requirements for laboratory science or public speaking courses. Students must have a score report sent to the college to be evaluated for college credit. Students must pay a $25 per course transcripting fee to receive this credit.

Advanced placement
SFCC grants credit for Advanced Placement test scores of three or higher. Students must have a score report sent to the college to be evaluated for college credit. Students must pay a $25 per course transcripting fee to receive this credit.

Departmental exams
Departmental exams administered in major areas of study may provide an alternative to credit awarded for non-traditional education. Each academic department determines which courses have a test-out option and the minimum score to receive credit. An application to request a departmental exam must be submitted to the dean of that division. If the requirements to receive credit have been met, the paperwork will be forwarded to the Academic Records and Registrar's Office to be evaluated for college credit. To receive the credit, students must enroll in the course(s) and pay tuition and fees for the course(s). Normal tuition and fees apply to any credits awarded.

Academic Standards

Credit for armed service experience
Advanced placement credit may be granted for educational training earned while in the armed services, according to the American Council of Education (ACE) recommendations. The credit must be appropriate to the degree sought. Students must submit a military transcript to be evaluated for college credit. In some cases (e.g. the course(s) were taken many years ago), a military transcript may not be available. Students will need to contact the Academic Records and Registrar's Office to determine what other documents are acceptable to be evaluated for college credit. Students will receive two physical activity credits upon submission of a DD-214. These credits do not count toward the wellness requirement.

Credit for work experience
Credit may be awarded for work experience and may only be applied to courses in the student's degree major. Specific requirements may vary by academic department. However, for any credit to be awarded, students must satisfactorily complete a significant capstone project, such as a major paper reflecting how lessons learned in that work experience can be applied to the discipline. An application to request credit for work experience (with documentation) must be submitted to the dean of that division. If the requirements to receive credit have been met, the paperwork will be forwarded to the Academic Records and Registrar's Office to be evaluated for college credit. To receive the credit, students must enroll in the course(s) and pay appropriate tuition and fees. Normal tuition and fees apply to any credits awarded.

Credit for other non-traditional education
In some cases, credit in the student's major discipline may be awarded for workshops or industry certifications that are equivalent to college classes. For credit to be received, the workshops or industry certifications must meet the following criteria:

The learning was sponsored by a recognized, national or state organization; and, an application to request credit must be submitted to the dean of that division with validated documentation stating the course, knowledge, skills, competencies, credit/clock hours completed and/or certification.

If the requirements to receive credit have been met, the paperwork will be forwarded to the Academic Records and Registrar's Office to be evaluated for college credit. Students must pay a $25 per course transcripting fee to receive this credit. *(Regulation 6440)*

DEGREE PROGRAM STATUTE OF LIMITATIONS

The college catalog is effective in the fall semester.

A student may use for degree requirements the catalog in effect at the time of initial enrollment or any subsequent catalog provided:

- The catalog is dated no more than six years to the date the degree is to be conferred;
- The student enrolled in classes and earned academic credit during the time the chosen catalog was in effect;
- Only one catalog is used to determine curriculum. (To use a subsequent catalog a student must submit a Change of Major/Catalog Request form.)

Students who do not earn academic credit for four consecutive regular semesters (excluding summer) may only use the catalog in effect from the time of their re-entry. A student may not continue in the original program of study if the program was discontinued prior to re-entry. *(Taken from Regulation 2511)*

GRADE REPORTS

Final grades are available online a few days after the end of each semester or session. Questions about grades should be directed to the instructor first. Grades not questioned within 30 days will stand as recorded. Students may make grade appeals through the Student Grievance and Appellate Process as described in Regulation 2160.

GRADING SYSTEM

Credits are granted on a semester-hour basis. The following symbols and points are used:

A	Excellent (4 grade points per semester hour)
B	Good (3 grade points per semester hour)
C	Average (2 grade points per semester hour)
D	Below average (1 grade point per semester our)
F	Failing (no grade points)
P	Passing (no grade points)
N	No credit – Course waived
CR	Credit (no grade points)
W	Withdrawn
AU	Audit
U	Unfinished

A grade of U may be given by an instructor to indicate unfinished work or absence from a scheduled final examination if other work is of passing quality. After one regular semester, the instructor must either change the original grade or the U will automatically become an F. *(Taken from Regulation 2510)*

GRADUATION REQUIREMENTS

Students are responsible for applying for a degree/certificate one semester before the completion of that degree/certificate. The college does not automatically award degrees/certificates. The application for graduation is valid until the end of the spring semester each year. If all graduation requirements are not met, the student must reapply.

Requirements for a degree

The college offers four degrees, the Associate of Arts, the Associate of Arts in Teaching, the Associate of Science and the Associate of Applied Science. For a student to qualify for a degree the following must be met:

- Complete at least 64 credit hours of credit for the AA degree. These hours consist of 42 credit hours of specified general education credits plus 22 hours of electives. For the AAT, AS and AAS degrees, the student needs to complete the curriculum required for the specific degree and the general education requirements for that program.
- Complete at SFCC at least 15 credit hours toward the degree. Active duty military who participate in SOC (Serviceman's Opportunity College) may meet different residency requirements under terms of that agreement.
- Maintain a minimum cumulative grade point average of 2.0 and a 2.0 average for work completed at SFCC. Associate of Arts in Teaching students are required to have a 2.5 cumulative grade point average and complete all sections of the C-BASE exam with a 235 or higher on each section. Associate Degree nursing students are required to have a 2.5 cumulative grade point average.
- Take an exit examination. Tests dates are prior to the end of each semester.
- Complete an application for graduation after enrolling for the final semester and pay the graduation and exit exam fees in the Business Office.
- Attend commencement. If unusual circumstances do not allow the student to attend the commencement ceremony, the student must request approval in advance for a degree to be conferred in absentia. *(Taken from Regulation 2511)*

Academic Standards

Requirements for a Professional Certificate
The college offers Professional Certificates in various career areas. To qualify for a certificate the student must meet the following:

- Complete curriculum required for the specific certificate program.
- Complete at SFCC at least 15 credit hours toward the certificate.
- Maintain a minimum cumulative grade point average of 2.0 and a 2.0 average for work completed at SFCC.
- Complete an application for graduation after enrolling for the final semester and pay the graduation fees in the Business Office.
- Attend commencement. If unusual circumstances do not allow the student to attend the commencement ceremony, the student must request approval in advance for a certificate to be conferred in absentia. *(Taken from Regulation 2511)*

Requirements for honors graduation
Academic honors may be awarded at commencement to Associate of Arts, Associate of Arts in Teaching, Associate of Science, and Associate of Applied Science degree graduates, based upon courses completed and cumulative GPA at the end of the fall semester. Final designation of honors will be based upon cumulative GPA at the conclusion of the spring semester. Honors are awarded at two levels based upon all courses completed:

- Graduation with honors for a 3.6 to 3.84 cumulative grade point average
- Graduation with highest honors for a 3.85 to 4.0 cumulative grade point average.

Professional Certificate completers may graduate with distinction with a cumulative grade point average of 3.6 or higher. (*Taken from Regulation 2511*)

Requirements for participation in the commencement ceremony
The commencement ceremony is held in May each academic year. To participate, students must have either completed all degree or certificate requirements before the commencement date or be enrolled in sufficient hours (at the time the graduation list is finalized) to expect to complete requirements at the end of the spring semester. This includes the Exit Exam and the C-BASE Exam if applicable.

Exception to this rule is made for the practical nursing program students who are scheduled to complete their program requirements at the end of the summer session.

Only students with a cumulative GPA of at least a 2.0 at the end of the fall semester (or upon the successful completion of all coursework) may participate.

Regardless of when the degree is presented formally, the actual end-of-semester date that all requirements have been completed will be entered on the transcript. Diplomas are mailed to graduates at the end of June after a final degree audit is conducted. *(Taken from Regulation 2511)*

HONORS LIST

A President's list is published at the end of the regular spring and fall semesters. To qualify, a student must complete 12 or more GPA hours with a grade point average of 4.0.

A Dean's list is published at the end of the regular spring and fall semesters. To qualify, a student must complete 12 or more GPA hours with a grade point average of 3.5 - 3.99.

The published lists are determined by a student's standing two weeks after the spring and fall semesters end.

MEDICAL WITHDRAWAL

A student may request and be considered for a medical withdrawal when extraordinary circumstances relating to either physical health or mental health difficulties. Documentation must support that the illness or injury (medical) prevents a student from continuing his or her classes, and incompletes or other arrangements with the instructors are not possible. The following documentation is needed to start the process:

1. Submit letter petitioning for a medical withdrawal to the Access Counselor and it will be forwarded to the appropriate office for review. The letter must include:
   - How the student has addressed the issues with the instructors or with the Access Office prior to the issue which led to the need for a withdrawal,
   - All treatment that the student has received,
   - Activities which demonstrate the student's inability to manage or cope with the issues which led to the request for a medical withdrawal, and
   - The student's current address and telephone number(s).
2. A letter from the health care provider(s) who provides treatment to the student for the illness or injury. If the student had multiple health care providers, each provider would need to submit a letter. To maintain confidentiality, the letter(s) can be placed in a sealed envelope, addressed to the Access Counselor and mailed to the Student Services Office. The letter from the provider should include the following:
   - Provider's name, address, and telephone number;
   - Diagnosis, treatment modality used;
   - Assessment of the student's ability to manage or cope with the issues which led to his/her withdrawal;
   - Assessment of the student's present ability to handle college life (e.g., academics and independent living);
   - Anticipated date of return to school, and the last date the student was able to attend class; and
   - Follow-up recommendations (e.g., reduced academic load, medical treatment, or continued counseling services). *(Regulation 2112)*

MILITARY WITHDRAWAL

Students called into service of the United States pursuant to 32 U.S.C. 502 (f)(1) or the authority of 10 U.S.C. 12301 (d) or 10 U.S. C. 12304 or any such call or order by the President of the United States or the Congress or the governor, to active service for training, prior to the completion of the semester or similar grading period, that student will be eligible for:

- A complete refund of all tuition and incidental fees for that semester, or
- An award of a grade of "incomplete."

Students choosing Option 2 must complete the course work to the satisfaction of the course instructor and the institution. If course work is not completed within six months of discharge or release from active military service, the student will receive a failing grade for the class. *(Policy 2180)*

PASS/FAIL CREDIT

Pass/Fail credit is granted for some credit courses. No more than six hours of pass/fail credit may be applied to a degree or certificate. Course numbers below 100 do not apply toward a degree or certificate. This regulation does not apply to some Allied Health programs that use Pass/Fail for required courses. *(Taken from Regulation 2510)*

Academic Standards

REPEATING COURSES

Students can repeat any course regardless of the previous grade earned. The original course(s) and grade(s) earned as well as the repeated course(s) and grade(s) earned will be printed on the SFCC transcript. Regardless of how many times the course is repeated, the highest (best) grade is used to calculate the SFCC institutional GPA (SFCC courses) and cumulative GPA (all grades earned at all colleges). The repeated course with the lowest grade will be annotated with an E on the SFCC transcript indicating that the grade is *excluded* from the GPA calculation. The repeated course with the highest grade will be annotated with an I on the SFCC transcript indicating that the grade is *included* in the GPA calculation.

The following courses may be taken multiple times and do not count as repeats. Check with the Registrar if you have questions about repeating these courses.

- PEAC 124
- PEAC 125
- WELL 118
- WELL 119
- SPTH 115
- OADM 123
- Internships
- Problems classes

Students should be cautioned that repeating courses may impact financial aid received. Always check on the repeat policy of a funding source (including federal grants and loans, scholarships, A+, WIA, TRA, Vocational Rehabilitation, employer reimbursement, etc.) before enrolling to repeat a course. In some instances, students could be responsible for the payment of the tuition and fees of the repeated course.

SCHEDULE CHANGES

Add a course
The last day to add a course, (and whether or not instructor permission or signature is required) depends on the length of the course. Students should refer to the Academic Calendar in mySTAR to determine the last day to add a course.

Courses can be added before the start date by logging into mySTAR, sending an e-mail to the Academic Records and Registrar's Office with appropriate information, or completing a Petition to Change Registration form and forwarding it to the Academic Records and Registrar's Office. The form can be found online in mySTAR.

Courses can be added after the start date by logging into mySTAR until the published Web close date, sending an e-mail to the Academic Records and Registrar's Office with appropriate information, or completing a Petition to Change Registration form and forwarding it to the Academic Records and Registrar's Office. The form can be found online in mySTAR. Online classes require instructor permission to add after the class has started.

Drop a course or withdraw from all courses
Students are expected to complete the courses for which they enroll. Failure to properly drop or withdraw from classes will result in a grade of F and may include the payment of tuition and fees.

Dropping below full-time or half-time enrollment status may jeopardize insurance, financial aid, scholarships, and athletic participation eligibility. Students who drop a course because of a concern regarding a grade are encouraged to consult with the instructor prior to dropping the course. The last day to drop a course depends on the length of the course. Students should refer to the Academic Calendar in mySTAR to determine the last day to drop a course.

Courses can be dropped before the start date by logging into mySTAR, sending an e-mail to the Academic Records and Registrar's Office with appropriate information, or completing a Petition to Change Registration form or Complete Withdrawal form and forwarding it to the Academic Records and Registrar's Office. The forms can be found online in mySTAR.

Courses can be dropped after the start date by logging into mySTAR until the published Web close date, sending an e-mail to the Academic Records and Registrar's Office with appropriate information, or completing a Petition to Change Registration form or Complete Withdrawal form and forwarding it to the Academic Records and Registrar's Office. The forms can be found online in mySTAR.

Courses may be dropped until the official last date to withdraw. The instructor's signature and last date of attendance are required to drop a course after the 100% refund period. Courses dropped before or during the 100% refund period will not appear on a transcript. Courses dropped after the 100% refund period will appear on a transcript with a grade of W. (*Taken from Regulation 6470*)

STUDENT ACADEMIC PROGRESS

Students of the college are expected to make satisfactory academic progress. Students admitted to SFCC as transfer students must also meet satisfactory academic progress requirements or they may enter on probation. Both grades earned and hours attempted and completed are considered. In the calculation of grade point average (GPA), one measure of satisfactory progress, GPA hours, will include all course credit hours for which the student is assessed grades of A, B, C, D or F.

Satisfactory progress is defined as follows:

- Upon completion of 12 semester GPA hours – a minimum 1.50 cumulative grade point average
- Upon completion of 24 semester GPA hours – a minimum 1.75 cumulative grade point average
- Upon completion of 36 semester GPA hours – a minimum of 1.85 cumulative grade point average
- Upon completion of 48 semester GPA hours – a minimum of 2.0 cumulative grade point average

Academic review

- If a student has not maintained satisfactory progress, he/she will be placed on academic probation and allowed to re-enroll in a limited number of hours; however, the student will be assigned to work with a counselor during the subsequent semester. The counselor will use the resources of the college in an effort to assist the student in performing in a more satisfactory manner.
- A student will be allowed to re-enroll after a second semester of less than satisfactory progress, but will be continued on academic probation. However, the assigned counselor by or before the end of the twelfth week of a term or its equivalent will, in a written report to the Vice President for Educational and Student Support Services, detail intervention steps taken and the progress being made by the student.
- A student will normally be suspended for at least one regular semester after a third consecutive semester of less than satisfactory progress. A second suspension will result in the student being suspended for one year.
- A suspended student may be readmitted after the Vice President for Educational and Student Services reviews the circumstances of the student's case. Re-admission in such a case is contingent upon the student's ability to demonstrate that the conditions that precipitated the unsatisfactory progress have been corrected. *(Regulation 2530)*

Academic Standards

STUDENT CLASSIFICATION

Students are classified as either freshmen or sophomores. Freshmen have earned less than 30 semester hours. Sophomores have earned 30 semester hours or more.

STUDENT COURSE LOAD

Full-time students generally take from 12 to 19 semester hours each 16-week semester of the regular academic year and six to 10 semester hours during the 8-week summer session.

Part-time students generally take 11 semester hours or less each 16-week semester of the regular academic year and five semester hours or less during the 8-week summer session.

Students requesting to exceed the maximum 19 semester hours during the 16-week semesters and 10 semester hours during the 8-week summer session must submit a Student Overload Request form to the Registrar. Consideration of the request is given to graduating students and those with a 3.0 or higher cumulative GPA.

TRANSCRIPTS

An academic record (transcript) is permanently maintained for each student who enrolls at State Fair Community College.

A written request with the student's signature is required for an official transcript. A student who still has access to his or her mySTAR account may request an official transcript online through the Student tab. Otherwise, a written request must be made on a Transcript Request form in person, by mail, or by fax. The Academic Records and Registrar's Office cannot accept transcript requests by telephone or e-mail. Transcript requests are processed within two business days once a request and payment is received. A hold on an account prevents the release of transcripts.

Cost for an official transcript
A processing fee per transcript request applies for all transcripts. Please note that some institutions do not consider faxed copies official. Payment can be made via check (payable to SFCC), cash, money order, or credit/debit card (Visa, Master Card, or Discover accepted). Transcripts will not be processed until payment is received. A detailed current tuition and fees listing is available online at www.sfccmo.edu or from the college.

42-hour general education block
Students who have not completed an Associate of Arts or Associate of Arts in Teaching degree but have completed the 42-hour general education block and want this annotated on their transcript must make the request at the time the transcript request is made.

Unofficial transcripts
State Fair Community College does not issue unofficial transcripts. A student who still has access to his or her mySTAR account may print an unofficial transcript through the Student tab.

TRANSFER OF CREDIT

Students who have attended other colleges (including dual credit courses taken while in high school) must request that an official transcript be sent to State Fair Community College. The transcript can be mailed to the SFCC Academic Records and Registrar's Office, 3201 West 16th Street, Sedalia, MO 65301; it can be brought to the Student Services Office at the Sedalia campus or to an extended campus site in a sealed

envelope from the sending college's registrar's office; or, it can be faxed from the sending college registrar's office with a cover sheet to (660) 596-7472. Any other form of transcript will be considered "unofficial" and will not be accepted for transfer credit. Unofficial transcripts can be used for advising purposes only. Official transcripts are required to transcript credit.

Credit is evaluated and transcripted from colleges that are accredited by a national or regional association (e.g. North Central Association of Colleges and Schools). For information regarding these associations, contact the SFCC Academic Records and Registrar's Office. Courses completed from colleges that are not accredited by one of the national or regional associations may be considered for college credit. Course descriptions or course syllabi must be submitted to the appropriate dean for review. The dean's decision is final and may be made in consultation with the department.

All grades (except withdrawals) are transcripted. When a student repeats an equivalent transfer course at SFCC, the higher of the two grades will be used to calculate hours earned and the GPA. The repeated course and grade remain on the SFCC transcript.

Transfer courses for which SFCC has an equivalent course will be transcripted with the SFCC subject code, course number and credit hours. If there is no equivalent SFCC course, the transfer course will be coded on the student's transcript to indicate which degree requirement it fulfills. Developmental courses (numbered below 100) are only transcripted if there is a direct equivalency to an SFCC developmental course. Grades earned in developmental courses are included in a student's GPA. Equivalency guides for colleges that SFCC accepts transfer credit from can be found at www.sfccmo.edu.

Official transcripts are evaluated and transfer credit is entered by the Registrar on the student's SFCC transcript. This process usually occurs within a few weeks of receiving the transcript. Students transferring credit over 15 years old may be asked to provide course descriptions or course syllabi to determine SFCC course equivalency. Some departments have time limits for transfer courses. A course may transfer as an SFCC equivalent but because of its age may not be applicable to a specific major. Students can view the credit that has been accepted on mySTAR. If a student does not agree with the evaluation of a course, he/she may submit a catalog course description or course syllabus from the sending college to have the course re-evaluated by the Registrar. If the appeal regarding the disputed course is not resolved, the student may appeal using the college's Grievance and Appellate Process (*Regulation 2160*). Credit earned by credit-by-exam (CLEP, DSST or AP) and from non-traditional sources (military experience, standardized occupational testing or department exams) are reviewed by the Registrar and credit may be granted if applicable.

SFCC is a Servicemembers Opportunity College (SOC). Under this status, SFCC agrees to work with other SOC schools by accepting all credits from these schools. SFCC also agrees to provide in-district tuition rates for military members wanting to attend SFCC.

Transfer credit is awarded for courses completed at colleges and universities outside the United States that are accredited or approved by the Ministry of Education (or other appropriate government agency) of the country in which they are located. The transcripts must be translated into English and evaluated course-by-course by one of the recognized transcript evaluation services. A student may be asked to provide course descriptions or course syllabi to determine course equivalencies. Contact the Academic Records and Registrar's Office for information.

Any irregularities in transcripts that are received will be checked and if a document is determined to not be authentic, admission will be denied and enrollment at SFCC will be canceled.

All college transcripts must be on file prior to the end of the first term of enrollment. An enrollment hold will be placed on the student's record until all official transcripts have been submitted. *(Regulation 6610)*

Student Code of Conduct

PROHIBITED CONDUCT

The following acts will subject a student to college disciplinary action:

- Interference with the academic freedom or the freedom of speech of any student, employee, or guest of the college.
- Violence against or forcible interference with the freedom of movement of any member or guest of the college community.
- Interference with or obstruction of any college-sponsored or -approved function or activity.
- Behavior which infringes upon the rights of others, endangers their well-being or safety, or results in personal injury to others.
- Disturbing the peace on college premises.
- Failure to comply with the proper request of college officials acting in performance of their duties or to identify oneself to these officials when asked.
- Participating in or contributing to the unauthorized use of college property or unauthorized entrance into college buildings, including, but not limited to intentionally or wantonly causing damage to college or personal property.
- Theft of personal or college property or having in one's possession books or other library materials not properly checked out of the library.
- Knowingly furnishing false information to the college, including, but not limited to, alteration, misuse or unauthorized use of college identification cards, records or documents.
- Possession or use of weapons on college property (except for commissioned peace officers attending classes, who will be permitted to carry their firearms if so required by their department regulations). Weapons include any object or substance designed to inflict a wound, cause injury or incapacitate, including but not limited to all firearms, pellet guns, switchblade knives, knives with blades more than four inches in length, and any inappropriate use of chemicals.
- Use, possession or distribution of alcoholic beverages and/or illegal drugs and controlled substances on college premises or at any college-sponsored activity, including appearing on college premises while under the influence of alcohol or drugs/controlled substances.
- Violation of federal and state law or local ordinances on college premises, especially when such violation adversely affects the college and/or members of the college community.
- Inappropriate use of the college computer systems – downloading material that is copywrited, visiting pornographic sites, etc.
- All forms of academic dishonesty, including the following (See *Academic Honesty Policy and Regulation 6480):*
    - Plagiarism – the intentional use of the ideas or words of another as one's own in a paper or other academic assignment;
    - Cheating during examinations, whether by copying from a fellow student or by using information in the form of unauthorized aids brought to the examination;
    - The submission of work for an assignment that has been prepared by another student;
    - Submission of a single paper to fulfill requirements in two courses without prior approval of the instructors in both courses; or
    - Using a false name or signing the name of another individual without proper authorization in connection with any course work.
- Signing the name of another individual without proper authorization on any college form or using a false name or another person's identification card without proper authorization.
- Intentional disregard of board policies, college regulations, college procedures or college procedures applicable to students.
- Using tobacco products on campus other than designated areas.

DISCIPLINARY ACTION

Disciplinary action which may be imposed by the Vice President for Educational and Student Support Services or his/her designee:

- **Warning** – An oral explanation of the particular violation of the Student Code of Conduct to the student by the Vice President for Educational and Student Support Services along with notice that further disregard of the code will be cause for further disciplinary action.
- **Educational sanctions** – an assigned written paper related to the issue of violation.
- **Fines** – monetary fines as a matter of consequence for inappropriate actions.
- **Community service** – assigned activity with related service hours within the SFCC community.
- **Disciplinary reprimand** – Written notification to a student from the Vice President for Educational and Student Support Services regarding violation(s) of the Student Code of Conduct, warning that repeated infractions may result in more severe disciplinary action. A record of the action will be kept in the office of the Vice President for Educational and Student Support Services.
- **Restitution** – Requirement that the charged student pays for loss of, theft of, or damages to college property. Restitution may be combined with other appropriate disciplinary actions.
- **Disciplinary probation** – A period of conditional attendance of college classes not to exceed one semester during which a student who has violated the Student Code of Conduct is given the opportunity to demonstrate that he/she can become a responsible member of the college community by meeting certain conditions which the Vice President for Educational and Student Support Services or a Hearing Committee will specify.
  - The student will be notified that any violation of the conditions of probation may result in suspension;
  - At the end of the probation period, the student's case will be reviewed by the Vice President for Educational and Student Support Services. If all conditions of the probation have been met satisfactorily, the student will be removed from probation; and
  - Students on disciplinary probation will not represent the college in any extracurricular activities.
- **Suspension** – Termination of a student's enrollment, denial of further enrollment, and prohibition from participation in a college-sponsored activity for a period of up to one year. During the period of suspension, the suspended individual is not a student and may not participate in any activities of recognized college organizations. Further, the suspended individual will be denied all rights and privileges which are accorded to students in good standing, and the student's identification card will be voided.

  When the Vice President for Educational and Student Support Services or a Hearing Committee recommends that a student be suspended, the Committee or Vice President will specify the date at which the student subsequently may apply for readmission, which in no case will be later than one year after the effective date of the suspension. Appropriate notation will be made on the student's academic record. The suspended individual is responsible for initiating application for readmission. Such application will be reviewed by the Vice President for Educational and Student Support Services who, at his/her discretion, may recommend to the President that such application be denied;

  - Fee refunds will be determined on the same basis as with voluntary in-semester withdrawals;
  - Grades will be determined in accordance with the regular withdrawal policy; and
  - Once the decision has been made to suspend a student, the suspension may begin immediately or, especially if the decision is made toward the end of a semester, suspension may become effective at the beginning of the following semester.

  Should suspension be thus deferred, the student will be on disciplinary probation until the effective date of suspension.

Student Code of Conduct

- **Expulsion** – Suspension from the college for an indefinite period of not less than two years. Expulsion is the most serious disciplinary action which may be imposed and will be recommended by the Vice President for Educational and Student Support Services or a Hearing Committee only in instances involving the gravest violation of the Student Code of Conduct, or involving a student who has previously been placed on suspension and who, after the suspension period, again violates the Student Code of Conduct.

  An expelled individual will not be permitted to enroll unless the President approves readmittance, and no request for readmittance will be considered until at least two years after the date of expulsion; and a notation of the expulsion will be made on the individual's permanent record (including the date of expulsion).

Disciplinary action which may be imposed by the president without a hearing summary suspension: Suspension of five school days which takes effect immediately without a hearing upon the order of the President. This action may be taken under either of two conditions:

- If the student repeatedly fails to comply with the request of the Vice President for Educational and Student Support Services to meet or discuss allegations that the student has violated the Student Code of Conduct; or
- If, pending a hearing, the President believes that the continued presence of the student would seriously disrupt the operation of the college or constitute a danger to the health, safety, or welfare of the student or other persons or to the records or other physical property of the college.

Ordinarily, summary suspension will not remain in force more than five days. However, if the college has initiated formal disciplinary proceedings and diligently pursues each step until its conclusion, summary suspension may be continued until the proceedings are completed.

Student's right to appeal disciplinary action:

- The student who has received a disciplinary action decision from the Vice President for Educational and Student Support Services, a Hearing Committee, or the President has the right to appeal that decision to the next level of authority.
- A student may appeal a disciplinary decision by the Vice President for Educational and Student Support Services to the President for a hearing before the Hearing Committee. A decision by the Hearing Committee may be appealed to the President. The President shall have the final authority in any disciplinary decision.
- A student who wishes to appeal a disciplinary decision must submit an appeal in writing to the Vice President for Educational and Student Support Services outlining the basis for the appeal and do so within seven class days of the original decision.
- Only the recipient of disciplinary action has the right to appeal.
- Decisions will be communicated to the student via certified mail within three days of the decision. *(Regulation 2610)*

ACADEMIC HONESTY POLICY

State Fair Community College values the academic integrity of its curriculum and the commitment of its faculty and students to uphold it in all teaching and learning processes. The following acts of academic dishonesty will not be tolerated:

- Plagiarizing any information,
- Cheating in any form, or
- Falsifying any information provided to the college.

See Regulation 6480 for penalties imposed. *(Policy 6480)*

CHILDREN IN THE CLASSROOM

Students and staff members should not bring children to the classroom. A day care program is available at the Sedalia campus; however, it is not a drop-in service.

CHILDREN IN THE LIBRARY

Children under the age of eight must be supervised by a parent or a caregiver at all times. Children ages nine-12 may be unattended during library hours for no more than two hours with the stipulation that parents or caregivers must sign in children at the circulation desk and provide required contact information. The library staff is not responsible for the care, management, or safety of children in the library. Child safety and appropriate behavior is the responsibility of the parent or caregiver. Library staff has the right to return children to their parents or caregivers at any time. Parents/caregivers are financially responsible for damaged materials. *(Taken from Policy 6510)*

COPYRIGHT POLICY

The Board of Trustees intends that all members of the college community adhere to the provisions of United States Copyright Law (Title 17, U.S. Code). Copyrighted materials may be used in the preparation or delivery of instruction only after obtaining permission or determining that the doctrine of "Fair Use" is applicable. Employees and students are expected to be familiar with the "Fair Use" doctrine outlined in the Copyright Act of 1976, the TEACH Act of 2001, and other statutes governing the use of copyrighted works. Full text versions of these laws and "Copyright Best Use Practices" can be found in the Donald C. Proctor Library on campus. Members of the college community who willfully disregard the copyright policy do so at their own risk, assume all liability, and may face disciplinary action. Students must also comply with copyright laws and guidelines. Failure to comply may result in disciplinary action against the student. *(Policy 6240)*

DRUGS AND ALCOHOL AND TOBACCO PRODUCTS POLICY

The following policy is adopted in compliance with the Drug-Free Schools and Communities Act Amendments of 1989. *(Policy 2830)*

Illegal drugs
The unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited while in a college vehicle, on college property, at a college-sanctioned activity, or on the job while an employee of SFCC. The term "controlled substance" refers to any illegal substance, to the illegal use of alcohol, and/or to controlled prescriptive pharmaceutical products.

Alcohol
The use or possession of alcohol is prohibited while in a college vehicle, on college property, at a college-sanctioned activity, or on the job while an employee of SFCC.

Tobacco products
Effective June 1, 2006, smoking and tobacco use are only permitted within vehicles parked or driven on designated college parking areas and roads. *(Taken from Policy and Regulation 5250)*

FIREARMS AND WEAPONS POLICY

The presence of firearms and weapons poses a substantial risk of serious harm to college students, staff and community members. Therefore, possession of firearms and weapons is prohibited on college premises at all times except for law enforcement officials in the line of duty. As used in this policy, the phrase *college premises* include all college buildings and grounds. This prohibition also extends to the sites of college activities, whether or not those activities are conducted on college property. Instructors teaching firearms or hunter safety classes must report the need for students and/or instructors to carry firearms or weapons for instructional purposes to the Vice President for Educational and Student Support Services at least 24 hours prior to the first day of class.

Individuals found to be in violation of this policy will be dealt with severely. Students will be disciplined up to and including expulsion. Law enforcement officials will be notified and the individual violating this policy will be directed to leave the college premises. Non-students violating this policy will be barred from all college premises and college activities for a period of one year. Subsequent violations by the same individual will result in a permanent bar from college premises and college activities. Employees who violate this policy will be subject to discipline up to and including dismissal.

Student Code of Conduct

Student participation in college-sanctioned gun safety courses, student military or ROTC courses, or other college-sponsored firearm related events does not constitute a violation of this policy, provided the student does not carry a firearm or other weapon into any building, college transportation vehicle, or onto the premises of any other activity sponsored or sanctioned by college officials. In addition, persons passing through college property for purposes of dropping off or picking up a student do not violate this policy if they possess a lawful permitted weapon in the vehicle during this time. *(Policy 1332)*

HARASSMENT POLICY

The college prohibits any and all forms of harassment and discrimination because of race, color, sex, national origin, ethnicity, disability, or sexual orientation.

It shall be a violation of college policy for any student, teacher, administrator, or other college personnel to harass or discriminate against a student through conduct of a sexual nature, or regarding race, color, national origin, ethnicity, disability, sexual orientation.

It shall also be a violation of college policy for any teacher, administrator, or other college personnel to tolerate sexual harassment or harassment because of a student's race, color, sex, national origin, ethnicity, disability, sexual orientation, as defined by this policy, by a student, teacher, administrator, other college personnel, or by any third parties who are participating in, observing, or otherwise engaged in activities, including sporting events and other extracurricular activities, under the auspices of the college.

"Harassment" is defined as any verbal, written, or physical conduct that a person knows or has reasonable grounds to know would intimidate, demean, or degrade an individual's or group's character, self-worth, or dignity.

"Harassment" is further defined as conduct that has the effect of limiting or denying equal opportunity or treatment and that is conducted in disregard for an individual's or group's human or civil rights and that may result in their mental, emotional, or physical discomfort, ridicule, or harm. Offensive language or behavior that interferes with a person's employment, educational status, or performance or that otherwise creates a hostile environment shall fall within the meaning of harassment.

Threats or other forms of intimidation or retaliation against complaining witnesses, other witnesses, any reviewing officers, or any review panel shall constitute a separate violation of this policy, which may be subject to direct administrative action or judicial action.

For purposes of this policy, the term "college personnel" includes trustees, college employees, agents, volunteers, contractors, or persons subject to the supervision and control of the college.

The college will act to promptly investigate all complaints, either formal or informal, verbal or written, of harassment or discrimination because of race, color, sex, national origin, ethnicity, disability, sexual orientation; to promptly take appropriate action to protect individuals from further harassment or discrimination; and, if it is determined that harassment or discrimination occurred, to promptly and appropriately discipline any student, teacher, administrator, or other college employee who is found to have violated this policy, and/or to take other appropriate action reasonably calculated to end the harassment/discrimination. *(Policy 2130)*

CAMPUS CRIME AND SECURITY

State Fair Community College shall develop and maintain policies in accordance with the Crime Awareness and Security Act of 1990, as amended in 1992. A full report on campus crime shall be completed and published annually and distributed to all new students. In addition, this report is available in its entirety in the Student Services Office and on the SFCC Web site at http://www.sfccmo.edu/pages/259.asp.

Main campus sites have automated lights for the parking areas. They are on full brightness throughout dusk until one-half hour after evening classes end when classes are in session. In addition, walk lights, parking lot lights and interior and exterior building lights operate from dusk to dawn at most SFCC locations.

An evening security guard is on duty from 5-10 p.m. Monday through Thursday while classes are in session at the Sedalia campus. The security guard and safety and security coordinator have no power of arrest but are available to assist in summoning law enforcement personnel or to report other incidents that infringe on student or employee safety. At off-campus sites, the site director or coordinator is responsible for security and should be contacted in the case of a perceived threat to security.

CRIME REPORTING POLICY

Any individual at any SFCC campus location who is a victim of or observes any criminal activity should call 911 immediately, from either a campus phone or another phone. Public phones for emergency communication are located on the Sedalia campus in these areas:

- Hopkins - north entrance
- Fielding/Heckart - connecting hallway
- Yeater - off main lobby near TRiO office
- Stauffacher - across from north theatre entrance
- Davis Center - two phones-southeast corner on both upper and lower levels

Persons reporting criminal incidents should provide as much information as possible including location, nature of injuries, description of persons involved, and a brief report on the incident.

Once the 911 call is complete, notify campus safety and security by calling extension 7110 from a Sedalia campus phone or (660) 596-7110 from other phones to report an incident.

Report non-emergency situations by calling extension 7110 from a Sedalia campus phone or (660) 596-7110 from other phones or by e-mailing safety@sfccmo.edu.

COMMUNICABLE DISEASES POLICY

A student shall not attend classes or other college-sponsored activities, if the student (1) has, or has been exposed to, an acute (short duration) or chronic (long duration) contagious or infectious disease, and (2) is liable to transmit the contagious or infectious disease. The student may not return to class or college activities unless the student has demonstrated to the Vice President for Educational and Student Support Services, based upon medical evidence, that the student:

- No longer has the disease,
- Is not in the contagious or infectious stage of an acute disease, or
- Has a chronic infectious disease that poses little risk of transmission in the classroom environment with reasonable precautions.

The Vice President for Educational and Student Support Services may require any student suspected of having a contagious or infectious disease to be examined by a physician and may exclude the student from classes, in accordance with the procedures authorized by this policy, so long as there is a substantial risk of transmission of the disease in the college environment.

A student who has a chronic infectious disease, and who is permitted to attend classes, may be required to do so under specified conditions. Failure to adhere to the conditions will result in the student being excluded from classes. A student who has a chronic infectious disease and who is not permitted to attend classes or participate in college activities will be provided instruction in an alternative educational setting in accordance with college policy on Equal Educational Opportunity.

Students Right to Know

Students with acute or chronic contagious or infectious diseases have a right to privacy and confidentiality and should register the health issue with the Vice President for Educational and Student Support Services. Only staff members who have a medical reason to know the identity and condition of such students will be informed. Willful or negligent disclosure of confidential information about a student's medical condition by staff members will be cause for disciplinary action. *(Policy 2810)*

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA) GUIDELINES

The Family Educational Rights and Privacy Act of 1974 helps protect the privacy of your education records. The act provides for the right to inspect and review education records, the right to seek to amend those records, and the right to limit disclosure of information from the records. The intent of the legislation is to protect your rights and to ensure the privacy and accuracy of education records. The act applies to all institutions that are recipients of federal aid administered by the Secretary of Education.

What rights does FERPA afford you with respect to your education records?

- The right to inspect and review your education records within 45 days of the day the college receives a request for access.

  You should submit to the Registrar a written request that identifies the record(s) you wish to inspect. The Registrar will make arrangements for access and notify you of the time and place where the records may be inspected. If the records are not maintained in the Academic Records and Registrar's Office, the Registrar will advise you of the correct official to whom the request should be addressed.
- The right to request an amendment to your education records that you believe are inaccurate or misleading.

  You may ask the college to amend a record you believe is inaccurate or misleading. You should write the Registrar, clearly identify the part of the record you want changed, and specify why it is inaccurate or misleading. If the college decides not to amend the record as requested, the college will notify you and advise you of your right to a hearing regarding the request for amendment. Additional information regarding the hearing will be provided when you are notified of a hearing.
- The right to consent to disclosures of personally identifiable information contained in your education records, except to the extent that FERPA authorizes disclosure without consent.

  One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the college in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the college has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.
- The right to file a complaint with the U.S. Department of Education concerning alleged failures by the college to comply with the requirements of FERPA.

  The name and address of the office that administers FERPA is: Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4605

Who is protected under FERPA?

- Students who are currently or formerly enrolled, regardless of their age or status in regard to parental dependency
- Students who have applied to but have not attended an institution and deceased students do not come under FERPA guidelines.
- Parents of students termed as "dependent" for income tax purposes may have access to the student's education records. A copy of the parent's most recent federal income tax return, on which the parents declared the student as a dependent, must be submitted to the Academic Records and Registrar's Office to document "dependency."

What are education records?

With certain exceptions, an education record is any record (1) from which a student can be personally identified and (2) maintained by the college. You have the right of access to these records. Education records include any records in whatever medium (handwritten, print, magnetic tape, film, diskette, etc.) that are in the possession of any school official. This includes transcripts or other records obtained from a school at which a student was previously enrolled.

What is not included in an education record?

- Sole possession records or private notes held by school officials that are not accessible or released to other personnel;
- Law enforcement or campus security records that are solely for law enforcement purposes and maintained solely by the law enforcement unit;
- Records relating to individuals who are employed by the institution (unless contingent upon attendance);
- Records relating to treatment provided by a physician, psychiatrist, psychologist, or other recognized professional or paraprofessional and disclosed only to individuals providing treatment; and
- Records of an institution that contain information about an individual obtained only after that person is no longer a student at that institution, i.e., alumni records.

What is directory information?

SFCC may disclose information about you without violating FERPA if the college has designated that information as "directory information." Directory information is not generally considered harmful or an invasion of privacy if disclosed. Unless you request in writing to the contrary, federal law permits the college to release the following directory information to the public without your consent:

- Name
- Address
- Telephone number
- Dates of attendance
- Hours completed
- Degrees and awards, including honor lists
- Previous educational agency
- Major field of study
- Participation in officially recognized activities and sports
- Photographs taken for identification or in college publications
- E-mail addresses
- Job placement records
- Height/weight of athletic teams
- Current enrollment

Directory information cannot include:

- Student ID numbers or Social Security numbers
- Ethnicity, race or nationality
- Gender
- Probation status
- Grades, courses in which you're enrolled, or hours earned

How do you authorize release of your education record in the form of an academic transcript?

You must authorize the release of your transcripts by written request with your signature or by completing and signing transcript request forms available in the Academic Records and Registrar's Office. The receipt of a written request via fax with signature to release an education record is permissible.

Students Right to Know

Who may have access to your information?

- You and any outside party who has your written request;
- School officials (as defined by the college) who have "legitimate education interests";
- Parents of a dependent student as defined by the Internal Revenue Code; and
- A person in response to a lawfully issued subpoena or court order, as long as the college first makes a reasonable attempt to notify the student. Normally, the college will comply with a subpoena after two weeks have elapsed from the day the subpoena was received.

When is your consent not required to disclose information?

When the disclosure is:

- To school officials (defined in policy) who have a legitimate educational interest;
- To federal, state, and local authorities involving an audit or evaluation of compliance with educational programs;
- In connection with financial aid (this includes veterans' benefits);
- To organizations conducting studies for or on behalf of educational institutions;
- To accrediting organizations;
- To parents of a dependent student;
- To comply with a judicial order or subpoena;
- In a health or safety emergency;
- Releasing directory information;
- Releasing the results of a disciplinary hearing to an alleged victim of a crime of violence.

How does increasing technology impact FERPA on our campuses?

The use of computerized recordkeeping systems is increasing at a fast pace. The same principles of confidentiality that apply to paper records also apply to electronic data.

GRIEVANCE AND APPELLATE PROCESS

The grievance and appellate process is designed to provide students with due process in the course of any accusation, investigation or decisions made by administration.

Students – The following matters related to students of State Fair Community College are subject to process under this policy:

- Issues related to violations of Civil Rights, including Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. 2000d et seq., which prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving federal financial assistance;
- Issues related to discrimination on the basis of sex, including violations of Title IX of the Education Amendments of 1972 (Title IX), as amended, 20 U.S.C. 1681 et seq., including students with regard to educational opportunities and freedom from harassment, employees with regard to employment opportunities and freedom from harassment, and to individuals with whom the college does business;
- Issues related to discrimination on basis of disability, including violations of Section 504 of the Rehabilitation Act of 1973 (Section 504), as amended, 29 U.S.C. 794, and the Americans with Disabilities Act of 1990;
- Issues related to discrimination based on age, including violations of the Age Discrimination Act of 1975, as amended 42 U.S.C. 6101 et seq;
- Issues related to sexual harassment, including violations of Title VI of the Civil Rights Act of 1964 and Title IX of the Education Amendments of 1972;
- Violations of the Student Code of Conduct;
- Residence Hall disciplinary action or violations of Residence Hall regulations or contract;
- Violations of Board of Trustees policy;

- Violations of the Family Educational Rights and Privacy Act (FERPA);
- Concerns or complaints about eligibility for student extracurricular activities both non-credit and for credit events, bookstore, food service;
- Student conduct which has serious implications for the college's public image or liability for damages;
- Violations of the Campus Crime and Security Policy;
- Violations of the Substance Abuse Policy;
- Violations of the Campus Drug, Alcohol and Tobacco Policy (Policy 2830);
- Refunds of tuition and or any fees, including housing;
  - Restrictions: Appeals are only permissible if tuition or fees were misapplied due to administrative error.
- Appeals of administrative drops;
  - Restrictions: Appeals are only permissible if drops were misapplied due to administrative error.
- Library fines;
- Billing errors;
- Appeal of the Medical Withdrawal Policy;
- Financial aid suspension;
- Academic probation/suspension;
- Determination of residency relative to tuition charges;
- Graduation or commencement problems;
- Grade appeals;
  - Restrictions: Appeals are only permissible if grades were inaccurate due to administrative error or if grades were computed outside of the terms defined in the course syllabus.
- Transcript evaluations;
- Placement testing decisions; and
- Parking fines.

The Student Success Coordinator is designated as the Section 504, Title VI and Title IX compliance officer for issues related to students.

Complaints about or failure to comply with expectations outlined in each course syllabus are not matters subject to the grievance and appellate process. Students are expected to review and discuss any issues related to interpretation or expectations of syllabus with the instructor during the semester in which the course occurs.

Grievance process
All matters must be addressed within 30 days of the incident/issue utilizing the following procedure:

- The student should first attempt to resolve the issue informally with the appropriate student or employee involved *(Note: Degree programs with specific accreditation requirements, such as the Nursing, Radiologic Technology, Dental Hygiene, Occupational Therapy and Physical Therapy programs, must follow those guidelines outlined in program handbooks prior to pursuing this process).*
- If the issue cannot be resolved informally and the student wishes to formally appeal the decision, the student must meet with the Student Success Coordinator to discuss the issue. The student must present the formal grievance/explanation of the situation in writing to the Student Success Coordinator. The coordinator will provide impartial guidance and investigation to advise the student on process and to help the student resolve the issue. The coordinator will notify the student, in writing on the outcome of the complaint.
  - If a complaint is made against the Student Success Coordinator, the Campus Judicial Officer will act as Student Success Coordinator temporarily or will appoint a temporary substitute.
- If the issue cannot be resolved with the help of the Student Success Coordinator, the student must present, in writing, a formal grievance/explanation of the situation to the Campus Judicial Officer.

The Campus Judicial Officer will provide an impartial, prompt and thorough investigation. The burden of proof shall rest on the accuser or complainant, with the opportunity to present witnesses and other evidence.

- If a complaint should arise that includes the Campus Judicial Officer, the President will appoint a temporary substitute.

- The Campus Judicial Officer will make a decision based on the evidence and thorough consultation with the Student Success Coordinator and all parties involved within 10 business days of receiving the written formal grievance. The Campus Judicial Officer will then send notice to all parties of the outcome of the complaint.
  - During this appeal period the Campus Judicial Officer may impose sanctions on the student until the process is complete (i.e. barring from residence hall, temporary suspension, loss of campus privileges, etc.).
- If the student is not satisfied with the decision of the Campus Judicial Officer he/she must present to the Campus Issue Resolution Committee, in writing, a formal appeal. The burden of proof shall rest on the accuser or complainant, with the opportunity to present witnesses and other evidence. This appeal must be made within 10 business days of the decision of the Campus Judicial Officer and must outline grounds for the appeal. The Campus Issue Resolution Committee will return a decision within 10 business days of receiving the appeal and notify, in writing, all parties involved of the outcome of their decision. The Campus Issue Resolution Committee will be impartial, prompt and thorough to investigate each appeal. The decision of the committee will be final.
  - The Campus Issue Resolution Committee will be appointed each fall by the President of SFCC and will include a faculty member, staff member, and a student.
  - Each member of the Campus Issue Resolution Committee will serve one-year terms.
  - If a complaint should arise that includes one of the committee members, the President of SFCC will appoint a temporary substitute for that member.
  - Decisions of the committee will be decided by majority vote and will be communicated in writing to the Campus Judicial Officer who will then disseminate the information to all involved parties.

Retaliation notice
Retaliation against a person who files a complaint or persons who participate in the grievance proceeding is prohibited. The college will take steps to prevent the recurrence of any discrimination and correct its discriminatory effects on the complainant and others, where appropriate.

Interim suspension
In certain circumstances, the Campus Judicial Officer, or a designee, may impose a college or residence-hall suspension prior to a hearing before a hearing body (or, until specified conditions have been met in cases of a suicide attempt or gesture, or where a psychiatric disturbance is suspected).

Interim suspension may be imposed:

- To ensure the safety and well-being of members of the college community or preservation of college property;
- To ensure the student's own physical or emotional safety and well-being;
- If the student has violated a provisional order put into effect to ensure the safety and well-being of members of the college community or preservation of college property; or,
- If the student poses a definite threat of disruption of, or interference with, the normal operations of the college.

During interim suspension, the student shall be denied access to the residence halls and/or the campus (including classes) and/or computing and networking facilities and resources and/or all other college activities or privileges for which the student might otherwise be eligible, as the Campus Judicial Officer may determine to be appropriate.

Federal and/or state resources for grievance appeals
Students and employees are protected against race discrimination by Title VI and sex discrimination, including sexual harassment, by Title IX. Those who believe they have been discriminated against may utilize the appellate procedures to address their complaints.

Americans with Disabilities Act (ADA) related grievances are covered by the appellate process. Requests for accommodation are not considered to be a grievance but should be addressed to the Vice President for Educational and Student Support Services for referral to the appropriate person. A committee to determine "reasonable accommodation" may be convened by the President when necessary. Should this process then result in a request for review by the appellate process, it would begin at Level Three.

Students or employees may also file a complaint of discrimination with the Office of Civil Rights (OCR), Department of Education, Washington, D.C. Such complaints must be filed in writing no later than 180 days after the occurrence of the alleged discrimination. Addresses for the OCR office in Missouri and the National Headquarters are:

Kansas City Office
U.S. Department of Education
10220 North Executive Hills Boulevard
Kansas City, MO 64153-1367

Phone: (816) 880-4200
Fax: (816) 891-0644
Email: OCR_KansasCity@ed.gov

U.S. Department of Education
Office for Civil Rights
Customer Service Team
Mary E. Switzer Building

330 C Street, SW
Washington, DC 20202
Phone: (800) 421-3481
Fax: (202) 205-9862
TDD: (877) 521-2172
Email: OCR@ed.gov

Charges of employment discrimination on the basis of disability may be filed at any field office of the U.S. Equal Employment Opportunity Commission. Field offices are located in 50 cities throughout the United States and are listed in most telephone directories under U.S. Government. Information on all EEOC-enforced laws may be obtained by calling toll free (800) 669-4000 or (800) 669-6820 (TDD). The address for the EEOC office in Kansas City is:

400 State Avenue
Suite 905
Kansas City, KS 66101
Phone: (913) 551-5655
TTY: (913) 551-5657 *(Regulation 2160)*

Students Right to Know

INTELLECTUAL PROPERTY

State Fair Community College fosters an environment conducive to the creation, dissemination, discussion, and exploration of knowledge. In addition, ownership of academic intellectual property resides with the creator in order to encourage the investment of time, thought, creativity, and energy in the development of academic works, including copyright, books, articles, works of art, musical compositions, and course materials. This policy applies to all intellectual property related to the academic works of faculty and students, except in the following circumstances:

- Works written or produced for grants or contracts that specify that ownership belongs to the funding or contracting party, or for college administrative software.
- Student-created products that are not claimed by students within 30 days of the close of the semester in which those products were created. After this period, these works belong to the college.
- If intellectual property developed at the college is commercialized by someone other than the college, the institution retains the right to control whether its name or logo is displayed in association with the work and to require appropriate acknowledgment of institutional support of the creation of the work. The college should be notified of intent to commercialize prior to any commercial agreements.
- If the creator was assigned, directed or specifically funded by the college to develop the material, the institution can recover direct expenses related to the development of intellectual property from revenue subsequently collected by the creator.
- Unless otherwise agreed in writing prior to the creation of copyrightable material that is developed for college courses or curriculum, the institution will have for five years non-exclusive, royalty-free, use of the work and the ability to modify the work for its use within the institution so that the college's continued use of such material for educational purposes is not jeopardized.
- Mediated courseware shall not be sold, leased, rented or otherwise used in a manner that competes in a substantial way with the for-credit offering of State Fair Community College while the creator is employed by this institution, unless that transaction has received the approval of the Vice President for Educational and Student Support Services.
- This policy does not apply to intellectual property developed before this policy is formally approved.

Appeals concerning student issues related to intellectual property can be made through the Student Grievance and Appellate Process as described in *Regulation 2160*.

REPORTING AND RECORD KEEPING PROCEDURES

Student Services Office is the repository for statistics on crime and campus incidents at all sites. The Student Services Office will gather other SFCC site information and will disseminate this information annually as required by law.

Faculty and staff are required to file an "incident report" with their supervisor if they are aware of accidents, fire, theft/burglary, vandalism, etc., on SFCC premises. Supervisors are to forward these reports to the Campus Judicial Officer promptly. Incidents falling within the jurisdiction of law enforcement agencies will be reported as appropriate. Incident report forms are available in the Student Services Office.

Off-campus sites will report crimes to their nearest law enforcement agency. All crime reports are to be sent to the Campus Judicial Officer within three days of the reported event. *(Policy 2820)*

SEARCHES BY COLLEGE PERSONNEL AND/OR LAW ENFORCEMENT

Property of the college is subject to periodic inspection without notice, without student consent, and without a search warrant. Property may be searched by college administrators or staff who have reasonable suspicion that lockers, desks, and bags or purses, contain drugs, alcohol, material of a disruptive nature, stolen properties, weapons, or items posing a danger to the health or safety of students and staff. In addition, the Board of Trustees authorizes the use of trained dogs to sniff lockers, bags, purses, residence hall rooms or other college property to assist in the detection of the presence of drugs, explosives and other contraband.

Students or student property may be searched based on reasonable suspicion, of a violation of college rules, policy or state law. Reasonable suspicion must be based on facts known to the administration, credible information provided or logical inference drawn from such facts or information. The privacy and dignity of students shall be respected. Searches shall be carried out in the presence of a college administrator. Local law enforcement may be utilized if acting at the request of school officials.

Students are permitted to park on college property as a matter of privilege, not "right." The college retains the authority to conduct routine patrols of parking lots. The interior of a student's vehicle on college property may be searched if a college administrator has reasonable suspicion to believe that illegal, unauthorized or contraband items are contained inside the vehicle.

Law enforcement officials shall be contacted if the search produces a controlled substance, drug paraphernalia, weapons, stolen goods or evidence of a crime, in any case involving a violation of law when a student refuses to allow a search, or where the search cannot safely be conducted. A student who refuses to submit to a search may be appropriately disciplined by college officials.

Residence halls
Regular monthly health and safety room checks in the residence halls will be conducted by the residence life staff. The dates and times of these checks may or may not be communicated to students in advance; however, students will know that these checks will be conducted monthly.

Additional searches may be conducted if a college administrator has reasonable suspicion that illegal, unauthorized or contraband items are contained within the residence hall room or to regulate the use of the premises in accordance with college rules and regulations. *(Policy 2150)*

Section 2 | 1

State Fair
Community College

General Education

General Education Goals

State Fair Community College faculty and staff maintain the belief that a core of learning experiences exist that are invaluable to all students regardless of their present or future roles in the workplace and the community. These core experiences, which are addressed and assessed in the general education program, are consistent with the required skill-based and knowledge-based learning outcomes identified by the Missouri Coordinating Board for Higher Education (CBHE). They are also consistent with the college's Institutional Learning Outcomes (ILOs) that students will achieve upon completion of their general or specialized study.

The CBHE outcomes include mastering the skills of communicating, higher-order thinking, managing information, and valuing. They also include acquiring knowledge in the areas of social and behavioral sciences, humanities and fine arts, mathematics, and life and physical sciences. The ILOs include thinking critically, communicating effectively, behaving responsibly, valuing others, developing life skills, utilizing technology, and investigating world processes. Students acquire these outcomes through a 42-hour block of core general education courses as well as additional electives.

General Education Matrix

Skill Area: Communicating
To develop students' effective use of the English language and quantitative and other symbolic systems essential to their success in school and in the world. Students should be able to read and listen critically and to write and speak with thoughtfulness, clarity, coherence, and persuasiveness.

Skill Area: Higher-Order Thinking
To develop students' ability to distinguish among opinions, facts, and inferences; to identify underlying or implicit assumptions; to make informed judgments; and to solve problems by applying evaluative standards.

Skill Area: Managing Information
To develop students' abilities to locate, organize, store, retrieve, evaluate, synthesize, and annotate information from print, electronic, and other sources in preparation for solving problems and making informed decisions.

Skill Area: Valuing
To develop students' abilities to understand the moral and ethical values of a diverse society and to understand that many courses of action are guided by value judgments about the way things ought to be. Students should be able to make informed decisions through identifying personal values and the values of others and through understanding how such values develop. They should be able to analyze the ethical implications of choices made on the basis of these values.

Knowledge Area: Social and Behavioral Sciences
To develop students' understanding of themselves and the world around them through study of content and the processes used by historians and social and behavioral scientists to discover, describe, explain, and predict human behavior and social systems. Students must understand the diversities and complexities of the cultural and social world, past and present, and come to an informed sense of self and others. (Students must fulfill the state statute requirement of the Missouri Constitution.)

Knowledge Area: Humanities and Fine Arts
To develop students' understanding of the ways in which humans have addressed their condition through imaginative work in the humanities and fine arts; to deepen their understanding of how that imaginative process is informed and limited by social, cultural, linguistic, and historical circumstances; and to appreciate the world of the creative imagination as a form of knowledge.

Knowledge Area: Mathematics
To develop students' understanding of fundamental mathematical concepts and their applications. Students should develop a level of quantitative literacy that would enable them to make decisions and solve problems and which could serve as a basis for continued learning. (The mathematics requirement for general education should have the same prerequisite(s) and level of rigor as college algebra.)

Knowledge Area: Life and Physical Science
To develop students' understanding of the principles and laboratory procedures of life and physical sciences and to cultivate their abilities to apply the empirical methods of scientific inquiry. Students should understand how scientific discovery changes theoretical views of the world, informs our imaginations, and shapes human history. Students should also understand that science is shaped by historical and social contexts.

Associate of Arts Degree Requirements

GENERAL EDUCATION CORE 42 Hours

COMMUNICATIONS

3 Courses Required		9 Hours
ENGL 101	English Composition I	3
ENGL 102	English Composition II	3
SPTH 101	Public Speaking	3

AMERICAN INSTITUTIONS

1 Course Required		3 Hours
HIST 101	U.S. History Before 1877	3
HIST 102	U.S. History Since 1877	3
POLS 101	American/National Government	3

These courses satisfy the state requirement for the Missouri Constitution. Students transferring credit for American history or national government from out-of-state must complete POLS 102 Missouri Constitution.

SOCIAL SCIENCES

1 Course Required		3 Hours
BADM 101	Introduction to Business	3
ECON 101	Principles of Macroeconomics	3
ECON 102	Principles of Microeconomics	3
GEOG 101	World Geography	3
HIST 108	World Civilization Before 1500	3
HIST 109	World Civilization Since 1500	3
POLS 103	Introduction to Political Science	3

BEHAVIORAL SCIENCES

1 Course Required		3 Hours
BADM 107	Personal Finance	3
PSY 101	General Psychology	3
PSY 102	Child Psychology	3
PSY 104	Psychology of Personal Adjustment	3
SOC 100	General Sociology	3
SOC 102	Marriage and Family	3

LITERATURE

1 Course Required		3 Hours
LIT 101	Introduction to Literature	3
LIT 104	Masterpieces Before 1650	3
LIT 105	Masterpieces After 1650	3
LIT 107	American Literature	3
LIT 109	English Literature	3
LIT 114	Topics in Literature	3

FINE ARTS

1 Course Required		3 Hours
ART 101	Art Appreciation	3
ART 120	Modern Art History	3
MUS 101	Music Appreciation	3
MUS 103	Music History and Literature I	3
MUS 104	Music History and Literature II	3
SPTH 107	Introduction to Theatre	3

HUMANITIES

1 Course Required		3 Hours
AGRI 106	Global Agriculture	3
FREN 101	Elementary French I	3
PHIL 101	Introduction to Philosophy	3
PHIL 102	Ethics	3
PHIL 104	Living Religions	3
SOC 120	American Diversity	3
SPAN 101	Elementary Spanish I	3

MATHEMATICS

1 Course Required		3 Hours
MATH 114	College Algebra	3
MATH 116	Finite Math	3
MATH 117	Contemporary Mathematics	3
MATH 120	Trigonometry	3
MATH 122	Precalculus Math	5
MATH 125	Calculus for Business	3
MATH 127	Business Statistics	3
MATH 130	Calculus and Analytic Geometry I	5

Associate of Arts Degree Requirements

NATURAL SCIENCES
2 Courses Required **8 Hours**

One course must be from Group A to fulfill the laboratory requirement. The additional course can come from Group A or Group B but must have a different subject prefix.

Group A:

BIO 112	Introduction to Biology with Lab	5
BIO 125	Biology I with Lab	5
BIO 140	Introduction to Biotechnology I	5
CHEM 101	Introduction to Chemistry with Lab	5
CHEM 113	Fundamentals of Chemistry with Lab	5
CHEM 123	General Chemistry I with Lab	5
EASC 101	Introduction to Earth Sciences with Lab	5
EASC 106	Physical Geology with Lab	5
PHYS 105	College Physics I with Lab	5
PHYS 118	General Physics I with Lab	5

Group B:

BIO 100	Introduction to Biological Sciences	3
BIO 103	Human Biology	3
BIO 105	Wildlife Conservation	3
BIO 207	Human Anatomy with Lab	4
BIO 208	Human Physiology with Lab	4
BIO 210	Principles of Genetics with Lab	4
EASC 116	Environmental Science	3
EASC 120	Introduction to Astronomy	3
PHYS 103	Introduction to Physical Science	3

GENERAL EDUCATION ELECTIVE

Select an additional general education course if needed for a minimum total of 42 hours of general education.

WELLNESS
1 Course Required **1 Hour**

HLTH 101	Personal Health/Fitness	2
WELL 116	Building Fitness for Life I	1
WELL 117	Building Fitness for Life II	1
WELL 118	Aerobics	1
WELL 119	Low Impact Aerobics	1
WELL 121	Women and Health	1
WELL 122	Applied Wellness	1
PPRO 106	Introduction to Physical Education in the Elementary School	2

GENERAL EDUCATION MINIMUM TOTAL: **42 Hours**

ELECTIVES **22 Hours**

Additional courses numbered 100 or above which may include 12 hours of restricted electives from technical training in the military or from technical courses taken at an accredited college. Additional physical education activity courses (PE, PEAC or WELL prefix) may be accepted as elective credit for a maximum of two credit hours. Veterans, members of the National Guard, and active duty military personnel may receive two hours of physical education activity elective credit by presenting a copy of their DD214 or similar record.

ASSOCIATE OF ARTS DEGREE MINIMUM TOTAL: **64 Hours**

Associate of Arts in Teaching

The Associate of Arts in Teaching (AAT) degree prepares students with a foundation in educational principles, theory and practice, and exposes them to complex problems and relationships in the field of education. Teachers play an essential role in fostering the intellectual and social development of children in their formative years. Using a variety of active learning approaches, teachers help children understand abstract principles, solve problems, and develop critical thought processes. Whether desiring to teach preschool or elementary school, teachers provide the tools and the environment for their students to develop into responsible citizens. Any Missouri community college student who has earned an AAT degree is guaranteed consistent treatment by the majority of four-year transfer institutions. Completing the AAT is the first step to achieving a Bachelor of Arts or a Bachelor of Science in an Elementary Education degree.

Bachelor's degree institutions with teacher education programs have different requirements. It is essential to work with your advisor to select the correct courses (categories indicated with * in the Program Requirements) you need for the transfer institution of your choice.

All students must pass a criminal background check to be employed in this field.

Other AAT Requirements:

1. Minimum cumulative GPA of 2.5 and institutional GPA of 2.0 to apply for graduation.
2. Successful completion of the C-BASE (minimum score of 235 on each sub-section).
3. Take the required college exit exam.

A student who meets all course requirements for the AAT but does not have a 2.5 GPA, (but has at least a cumulative 2.0 GPA) and has not successfully completed the C-BASE may still graduate with an AA degree.

Degree Requirements

ENGL 101	English Composition I	3
*Fine Arts Course**		3
SPTH 101	Public Speaking	3
GEOG 101	World Geography	3
POLS 101	American/National Government	3
ENGL 102	English Composition II	3
*Mathematics Course**		3
EDUC 205	Teaching Profession with Field Experience	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877	3
PSY 102	Child Psychology	3
*Wellness Course****		1
EDUC 209	Foundations of Education	3
EASC 101	Introduction to Earth Sciences with Lab (or)	
EASC 106	Physical Geology with Lab (or)	
PHYS 105	College Physics I with Lab	5
EDUC 212	Technology for Teachers	3
*Literature Course**		3
*Humanities Course**		3
BIO 112	Introduction to Biology with Lab (or)	
BIO 125	Biology I with Lab	5
EDUC 220	Educational Psychology	3
*Elective Courses***		9

Degree Total 65

*Suggested Elective Courses*** - Select 9 hours from ECON 101, EDUC 218, FREN 101 (or) SPAN 101, (or) MUS 230

*Wellness Course**** – Select one course from the following - HLTH 101, PPRO 106, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

Associate of Science in Engineering

The basic pre-engineering curriculum is designed for students who want to earn bachelor's degrees in any engineering field at a four-year institution. This program provides students with the first two years of study toward a Bachelor of Science degree at the Missouri University of Science and Technology (MS&T) in Rolla, Missouri. Students take basic courses common to most engineering disciplines and continue their studies in specialized areas (electrical, mechanical, civil, chemical, etc.) during their remaining years at MS&T. The curriculum responds to the Model Program for Engineering Transfers developed in cooperation with MS&T and the Coordinating Board for Higher Education (CBHE). Engineering programs at other institutions differ slightly so it is strongly suggested that a student electing to receive an Associate of Science degree work very closely with an advisor from both SFCC and the receiving institution to individually plan the four-semester degree plan.

Degree Requirements

Check the specific major for which course would be best*

ENGL 101	English Composition I	3
ENGL 102*	English Composition II (or)	
SPTH 101*	Public Speaking	3
MATH 130	Calculus and Analytic Geometry I	5
MATH 131	Calculus and Analytic Geometry II	5
MATH 132	Calculus and Analytic Geometry III	5
ECON 101	Principles of Macroeconomics	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
*Literature, Humanities, or Social Sciences***		6
*Electives****		16
*Wellness Course*****		1
PHYS 118	General Physics I with Lab	5
PHYS 119	General Physics II with Lab	5
CHEM 123	General Chemistry I with Lab	5
	Degree Total	**65**

*Literature, Humanities, or Social Sciences*** - Select 6 hours from AGRI 106, BADM 101, ECON 102, FREN 101, GEOG 101, HIST 108, HIST 109, LIT 101, LIT 104, LIT 105, LIT 107, LIT 109, LIT 114, PHIL 101, PHIL 102, PHIL 104, POLS 103, SOC 120, (or) SPAN 101

Electives*** - Select 16 hours from the following: BIO 112, CAD 111, CAPP 125, CHEM 124, CHEM 221, CIS 155, CIS 157, MATH 114, MATH 120 (or) MATH 134. You must check the individual degree requirements at your transfer institution to determine which classes are best for your area.

*Wellness Course**** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Associate of Applied Science General Education Requirements

GENERAL EDUCATION CORE 10 Hours

COMMUNICATIONS 3 Hours

ENGL 101	English Composition I	3
ENGL 102	English Composition II	3
ENGL 110	Business Communications	3
ENGL 112	Technical Writing	3

MATHEMATICS 3 Hours

MATH 101	Business Math	3
MATH 107	Technical Math I	3
MATH 108	Technical Math II	3
MATH 112	Intermediate Algebra	3
MATH 114	College Algebra	3
MATH 116	Finite Math	3

SOCIAL SCIENCE 3 Hours

HIST 101	U.S. History Before 1877	3
HIST 102	U.S. History Since 1877	3
POLS 101	American/National Government	3

These courses satisfy the state requirement for the Missouri Constitution. Students transferring credit for American history or national government from out-of-state must complete POLS 102 Missouri Constitution.

WELLNESS 1 Hour

All students, except those in Allied Health programs, must complete the one credit hour wellness requirement.

HLTH 101	Personal Health/Fitness	2
WELL 116	Building Fitness for Life I	1
WELL 117	Building Fitness for Life II	1
WELL 118	Aerobics	1
WELL 119	Low Impact Aerobics	1
WELL 121	Women and Health	1
WELL 122	Applied Wellness	1

GENERAL EDUCATION ELECTIVES 6 Hours

GENERAL EDUCATION MINIMUM TOTAL 16 Hours

PROGRAM REQUIREMENTS 45-79 Hours

ASSOCIATE OF APPLIED SCIENCE DEGREE TOTAL 61-95 Hours

Each AAS degree program includes six hours of general education elective courses from two of the following areas:

COMMUNICATING
ENGL 101, ENGL 102, ENGL 110, ENGL 112, SPTH 101

MATHEMATICS
MATH 101, MATH 107, MATH 108, MATH 112, MATH 114, MATH 116

SOCIAL AND BEHAVIORAL SCIENCES
BADM 101, BADM 107, ECON 101, ECON 102, HIST 108, HIST 109, PSY 101, PSY 102, SOC 100

HIGHER ORDER THINKING
BADM 103, ENGL 102, LIT 104, SOC 120

VALUING
PHIL 101, PHIL 104, SOC 102, SOC 120

MANAGING INFORMATION
CAPP 125, CIS 103, ENGL 101, ENGL 102, HEOC 140

LIFE AND PHYSICAL SCIENCE
AGRI 108, AGRI 118, BIO 207, BIO 208, CHEM 101, CHEM 113, PHYS 103, PHYS 105, PHYS 125

HUMANITIES AND FINE ARTS
ART 101, FREN 101, LIT 101, LIT 104, LIT 105, LIT 107, LIT 109, LIT 114, MUS 101, PHIL 101, PHIL 102, PHIL 104, SOC 120, SPAN 101, SPAN 120, SPTH 107

Note: Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Accounting

The Accounting program prepares students with a foundation in accounting principles, theory and practice, and exposes them to complex problems and relationships in fields of business, cost management, tax and economics. Persons planning a career in accounting should have an aptitude for mathematics; be able to analyze, compare and interpret facts and figures quickly; and make sound judgments based on this knowledge. They must be good at working with people as well as with business systems and computers. Accuracy and the ability to handle responsibility with limited supervision are important. Perhaps most important, accountants should have high standards of integrity. The practical skills you receive from this program will prepare you for a variety of employment opportunities including financial accountant, bookkeeper, income tax preparer, payroll specialist, or cost/management accountant.

Degree Requirements

*Courses to complete with a grade of C or higher**

ACCT 109*	Applied Accounting Procedures	3
CAPP 125*	Microcomputer Applications	3
ENGL 101	English Composition I	3
MATH 101*	Business Math (or)	
MATH 112*	Intermediate Algebra	3
BADM 101	Introduction to Business	3
OADM 121*	Calculators	1
ACCT 101*	Principles of Financial Accounting	3
ENGL 110	Business Communications	3
CAPP 166*	Excel	3
BADM 107	Personal Finance	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
*Wellness Course***		1
ACCT 102*	Managerial Accounting	3
ACCT 203*	Intermediate Financial Accounting I	3
ACCT 132*	Business Taxation	3
ECON 101	Principles of Macroeconomics	3
BADM 103	Legal Environment of Business	3
SS 120	Employment Strategies	1
ACCT 220*	Current Topics in Accounting	3
ACCT 137*	Introduction to Federal Taxation	3
ACCT 125*	Computerized Accounting Applications	3
BSMT 125	Human Relations (or)	
SPTH 101	Public Speaking	3
ACCT 175*	Accounting Internship	4

Degree Total 64

*Wellness Course** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Agriculture

Agriculture is one of the largest and most diverse industries in the world. Careers in agriculture are exciting and self-satisfying, the opportunities are numerous and the salaries competitive. Students interested in agriculture are self-motivated, goal-oriented, and take a tenacious, creative approach to problem solving. The technical and business skills to be gained will provide an advantage to work on the family farm or pursue a job in agribusiness. The AAS degree in Agriculture provides a vast assortment of opportunities. Firms supply farmers with fertilizer, seed, feed, fuel, chemicals, machinery, equipment, marketing, credit and supplies. Agribusinesses also produce, buy, process, package, transport, and deliver livestock and products to the consumer. In agribusiness, trained staff familiar with agriculture, marketing, accounting, economics, and public relations is a must. The program combines instruction with job experience. In addition to regular classroom hours, students work for a major industry in the career field chosen with an occupational internship. The internship provides a unique opportunity to apply the knowledge acquired in class to work situations.

Degree Requirements

AGRI 101	Ag Leadership and Issues I	2
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
AGRI 118	Plant Science	3
AGRI 119	Soils I with Lab	4
AGRI 125	Natural Resources	3
AGRI 129	General Horticulture	3
AGRI 102	Ag Leadership and Issues II	1
AGRI 132	Agriculture Economics	3
AGRI 127	Farm Chemicals	3
ACCT 126	Introduction to QuickBooks	1
AGRI 108	Animal Science	3
AGRI 175	Occupational Internship	4
AGRI 103	Ag Leadership and Issues III	2
*Wellness Course**		1
AGRI 116	Animal Nutrition	3
AGRI 134	Marketing Farm Commodities	3
AGRI 114	Livestock Management	3
AGRI 138	Ag Business Management	3
AGRI 174	Crop and Insect Scouting	2
AGRI 104	Ag Leadership and Issues IV	1
MATH 101	Business Math (or)	
MATH 112	Intermediate Algebra	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
BSMT 110	Salesmanship	3
AGRI 136	Ag Credit and Finance	3
AGRI 121	Soils II	3
AGRI 168	Commercial Applicator Licensing	2

Degree Total 68

*Wellness Course** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Agriculture with Emphasis in Horticulture

Workers in landscaping, grounds keeping, nursery, greenhouse, and lawn service occupations are responsible for the variety of tasks necessary to achieve a pleasant and functional outdoor environment. They also care for indoor gardens and planting in commercial and public facilities. Nursery and greenhouse workers help cultivate plants. Managers make decisions about type and quantity of plants to be grown; purchase seed, fertilizers, and chemicals; hire employees; manage record keeping and marketing; and oversee operations. Landscape contractors usually follow designs of a landscape architect to install trees, shrubs, sod, and ornamental features. Groundskeepers maintain a variety of facilities including athletic fields, golf courses, cemeteries, college campuses and parks. The Horticulture program will prepare students for numerous career opportunities with practical experience in a fully equipped greenhouse and an internship to enhance the classroom learning experiences.

Degree Requirements

AGRI 101	Ag Leadership and Issues I	2
AGRI 147	Plant Identification	4
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
AGRI 119	Soils I with Lab	4
AGRI 129	General Horticulture	3
AGRI 102	Ag Leadership and Issues II	1
AGRI 132	Agriculture Economics	3
AGRI 127	Farm Chemicals	3
AGRI 152	Turf Management	4
AGRI 151	Landscape Design and Maintenance	3
AGRI 121	Soils II	3
AGRI 175	Occupational Internship	4
AGRI 103	Ag Leadership and Issues III	2
*Wellness Course**		1
AGRI 125	Natural Resources	3
AGRI 118	Plant Science	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
AGRI 138	Ag Business Management	3
AGRI 174	Crop and Insect Scouting	2
AGRI 104	Ag Leadership and Issues IV	1
MATH 101	Business Math (or)	
MATH 112	Intermediate Algebra	3
AGRI 136	Ag Credit and Finance	3
AGRI 168	Commercial Applicator Licensing	2
ACCT 126	Introduction to QuickBooks	1
AGRI 154	Greenhouse Management with Lab	4
AGRI 179	Innovative Horticulture	1

Degree Total 69

*Wellness Course** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS In Agriculture with Emphasis in Sustainable Agriculture

The Agriculture with emphasis in Sustainable Agriculture program is a "green" program designed to provide you with the knowledge, entrepreneurial skills and technical skills to develop or manage an environmentally sound sustainable agriculture business. It offers another career option for agriculture majors, and provides farmers and gardeners with additional crop production training.

Degree Requirements

AGRI 101	Ag Leadership and Issues I	2
AGRI 119	Soils I with Lab	4
AGRI 125	Natural Resources	3
ACCT 126	Introduction to QuickBooks	1
AGRI 102	Ag Leadership and Issues II	1
AGRI 127	Farm Chemicals	3
AGRI 154	Greenhouse Management with Lab	4
AGRI 116	Animal Nutrition	3
AGRI 134	Marketing Farm Commodities	3
AGRI 138	Ag Business Management	3
AGRI 114	Livestock Management	3
AGRI 174	Crop and Insect Scouting	2
AGRI 121	Soils II	3
AGRI 140	Vegetable Production	3
AGRI 142	Water Management	3
AGRI 190	AGRI Capstone	1
AGRI 168	Commercial Applicator Licensing	
(or)		
AGRI 144	Introduction to Beekeeping (and)	
AGRI 145	Advanced Beekeeping	2
AGRI 148	Fruit Production	3
AGRI 149	Chemistry of Soil Additives	3
MATH 101	Business Math (or)	
MATH 112	Intermediate Algebra (or)	
MATH 114	College Algebra	3
AGRI 118	Plant Science (or)	
AGRI 108	Animal Science	3
*Wellness Course**		1
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
ENGL 112	Technical Writing	3
BADM 107	Personal Finance	3

Degree Total 66

*Wellness Course** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 or WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

Professional Certificate in Automotive Mechanics

Earning an Automotive Mechanics Professional Certificate requires satisfactory completion of the 13 core courses within the Automotive Technology program. Students who complete this course of study prove that they have studied automotive systems, theory and principles in depth and received specialized hands-on training utilizing up-to-date industry standard equipment. With a Professional Certificate, the student will be prepared to enter the labor force equipped with the knowledge and skills to go to work. In addition, this specialized training enhances the student's chance of securing employment quickly.

Certificate Requirements

AUTO 101	Preventive Maintenance	5
AUTO 123	Service Operation Management	3
AUTO 116	Automotive Electrical System Fundamentals	3
AUTO 118	Advanced Automotive Electrical and Electronics	3
AUTO 111	Computerized Engine Control	5
AUTO 103	Manual Transmissions, Drivelines and Axles	5
AUTO 105	Automatic Transmissions	5
AUTO 109	Fuel Systems and Emissions	5
AUTO 113	Steering, Suspension and Wheels	5
AUTO 115	Automotive Brakes	5
AUTO 119	Automotive Heating and Air Conditioning	5
AUTO 108	Advanced Engine Performance	6
AUTO 121	Automotive Engines	6
SS 120	Employment Strategies	1

Certificate Total 62

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Automotive Technology

In the Automotive Technology program students will study automotive systems in depth, beginning with fundamental principles and quickly advancing to more sophisticated theories and application. Along with classroom study, the program is also designed to allow students to develop a strong skill foundation through lab and shop learning activities. In today's automotive repair industry, technicians must have the ability to quickly diagnose and repair vehicle systems from the trivial problems to the most sophisticated. This course of study will prepare the student to embrace the ever-changing technology associated with the automobile repair industry. An automotive technician must be well versed in computers, mathematics, reading, and communication skills along with skills specific to the trade. The program will also provide instruction on employability skills and shop operation management. Students frequently work with dirty and greasy parts, and in awkward positions. They often lift heavy parts and tools. Minor cuts, burns, and bruises are common.

The Automotive Technology program has attained national accreditation status from the National Automotive Technicians Education Foundation (NATEF), an affiliate of the National Institute of Automotive Service Excellence (ASE), signifying that the program meets uniform standards for instructional facilities, equipment, curriculum, and staff credentials.

Degree Requirements

AUTO 101	Preventive Maintenance	5
AUTO 123	Service Operation Management	3
AUTO 116	Automotive Electrical System Fundamentals	3
AUTO 118	Advanced Automotive Electrical and Electronics	3
AUTO 111	Computerized Engine Control	5
AUTO 103	Manual Transmissions, Drivelines and Axles	5
AUTO 105	Automatic Transmissions	5
AUTO 109	Fuel Systems and Emissions	5
AUTO 113	Steering, Suspension and Wheels	5
AUTO 115	Automotive Brakes	5
AUTO 119	Automotive Heating and Air Conditioning	5
AUTO 108	Advanced Engine Performance	6
AUTO 121	Automotive Engines	6
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
MATH 107	Technical Math I	3
MATH 108	Technical Math II	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
*Wellness Course**		1
PHYS 125	Technical Science	4
SS 120	Employment Strategies	1

Degree Total 79

*Wellness Course** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Building Materials Merchandising

The Building Materials Merchandising program prepares students for jobs in the wholesale and retail building materials field. Graduates find excellent, well-paying jobs working with professionals—architects, contractors, developers, and building inspectors—to provide materials for varied building projects. This challenging, established career requires technical skills in design, drafting, engineering, marketing, and business management. Employment opportunities exist in wholesale building materials distribution, in retail companies, with lumberyards and home centers management, and with construction companies.

Degree Requirements

ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
MATH 101	Business Math	3
BSMT 110	Salesmanship	3
CNST 101	Construction Materials and Methods I	3
CAD 111	Introduction to Computer Drafting	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
CAD 120	Architectural Drafting	3
CNST 103	Construction Materials and Methods II	3
CNST 106	Construction Estimation	3
ACCT 101	Principles of Financial Accounting	3
*Wellness Course***		1
BLDG 175	Building Materials Internship	4-8
BSMT 120	Advertising	3
CNST 113	Construction Management	3
BADM 107	Personal Finance (or)	
BADM 103	Legal Environment of Business	3
CAPP 125	Microcomputer Applications	3
*Program Elective**		3
SS 120	Employment Strategies	1
BSMT 106	Principles of Marketing	3
CNST 162	Construction Safety	3
BSMT 125	Human Relations	3
ENGL 110	Business Communications	3
PSY 101	General Psychology (or)	
SOC 100	General Sociology	3

Degree Total 66

*Program Elective** - Select 3 hours from ECON 101, BADM, BSMT, CAD (or) MACH

*Wellness Course*** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Business Management with Management Specialty

Students wishing to pursue a degree in Business Management with a specialty in Management should possess leadership and decision-making skills and enjoy analyzing information and implementing solutions in a variety of situations. It is essential that a student possess good communication and human relation skills to be successful. This program requires all students to complete an internship between the first and second year and offers students the experience of employment in a degree-related field. Employment opportunities in this area typically are found in entry-level positions in human resource management, banking, insurance, and entry-level management in areas such as retail, sales and food service. Many students pursuing this degree are seeking to open their own businesses.

Degree Requirements

BADM 101	Introduction to Business	3
MATH 101	Business Math (or)	
MATH 112	Intermediate Algebra	3
CAPP 125	Microcomputer Applications	3
BSMT 106	Principles of Marketing	3
BSMT 110	Salesmanship	3
ENGL 101	English Composition I	3
BSMT 108	Principles of Management	3
ACCT 101	Principles of Financial Accounting	3
*Wellness Course****		1
ENGL 110	Business Communications (or)	
SPTH 101	Public Speaking	3
BADM 107	Personal Finance	3
BSMT 175**	Business Management Internship	3 or 6
*Program Elective**		3
BADM 109	Business Ethics	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
ACCT 102	Managerial Accounting	3
BSMT 117	Human Resource Management	3
BSMT 125	Human Relations	3
BADM 103	Legal Environment of Business	3
ECON 101	Principles of Macroeconomics	3
*Program Elective**		3
SS 120	Employment Strategies	1
BSMT 130	Business Strategies	3

Degree Total 65

*Program Electives** - Select 6 hours from ACCT 132, BSMT 112, BSMT 120, BSMT 132, CAPP 160, CAPP 166 (or) CIS 124

*Internship*** – With prior approval from the program coordinator, in the case that BSMT 175 cannot be taken – select 3 hours from ACCT 137, CAPP 164, ECON 102, IEM 146 (or) SOC 120

*Wellness Course**** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Business Management with Marketing and Retail Specialty

Students wishing to pursue a degree in Business Management with a specialty in Marketing and Retail should possess good communication, problem-solving and human relations skills, and be team oriented. It is also helpful if the student enjoys doing research, can be creative, open minded and organized. This program requires all students to complete an internship between the first and second year and offers students the experience of employment in a degree-related field. Employment opportunities in this area typically are found in entry-level positions in retail management, retail sales and supervision, professional sales, marketing, customer service, product distribution, and advertising.

Degree Requirements

BSMT 110	Salesmanship	3
CAPP 125	Microcomputer Applications	3
BSMT 106	Principles of Marketing	3
MATH 101	Business Math (or)	
MATH 112	Intermediate Algebra	3
ENGL 101	English Composition I	3
*Wellness Course****		1
BSMT 108	Principles of Management	3
ACCT 101	Principles of Financial Accounting	3
ENGL 110	Business Communications	3
BADM 107	Personal Finance	3
BSMT 112	Visual Merchandising	3
BSMT 175**	Business Management Internship	3 or 6
SPTH 101	Public Speaking	3
BSMT 120	Advertising	3
BADM 109	Business Ethics	3
BSMT 117	Human Resource Management	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
BSMT 125	Human Relations	3
BADM 103	Legal Environment of Business	3
BSMT 132	E-Commerce Marketing	3
*Program Electives**		6
SS 120	Employment Strategies	1

Degree Total 65

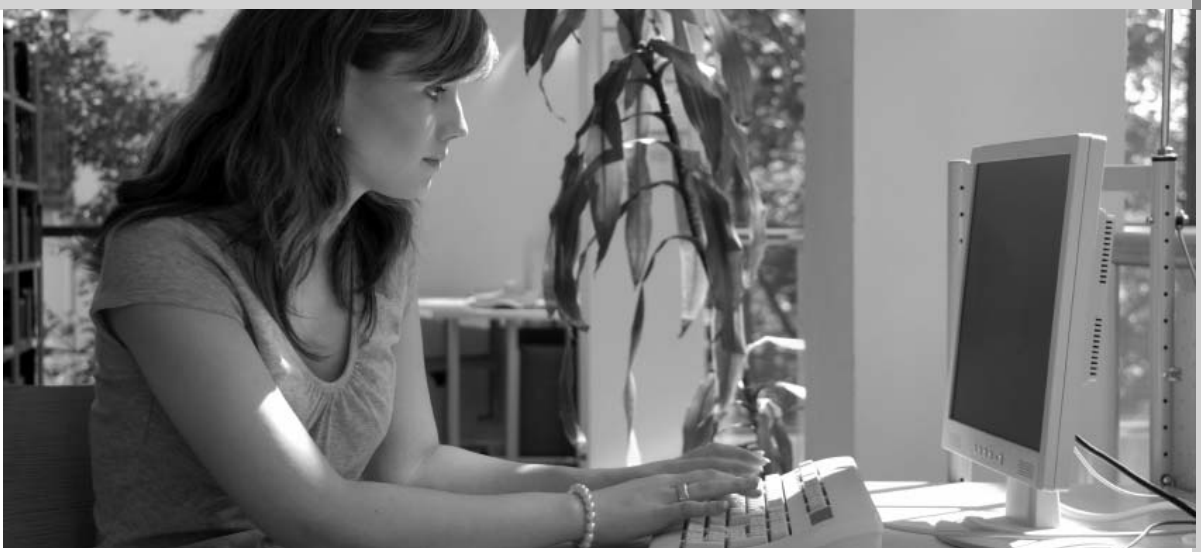
*Program Electives** - Select 6 hours from ACCT 102, ACCT 132, BADM 101, ECON 101, BSMT 130, CAPP 160, CAPP 166 (or) CIS 124

*Internship*** – With prior approval from the program coordinator, in the case that BSMT 175 cannot be taken – select 3 hours from ACCT 137, CAPP 164, ECON 102, IEM 146 (or) SOC 120

*Wellness Course**** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

Professional Certificate in Office Support Services



The Professional Certificate in Office Support Services is designed to help students update their computer skills and get into the workforce as quickly as possible. This certificate consists of 33 hours and is designed to be completed within one year. Students gain an understanding of computers and computer software. Job readiness skills are also covered to help enhance the student's potential. Students completing this program should be prepared for entry-level employment in most business office settings.

Note: Technology courses must be completed within five years of graduation unless the student has been continuously enrolled for a longer period of time. Students need to type 45 words per minute with a maximum of five errors in order to receive their certificate.

Certificate Requirements

*Courses to complete with a grade of C or higher**		
CAPP 118	Keyboarding	3
OADM 123	Professional Business Leadership	1
CAPP 125*	Microcomputer Applications	3
OADM 121*	Calculators	1
CAPP 119*	Document Formatting	2
OADM 116*	Records and Database Management	3
BSMT 125	Human Relations	3
OADM 132*	Office Management for Assistants	3
SS 120	Employment Strategies	1
OADM 125*	Skillbuilding for Office Support Services	1
*Program Electives***		9
*Business Elective****		3

*Program Electives***

Choose Group A (or) Group B courses

Group A:		
CAPP 160*	Word	3
OADM 118*	Transcription Skills	3
ENGL 110*	Business Communications	3
Group B:		
ACCT 109*	Applied Accounting Procedures	3
CAPP 166*	Excel	3
MATH 101*	Business Math	3

*Business Elective****

Select 3 hours from the following (or you may select a class you have not taken from Group A or B):
BADM 103, BADM 107 (or) BADM 109

Certificate Total 33

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Business Management with Office Management Specialty

Students wishing to pursue a degree in Business Management with a specialty in Office Management should be good organizers, problem solvers and planners. They should be detail-oriented and efficient, computer-literate, and able to express themselves well verbally and in writing. It is also essential they have good human relations skills. An internship in the last semester gives the student the opportunity to apply the knowledge and skills learned to a workplace setting. Employment opportunities for office managers and administrative assistants in this area typically are found in small businesses of all types and in service-providing industries such as banks and insurance agencies.

Note: Technology courses must be completed within five years of graduation unless the student has been continuously enrolled for a longer period of time. Students need to type 52 words per minute with a maximum of five errors in order to receive their degree.

Degree Requirements

Prerequisite: CAPP 118* Keyboarding (or test out)

*Courses to complete with a grade of C or higher**

*Course to complete with a grade of B or higher***

CAPP 125	Microcomputer Applications	3
BSMT 110	Salesmanship (or)	
BSMT 106	Principles of Marketing	3
MATH 101	Business Math (or)	
MATH 112	Intermediate Algebra	3
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
OADM 118*	Transcription Skills	3
*Wellness Course****		1
BSMT 108	Principles of Management	3
ACCT 101	Principles of Financial Accounting (or)	
ACCT 109	Applied Accounting Procedures	3
ENGL 110	Business Communications	3
BADM 107	Personal Finance	3
CAPP 166*	Excel	3
OADM 121*	Calculators	1
CAPP 119*	Document Formatting	2
OADM 127**	Skillbuilding for Office Management	1
OADM 116*	Records and Database Management	3
CAPP 160*	Word	3
BADM 109	Business Ethics	3
BSMT 117	Human Resource Management	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
BSMT 125	Human Relations	3
BADM 103	Legal Environment of Business	3
CAPP 164*	Access	3
OADM 134*	Office Management for Administrators	3
OADM 175*	Office Management Internship	3
SS 120	Employment Strategies	1

Degree Total 66

*Wellness Course**** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

Professional Certificate in Business Management with Emphasis in Real Estate Appraisal

The Professional Certificate in Business Management with emphasis in Real Estate Appraisal provides the minimum educational requirements that the state of Missouri requires for students who do not have a bachelor's degree seeking to become a certified real estate appraiser. The knowledge and skills obtained from the applied courses in real estate and business will help students prepare for entry-level positions in real estate offices, banks, insurance companies, trust and title companies and state, county, and local government.

Completion of this certificate does not qualify a student for a certified residential, certified commercial or certified general appraiser license. Contact the state of Missouri for specific certification requirements.

Certificate Requirements

ENGL 101	English Composition I	3
REAL 107	Real Estate Law	3
ECON 101	Principles of Macroeconomics	3
MATH 114	College Algebra	3
ECON 102	Principles of Microeconomics	3
REAL 105	Principles of Real Estate	3
REAL 110	Introduction to Finance	3
GEOG 103	Introduction to GPS/GIS	3
MATH 127	Business Statistics	3
REAL 112	Real Estate Appraisal	3
CAPP 125	Microcomputer Applications	3
SS 120	Employment Strategies	1

Certificate Total 34

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Business Management with Real Estate Specialty

Students wishing to pursue a degree in Business Management with a specialty in Real Estate should possess leadership and decision-making skills, enjoy analyzing information, and implementing solutions in a variety of situations. It is essential that a student possess good communication and human relation skills to be successful. Employment opportunities in this area typically are found in entry-level positions in real estate offices, banks, insurance companies, trust and title insurance companies, and state, county, and local government. Some students pursuing this degree may also seek to couple this background by obtaining a real estate license. This degree also meets general standards of higher education required for additional preparation needed to become a certified residential appraiser and/or a certified general appraiser.

Degree Requirements

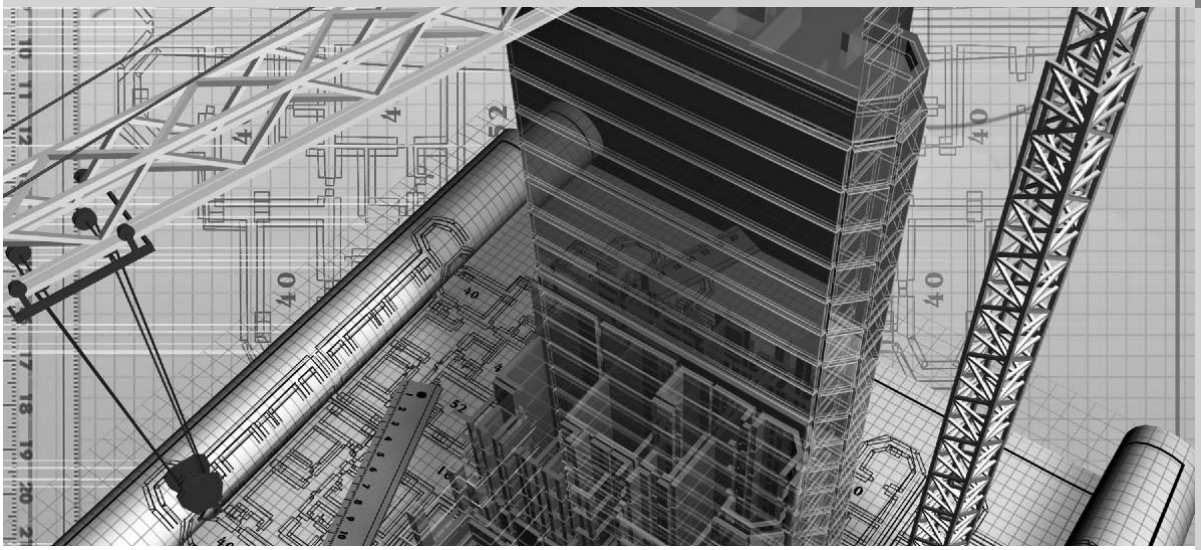
REAL 107	Real Estate Law	3
REAL 105	Principles of Real Estate	3
CAPP 125	Microcomputer Applications	3
BSMT 110	Salesmanship	3
ENGL 101	English Composition I	3
SPTH 101	Public Speaking	3
*Wellness Course**		1
MATH 114	College Algebra	3
ENGL 110	Business Communications	3
REAL 110	Introduction to Finance	3
BSMT 108	Principles of Management	3
BADM 109	Business Ethics	3
MATH 127	Business Statistics	3
ECON 101	Principles of Macroeconomics	3
BSMT 117	Human Resource Management	3
ACCT 101	Principles of Financial Accounting	3
REAL 112	Real Estate Appraisal	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
GEOG 103	Introduction to GPS/GIS	3
ECON 102	Principles of Microeconomics	3
ACCT 102	Managerial Accounting	3
SS 120	Employment Strategies	1

Degree Total 62

*Wellness Course** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Computer Aided Drafting Technology



The Computer Aided Drafting Technology program will provide necessary skills and knowledge to obtain employment in the growing, high-demand computer aided drafting field as a designer/drafter in a manufacturing, civil, structural, or architectural environment. The outlook for competent drafters is expected to increase faster than average since all new products and buildings require drawings and specifications to manufacture, build and assemble. The application of drafting and design standards and skills will be examined with the study of basic to advanced concepts in popular computer aided drafting programs. The program is accredited by the Association of Technology, Management and Applied Engineering (ATMAE, formerly NAIT).

Degree Requirements

CAD 105	Print Reading	3
CAD 111	Introduction to Computer Drafting	3
CAPP 125	Microcomputer Applications	3
MATH 108	Technical Math II (or)	
MATH 114	College Algebra	3
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
*Wellness Course****		1
CAD 113	Intermediate Computer Drafting	3
*CAD Elective**		3
SPTH 101	Public Speaking	3
ENGL 102	English Composition II (or)	
ENGL 110	Business Communications	3
PHYS 105	College Physics I with Lab (or)	
PHYS 125	Technical Science	4-5
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
CAD 115	Advanced Computer Drafting	3
*Program Elective***		3
SS 120	Employment Strategies	1
*CAD Electives**		6
*CAD Electives**		6
CAD 175	CAD Internship	4
*Program Electives***		6

Degree Total 64

*CAD Electives** - Select 15 hours from CAD 116, CAD 120, CAD 125, CAD 130, CAD 132, CAD 134, CAD 136, CAD 155, CAD 180, CAD 190 (or) MACH 101

*Program Electives*** - Select 9 hours from CAD, CIS, CNST, IEM, MACH, NET (or) WELD

*Wellness Course**** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Computer Information Systems with Emphasis in Accounting

The Computer Information Systems with emphasis in Accounting program can launch an exciting career. Changes in markets and technology have transformed the way companies compete in the global workplace. Businesses are rapidly computerizing their accounting and information systems. Preparing for tomorrow's jobs today requires a new level of skill and dedication. Working in the field of accounting computer information systems demands patience, persistence and extreme accuracy. Students need to think logically and analytically. A graduate of the CIS/Accounting program has the skills needed to set up and maintain the latest computerized accounting systems. The demand for employees who can apply both accounting and computer skills is increasing daily.

Degree Requirements

*Courses to complete with a grade of C or higher**

CAPP 125*	Microcomputer Applications	3
CIS 103*	Introduction to CIS	3
CIS 145*	Visual Basic	3
WEB 113*	Web Design	1
ACCT 109*	Applied Accounting Procedures	3
*Program Elective***		3
ACCT 101*	Principles of Financial Accounting	3
CAPP 166*	Excel	3
*Program Elective***		3
ACCT 102*	Managerial Accounting	3
ACCT 132*	Business Taxation	3
CIS 124*	Database Management	3
CIS 185*	Project Management	3
ACCT 125*	Computerized Accounting Applications	3
CIS 161*	Systems Analysis	3
CIS 175*	CIS Internship	4
*Program Elective***		3
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
ENGL 102	English Composition II (or)	
ENGL 110	Business Communications (or)	
SPTH 101	Public Speaking	3
MATH 101	Business Math (or)	
MATH 112	Intermediate Algebra	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
*Wellness Course****		1
SS 120	Employment Strategies	1

Degree Total 64

*Program Electives** - Must complete with a grade of C or higher* - Select 9 hours from CIS 132, CIS 151, CIS 162, CIS 163 (or) WEB 116

*Wellness Course**** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Computer Information Systems with Emphasis in Programming

The Computer Information Systems with emphasis in Programming program prepares students to enter an exciting field of computer programming. Local, national and international companies including banks, insurance companies, state agencies, and major programming firms have hired our graduates. Students receive hands-on experience in programming. COBOL, DB2, Visual Basic, C#, and JAVA are taught, in addition to courses in programming concepts, software and hardware applications, and computer operations. An internship provides an opportunity to apply knowledge and skills in a work environment.

Degree Requirements

*Courses to complete with a grade of C or higher**		
CAPP 125*	Microcomputer Applications	3
CIS 103*	Introduction to CIS	3
CIS 124*	Database Management	3
CIS 145*	Visual Basic	3
CIS 132*	Unix	1
CIS 148*	Cobol	3
CIS 155*	Programming in C#	3
CIS 185*	Project Management	3
WEB 112*	Web Utilities	1
WEB 113*	Web Design	1
ACCT 101*	Principles of Financial Accounting	3
*Program Electives***		6
CIS 149*	Advanced Cobol	3
CIS 151*	DB2 Relational Database	3
CIS 157*	Advanced C#	3
CIS 158*	Java	3
CIS 161*	Systems Analysis	3
CIS 175*	CIS Internship	4
*Program Elective***		3
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
MATH 101	Business Math (or)	
MATH 112	Intermediate Algebra	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
ENGL 102	English Composition II (or)	
ENGL 110	Business Communications (or)	
SPTH 101	Public Speaking	3
*Wellness Course****		1
SS 120	Employment Strategies	1

Degree Total 69

*Program Electives** - Must complete with a grade of C or higher* - Select 9 hours from CIS 162, CIS 163, CIS 164, CIS 168, NET 102, WEB 114 (or) WEB 116

*Wellness Course**** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Construction Technology

The Construction Technology program can provide the knowledge and skills needed to begin a rewarding career in the construction industry. In this program, theory and practical courses are combined to lead to competencies needed to meet employers' needs. Graduates may work with businesses engaged in all areas of construction. The jobs are varied and challenging including general contractors, construction management, materials suppliers, and employment with government agencies. Work environments range from permanent offices to offices at job sites. Studies of future work force needs project a high demand for persons trained in construction technology. The degree is accredited by the American Council for Construction Education (ACCE).

Degree Requirements

CAD 105	Print Reading	3
CAD 111	Introduction to Computer Drafting	3
CNST 101	Construction Materials and Methods I	3
CNST 113	Construction Management	3
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
MATH 108	Technical Math II (or)	
MATH 114	College Algebra	3
*Natural Sciences Course**		3
CNST 103	Construction Materials and Methods II	3
CNST 162	Construction Safety	3
CAPP 125	Microcomputer Applications	3
CAD 120	Architectural Drafting	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
CNST 142	Building Mechanical Systems	3
CNST 148	Construction Codes and Law	3
ACCT 101	Principles of Financial Accounting	3
BADM 101	Introduction to Business (or)	
BSMT 106	Principles of Marketing (or)	
BSMT 108	Principles of Management (or)	
BSMT 115	Principles of Supervision	3
ENGL 110	Business Communications (or)	
SPTH 101	Public Speaking	3
*Wellness Course***		1
SS 120	Employment Strategies	1
CNST 106	Construction Estimation	3
CNST 138	Construction Planning and Scheduling	3
CNST 160	Statics and Strength of Materials	3
*Program Electives**		6

Degree Total 68

*Natural Sciences** - Select 3 hours from BIO, CHEM, EASC or PHYS

*Program Electives*** - Select 6 hours from BADM, BSMT, CAD, CNST, ECON, IEM, MACH, SPAN (or) WELD

*Wellness Course**** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

The Associate of Applied Science degree prepares

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

students to enter the job market for various occupations in criminal justice including, but not limited to, law enforcement and corrections. In addition, successful completion of the degree requirements should prepare the student to enter a law enforcement training academy for Missouri police officers.

The Associate of Arts degree is designed for those students seeking to continue their education at a four-year college or university.

The education of a criminal justice student requires assimilation of knowledge and acquisition of skills through practical experiences and classroom participation. Essential skills and capabilities needed will vary with the demand of the job to be performed.

Students may receive college credit for past basic law enforcement academy/corrections training. Please contact the program coordinator for more information.

Students are also required to complete the NOCTI exam in the area of Law Enforcement during their final semester. Students may be responsible for the cost of the exam.

Note: People with felony convictions may have difficulty securing employment in the criminal justice field.

Degree Requirements

CJ 102	Introduction to Criminal Justice	3
CJ 109	Juvenile Delinquency	3
ENGL 101	English Composition I	3
PSY 101	General Psychology	3
CAPP 125	Microcomputer Applications	3
CJ 101	Introduction to Law Enforcement	3
CJ 105	Criminal Law	3
SOC 100	General Sociology	3
POLS 101	American/National Government	3
*Program Elective**		2-3
*Wellness Course***		1
CJ 111	Introduction to Corrections	3
CJ 115	Procedural Law	3
CJ 107	Criminology	3
MATH 101	Business Math (or)	
MATH 112	Intermediate Algebra	3
BSMT 125	Human Relations	3
CJ 175	Supervised Occupational Experience in Criminal Justice	4
CJ 118	Criminal Justice Communications	3
CJ 104	Criminal Investigation	3
SPTH 101	Public Speaking (or)	
SPTH 105	Interpersonal Communication	3
*Program Electives**		5-6
SS 120	Employment Strategies	1

Degree Total 65

*Program Electives** - Select 3 courses from BADM 103, CJ 122, ENGL 110, ENGL 112, HLTH 102, PHIL 102, POLS 103, PSY 104, SOC 101, SOC 102, SOC 103, SOC 120 (or) SPAN 101

*Wellness Course*** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

The Dental Hygiene program signifies that the

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Dental Hygiene

holder of that degree has been educated to competently enter dental hygiene in all health care settings and to apply for dental hygiene licensure in the state of Missouri. The education of a dental hygienist requires assimilation of knowledge, acquisition of skills and development of judgment through patient care experiences. The practice of dental hygiene emphasizes collaboration among dentists, other hygienists, allied health care professionals, and the patient. The program requires students to engage in diverse, complex and specific experiences vital to the acquisition and practice of essential dental hygiene skills and functions. Unique combinations of cognitive, affective, psychomotor, physical, and social abilities are required to satisfactorily perform these functions. Admission to the program is selective and an informational packet with an application to the program is available from the college or online.

Degree Prerequisite Requirements

Must be completed with grades of C or higher prior to applying to the program:

BIO 207	Human Anatomy with Lab	4
BIO 208	Human Physiology with Lab	4
CHEM 101	Introduction to Chemistry with Lab (or)	
CHEM 113	Fundamentals of Chemistry with Lab	5
MATH 112	Intermediate Algebra	3
BIO 121	Microbiology for Allied Health with Lab	4

Degree Requirements

*Courses can be completed prior to the start of the program**

DH 105	Introduction to Dental Hygiene	6
DH 107	Dental Radiography	2
DH***	Oral Anatomy and Histology	3
DH 109	Oral Anatomy and Histology Lab	1
ENGL 101*	English Composition I	3
DH 106	Dental Clinic Emergencies	1
DH 110	Clinical Dental Hygiene I	6
DH 118	Principles of Periodontics	2
DH 124	Applied Nutrition and Oral Health Education	2
DH***	Pathology	3
HIST 101*	U.S. History Before 1877 (or)	
HIST 102*	U.S. History Since 1877 (or)	
POLS 101*	American/National Government	3
SPTH 101*	Public Speaking	3
DH 112	Clinical Dental Hygiene II	4
DH 125	Local Anesthesia	3
DH 114	Clinical Dental Hygiene III	8
DH 126	Community Dental Health	1
DH 130	Pharmacology	2
DH 120	Dental Biomaterials with Lab	2
PSY 101*	General Psychology	3
DH 116	Clinical Dental Hygiene IV	8
DH 119	Advanced Periodontics Practicum	.5
DH 127	Community Dental Health Lab	1
DH 132	Dental Hygiene Ethics and Legal Issues	2
SOC 100*	General Sociology	3
HEOC 135	Allied Health Career Development	.5

Degree Total 93

DH*** These courses are transferred into the program from another institution by arrangement.

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Early Childhood Development

The Early Childhood Development program prepares graduates to enter the child care field at several levels. Graduates from the program will be prepared to manage an in-home child care facility, be a teacher in an early childhood classroom or become a director for an early childhood center. Many of the courses in the program are available in the evenings to enable students who are employed in the field to complete a degree and increase their opportunities for advancement. Graduates must be physically able and willing to participate in all children's activities.

All students must pass a criminal background check to work in this field.

Degree Requirements

ECD 101	Introduction to Early Childhood	3
ECD 103	Child Growth and Development	3
ECD 127	Parent/Teacher Interaction	3
ENGL 101	English Composition I	3
*Humanities or Fine Arts Course**		3
EDUC 212	Technology for Teachers	3
ECD 107	Child Nutrition, Health and Safety	3
ECD 109	Observation, Planning and Assessment	3
ECD 111	Language Development/Early Literacy	3
SPTH 101	Public Speaking	3
MATH 101	Business Math (or)	
MATH 112	Intermediate Algebra (or)	
MATH 116	Finite Math	3
*Wellness Course****		1
ECD 115	Child Social/Emotional Development	3
ECD 117	Creative Expression and Play	3
ECD 121	Curriculum Strategies for Early Childhood	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
EDUC 218	Children's Literature	3
ECD 125	Introduction to Special Individuals	3
PSY 101	General Psychology	3
ECD 129	Administration in Early Childhood Care	3
ECD 175	Child Care Practicum	3
*Program Elective***		3
SS 120	Employment Strategies	1

Degree Total 65

*Humanities or Fine Arts Course** – Select 3 hours from ART 101, MUS 101, SOC 120, SPAN 101 (or) SPTH 107

*Program Elective*** – Select 3 hours from ECD 131, EDUC 220, PPRO 106, PSY 102, PSY 104, SOC 102, SOC 103 (or) SPTH 105

*Wellness Course**** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

Professional Certificate in Electrical Maintenance Technology

The Professional Certificate in Electrical Maintenance Technology is designed to prepare students for entry into electro-mechanical maintenance, employed in commercial, production, manufacturing, and other industrial settings. Inclusion of industrial mechanics, fluid power and primary electrical classes provide a solid foundation of maintenance skills and is a major step in the pathway to an Associate of Applied Science degree in Industrial Electrical Maintenance. In addition to electro-mechanical skills, additional knowledge and skills are available from a wide range of electives in electronics, electrical installations, safety and management, machining, and welding.

Certificate Requirements

*Courses to complete with a grade of C or higher**

MATH 108	Technical Math II	3
PHYS 125	Technical Science	4
SS 120	Employment Strategies	1
IEM 102*	Electric Fundamentals	3
IEM 104*	Electrical Power	3
IEM 106*	Industrial Mechanics	3
IEM 108*	Fluid Power Technology	3
IEM 112*	Control Circuit Troubleshooting	3
IEM 114*	Motor Control	3
IEM 122*	Introduction to PLCs	3
IEM 124*	Intermediate PLCs	3

Certificate Total 32

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Industrial Technology with Emphasis in Electrical Maintenance

The Industrial Technology with Emphasis in Electrical Maintenance program is designed to prepare students as electrical and maintenance technologists or millwrights, employed in commercial, production, manufacturing and other industrial settings. Inclusion of all major maintenance disciplines results in a comprehensive knowledge and skill base. Competency is gained in interpreting and utilizing electrical and fluid power schematics for troubleshooting; performing general wiring task in accordance with the National Electrical Code; and programming, troubleshooting and conversion of machinery to Programmable Logic Control. In addition to the electro-mechanical and control technology, additional knowledge and skills are available from a wide range of electives in electronics, electrical installations, safety and management, machining, and welding. The physical requirements of this occupation typically include lifting up to 45 pounds, pushing, pulling, reaching, walking, standing, crawling, kneeling, ascending and descending ladders, manual dexterity, and working in cramped positions for sustained periods of time. The program is accredited by the Association of Technology, Management and Applied Engineering (ATMAE, formerly NAIT).

Degree Requirements

*Courses to complete with a grade of C or higher**

ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
SPTH 101	Public Speaking	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
MATH 108	Technical Math II (or)	
MATH 112	Intermediate Algebra	3
PHYS 125	Technical Science	4
*Wellness Course****		1
SS 120	Employment Strategies	1
IEM 106*	Industrial Mechanics	3
IEM 108*	Fluid Power Technology	3
IEM 102*	Electric Fundamentals	3
IEM 104*	Electrical Power	3
IEM 112*	Control Circuit Troubleshooting	3
IEM 114*	Motor Control	3
*Program Electives***		12

Additional IEM Courses – Select 18 hours from any of the 4 groups

Control Technology Group		
IEM 122*	Introduction to PLCs	3
IEM 124*	Intermediate PLCs	3
IEM 132	Advanced PLCs	3
IEM 134	PLC Networks	3
IEM 142	Motion Control Systems	3
IEM 144	Process Control	3
Electronics Group		
IEM 118	Analog/Digital	3
IEM 116	Solid State Devices	3
IEM 110	Digital Principles	3
Electrical Installations Group		
IEM 140	Transformers and Motors	3
IEM 136	General NEC Requirements	3
IEM 138	Power Distribution	3
Safety and Management Group		
IEM 126	Industrial Safety	3
IEM 146	Quality Management and Control	3
IEM 128	Maintenance Management	3

Degree Total 66

*Program Electives*** - Select 12 hours from AUTO, CAD, CNST, IEM, MACH, MATH 107, NET (or) WELD

*Wellness Course**** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

Professional Certificate in Machine Tool Technology

This curriculum is designed to prepare students for employment in the field of Machine Tool Technology. Machinists are employed in a wide range of jobs for production, manufacturing, industrial, and other settings. Coursework includes interpreting drawings and prints, heat treating and metallurgy, and manual machining involving lathe, milling and grinding operations. There is a strong emphasis on skills and safety. These classes provide a solid foundation and prepare the student for entry-level employment and are a pathway to an Associate of Applied Science degree in Machine Tool Technology or an Associate of Applied Science degree in Metals Technology.

Certificate Requirements

MACH 101	Introduction to Machining	4
MACH 102	Lathe and Milling Machine Operations	4
MACH 103	Milling and Grinding Machine Applications	4
MACH 104	Advanced Machining	4
WELD 115	Print Reading for Welders and Machinists	3
MACH 115	Heat Treating and Metallurgy	3
MATH 108	Technical Math II	3
PHYS 125	Technical Science	4
*Program Elective**		3
SS 120	Employment Strategies	1
	Certificate Total	**33**

*Program Elective** - Select 3 hours from AUTO, CAD, CNST, IEM, MACH, MATH 107, (or) WELD

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Machine Tool Technology

The Machine Tool Technology program provides the degree requirements to learn the processes of manufacturing and machining with an understanding of specifications, dimensions, materials, finishing, methods of assembly, and shape descriptions. The program prepares students for machining related occupations such as machine operators, machine sellers, machinists, and tool and die makers. Because of changes in technology, the demand for skilled machinists with communication, design, decision-making and computer skills is increasing. CNC equipment in the machine tool lab is interfaced with the CAD/CAM lab to provide experience in computer-aided manufacturing. The physical requirements of this occupation typically include lifting up to 45 pounds, pushing, pulling, reaching, walking, standing, crawling, kneeling, ascending and descending ladders, manual dexterity, and working in cramped positions for sustained periods of time. The program is accredited by the Association of Technology, Management and Applied Engineering (ATMAE, formerly NAIT).

Degree Requirements

ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
MATH 108	Technical Math II	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
*Wellness Course***		1
PHYS 125	Technical Science	4
SPTH 101	Public Speaking	3
MACH 101	Introduction to Machining	4
MACH 102	Lathe and Milling Machine Operations	4
MACH 103	Milling and Grinding Machine Applications	4
MACH 104	Advanced Machining	4
MACH 106	CNC Machining	3
MACH 109	Advanced CNC Machining	3
MACH 115	Heat Treating and Metallurgy	3
MACH 175	Machine Tool Internship	4
WELD 115	Print Reading for Welders and Machinists	3
CAD 130	Solid Modeling I	3
CAD 134	CAD/CAM	3
SS 120	Employment Strategies	1
*Program Electives**		9

Degree Total 65

*Program Electives** - Select 9 hours from AUTO, CAD, CNST, IEM, MACH, MATH 107, (or) WELD

*Wellness Course*** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Marine Technology

The Marine Technology program is a partnership with the Lake Career and Technical Center (LCTC) in Camdenton and SFCC-Lake of the Ozarks. The program courses are only taught at the LCTC campus in Camdenton. The general education requirements are taught at SFCC locations. Participants earn an AAS degree via articulation and/or experiential credit. Students who have graduated from an accredited marine technology/ power sports program or have experience in industry may earn up to 45 credit hours toward the degree in Marine Technology. To qualify for the articulated credit, students must provide official transcripts from the accredited technical program, occupational testing scores and/or industry certification. The physical requirements of this profession typically include lifting up to 45 pounds, pushing, pulling, reaching, walking, standing, crawling, kneeling, ascending and descending ladders, manual dexterity and work in cramped positions for sustained periods of time.

Courses to be taken from SFCC must include:

ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
MATH 108	Technical Math II (or)	
MATH 112	Intermediate Algebra	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
*Wellness Course**		1
PHYS 125	Technical Science	4
BADM 101	Introduction to Business (or)	
ECON 101	Principles of Macroeconomics (or)	
PSY 101	General Psychology (or)	
SPTH 101	Public Speaking	3
SS 120	Employment Strategies	1

Degree Requirements

The following courses are available for articulation from Lake Career and Technical Center:

MRN 101	Marine Systems Rigging I	6
MRN 105	Marine Ignition Systems	3
MRN 107	Marine Starter and Charging Systems	2
MRN 109	Marine Cooling Systems	2
MRN 111	Marine Lubrication Systems	2
MRN 113	Marine Engine Component and Precision Measuring	3
MRN 115	Marine Shop Procedures and Business Operations	2
MRN 117	Marine Engine Systems Analysis	2
MRN 119	Marine Systems Preventive Maintenance	4
MRN 121	Marine Power Transfer Systems	4
MRN 123	Marine Systems Troubleshooting	3
MRN 125	Marine Fuel Systems	4
MRN 127	Marine Instrumentation Systems	2
MRN 129	Marine Power Trim/Tilt Systems	2
MRN 175	Marine Technology Internship	4

In addition to the above program requirements, successful completion of an approved end of program marine technical assessment is required.

Degree Total 63

*Wellness Course** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

Professional Certificate in Medical Office Support Services

The Professional Certificate in Medical Office Support Services prepares the student to work in any medical setting. The certificate introduces the student to basic aspects of the medical office including, but not limited to, medical terminology, coding, documentation and compliance, medical office procedures, communications, records and database management, and microcomputers. The outlook for entry-level medical office jobs leading to positions in office support services is excellent. Students must have good skills and abilities in information-ordering, oral and written comprehension and expression, speech clarity and recognition, near vision, problem sensitivity, selective attention, and time-sharing.

Note: CAPP 118, CAPP 125, MEOF 125 and OADM 116 are courses to be completed within five years of graduation unless student has been continuously enrolled in the program longer.

Certificate Requirements

*Courses to complete with a grade of C or higher**

CAPP 118*	Keyboarding	3
MEOF 101*	Medical Terminology I	3
MEOF 103*	Job Shadowing in the Medical Office	1
HEOC 101*	Managing Medical Emergencies	1
OADM 118*	Transcription Skills	3
MEOF 118*	Procedure and Diagnosis Coding	3
CAPP 125*	Microcomputer Applications	3
OADM 121	Calculators	1
MEOF 102*	Medical Terminology II	3
MEOF 105*	Medical Office Procedures	3
MEOF 125*	Medical Skillbuilding	1
MEOF 121*	Documentation and Compliance	1
ENGL 110*	Business Communications	3
OADM 116*	Records and Database Management	3
SS 120	Employment Strategies	1

Certificate Total 33

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Medical Office Administration with Emphasis in Management Support Services

The Medical Office Administration degree with emphasis in Management Support Services prepares the student to work in any medical setting. The program introduces the student to all areas of the medical office setting including, but not limited to, transcription, coding, communications, accounting, ethics, records and database management, clinical assisting techniques, medical terminology, body structure and function, pharmacology, and medical office procedures. The culmination of the program is an internship in a medical setting of the student's choice. The outlook for medical office jobs leading to positions in management support services is excellent. Students must have good skills and abilities in information-ordering, oral and written comprehension and expression, speech clarity and recognition, near vision, problem sensitivity, selective attention, and timesharing. In addition, students taking MEOF 107 or specializing in Medical Transcription must have auditory acuity.

Note: CAPP 118, CAPP 125, CAPP 160, MEOF 107, MEOF 125 and OADM 116 are courses to be completed within five years of graduation unless student has been continuously enrolled in the program longer.

Degree Requirements

Prerequisite: CAPP 118 Keyboarding

*Courses to complete with a grade of C or higher**

*Course to complete with a grade of B or higher***

MEOF 101*	Medical Terminology I	3
MEOF 103*	Job Shadowing in the Medical Office	1
OADM 118*	Transcription Skills	3
MATH 101	Business Math	3
CAPP 125*	Microcomputer Applications	3
BSMT 125	Human Relations	3
*Wellness Course****		1
MEOF 102*	Medical Terminology II	3
MEOF 105*	Medical Office Procedures	3
MEOF 125**	Medical Skillbuilding	1
CAPP 160*	Word	3
ENGL 110*	Business Communications	3
OADM 116*	Records and Database Management	3
OADM 121	Calculators	1
MEOF 107*	Medical Transcription	3
MEOF 110*	Clinical Assisting Techniques	3
ACCT 109	Applied Accounting Procedures	3
MEOF 108*	Body Structure and Function for Medical Office Administration	3
MEOF 118*	Procedure and Diagnosis Coding	3
MEOF 130*	Essentials of Pharmacology	2
HEOC 101*	Managing Medical Emergencies	1
SS 120	Employment Strategies	1
MEOF 121*	Documentation and Compliance	1
ACCT 126	Introduction to QuickBooks	1
BADM 109	Business Ethics	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
SPAN 120	Spanish for the Medical Profession	3
MEOF 111*	Clinical Practicum	1
MEOF 182*	Medical Office Management Support Services Internship	3

Degree Total 68

*Wellness Course**** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Medical Office Administration with Emphasis in Medical Transcription

The Medical Office Administration degree with emphasis in Medical Transcription prepares the student to work in various medical office settings, but particularly in the area of medical transcription. The program of study for medical transcription includes training in beginning and advanced medical transcription, including courses in transcription skills, microcomputers, body structure and function, beginning and advanced medical terminology, advanced keyboarding, records and database management, pharmacology, clinical assisting techniques, communications, and ethics. The capstone class for this program of study is an internship in medical transcription. The outlook for medical transcription is excellent, with many medical transcriptionists working from home. Students must have good skills and abilities in information-ordering, oral and written comprehension and expression, speech clarity and recognition, near vision, problem sensitivity, selective attention, and time-sharing. In addition, students taking MEOF 107 or specializing in Medical Transcription must have auditory acuity.

Note: CAPP 118, CAPP 119, CAPP 125, CAPP 160, MEOF 126 and OADM 116 are courses to be completed within five years of graduation unless student has been continuously enrolled in the program longer.

Degree Requirements

Prerequisite: CAPP 118 Keyboarding

*Courses to complete with a grade of C or higher**

*Course to complete with a grade of B or higher***

MEOF 101*	Medical Terminology I	3
MEOF 103*	Job Shadowing in the Medical Office	1
OADM 118*	Transcription Skills	3
MATH 101	Business Math	3
CAPP 125*	Microcomputer Applications	3
BSMT 125	Human Relations	3
MEOF 102*	Medical Terminology II	3
MEOF 105*	Medical Office Procedures	3
CAPP 119*	Document Formatting	2
MEOF 107*	Medical Transcription	3
CAPP 160*	Word	3
OADM 116*	Records and Database Management	3
MEOF 112*	Advanced Medical Transcription	3
MEOF 126**	Medical Skillbuilding for Transcription	1
MEOF 118*	Procedure and Diagnosis Coding	3
HEOC 101*	Managing Medical Emergencies	1
MEOF 130*	Essentials of Pharmacology	2
ENGL 110*	Business Communications	3
OADM 121	Calculators	1
MEOF 108*	Body Structure and Function for Medical Office Administration	3
SPAN 120	Spanish for the Medical Profession	3
ACCT 126	Introduction to QuickBooks	1
MEOF 121*	Documentation and Compliance	1
BADM 109	Business Ethics	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
*Wellness Course****		1
MEOF 183*	Medical Office Medical Transcription Internship	3
SS 120	Employment Strategies	1

Degree Total 66

*Wellness Course**** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Medical Office Administration with Emphasis in Procedure and Diagnosis Coding

The Medical Office Administration degree with emphasis in Procedure and Diagnosis Coding is a rigorous program which prepares the student to sit for and achieve coding certifications after working in the field one to two years. The course of study includes, but is not limited to, beginning and advanced medical terminology, beginning and advanced procedure and diagnosis coding, human biology, human anatomy, human physiology, pharmacology, clinical assisting techniques, microcomputers, communications, ethics, human relations, and medical office procedures. The high point of this program of study is an internship in a procedure and diagnosis coding setting. The outlook for jobs in procedure and diagnosis coding is outstanding with excellent monetary compensation. Students must have good skills and abilities in information-ordering, oral and written comprehension and expression, speech clarity and recognition, near vision, problem sensitivity, selective attention, and time-sharing.

Note: CAPP 118, CAPP 125, MEOF 125 and OADM 116 are courses to be completed within five years of graduation unless student has been continuously enrolled in the program longer.

Degree Requirements

Prerequisite: CAPP 118* Keyboarding

*Courses to complete with a grade of C or higher**

*Course to complete with a grade of B or higher***

MEOF 101*	Medical Terminology I	3
MEOF 103*	Job Shadowing in the Medical Office	1
BIO 103	Human Biology	3
MATH 101	Business Math	3
CAPP 125*	Microcomputer Applications	3
BSMT 125	Human Relations	3
*Wellness Course****		1
MEOF 102*	Medical Terminology II	3
MEOF 105*	Medical Office Procedures	3
MEOF 125**	Medical Skillbuilding	1
BIO 207	Human Anatomy with Lab	4
ACCT 109	Applied Accounting Procedures	3
OADM 116*	Records and Database Management	3
ENGL 110*	Business Communications	3
ACCT 126	Introduction to QuickBooks	1
MEOF 118*	Procedure and Diagnosis Coding	3
MEOF 130*	Essentials of Pharmacology	2
BIO 208	Human Physiology with Lab	4
BADM 109	Business Ethics	3
OADM 121	Calculators	1
MEOF 119*	Advanced Procedure and Diagnosis Coding	3
HEOC 101*	Managing Medical Emergencies	1
MEOF 121*	Documentation and Compliance	1
SPAN 120	Spanish for the Medical Profession	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
MEOF 184*	Medical Office Procedure and Diagnosis Coding Internship	3
SS 120	Employment Strategies	1

Degree Total 66

*Wellness Course**** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Metals Technology

This curriculum is designed to prepare students for employment in the field of Metals Technology. The program is comprised primarily of the courses from the Professional Certificate in Welding Technology and Machine Tool Technology. Additional coursework includes interpreting drawings and prints, heat treating and metallurgy. There is a strong emphasis on "hands-on" skills and safety. These classes provide a path for potential employment in a wide range of jobs for production, manufacturing, industrial and other settings.

Degree Requirements

*Courses to complete with a grade of C or higher**

WELD 101*	Welding Technology I	4
MACH 101*	Introduction to Machining	4
WELD 102*	Welding Technology II	4
MACH 102*	Lathe and Milling Machine Operations	4
WELD 103*	Welding Technology III	4
MACH 103*	Milling and Grinding Machine Applications	4
WELD 104*	Welding Technology IV	4
MACH 104*	Advanced Machining	4
WELD 115	Print Reading for Welders & Machinists	3
MACH 115	Heat Treating and Metallurgy	3
CNST 162	Construction Safety (or)	
IEM 126	Industrial Safety	3
MATH 108	Technical Math II (or)	
MATH 112	Intermediate Algebra	3
PHYS 125	Technical Science	4
SS 120	Employment Strategies	1
*Program Electives***		6
ENGL 101	English Composition I (or)	
ENG l12	Technical Writing	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
SPTH 101	Public Speaking	3
*Wellness Course****		1

Degree Total 65

*Program Electives*** - Select 6 hours from AUTO, CAD, CNST, IEM, MACH, MATH 107 (or) WELD

*Wellness Course**** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 or WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Network Administration

Typical job titles for the degree are systems administrator, IT specialist, IT manager, LAN administrator, or network manager.

Tasks associated with the job may include installation, configuration, and support of a local area network (LAN), a wide area network (WAN), and an Internet system or segment of the network. Students learn to maintain and monitor network hardware and software to ensure network availability to all system users.

The AAS in Network Administration prepares students for a number of certifications, including A+, Network +, CCNA, MCP, MCSA, or MCSE. SFCC networking instructors hold at least one of these certifications. Students work on the latest versions of software and hardware. The high demand for certified network administrators will continue to increase as software and hardware become more and more complex.

Degree Requirements

*Courses to complete with a grade of C or higher**		
MATH 108*	Technical Math II (or)	
MATH 112*	Intermediate Algebra	3
PHYS 125	Technical Science	4
CAPP 125*	Microcomputer Applications	3
NET 102*	Networking I (or)	
NET 150*	CISCO Networking	3
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
*Wellness Course****		1
NET 120*	Network Server	3
NET 106*	Networking II	3
NET 130*	TCP/IP	3
NET 151*	CISCO Router Basics	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
NET 126*	Network Client	3
NET 152*	CISCO Switching Basics	3
NET 138*	Network Directory Services	3
NET 140*	PC Hardware	3
NET 142*	PC Operating Systems	3
ENGL 102	English Composition II (or)	
ENGL 110	Business Communications	3
*Program Electives***		9
NET 158*	Network Firewalls	3
NET 175*	Network Administration Internship	4
SS 120	Employment Strategies	1

Degree Total 67

*Program Electives** - Select 9 hours from CIS with the exception of CIS 103, IEM, NET (or) WEB

*Wellness Course**** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS Networking with Emphasis in PC Technician

The Networking with emphasis in PC Technician program is designed to train students in PC hardware maintenance and various PC operating systems. Job opportunities include personal computer technician, microcomputer hardware specialist, or PC maintenance technician. PC technicians work with computer software and hardware. Technicians install new software packages, assist users in learning and properly using software packages, and troubleshoot software application problems. They keep computers up and running and set up and maintain network computer systems. Technicians need knowledge of commonly-used concepts, practices and procedures, and rely on instructions and pre-established guidelines to perform the functions of the job and work under immediate supervision. Primary job functions do not typically require exercising independent judgment. A technician typically reports to a project leader or manager.

Degree Requirements

MATH 108	Technical Math II (or)	
MATH 112	Intermediate Algebra	3
PHYS 125	Technical Science	4
IEM 102	Electric Fundamentals	3
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
NET 102	Networking I (or)	
NET 150	CISCO Networking	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
*Wellness Course***		1
ENGL 102	English Composition II (or)	
ENGL 110	Business Communications	3
NET 120	Network Server	3
NET 106	Networking II	3
CAPP 125	Microcomputer Applications	3
IEM 116	Solid State Devices	3
IEM 110	Digital Principles and Applications	3
NET 126	Network Client	3
NET 140	PC Hardware	3
NET 142	PC Operating Systems	3
*Program Electives**		12
NET 151	CISCO Router Basics	3
NET 175	Network Administration Internship	4
SS 120	Employment Strategies	1

Degree Total 67

*Program Electives** - Select 12 hours from CIS, IEM (or) NET

*Wellness Course*** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Nursing

The AAS in Nursing is a bi-level program that prepares the student to complete the requirements for the Professional Certificate in Practical Nursing after the first year (Level 1) and the requirements for the Associate of Applied Science in Nursing after the second year (Level 2). This competency based bi-level curriculum allows students to transition from practical nursing to associate degree nursing in a seamless fashion. An advanced placement option is available for current licensed practical nurses into Year Two (Level 2). The program has full approval by the Missouri State Board of Nursing and is accredited by the Department of Elementary and Secondary Education.

Year One

The program accepts first year students each fall and spring semester. Application may be made upon completion of the nursing program prerequisite courses or the first day of the semester that a student will complete the prerequisite courses. Students applying to the AAS in Nursing program must verify that they meet the Essential Abilities of Candidates for Admission and Continuance. An information application packet is available online or by request from the Student Services Office at the Sedalia campus. This packet contains the Essential Abilities and admission requirements, fee sheet, program mission and philosophy, sequencing of courses, an application form and other pertinent information. Applicants are reviewed by the Nursing Admission Committee based upon the order submitted and admission criteria completed. The successful applicant must have a 2.75 GPA for all prerequisites as well as any program requirements completed by the time of review by the Nursing Admissions Committee and a 2.5 overall GPA. Any required science class must be passed with a grade of B or higher. Other prerequisite and required general education classes must be passed with a grade of C or higher. Applicants will be notified in writing regarding admission status following committee review.

Year Two

Year One students progress to Year Two based upon successful completion of the Year One program from the previous semester. Successful passing of NCLEX-PN is required for continuation in Year Two prior to the beginning of the second 8-week term of the first semester of Year Two. Advanced placement students for Year Two (current LPNs) are eligible for either fall or spring admission. Application may be made upon completion of the advanced placement prerequisite courses or the first day of the semester that a student will complete the prerequisite courses. An information application packet is available online or by request from the Student Services Office at the Sedalia campus. This packet contains the Essential Abilities and admission requirements, fee sheet, program mission and philosophy, sequencing of courses, an application form and other pertinent information. Applicants are reviewed by the Nursing Admission Committee based upon the order submitted and admission criteria completed. The successful applicant must have a 2.75 GPA for all prerequisites as well as any program requirements completed by the time of review by the Nursing Admissions Committee and a 2.5 overall GPA. Any required science class must be passed with a grade of B or higher. Other prerequisite and required general education classes must be passed with a grade of C or higher. Applicants will be notified in writing regarding admission status following committee review.

Mission

The mission of the bi-level Associate of Applied Science in Nursing program is to prepare learners to become registered professional nurses in an educational environment that promotes critical thinking, growth of the individual student and a holistic view of health care. The learner is expected to be caring, conscientious, flexible, professional, and accountable for their actions. The education and learning processes of the program promote a seamless transition from Level 1 to Level 2 that results in behavioral change. This approach is most effective as a shared responsibility of faculty and learner.

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

Prerequisite Courses for Year One (Level One)
Course to complete with a grade B or higher

BIO 207	Human Anatomy with Lab	4

Courses to complete with a grade of C or higher

ENGL 101	English Composition I	3
MATH 112	Intermediate Algebra	3
NURS 102	CPR for Health Care Providers (AHA)	.5

Prerequisite Courses for Advanced Placement for Year Two (Level Two)
Course to complete with a grade B or higher

BIO 208	Human Physiology with Lab	4

Courses to complete with a grade of C or higher

ENGL 101	English Composition I	3
MATH 112	Intermediate Algebra	3
NURS 102	CPR for Health Care Providers (AHA)	.5
NURS 210	Nursing Transition Course (required for advanced placement students only)	2
PSY 101	General Psychology	3

All Year One (Level One) courses must be completed with a grade of B or higher. Each 8-week session of nursing must be successfully completed to take the next 8-week courses.

Prerequisite Courses 10.5

Certificate Requirements
*Courses can be completed prior to the start of the program**
Course can be articulated from secondary health occupations programs. Consult the SFCC TECH PREP Director or high school counselor for procedure**

BIO 208*	Human Physiology with Lab	4
NURS 110	Personal Vocational Concepts	1
NURS 112	Introduction to Psycho-Social Health	2
NURS 114**	Fundamentals I	2
NURS 117	Fundamentals II	3
NURS 118	Fundamentals II Clinical	1.5
NURS 119	Allied Health Pharmacology	3
NURS 122	Adult Health I	4
NURS 124	Adult Health II	4
NURS 126	Adult Health Nursing Clinical	3
NURS 132	Nutrition	3
NURS 134	Nursing Care for the Childbearing Family	2
NURS 136	Childbearing Family Clinical	1.5
NURS 140	Nursing Care for the Child Rearing Family	2
NURS 142	Child Rearing Family Clinical	1.5
NURS 128	Adult Health III	2
NURS 130	Adult Health Care Coordination Clinical	2
HEOC 135	Allied Health Career Development	.5
PSY 101*	General Psychology	3

Certificate Total 55.5

All Year Two (Level Two) courses must be completed with grades of B or higher. Each 8-week session of nursing courses must be successfully completed to take the next 8-week courses.

Degree Requirements
*Courses can be completed prior to the start of the program**

NURS 213	Introduction to Professional Nursing	2
NURS 215	Complex Health: Mental Health	2.5
NURS 216	Complex Health: Mental Health Clinical	2
NURS 221	Complex Health: Nutrition/ Metabolic	2.5
NURS 227	Complex Health: Family	3
NURS 228	Complex Health: Family Clinical	1
NURS 230	Complex Health: Adult Clinical I	1
NURS 231	Complex Health: Adult Clinical II	1
NURS 219	Complex Health: Elimination	3
NURS 233	Complex Health: Adult Clinical III	3
NURS 234	Complex Health: Activity and Rest	3
NURS 237	Complex Health: Cognitive/ Perceptual	3
NURS 243	Professional Nursing Capstone Clinical	2.5
BIO 121*	Microbiology for Allied Health with Lab	4
HIST 101*	U.S. History Before 1877 (or)	
HIST 102*	U.S. History Since 1877 (or)	
POLS 101*	American/National Government	3
SPTH 101*	Public Speaking	3

Degree Total 95

Any required science class must be passed with a grade of B or higher. Other prerequisite and required general education classes must be passed with a grade of C or higher.

Prospective students should be aware that Section 335.066, RSMo of the Missouri Nursing Practice Act may prohibit persons from taking the state nursing licensure exams in cases of prior legal action. Before starting prerequisites or applying to the nursing program, you should consult with a nursing advisor or refer to the act online at http://www.moga.mo.gov/statutes/C300-399/3350000066.HTM.

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Occupational Therapy Assistant

The Occupational Therapy Assistant program is a one-plus-one degree program which prepares students to practice as Certified Occupational Therapy Assistants (COTA) after meeting certification and state licensure standards. State Fair Community College is one of three colleges in the Missouri Health Professions Consortium (MHPC) currently selected to offer the program coordinated through the University of Missouri School of Health Professions. SFCC offers and enrolls students in the general education coursework; sophomore level (professional level) coursework originates from a classroom located on the University of Missouri-Columbia campus and is conveyed to SFCC students via Interactive television and internet based technology. Through the combination of general education, professional level coursework, classroom and laboratory practice, and clinical fieldwork experiences, students will learn the profession of occupational therapy assistant. The professional year does not run on a traditional SFCC academic cycle. Classes will begin the Monday after New Year's Day and will run through the end of the fall semester. Completion of professional year coursework takes one full calendar year.

Accreditation

The MHPC Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA). Following successful completion of coursework and passing of the certification exam, individuals will be a Certified Occupational Therapy Assistant (COTA). Even with successful coursework completion students may be prohibited from sitting for the NBCOT Certification Exam if they have a felony conviction. In Missouri, state licensure is required in order to practice and acquisition of a license is contingent upon passing the NBCOT Certification Exam. For more information regarding accreditation, please contact the American Occupational Therapy Association:

Accreditation Council for Occupational
Therapy Education
PO Box 31220
Bethesda, MD 20824-1220
(301) 652-2682
(800) 377-8555
accred@aota.org

Admission Process

Enrollment in the MHPC Occupational Therapy Assistant program is selective and an informational packet with application materials is available from the college online or at the Sedalia campus. Students must complete all general education coursework PRIOR to entry into the professional level program. However, students can complete coursework in the semester prior to the start of the program; under these circumstances, program admission would be contingent upon successful completion of general education prerequisite coursework and maintenance of the required 2.5 GPA. Transcript evidence of satisfactory completion of general education/prerequisite coursework must be received with the application packet. SFCC may not be able to offer admission to all qualified applicants. Only students meeting all admission criteria and submitting completed application packets to the Selection Committee within the established timeframe will be considered. The Selection Committee meetings are conducted the summer before the start of the professional year. Admission decisions of the Selection Committee are final. Applicants will receive a letter regarding admissions status following committee review.

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Occupational Therapy Assistant

Program Prerequisites/General Education Courses

Must be completed prior to the start of the program with grades of C or higher in science based courses:

Year One

General Education Requirements

Course	Credit Hours
Human Anatomy with Lab	4
Human Physiology with Lab	4
Public Speaking	3
English Composition I	3
General Psychology	3
Lifespan Development	3
Medical Terminology I	3
Contemporary Math (or) Intermediate Algebra	3
U.S. History Before 1877 (or) U.S. History Since 1877 (or) American/National Government	3
General Education Electives*	1-3
Total general education	**30-32**

*Recommended: Sociology

Year Two – Each January (spring semester)

Semester 1: January – April	Credit Hours
OTA 200: Foundations of Occupational Therapy	4
OTA 205: Medical Conditions in Occupational Therapy	3
OTA 210: Analysis of Occupations	2
OTA 215: Mental Health and Psychosocial	4
OTA 220: Pediatric and Adolescent Practice	4
Total	**17**

Semester 2: May-August	
OTA 250: Functional Kinesiology	2
OTA 255: Physical Disabilities Practice	4
OTA 260: Community Practice	3
OTA 265: Ethics, Management, and Leadership	3
OTA 270: Professional Skills	3
Total	**15**

Semester 3: August - December	
OTA 290: Level II A Fieldwork	8
OTA 295: Level II B Fieldwork	8
Total	**16**

Total Professional 48

AAS in Paraprofessional Educator

This program leads to an Associate of Applied Science degree with emphasis in Paraprofessional Educator. The degree is geared for students wishing to pursue employment as a Paraprofessional Educator or Substitute Teacher within a pre K-12 school. The graduate will meet current state and federal regulations for working as a Paraprofessional Educator in any classroom or school setting. Many of the courses will transfer to a four-year institution and will count toward a bachelor degree. Other courses are specific to the needs of students with whom paraprofessional are likely to work. All students must pass a criminal background check to work in this field.

Degree Requirements

ENGL 101	English Composition I	3
ART 101	Art Appreciation (or)	
MUS 101	Music Appreciation (or)	
SPTH 107	Introduction to Theatre	3
ECD 117	Creative Expression and Play	3
SPTH 101	Public Speaking	3
PSY 101	General Psychology	3
MATH 112	Intermediate Algebra (or)	
MATH 114	College Algebra (or)	
MATH 117	Contemporary Mathematics	3
EDUC 205	Teaching Profession with Field Experience	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877	3
HLTH 102	First Aid	2
PSY 102	Child Psychology	3
*Program Elective**		3
EDUC 209	Foundations of Education	3
BIO 112	Introduction to Biology with Lab (or)	
CHEM 101	Introduction to Chemistry with Lab (or)	
EASC 101	Introduction to Earth Sciences with Lab (or)	
EASC 106	Physical Geology with Lab	5
POLS 101	American/National Government	3
EDUC 212	Technology for Teachers	3
HLTH 101	Personal Health and Fitness (or)	
WELL 122	Applied Wellness (or)	
PPRO 106	Introduction to Physical Education in the Elementary School	1-2
EDUC 228	Education of the Exceptional Learners pre K-12	3
EDUC 218	Children's Literature	3
EDUC 250	Paraprofessional Educator Practicum	3
EDUC 220	Educational Psychology	3
SOC 120	American Diversity	3
SS 120	Employment Strategies	1

Degree Total 63

*Program Elective** - Select 3 hours from ECD 115, ECD 121, ECD 127, GEOG 101, LIT 101, PSY 104 (or) SPTH 105

Note: Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

Professional Certificate in Pharmacy Technology

The Professional Certificate in Pharmacy Technology provides the background and education to prepare students with no pharmacy background to take the Pharmacy Technician Certification Board Examination (PTCE) to achieve their CPhT designation. While the state of Missouri does not require certification for pharmacy technicians, the CPhT is a nationally recognized certification that is required in some states. While not a state requirement, some pharmacies, hospitals and related employers prefer to hire employees who have achieved their CPhT certification, typically at higher wage rates than noncertified employees. This certificate is appropriate for both retail and hospital pharmacies, as well as related fields in the health care industry. Selection of electives can customize the certificate to allow opportunities for students to extended their knowledge that is related to their own personal or job-related situation while earning the CPhT certification.

Certificate Requirements

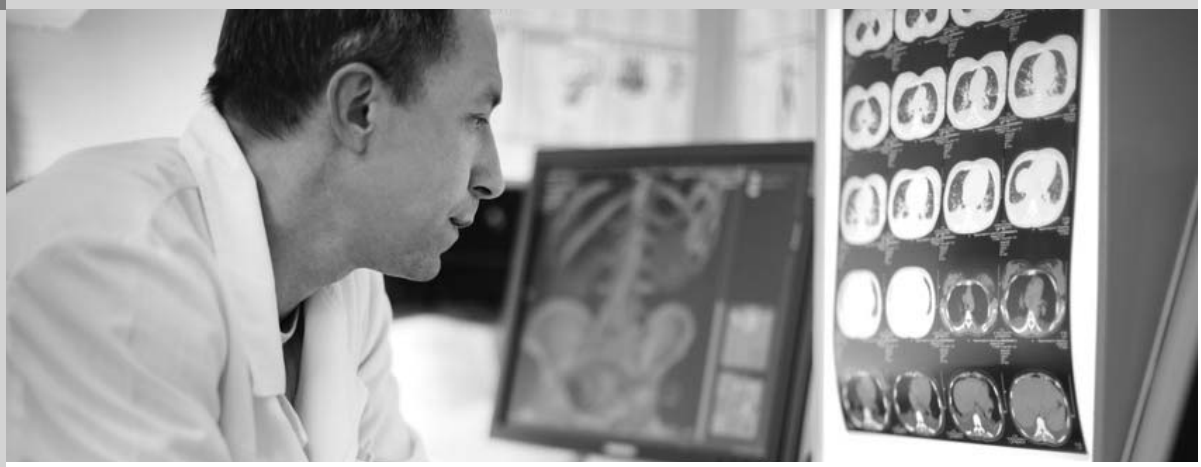
MEOF 101	Medical Terminology I	3
PHRM 105	Pharmacy Technician I	3
PHRM 107	Pharmacy Technician II	3
PHRM 109	Pharmacology for Pharmacy Technicians	3
*Program Electives**		3-5
PHRM 111	Practicum for Pharmacy Technicians	3
PHRM 115	Pharmacology Certification	3
HEOC 140	Technology and Health Care	3
*Program Electives**		4-6

Certificate Total 30

*Program Electives** Select 9 hours from CHEM 101, HEOC 101, HLTH 102, MATH 112, (or) MEOF 102

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Radiologic Technology



Radiologic Technologists are the only allied health professionals educated in image production, radiation protection and image evaluation. Although an interdisciplinary team of radiologists, radiologic technologists and support staff plays a critical role in the delivery of health services, it is the radiologic technologist who performs the radiologic examination that creates the images needed for diagnosis. The Radiologic Technology program is dedicated to serving the communities of rural Missouri through the preparation of highly competent, registry-eligible medical imaging professionals. The program provides a solid educational base and a thorough professional preparation that will allow the graduate to competitively enter the work force, continue their education in advanced imaging technologies, and/or transfer into baccalaureate degree programs in imaging science. Admission to the program is selective and an informational packet with an application to the program is available online or by request from the Student Services Office at the Sedalia campus.

Program Prerequisite Requirements

Must be completed prior to the start of the program with a grade of C or higher:

BIO 207	Human Anatomy with Lab	4
ENGL 101	English Composition I	3
MATH 112	Intermediate Algebra	3
MEOF 101	Medical Terminology I	3
RAD 100	Radiologic Technology Prep Workshop (by invitation only - part of the application process)	.5

Degree Requirements

*Courses can be completed prior to the start of the program**

RAD 102	Orientation to Radiologic Technology	2
RAD 120	Radiographic Procedures I	3
RAD 122	Radiographic Procedures II	3
RAD 128	Patient Care	3
RAD 136	Radiation Protection	2
BIO 208*	Human Physiology with Lab	4
RAD 106	Clinical Education I	3
RAD 124	Radiographic Procedures III	3
RAD 142	Trauma and Advanced Imaging	3
RAD 134	Radiographic Exposures and Quality Control	3
RAD 146	Imaging Equipment	3
RAD 108	Clinical Education II	3
RAD 110	Clinical Education III	3
HIST 101*	U.S. History Before 1877 (or)	
HIST 102*	U.S. History Since 1877 (or)	
POLS 101*	American/National Government	3
RAD 112	Clinical Education IV	3
RAD 130	Radiation Production and Characteristics	3
RAD 140	Radiologic Pharmacology	3
RAD 154	Sectional Anatomy	3
SPTH 101*	Public Speaking	3
RAD 114	Clinical Education V	3
RAD 144	Radiation Biology	2
RAD 150	Radiographic Pathology	3
RAD 152	Image Analysis	3
RAD 170	Preparing for Professionalism	3

Degree Total 83.5

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Renewable Energy Technology with Emphasis in Biomass Energy

Utilizing biomass energy sources, such as wood chips, agricultural residues or even municipal waste to produce electricity or generate heat for buildings, whole communities, or for industrial processes offers significant employment opportunities. The program will prepare students to pursue careers in this new and growing career field. The program is structured to initially provide students with a fundamental understanding of the theory and application of the various types of renewable energy technology. The Renewable Energy Technology with emphasis in Biomass Energy program will enable each student to develop an in-depth understanding of power plant operations, biomass chemistry and selecting fuels for applications, operating boilers and power turbines and managing agriculture operations to produce and harvest biomass fuels. The program will offer students both classroom and hands-on lab experience. Internship opportunities will be offered. In addition, the program will emphasize environmental protection systems, OSHA safety training and detailed understanding of the National Electrical Code as it applies to the installation of power generation systems. Proficiency in math skills, using computers, safety equipment and hand tools, and an understanding of basic chemistry is required.

The program will pursue certification through the Interstate Renewable Energy Council* (IREC), www.irecusa.org, which utilizes the Institute for Sustainable Power Quality (ISPQ) STANDARD 01022, for the accreditation and certification of renewable energy, energy efficiency, and distributed generation training providers. This certification process ensures continuity, consistency and quality in the delivery of training.

*IREC, a nonprofit organization, is responsible for the full accreditation and certification cycle, including processing applications, assigning registered auditors, awarding the credential, and maintaining all records of applicants, candidates and award recipients.

Degree Requirements

*Courses to complete with a grade of C or higher**

ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
SPTH 101	Public Speaking	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
MATH 108*	Technical Math II	3
PHYS 125	Technical Science	4
*Wellness Course***		1
RETS 102*	Introduction to Renewable Energy	3
RETS 126*	Solar Photovoltaic Instrumentation and Metrology	3
IEM 106	Industrial Mechanics	3
IEM 108	Fluid Power Technology	3
IEM 102	Electric Fundamentals	3
IEM 104	Electrical Power	3
IEM 136	General NEC Requirements	3
IEM 138	Power Distribution and Switchgear	3
SS 120	Employment Strategies	1
RETB 105*	Biomass/Biofuels Energy Generation	3
RETB 110*	Power Plant Systems	3
RETB 115*	Plant Boilers and Operations	4
RETB 120*	Turbines and Generators	3
RETB 125*	Power Plant Chemistry with Lab	5
RETB 175*	Biomass Generation Internship	8

Degree Total 68

*Wellness Course** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Renewable Energy Technology with Emphasis in Solar Electric

According to the Solar Energy Industries Association (SEIA), www.seia.org, employment opportunities in the solar industry are expected to exceed 500,000 by the year 2015. This program will prepare students to pursue careers in this new and growing career field. The program is structured to initially provide students with a fundamental understanding of the theory and application of the various types of renewable energy technology. The Renewable Energy Technology with emphasis in Solar Electric program will enable each student to develop an in-depth understanding of how to design, specify, adapt, implement, configure, install, inspect, and maintain photovoltaic systems, including grid-connected and stand-alone systems, with or without battery storage for residential and commercial applications. The program will offer students both classroom and hands-on lab experience, as well as an opportunity to install a system on a building. Internship opportunities will be offered. In addition, the program will emphasize OSHA safety training and detailed understanding of the National Electrical Code as it applies to the installation of solar PV systems. The program requires students to lift objects weighing 30 pounds or more, and perform installation tasks on roof structures that are sloped and at heights of 10 – 20 feet above the ground. Proficiency in math skills, using computers, safety equipment, and hand tools is required. The curriculum is structured to cover all the objectives for the North American Board of Certified Energy Practitioners (NABCEP), www.NABCEP.org, Entry Level Exam Program. NABCEP is the "gold standard" for PV certification and designed to raise industry standards and promote consumer confidence. Upon successful completion of the program, students will be afforded the opportunity to take the NABCEP PV Entry Level Exam for Level 1 certification. In addition, they will be prepared to take the NABCEP Certified Solar PV Installer Exam, once they complete the appropriate work experience requirements.

The program will pursue certification through the Interstate Renewable Energy Council* (IREC), www.irecusa.org, which utilizes the Institute for Sustainable Power Quality (ISPQ) STANDARD 01022, for the accreditation and certification of renewable energy, energy efficiency and distributed generation training providers. This certification process ensures continuity, consistency and quality in the delivery of training. In addition, the program intends to seek approval as an NABCEP PV entry level exam provider.

*IREC, a nonprofit organization, is responsible for the full accreditation and certification cycle, including processing applications, assigning registered auditors, awarding the credential, and maintaining all records of applicants, candidates and award recipients.

Degree Requirements

*Courses to complete with a grade of C or higher**

ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
SPTH 101	Public Speaking	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
MATH 108*	Technical Math II	3
PHYS 125	Technical Science	4
*Wellness Course***		1
RETS 102*	Introduction to Renewable Energy	3
RETS 126*	Solar Photovoltaic Instrumentation and Metrology	3
IEM 106	Industrial Mechanics	3
IEM 108	Fluid Power Technology	3
IEM 102	Electric Fundamentals	3
IEM 104*	Electrical Power	3
IEM 136	General NEC Requirements	3
IEM 138	Power Distribution and Switchgear	3
SS 120	Employment Strategies	1
RETS 106*	Introduction to Solar Photovoltaic Systems and Solar Radiation	1
RETS 110*	Solar Photovoltaic Site Planning, Components and Configurations	2
RETS 114*	Solar Photovoltaic System Design	3
RETS 118*	Solar Photovoltaic Balance of Systems	2
RETS 122*	Solar Photovoltaic Utility Interconnection, Permitting and Inspection	1
RETS 130*	Practical Solar Photovoltaic Electric Applications and Experience	8
RETS 134*	Solar Photovoltaic Commissioning, Maintenance, Troubleshooting and Economic Analysis	1
RETS 175*	Solar Photovoltaic Internship	6

Degree Total 66

*Wellness Course*** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Renewable Energy Technology with Emphasis in Wind Electric

According to the American Wind Energy Association (AWEA), www.awea.org, by the year 2030, 20% of the power produced in this country will come from the wind. Installing more wind power would foster rural economic development and support roughly 500,000 new jobs. This program will prepare students to pursue careers in this new and growing career field. The program is structured to initially provide students with a fundamental understanding of the theory and application of the various types of renewable energy technology. The Renewable Energy Technology with emphasis in Wind Electric program will enable each student to develop an in-depth understanding of how to specify, configure, install, inspect, and maintain small wind energy systems. The program will offer students both classroom and hands-on lab experience. Internship opportunities will be offered. In addition, the program will emphasize OSHA safety training and detailed understanding of the National Electrical Code as it applies to the installation of wind energy systems. The program requires students lift objects weighing 30 pounds or more and to perform tasks at heights of 45 – 100 feet above the ground. Proficiency in math skills, using computers, safety equipment, and hand tools is required. The curriculum is structured to cover all the objectives for the North American Board of Certified Energy Practitioners (NABCEP), www.NABCEP.org, Small Wind Installer Certification. NABCEP is the "gold standard" for wind energy certification and designed to raise industry standards. In addition, the program will follow AWEA's skills training recommendation for entry-level wind turbine service technicians. Upon successful completion of the program, students will be prepared to take the NABCEP Certified Small Wind Installer Exam, once they complete the appropriate work experience requirements.

The program will pursue certification through the Interstate Renewable Energy Council* (IREC), www.irecusa.org, which utilizes the Institute for Sustainable Power Quality (ISPQ) STANDARD 01022, for the accreditation and certification of renewable energy, energy efficiency, and distributed generation training providers. This certification process ensures continuity, consistency and quality in the delivery of training. In addition, the program will pursue AWEA Seal of Approval, www.awea.org/la_education_soa.cfm.

*IREC, a nonprofit organization, is responsible for the full accreditation and certification cycle, including processing applications, assigning registered auditors, awarding the credential, and maintaining all records of applicants, candidates and award recipients.

Degree Requirements

*Courses to complete with a grade of C or higher**

ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
SPTH 101	Public Speaking	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
MATH 108*	Technical Math II	3
PHYS 125	Technical Science	4
*Wellness Course***		1
RETS 102*	Introduction to Renewable Energy	3
RETS 126*	Solar Photovoltaic Instrumentation and Metrology	3
IEM 106	Industrial Mechanics	3
IEM 108	Fluid Power Technology	3
IEM 102	Electric Fundamentals	3
IEM 104	Electrical Power	3
IEM 136	General NEC Requirements	3
IEM 138	Power Distribution and Switchgear	3
SS 120	Employment Strategies	1
RETW 102*	Introduction to Wind Energy	2
RETW 106*	Wind Energy Project Operations	2
RETW 110*	Wind Turbine Mechanical Systems	3
RETW 114*	Wind Power Generation and Transmission	3
IEM 112	Control Circuit Troubleshooting	3
IEM 114	Motor Control	3
IEM 122	Introduction to PLCs	3
RETW 118*	Wind Systems Troubleshooting and Repair	3
RETW 122*	Wind Project Sitting	2
RETW 175*	Wind Energy Internship	4

Degree Total 70

*Wellness Course*** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

AAS in Web Development

With the explosion of e-commerce, many companies now generate a substantial percentage of their revenue from online purchases. Even the smallest companies have a presence on the Web. Companies are seeking individuals with the ability to create interactive Web sites capable of accessing multiple databases.

The Web Development program is designed to enable graduates to create powerful Web sites. The degree is ideal for the individual seeking a career in the world of cyber industry.

Degree Requirements

*Courses to complete with a grade of C or higher**		
CAPP 125	Microcomputer Applications	3
CIS 103*	Introduction to CIS	3
CIS 124*	Database Management	3
CIS 145*	Visual Basic	3
CIS 132*	Unix	1
NET 102*	Networking I	3
WEB 112*	Web Utilities	1
WEB 113*	Web Design	1
WEB 116*	Web Development	3
*Program Elective***		3
CIS 155*	Programming in C#	3
CIS 158*	Java	3
CIS 161*	Systems Analysis	3
CIS 162*	Advanced Visual Basic	3
NET 120*	Network Server	3
WEB 114*	Web Scripting	3
WEB 118*	Web Graphics	3
WEB 120*	XML	3
WEB 175*	Web Development Internship	4
ENGL 101	English Composition I (or)	
ENGL 112	Technical Writing	3
ENGL 110	Business Communications	3
MATH 101	Business Math (or)	
MATH 112	Intermediate Algebra	3
HIST 101	U.S. History Before 1877 (or)	
HIST 102	U.S. History Since 1877 (or)	
POLS 101	American/National Government	3
*Wellness Course****		1
SS 120	Employment Strategies	1

Degree Total 66

*Program Elective** - Must complete with a grade of C or higher* - Select 3 hours from BSMT 132, CIS 157, CIS 163, NET 134, WEB 117, WEB 125, WEB 126, (or) WEB 127

*Wellness Course**** – Select one course from the following - HLTH 101, WELL 116, WELL 117, WELL 118, WELL 119, WELL 121 (or) WELL 122

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

Professional Certificate in Welding Technology

Depth of training required for entry into the welding occupation depends on the specific needs of employers. Almost every manufacturing industry uses welding at some stage of production or in the repair and maintenance of equipment. Welders may perform manual welding, in which the work is entirely controlled by the welder, or semi-automatic welding in which the welder uses machinery to help perform welding tasks. They generally plan work from drawings or specifications, or by analyzing damaged metal parts, using knowledge of welding and metals. They select and set up welding equipment and examine welds to insure they meet standards or specifications. In some production processes in which work is repetitive and items to be welded are relatively uniform, automated welding is used. In this process, a machine performs the welding tasks and it is monitored by a welding machine operator. The Welding Technology program provides theory and practical lab training to achieve the competencies needed to enter the job market upon the completion of the certificate course requirements. The physical requirements of this occupation typically include lifting up to 45 pounds, pushing, pulling, reaching, walking, standing, crawling, kneeling, ascending and descending ladders, manual dexterity, and working in cramped positions for sustained periods of time. The courses in this certificate program are offered primarily in the evening. All welding courses follow American Welding Society standards and welder qualification is available.

Certificate Requirements

*Courses to complete with a grade of C or higher**

CNST 162	Construction Safety (or)	
IEM 126	Industrial Safety	3
MATH 108	Technical Math II	3
PHYS 125	Technical Science	4
WELD 115	Print Reading for Welders and Machinists	3
WELD 101*	Welding Technology I	4
WELD 102*	Welding Technology II	4
WELD 103*	Welding Technology III	4
WELD 104*	Welding Technology IV	4
MACH 115*	Heat Treating and Metallurgy	3
*Program Elective***		3
SS 120	Employment Strategies	1

Certificate Total 36

*Program Elective*** - Select 3 hours from CAD 130, MACH, MATH 107 (or) WELD 180

Note: It is recommended that courses be taken in the order listed. Not all courses are offered every semester. Check with your advisor or the department. Refer to the course descriptions for prerequisites.

Section 3 | 1

State Fair Community College

Course Descriptions

Accounting

ACCT 101 - Principles of Financial Accounting 3
Prerequisites: BSKL 020 and BSKL 061 with grades of C or higher or equivalent placement scores. Introductory course covering fundamental accounting principles and financial statement preparation. Emphasis on analysis of effects of business transactions on the earnings, financial position, and cash flows of business entities.

ACCT 102 - Managerial Accounting 3
Prerequisite: ACCT 101 with a grade of C or higher. Introduction to accounting methods and processes of managerial and cost accounting. Emphasis on developing and using accounting information related to a manufacturing environment, including management control and decision making.

ACCT 109 - Applied Accounting Procedures 3
Prerequisite: BSKL 015 with a grade of C or higher or equivalent placement score. Provides a basic understanding of accounting terminology and procedures used to record, classify and summarize financial data for a sole proprietorship. Designed for those with no previous knowledge of accounting.

ACCT 125 - Computerized Accounting Applications 3
Prerequisites: ACCT 109 and CAPP 125 with grades of C or higher. Project-intensive approach to accounting and reporting utilizing accounting software currently used in industry. Emphasis on using a microcomputer to process financial accounting data and prepare financial statements and related reports.

ACCT 126 - Introduction to QuickBooks 1
Introduction to the basic concepts and skills necessary for using QuickBooks. Emphasis on entering accounts payable/receivable and payroll transactions, completing end-of-year processes and generating reports to make business decisions.

ACCT 132 - Business Taxation 3
Prerequisite: ACCT 101 with a grade of C or higher. Introduction to the federal and state laws that affect employment practices, payment of wages, benefit plans, worker's compensation, garnishments, and sales tax. Emphasis on compliance with federal and state reporting requirements.

ACCT 137 - Introduction to Federal Taxation 3
Prerequisite: ACCT 101 with a grade of C or higher. Introduction to federal income tax principles and procedures. Emphasis on application of tax laws to solve tax problems, develop tax plans, perform tax research, and prepare required returns.

ACCT 175 - Accounting Internship 4
Prerequisite: Consent of program coordinator. Supervised on-the-job training plan, tailored to meet student and employer needs.

ACCT 203 - Intermediate Financial Accounting I 3
Prerequisite: ACCT 101 with a grade of C or higher. Financial accounting theory and practice are applied in accordance with generally accepted accounting principles for financial reporting of corporate entities. Emphasis on corporate financial statement preparation and analysis.

ACCT 220 - Current Topics in Accounting 3
Prerequisites: ACCT 102 and ACCT 203 with grades of C or higher. Accounting theory and practice are applied to selected topics related to financial reporting and management decision-making. Course will utilize case studies and current events involving the accounting profession.

Agriculture

AGRI 101 - Ag Leadership and Issues I 2
Course is designed to help the student begin planning a career in the agriculture industry by creating and setting goals and developing means of attaining those goals. The course focuses on leadership development, team building, problem solving, and current issues in agriculture.

AGRI 102 - Ag Leadership and Issues II 1
Prerequisite: AGRI 101. A continuation of AGRI 101 promoting further development of the student's career plan. This course will help students identify what attributes they attain that are sought by the agriculture industry and how to prepare for getting into the work force. Course focuses on resume building, creating cover letters, filling out employment applications, and job interview skills.

AGRI 103 - Ag Leadership and Issues III 2
Prerequisite: AGRI 102. Course allows students to review the progress they made in the previous year in AGRI 101 and AGRI 102 and continue toward their goal of employment in the agriculture industry. Course focuses on the continuing development and implementation of a career plan for progress into an agriculture related career.

AGRI 104 - Ag Leadership and Issues IV 1
Prerequisite: AGRI 103. A continuation of AGRI 103 completing the progress of the students' plan for employment. Course focuses extensively on the process of employment; from job identification, application, and interviewing for the position. Activities include job searching, contacting employer, filling out applications, and experiencing a job interview.

AGRI 106 - Global Agriculture 3
A general education course intended for non-agriculture majors. Course introduces the student to economic, political, cultural, and environmental issues that affect food production and distribution in the advancement of societies in developed and developing countries.

AGRI 108 - Animal Science 3
Presents principles of animal agriculture essential for a basic understanding of the animals that are chief producers of food and fiber for human consumption. Specific breeds, animal behavior, anatomy, physiology, reproduction, and nutrition will be included.

AGRI 112 - Livestock Evaluation 3
Course is a study of livestock evaluation in selection of breeding and marketing animals including dairy cattle, beef cattle, swine, and sheep.

AGRI 114 - Livestock Management 3
Course is a study of the segments of livestock production which identifies the essential ingredients needed by producers to raise productive and profitable livestock.

AGRI 116 - Animal Nutrition 3
Study includes the nutritional needs of livestock and the formulation of feeds, including hormones, antibiotics, minerals, vitamins, and other feed additives.

AGRI 118 - Plant Science 3
Study includes plant and seed development and selection, the cultural practices in the production of common farm crops, and seed and weed identification.

AGRI 119 - Soils I with Lab 4
Course is designed to give students an understanding of key concepts in soil formation, composition, uses, soil conservation, cropping systems, and soil improvements. The lab portion provides students with real world application to theories and concepts of soils taught in the classroom.

AGRI 121 - Soils II 3
Prerequisite: AGRI 119. Study includes soil composition and fertilization practices needed for proper nutrition of plants.

AGRI 123 - Soil Erosion and Management 3
Prerequisite: AGRI 119. Course includes training in surveying soil erosion control through construction of structures and management practices.

AGRI 125 - Natural Resources 3
Course includes the study of natural resources as they relate to our existence and their mutual relationship to each other.

AGRI 127 - Farm Chemicals 3
Course includes the study of the production, distribution, handling, and application of farm chemicals, including insecticides, rodenticides, fungicides, herbicides, and brush killers.

AGRI 129 - General Horticulture 3
Course includes study of horticultural crops and the horticultural industry. Study includes plant propagation and vegetable/fruit production.

AGRI 132 - Agriculture Economics 3
Study focuses on the factors affecting the income and expenditures of agricultural business, and the methods and systems of buying and selling products.

AGRI 134 - Marketing Farm Commodities 3
Course presents theory and practice in marketing livestock and livestock products, analysis of costs and efficiency in grain marketing and processing organizations, and the price-making process.

AGRI 136 - Ag Credit and Finance 3
Course emphasizes general principles associated with evaluation of management and use of capital. Will develop an understanding of agricultural finance to help the banker satisfy credit needs of modern agriculture.

Course Descriptions

AGRI 138 - Ag Business Management 3
Study includes management functions and economics of agriculture organizations and operations including input-output analysis, efficient allocations of resources, enterprise combinations, and budget analysis.

AGRI 140 - Vegetable Production 3
This course includes a study of crop production practices, including vegetables, cut flowers, and culinary and medicinal herbs. Topics include variety selection, production methods, and record keeping procedures for certification. Upon completion, students should be able to demonstrate a knowledge of crop production appropriate for the spring and fall seasons.

AGRI 142 - Water Management 3
This course includes a study of water management practices. Topics include water needs of plants, water conservation, water equipment needs, and best practices. Upon completion, students should be able to demonstrate a knowledge of water management.

AGRI 144 - Introduction to Beekeeping 1
An introduction to the basic principles of beekeeping and the importance of its role in agriculture production and maintenance of our food supply. Information provided should enable a person to become established as a hobbyist beekeeper.

AGRI 145 - Advanced Beekeeping 1
An advanced beekeeping course to enable participants to become established as a hobbyist beekeeper from obtaining bees, setting up, and managing several bee hives.

AGRI 147 - Plant Identification 4
Course includes the study and identification of various landscaping and greenhouse plants.

AGRI 148 - Fruit Production 3
This course includes a study of fruit crop production practices. Topics include variety selection, production methods, and record keeping procedures. Upon completion, students should be able to demonstrate a knowledge of crop production appropriate for the spring and fall seasons.

AGRI 149 - Chemistry of Soil Additives 3
This course covers the basic principles of soil fertilization and includes lime application, plant nutrients, fertilizing, and management. Upon completion, students should be able to give nutrient and liming recommendations for soils.

AGRI 151 - Landscape Design and Maintenance 3
A comprehensive study of landscaping including functional and aesthetical aspects of landscaping, maintenance and implementation, and computer aided design (CAD).

AGRI 152 - Turf Management 4
Course focuses on identifying, establishing and maintaining a turf grass environment including cultural practices of different environments.

AGRI 154 - Greenhouse Management with Lab 4
Course presents design, environmental control and equipment found in the greenhouse. Instruction includes principles and practices relative to plant nutrition, pest control, production, handling, and marketing greenhouse production.

AGRI 167 - CDL Licensing 2
Course is designed to enable students to pass the state Commercial Driver's License exam. Students must qualify for the Class A CDL with all appropriate endorsements.

AGRI 168 - Commercial Applicator Licensing 2
Course is designed to complement other courses offered in weed, insect, disease control, and pesticide application to give the students the skills necessary to pass the state and federal examination for commercial applicator licensing.

AGRI 174 - Crop and Insect Scouting 2
Utilizing real-life crop growing environments, students will learn to identify weeds, insect and disease infestations, determine life cycles, damage symptoms, economic thresholds, and recommended control alternatives.

AGRI 175 - Occupational Internship 2 to 8
Prerequisite: Consent of program coordinator. Supervised by agricultural staff and designed to assist the student in developing good work habits. Includes training in specific areas unique to the employer and provides basis for career decision for the student.

AGRI 179 - Innovative Horticulture 1
Prerequisite: Consent of instructor. Designed to provide the student an opportunity to apply horticultural knowledge, problem-solving skills, and creativity to develop and/or construct a capstone project. Student must have completed 55 credit hours in the AAS in Agriculture with emphasis in Horticulture program.

AGRI 180 - Problems in Agriculture 1 to 3
Prerequisite: Consent of program coordinator. Independent study of a special problem in agriculture under the supervision of an agriculture instructor.

AGRI 190 - AGRI Capstone 1
Prerequisite: Consent of program coordinator. An end-of-program course for sustainable agriculture majors. Students will utilize information from courses in the program to solve sustainable ag problems. This course provides an understanding of a sustainable ag problem or project which will incorporate prior knowledge.

Art

ART 101 - Art Appreciation 3
Study of art history from the last of the 19th century through the present. Consists of formal lectures, films, slides, gallery and studio visits, assigned readings, as well as hands-on experiences with art materials. Includes the evolution of art by focusing on the major art movements of the past 100 years. Encourages appreciation of visual art through the study of content, design, technique, and criticism of art. Students learn how art changed during this period and how it reflects the dynamics of 20th century civilization.

ART 103 - Design I 3
Course is a study of the visual elements and principles of design. Emphasis is placed on the student's ability to recognize and manipulate these elements and principles.

ART 104 - Design II 3
Prerequisite: ART 103. Compositional principles of art are explored through a variety of two- and three-dimensional materials. Emphasis is placed on the student solving specific problems creatively with color.

ART 106 - Watercolor I 3
Course introduces the materials and techniques of aqua media painting, various preparations of paper, and the use of brushes and other tools. Control of transparent color will be learned through experimentation.

ART 107 - Watercolor II 3
Prerequisite: ART 106. Continuation of ART 106 with advanced studio experience centered on a series of related paintings.

ART 108 - Watercolor III 3
Prerequisite: ART 107. Includes advanced problems and techniques of aqua media painting.

ART 110 - Printmaking 3
Course includes exploring and developing personal artistic identity in traditional and contemporary methods of printing. Wood block, etching and monoprint methods will be explored.

ART 112 - Drawing I 3
Entry-level art course required for all art majors. As a foundation course, emphasis is placed on drawing as an expressive medium. Content is based on a series of perceptual and conceptual assignments designed to force students to reach inside themselves to define, through their work, a sense of artistic self.

ART 113 - Drawing II 3
Prerequisite: ART 112. The second of a two-course sequence required for all art majors. As a foundation course, emphasis is placed on drawing as an expressive medium. Students search for expression of their own personal artistic identity through a series of process-oriented assignments using various colored media.

ART 114 - Figure Drawing I 3
The human figure is analyzed in terms of structure, proportion and form. Emphasis is placed on representative as well as conceptual approaches.

ART 115 - Figure Drawing II 3
Prerequisite: ART 114. Continuation of the study of refining the student's technical skills in drawing. Emphasis is placed on technical skills rendering the figure, as well as conceptual approaches and development.

ART 116 - Painting I 3
Students concentrate on painting as an expressive medium. Course is designed to allow students to explore a variety of subject matter and experiment with painting techniques in a search for personal artistic identity.

ART 117 - Painting II 3
Prerequisite: ART 116. Study includes form, color and organization of painting in oils and acrylics with emphasis placed on individual expression.

ART 118 - Painting III 3
Prerequisite: ART 117. Offered by appointment only. Students may concentrate in watercolor, oil, acrylics, or mixed media.

ART 120 - Modern Art History 3
Required for art majors and also serves as a fine arts course for those interested in modern art. Emphasis is placed on the creative nature of man and how creativity enriches society and the social, economic and political conditions that influenced and constructed modern art. Study begins with the development of impressionism and moves through the major art movements of the late 19th and 20th centuries.

ART 122 - Sculpture I 3
Develops insight into the principles of sculptural organization and stresses individual development of three-dimensional forms.

ART 123 - Sculpture II 3
Prerequisite: ART 122. A continuation of ART 122 with the student developing a body of work that is interrelated. Includes exploration of a variety of materials: metal, wood, found objects, etc., with an emphasis placed on individual exploration and development.

ART 126 - Ceramics I 3
Course designed to introduce the student to basic clay construction techniques, basic ways of glazing, and firing systems. Emphasis is placed on students acquiring technical proficiency in a variety of constructive methods and glazing techniques.

ART 127 - Ceramics II 3
Prerequisite: ART 126. Continuation of ART 126 with students becoming more proficient in construction techniques which are appropriate for their ideas. Emphasis is placed on students developing a body of work that is interrelated.

ART 130 - Fiber Arts I 3
Course explores a variety of traditional and nontraditional mediums and techniques in the fiber arts. Emphasis is placed upon process and investigation.

ART 131 - Fiber Arts II 3
Prerequisite: ART 130. Continuation of the study and exploration of traditional and nontraditional mediums and techniques in the fiber arts. Emphasis is placed upon process and further investigation of personal expression as well as development of craftsmanship through the fibers media.

ART 180 - Problems in Art 3
Prerequisite: Consent of instructor. Must complete courses I and II of desired subject area. Independent study of a special problem in art under the supervision of an art instructor. Students will concentrate on a particular medium, subject or source. May be repeated in a different problem area.

Automotive

AUTO 101 - Preventive Maintenance 5
The course includes many fundamental principles that are keys to laying a foundation for the automotive student, including shop safety, hazardous materials and environmental issues, hand tools, measuring tools, hardware, and math related to the automotive industry, career/industry specific information, and an overview of many of the automotive systems. "Real-world fixes" and "tech tips" are included throughout to help illustrate how real problems are solved. Each new topic covers the preventive maintenance requirements for various components and automotive systems, including the purpose, function, and operation, as well as how to service each system.

AUTO 103 - Manual Transmissions, Drivelines and Axles 5
Prerequisite: AUTO 101 with a grade of C or higher. Instruction for development of skills and knowledge required to diagnose and repair drivelines. Includes clutch, transmission, drive shaft, differential, axles, wheels, and transaxles.

AUTO 105 - Automatic Transmissions 5
Prerequisite: AUTO 101 with a grade of C or higher. Instruction designed to develop skills and knowledge required to diagnose and repair automatic transmissions and automatic transaxles with the use of a service manual. Includes the study of automatic transmission design and theory of operation.

AUTO 108 - Advanced Engine Performance 6
Prerequisites: AUTO 101, AUTO 111, AUTO 116, and AUTO 118 with grades of C or higher. Course is an advanced study of automotive diagnostic equipment and troubleshooting techniques related to modern vehicle powertrains. Course concentrates on electronic engine controls including fuel injection, feedback systems and computer controlled engine management systems.

AUTO 109 - Fuel Systems and Emissions 5
Prerequisites: AUTO 101, AUTO 111, AUTO 116, and AUTO 118 with grades of C or higher. Instruction designed to develop skills and knowledge required to diagnose and service fuel systems, evaporative emissions systems and exhaust and catalytic converter functions.

AUTO 111 - Computerized Engine Control 5
Prerequisites: AUTO 101, AUTO 116, and AUTO 118 with grades of C or higher. Topics include: safety; introducing the diagnosis and troubleshooting of automotive engine control systems, including information on digital storage oscilloscopes, fuel injection and ignition system diagnosis; current ramping tests; plus extensive scan tool diagnosis.

AUTO 113 - Steering, Suspension and Wheels 5
Prerequisite: AUTO 101 with a grade of C or higher. Instruction designed to develop skills and knowledge required to diagnose and repair steering and suspension systems. Includes wheel balance, four-wheel alignment, springs and torsion bar suspension, power steering pump and gears, and rack and pinion steering.

AUTO 115 - Automotive Brakes 5
Prerequisite: AUTO 101 with a grade of C or higher. Instruction designed to develop skills and knowledge required to diagnose and repair brakes, including drum and disc systems, power units and ABS.

AUTO 116 - Automotive Electrical System Fundamentals 3
Prerequisite: AUTO 101 with a grade of C or higher. Designed to develop skills and knowledge required to understand fundamental principles of electricity and how these principles apply to automotive systems. Included is the study of wiring diagrams, electrical symbols and how to utilize appropriate equipment such as meters and scopes in the troubleshooting process.

AUTO 118 - Advanced Automotive Electrical and Electronics 3
Prerequisites: AUTO 101 and AUTO 116 with grades of C or higher. Course is an in-depth focus on electrical theory, and the understanding and application of automotive electrical and electronic and computer systems as related to modern vehicle systems. Instruction includes methods to successfully troubleshoot vehicle electrical and electronic problems and effect appropriate repairs.

AUTO 119 - Automotive Heating and Air Conditioning 5
Prerequisites: AUTO 101, AUTO 116, and AUTO 118 with grades of C or higher. Instruction designed to develop skills and knowledge required to diagnose and repair problems related to passenger comfort. Includes both automatic and manual units.

AUTO 121 - Automotive Engines 6
Prerequisite: AUTO 101 with a grade of C or higher. The specifics of this instruction are designed to develop skills and knowledge required to understand the fundamental principles, servicing, troubleshooting and repair of modern automotive engines. The study includes diagnosis and troubleshooting, removal, disassembly, cleaning, inspection and repairs, reassembly and installation of engine assemblies. Students will be working in pairs on project vehicles so that skills learned in the classroom can be exercised in a live environment.

AUTO 123 - Service Operation Management 3
Instruction designed to enable the student to better understand the variables encountered in operating a service business. Areas of content include: management, finances, organization, customer and employee relations, marketing, legal guidelines, and OSHA safety requirements.

Basic Skills

BSKL 002 - Introduction to Basic Skills - Reading 3
Prerequisite: Placement by recommendation of instructor. Individualized course designed for students needing skills necessary for placement into BSKL 014. Course may be repeated. Does not apply toward a degree or certificate.

BSKL 003 - Introduction to Basic Skills - Writing 3
Prerequisite: Placement by recommendation of instructor. Individualized course designed for students needing skills necessary for placement into BSKL 010. Course may be repeated. Does not apply toward a degree or certificate.

BSKL 004 - Introduction to Basic Skills - Math 3
Prerequisite: Placement by recommendation of instructor. Individualized course designed for students needing skills necessary for placement into BSKL 061. Course may be repeated. Does not apply toward a degree or certificate.

BSKL 005 - Intensive English for Non-Native Speakers 3
Course for students whose primary language is not English. This course will cover basic English grammar and usage for academic purposes, as well as speaking, listening, reading, and writing skills necessary for academic success. Does not apply toward a degree or certificate.

BSKL 010 - Basic English Lab 3
Prerequisite: Enhanced ACT English score of 13 or below or equivalent placement score. Course is a review of grammar and mechanics. Does not apply toward a degree or certificate.

BSKL 014 - Basic Reading Lab 3
Prerequisite: Enhanced ACT reading score of 12 or below or equivalent placement score. This class provides systematic instruction for development and improvement of reading skills to prepare the student for BSKL 015. Does not apply toward a degree or certificate.

BSKL 015 - Reading 3
Prerequisite: BSKL 014 with a grade of C or higher or equivalent placement score. Course provides systematic instruction for development and improvement of reading, learning, and critical thinking skills. Student must earn a C or higher in this class. Does not apply toward a degree or certificate.

BSKL 016 - Textbook Reading Techniques 3
Prerequisite: BSKL 014 with a grade of C or higher or equivalent placement score. Course introduces students to various strategies useful in reading and studying college textbooks. Paired with a general education course, most activity will be focused on the transference of reading skill appropriate for success in the paired course. Does not apply toward a degree or certificate.

BSKL 020 - Introduction to Writing 3
Prerequisite: Enhanced ACT English score of 18 or below or equivalent placement score. If less than 14 on the Enhanced ACT English, student must also enroll in BSKL 010 and BSKL 015. Study of the fundamentals of language, usage and paragraph writing. A grade of C or better is required to advance to ENGL 101, ENGL 110, or ENGL 112. Does not apply toward a degree or certificate.

BSKL 060 - Basic Math Self Paced 3
Prerequisite: Recommendation of instructor. Class is a self-paced review of basic math skills presented in BSKL 061. Topics include basic operations with whole numbers, exponents, LCM and GCF, fractions, decimals, ratio/proportion, unit analysis, percents, and integers. This class is designed for students who did not meet the necessary requirements to complete BSKL 061 but have mastered at least 50 percent of the course requirements. Does not apply toward a degree or certificate.

BSKL 061 - Basic Math Lab 3
Prerequisite: BSKL 014 with a grade of C or higher or equivalent placement score. Class is a review of basic math skills to prepare for BSKL 064, MATH 101 or MATH 107. Topics include basic operations with whole numbers, exponents, LCM and GCF, fractions, decimals, ratio/proportion, unit analysis, percents, and intergers. Students must earn a C or higher in this class to advance to the next math class. Does not apply toward a degree or certificate.

BSKL 064 - Elementary Algebra 3
Prerequisites: BSKL 014 and BSKL 061 with grades of C or higher or equivalent placement scores. Topics include rules of exponents, arithmetic basic operations with polynomials, linear equations in one variable, linear inequalities, absolute values in one variable, factoring polynomials, and rational expressions. Students must earn a C or higher in this class to advance to the next math class. Does not apply toward a degree or certificate.

Biological Sciences

BIO 100 - Introduction to Biological Sciences 3
Prerequisites: ENGL 101 and MATH 112 with grades of C or higher or equivalent placement scores. Corequisite: ENGL 101. Introduction of biology that develops understanding of basic, unifying concepts in science and biology. Topics include: the scientific method, biochemistry, cell biology, metabolism, genetics, evolution, ecology, and human ecology.

BIO 103 - Human Biology 3
Prerequisite: BSKL 020 with a grade of C or higher or equivalent placement score. An introduction to the structure and function of the human body and its systems. Topics covered will include: biochemistry, organization, homeostasis, structural maintenance of cells, tissues, organ systems of the human body, and ecology and the human influence on the biosphere. It may NOT be taken if you already have credit for BIO 112, BIO 125, BIO 126, BIO 207 or BIO 208.

BIO 105 - Wildlife Conservation 3
Prerequisite: ENGL 101 with a grade of C or higher or equivalent placement score. Corequisite: ENGL 101. Integrated study focused on historical, cultural and scientific aspects of wildlife conservation. Topics include: public attitudes/perceptions, wildlife ethics, biodiversity, exotic species, population/community ecology, ecosystem management, and human impact.

BIO 112 - Introduction to Biology with Lab 5
Prerequisites: ENGL 101 and MATH 112 with grades of C or higher or equivalent placement scores. Corequisite: ENGL 101. Introduction of biology that develops understanding of basic, unifying concepts in science and biology through an investigative laboratory environment. Topics include: the scientific method, biochemistry, cell biology, metabolism, genetics, evolution, ecology, and human ecology.

BIO 115 - Human Sexuality 3
Prerequisite: ENGL 101 with a grade of C or higher or equivalent placement score. Corequisite: ENGL 101. An exploration of the sociological, biological and psychological aspects of human sexuality. Topics will include anatomy, social understandings of sexuality, genetics, gender, reproduction, contraception, STDs, sexual violence, human sexual behavior, and sexual orientation. Same as PSY 115 or SOC 115.

BIO 121 - Microbiology for Allied Health with Lab 4
Prerequisite: CHEM 101 or BIO 207 or BIO 208. Course presents basic principles of infection, immunity and control of infectious microbes. Introduces bacteriology, virology, parasitology, and mycology. Designed for SFCC nursing and allied health majors.

BIO 125 - Biology I with Lab 5
Prerequisites: ENGL 101 and MATH 112 with grades of C or higher or equivalent placement scores. Corequisite: ENGL 101. First semester of a two-semester introduction to biological sciences intended for biology and related majors. Topics include: philosophical, historical and social context of biology; scientific method and investigative techniques; biological structure and function at molecular and cellular levels; genetics; and plant form, function and diversity.

BIO 126 - Biology II with Lab 5
Prerequisites: BIO 112 or BIO 125 and ENGL 101 with grades of C or higher or equivalent placement score. Corequisite: ENGL 101. Second semester of a two-semester introduction to biological sciences intended for biology and related majors. Topics include: philosophical, historical and social context of biology; animal morphology, embryology and taxonomy and systematics; life histories; ecology; and evolution.

BIO 130 - Topics in Biology 1 to 3
Study of a major topic in biology and science. Content and topics change and may include: ecology, bio-history, evolution, science in science fiction, or history of science. Specific subjects will be announced prior to course offerings.

BIO 140 - Introduction to Biotechnology I 5
Prerequisites: BSKL 020 and BSKL 064 with grades of C or higher or equivalent placement scores. This course is an introduction to the field of biotechnology, its relevance to society and application to biology, agriculture, modern medicine, energy source alternative, bio-safety, and bioethics. Students will learn to apply scientific methods of study and concepts through hands-on experiments to develop the knowledge and laboratory skills required in biotechnology research and industry.

BIO 141 - Introduction to Biotechnology II 5
Prerequisite: BIO 140. A continuation of BIO 140. Students will continue to develop lab skills and learn to apply scientific methods of study and concepts through hands-on experiments of specific applications in biotechnology industry and research.

BIO 207 - Human Anatomy with Lab 4
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores, and a high school biology course taken within the previous five years, or a college science course with a grade of C or higher. Study of gross and microscopic anatomy of the human organs, tissues and systems.

BIO 208 - Human Physiology with Lab 4
Prerequisites: BSKL 015, BSKL 020 and BIO 207 with grades of C or higher or equivalent placement scores. Course presents the basic biological functions of the human body from cell to tissue, tissue to organ, and organ to organ system with attention to the interrelationships at these levels.

BIO 210 - Principles of Genetics with Lab 4
Prerequisites: BIO 112 or BIO 125 and ENGL 101 with grades of C or higher or equivalent placement score. A comprehensive introduction to fundamental principles of inheritance intended for biology and related majors. Topics include: philosophical, historical and social context of genetics; the physical, biochemical, chromosomal, cytological, mathematical bases for inheritance patterns; selection and breeding; and evolution.

BIO 280 - Problems in Biology 1 to 3
Prerequisite: Consent of instructor. Independent course presenting the study of a special problem in biology under the supervision of a science instructor.

Building Materials

BLDG 175 - Building Materials Internship 4 to 8
Prerequisite: Consent of program coordinator. A cooperative work experience within the building materials industry setting for building materials students. Student will work as a management-level employee for an established building materials related firm. Periodic site visits and employer interviews by the instructor will ensure that student is performing meaningful management level function and is generally meeting the expectations of the course.

BLDG 180 - Problems in Building Materials 1 to 3
Prerequisite: Consent of program coordinator. Independent study of a special problem in building materials under the supervision of an instructor.

Business Administration

BADM 101 - Introduction to Business 3
Prerequisite: BSKL 014 with a grade of C or higher or equivalent placement score. Introduction to the principles, practices and problems encountered in the general business environment. Topics include options for organizing a business, and the basic functions of accounting, marketing, management, and finance.

BADM 103 - Legal Environment of Business 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Investigation of various legal issues encountered in the business environment. Emphasis is placed on developing an understanding of the court system. Includes specific legal topics such as contracts, torts, employment law, product liability, and consumer protection.

BADM 107 - Personal Finance 3
Prerequisites: BSKL 014 and BSKL 061 with grades of C or higher or equivalent placement scores. An introduction to personal financial management. Examines the techniques necessary to analyze and make choices concerning major purchases, tax planning, insurance, borrowing, investing, and other personal finance issues.

BADM 109 - Business Ethics 3
Prerequisite: BSKL 010 with a grade of C or higher or equivalent placement score. An overview of basic ethical principles related to business and society. Examines corporate social responsibility as well as ethical perspectives related to internal and external stakeholders.

Business Management

BSMT 106 - Principles of Marketing 3
Prerequisite: BSKL 014 with a grade of C or higher or equivalent placement score. Introduction to the key concepts and issues underlying the modern practice of marketing that impact today's managers. The marketing process is analyzed through the four main decision areas of products and services, distribution, promotion, and pricing.

BSMT 108 - Principles of Management 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Introduction to the theory and practice of management covering the basic functions of management: planning, organizing, leading, and controlling.

BSMT 110 - Salesmanship 3
Prerequisite: BSKL 014 with a grade of C or higher or equivalent placement score. Introduction to the study of selling as a major function of the marketing mix. The focus is on consumer behavior, selling techniques and one role play sales presentation.

BSMT 112 - Visual Merchandising 3
Prerequisite: BSKL 014 with a grade of C or higher or equivalent placement score. Introduction to the principles of design as applied to retail stores. Topics include various design principles, color, mannequin usage, and lighting. The class creates several original window designs during the semester.

BSMT 115 - Principles of Supervision 3
Course is designed for the first-line foreman or supervisor. Topics include how to supervise, leadership styles, employee communications, human relations, delegation, discipline, and grievance procedures.

BSMT 117 - Human Resource Management 3
Prerequisite: BSMT 108. Introduction to the HRM functions including recruitment and selection, equal employment opportunity compliance, development and training, performance appraisal, compensation, and employee benefits.

BSMT 120 - Advertising 3
Prerequisite: BSMT 106. Introduction to the field of advertising with an emphasis on consumer behavior, research data, strategic planning, and brand positioning. An original ad campaign is created using creative product strategies.

BSMT 125 - Human Relations 3
Prerequisite: BSKL 014 with a grade of C or higher or equivalent placement score. Introduction to the concept of business organizations as a social system. Topics consist of motivation, perception, communication, behavior theories, and group dynamics. In-class activities are employed to emphasize topics covered in class.

BSMT 130 - Business Strategies 3
Prerequisites: ACCT 102, BSMT 106, BSMT 117, and ECON 101. Corequisite: ACCT 102. Capstone course which provides business management students with an understanding of the total enterprise system. Students will draw upon prior coursework to solve business problems.

BSMT 132 - E-Commerce Marketing 3
Prerequisite: BSMT 106. Review of e-business systems. Topics include a review of technology utilized to create e-businesses. The class focus is on the creation of an original Web page.

BSMT 175 - Business Management Internship 3 or 6
Prerequisite: Consent of program coordinator. On-the-job experience tailored to enforce topics taught within the degree. Student supervision will be the cooperative arrangement between the student's academic advisor and employer. Progress reports and a final report documenting work experience will be submitted. A three-hour upper level program elective may fulfill the internship requirement based on approval by program coordinator.

Chemistry

CHEM 101 - Introduction to Chemistry with Lab 5
Prerequisite: ENGL 101 with a grade of C or higher or equivalent placement score. One-semester course for non-science majors designed to acquaint the student with scientific reasoning. A writing intensive course, which introduces the basic principles of chemistry and their applications to current issues.

CHEM 113 - Fundamentals of Chemistry with Lab 5
Prerequisite: MATH 112 with a grade of C or higher or equivalent placement score. Designed for allied health students, course will focus on measurement, nomenclature, formula and equation writing, stoichiometry, and periodic properties, with an emphasis on algebraic problem solving and scientific reasoning; introduces organic chemistry.

CHEM 123 - General Chemistry I with Lab 5
Prerequisites: BSKL 020 with a grade of C or higher or equivalent placement score and either one-year high school chemistry, MATH 114, or CHEM 113 with a grade of C or higher or equivalent placement score. Intended for the science major and science-oriented fields, which examines the structure of the atom, periodic classification, molecular structures, chemical reactions, aqueous solutions, and chemical energetics.

CHEM 124 - General Chemistry II with Lab 5
Prerequisite: CHEM 123. A continuation of CHEM 123. Emphasis on chemical energetics, entropy, equilibria, reduction-oxidation systems, and reaction pathways in organic and biochemistry.

CHEM 180 - Problems in Chemistry 1 to 3
Prerequisites: Any CHEM course and consent of instructor. Independent study and/or lab investigation of a special problem in chemistry.

CHEM 221 - Organic Chemistry I with Lab 5
Prerequisite: CHEM 123 with a grade of C or higher. The first of a two-semester sequence in organic chemistry. Studies the structure, bonding, and nomenclature of organic compounds (alkanes, alkenes, alkynes, and conjugated systems); substitution and elimination reaction mechanisms; identification of organic compounds via UV, VIS, IR and NMR spectroscopy.

CHEM 222 - Organic Chemistry II with Lab 5
Prerequisite: CHEM 221 with a grade of C or higher. A continuation of CHEM 221. Topics include the study of the reactions associated with aromatic compounds, carbonyl compounds and polyfunctional natural products.

CHEM 265 - Elementary Organic and Biochemistry with Lab 5
Prerequisite: Any CHEM course with a grade of C or higher. An introduction to organic chemistry and the fundamental concepts of biochemistry. Topics include functional groups, nomenclature, reactivity, organic reaction mechanisms and exploration of molecules associated with life functions, emphasizing physiological, nutritional and comparative aspects. Required for some non-chemistry degrees; generally does not transfer for chemistry majors.

Computer Aided Drafting

CAD 105 - Print Reading 3
Course is designed for students in technical programs who require an understanding of basic mechanical drawing, architectural print reading and welding symbols. Students will gain knowledge of orthographic projection, geometric construction, section views, auxiliary views, and technical notation, dimensioning and tolerancing. Students will understand architectural plot plans, floor plans, elevations, schedules, and wall and building sections. Included are the interpretations of drawings, welding symbols, notations, and technical information.

CAD 111 - Introduction to Computer Drafting 3
An introduction to Computer Aided Drafting (CAD) software. Students will gain knowledge in the use and principles of CAD. Manual drafting concepts and tools will be discussed. The main emphasis will be the application of AutoCAD software. Specific hardware used in the CAD environment will be introduced and utilized. Basic concepts covered include drawing setup, two-dimensional entity creation, coordinate entry methods, and drawing aids.

CAD 113 - Intermediate Computer Drafting 3
Prerequisite: CAD 111. A continuation of CAD 111 emphasizing the principles of drafting utilizing Computer Aided Drafting (CAD) software. Students will gain knowledge of drafting fundamentals, drafting techniques and skills, descriptive geometry, CAD application, and drafting and design applications. The student will apply the knowledge of the principles of drafting using AutoCAD software. Section views, pictorial drawings, auxiliary views, text, dimensioning and tolerancing will be covered in this course.

CAD 115 - Advanced Computer Drafting 3
Prerequisite: CAD 113. An introduction to three-dimensional drawings and modeling, wire frame modeling, surface modeling, rendering, and solid modeling using AutoCAD software. Course will cover the necessary skills to become proficient in working with three-dimensional objects in preparation to meet the requirements of a CAD technician.

CAD 116 - Computer Drafting Programming 3
Prerequisite: CAD 115. A thorough study of customizing AutoCAD software. Course will cover customizing of menus and creating slides and scripts. The use of the AutoLISP and visual basic programming language as customizing tools will be introduced. The importing and exporting of drawing information through digitizing, raster image files and database connectivity will also be covered.

CAD 120 - Architectural Drafting 3
Course introduces students to the uses of Computer Assisted Drafting (CAD) as it relates to architectural design. This course will cover the use of CAD in preparing construction documents and three-dimensional models of buildings. Architecture terminology, building techniques, building conventions, building design, and architecture-related information will be introduced.

CAD 125 - Architectural Applications 3
Prerequisite: CAD 113 or CAD 120. An architectural modeling and drafting course utilizing popular 3D CAD software application(s). Course uses commercial based architectural software to model walls, doors, windows, floor plans, roof, kitchen appliances, bathroom fixtures, and other components of a building. The student will generate dimensioned plans, sections, elevations, and wall sections from the 3D digital model. Students will also create a digital walk-through and rendered images of the model.

CAD 130 - Solid Modeling I 3
An entry-level solid modeling and design course. Students will gain an understanding of 3D and parametric solid modeling using Autodesk Inventor. Included are: the development and generation of 2D sketches, 3D solid models, assemblies, creation of multiview drawings from

solids geometry, analyzing solids, shading and rendering topics, and the development of physical models with rapid prototyping equipment.

CAD 132 - Solid Modeling II 3
Prerequisite: CAD 115 or CAD 130. A continuation of CAD 130. Students will gain an understanding of different 3D and parametric solid modeling applications using SolidWorks and Inventor. Studies include the development and generation of advanced 2D and 3D sketches, solid models, assemblies, and the creation of complex and detailed drawings, analyzing and testing solid models, and the development of physical models with rapid prototyping equipment.

CAD 134 - CAD/CAM 3
Prerequisite: CAD 130. Course teaches principles of Computer Aided Machining (CAM) and Computer Numerical Controlled (CNC) machining including Wire EDM, lathes and mills utilizing FeatureCAM and other CAD/CAM software. Students will design 3D parts, generate CAM code, tool paths and graphically verify tool paths. Students will develop physical models with rapid prototyping and CNC equipment.

CAD 136 - Engineering Graphics 3
Prerequisite: CAD 115. A capstone of the series of classes utilizing AutoCAD software. Students will gain knowledge of pictorial drawings, geometric dimensioning and tolerancing, drawings for numerical control, welding drawings, design concepts, belts, chains, gears, couplings, bearings, and seals, developments and intersections, pipe drawings, structural drafting, jigs and fixtures, and electrical and electronics drawings.

CAD 155 - 3D Visualization 3
Explores the creation of photo realistic 3D objects and animation using Autodesk 3D VIZ software. Course covers the necessary skills to become proficient in working with three-dimensional objects and animations. Course includes creating a scene, creating shapes, modifying splines, lofting objects, twisting objects, creating curved paths, deformation tools, creating objects, materials, and 3D animation and rendering.

CAD 175 - CAD Internship 4
Prerequisites: CAD 115 and consent of program coordinator. A cooperative work experience within an industry setting for CAD students. Students work under the supervision of an approved professional or specialist in the CAD field. The instructor is a coordinator between the student and the employer and monitors the internship. A minimum of 160 work (clock) hours on the jobsite is required for successful completion of the course. The student submits progress reports and a final report documenting the work experience.

CAD 180 - Problems in CAD 3
Prerequisites: CAD 115 and consent of program coordinator. Independent study of special problems and/or projects in CAD in which the student works with industry and/or the instructor to solve a specific problem or project.

CAD 190 - CAD Capstone 3
Prerequisites: CAD 115 and consent of program coordinator. Independent study project in architectural, civil, mechanical or other CAD related field in which the student completes a complex project with instructor input and guidance. A capstone course to promote critical thinking skills and technical resourcefulness while allowing the student to broaden CAD skills.

Computer Applications

CAPP 110 - Introduction to Keyboarding 1
Individualized course which provides the student with a mastery of touch-typing. Emphasis is placed on developing speed and accuracy through instruction, guided practice and timed writings. Optional test out. Course is not intended for medical office or office management majors. No document production is done in this course.

CAPP 112 - Special Problems in Basic Keyboarding-A Continuation 1
Prerequisite: CAPP 110. Class is for students who have credit for CAPP 110 and need the equivalent of the next level of instruction. Business documents, as well as increased speed and accuracy, are the focus of the class.

CAPP 114 - Basic Keyboarding 2
Individualized course which provides the student with a mastery of touch-typing. The keying of mailable business letters, memos and reports is included. Optional test out. Course is not intended for medical office or office management majors.

CAPP 116 - Special Problems in Keyboarding-A Continuation 1
Prerequisite: CAPP 114. Class is for students who have credit for CAPP 114 and need the next level of instruction. Business documents, as well as increased speed and accuracy, are the focus of the class.

Course Descriptions

CAPP 118 - Keyboarding 3
Individualized course provides the beginning student with a mastery of touch-typing and an introduction to basic formats of letters, memos, tables, and reports. Optional test out. All office management students and medical office students are required to take this course as part of their core curriculum.

CAPP 119 - Document Formatting 2
Prerequisite: CAPP 118. Individualized course which includes processing various business and professional documents and forms. Emphasis is placed on accuracy, speed development and ability to follow directions. Optional test out. Core requirement for all office management majors and medical transcription majors.

CAPP 125 - Microcomputer Applications 3
Prerequisite: BSKL 015 with a grade of C or higher or equivalent placement score. Prerequisite knowledge: CAPP 114 or CAPP 118 recommended or demonstrated keyboard proficiency. Operations of personal computers through the use of Microsoft Office Professional software are presented. Applications include fundamentals of word processing, spreadsheets, database management, and presentations.

CAPP 160 - Word 3
Prerequisite: CAPP 125 with a grade of C or higher and taken within the last five years of continuous enrollment. Course is designed for Windows users who seek further knowledge of the word processing program, Microsoft Word.

CAPP 164 - Access 3
Prerequisite: CAPP 125 with a grade of C or higher and taken within the last five years of continuous enrollment. Course is designed for Windows users who seek further knowledge of the database program, Access.

CAPP 166 - Excel 3
Prerequisite: CAPP 125 with a grade of C or higher and taken within the last five years of continuous enrollment. Course is designed for Windows users who seek further knowledge of the spreadsheet program, Excel.

Computer Information Systems

CIS 103 - Introduction to CIS 3
Course teaches the skills necessary to understand the logic of computer programming, design and structure. Students will be presented effective tools needed to enhance their knowledge of using the latest innovations in technology.

CIS 124 - Database Management 3
Course implements the relational database management system tasks. Topics include creation of databases, storing, lists and displays, indexing, report generating, creating labels, constructing screens, programming skills, control structures, menus, multi-file programming, and special techniques.

CIS 132 - UNIX 1
Instruction demonstrates the proficient use of a multi-task, multi-user disk operating system of Unix. Students will learn to create folders and files, assign permissions, write programs, and perform system maintenance tasks.

CIS 145 - Visual Basic 3
Course provides an introduction to programming within a graphical environment. Application development will focus on the process of designing, building and maintaining projects that may be used within a business setting. The end product will increase the efficiency and productivity of the organization.

CIS 148 - COBOL 3
A computer programming course that will use the COBOL programming language in a business environment. Instruction will include data editing, arithmetic calculations, if/then structures, loop processing, conditional statements, control level breaks, tables, and evaluate statements.

CIS 149 - Advanced COBOL 3
Prerequisite: CIS 148 with a grade of C or higher. Advanced COBOL programming techniques are presented in this course. Instruction covers tables, call statements, multi-file processing, and end-user interaction.

CIS 151 - DB2 Relational Database 3
Prerequisite: CIS 148 with a grade of C or higher. Course prepares students for programming in the DB2 environment. DB2 is a relational database. A substantial portion of the course will use SQL statements.

CIS 155 - Programming in C# 3
Programming language C# is introduced as an application programming language. Top-down program development methodologies are discussed. Students learn different C language features to develop application programs.

CIS 157 - Advanced C# 3
Prerequisite: CIS 155 with a grade of C or higher. Course presents advanced C# programming techniques. Instruction includes data manipulation, file handling and logic processing.

CIS 158 - JAVA 3
Introduction to object-oriented programming with a major emphasis in developing GUI based applications for business problems and Web pages.

CIS 161 - Systems Analysis 3
Content includes the analysis and identification of multi-user computer system development. Documentation of systems requirements is stressed.

CIS 162 - Advanced Visual Basic 3
Prerequisite: CIS 145 with a grade of C or higher. Course is for the experienced Visual Basic programmer who would like to program commercially in Visual Basic. Extensive use of file handling is involved. The course covers object linking and multiple document interfaces.

CIS 163 - SQL Server 3
Prerequisite: CIS 145 with a grade of C or higher. Course is designed to teach extensive database administration. As databases are an integral part of interactive Web and business design, the course will be useful for commercial development. Extensive use of SQL commands will be covered.

CIS 164 - Oracle I-Oracle SQL 3
This course provides the fundamental skills in SQL with additional coverage of Oracle's implementations of SQL. This course is designed to provide a practical working knowledge of essential Oracle database skills and technologies.

CIS 165 - Oracle II-PL/SQL 3
Course instructs the student in topics related to Oracle PL/SQL (Procedure Language/Structured Query Language). Subjects will include invoker's rights, object patterns, database management, and Java libraries.

CIS 168 - Game Programming 3
Fundamentals of how to write computer games in the C# programming language using Direct3D, DirectSound, DirectX, and DirectInput. Students will receive knowledge of game programming using 3D modeling, collision detection and animation. No previous knowledge of HTML or Web design is assumed. Students are required to purchase a mass storage device such as a thumb or jump drive.

CIS 169 - Advanced JAVA 3
Prerequisite: CIS 158 with a grade of C or higher. Project oriented programming course which builds upon the knowledge presented in CIS 158. Topics will include database connectivity, sockets, advanced GUI programming, multi-threading, and data structures.

CIS 175 - CIS Internship 4 to 8
Prerequisite: Consent of program coordinator. Includes a minimum of 160 clock hours of supervised work experience that allows the student to apply CIS operation and programming theory. Recommended to be taken during the last year of study.

CIS 179 - Programming Project 4
Prerequisite: Consent of instructor. Must be taken during the last semester of study before completion of the CIS degree. Includes individually designed assignments that require the students to develop and test a program and document program results.

CIS 180 - Problems in CIS 1 to 3
Prerequisite: Consent of program coordinator. Independent study of a special problem in computer systems arranged under the supervision of a CIS instructor.

CIS 185 - Project Management 3
Prerequisite: CAPP 125. Course to assist students to adapt to the change taking place in the programming field. The course will assist students in writing specifications and in understanding project time for outsourcing.

Construction Technology

CNST 101 - Construction Materials and Methods I 3
Provides basic knowledge of methods and materials historically and currently in use in the construction industry as well as an exploration into potential future techniques and materials as technology progresses. Proper selection and application of the various materials and methods is discussed. Construction methods as well as materials are organized by the Construction Specification Institute into 16 major areas. This course is designed to address the first eight major areas of the CSI format and is offered in conjunction with CNST 103 in order to provide a comprehensive base of knowledge in all 16 major areas.

Course Descriptions

CNST 103 - Construction Materials and Methods II 3
As with CNST 101, course provides a basic knowledge of methods and materials historically and currently in use in the construction industry as well as potential future developments in technology. Course is designed to address the second eight major areas of construction materials and methods as detailed in CSI format. CNST 101 and CNST 103 may be taken out of sequence as each category is studied independently of the others. Having completed both CNST 101 and CNST 103, the student will have been exposed to all 16 major areas of the construction industry and will have a working knowledge of the materials and methods used in each of these areas.

CNST 106 - Construction Estimation 3
Examines the methods used in cost estimating in the construction industry. Skills such as quantity take-off, measurement, quote and bid solicitation, etc., are developed as well as discussion of strategy involved in bid formulation and submissions. Computerized estimating techniques are explored as well as manual methods. The course will require completion of a cost estimate for residential, commercial, industrial, or heavy construction projects.

CNST 113 - Construction Management 3
Discusses careers in construction as well as the general business operations involved in the construction industry. Basic overview of the legal structure of businesses, contract terms and the roles of stakeholders in a construction project.

CNST 138 - Construction Planning and Scheduling 3
Discusses methods of organizing work items associated with a construction project into a logical sequence of optimizing efficiency and profitability. Manual and computerized scheduling methods are used in developing project schedules for both real and simulated projects.

CNST 140 - Construction Methods 3 to 6
Students will study the methods used to install various construction materials broken down into the 16 major areas of the Construction Specification Institute (CSI) format. These areas include: site work, concrete, masonry, metals, woods and plastics, moisture and thermal control, doors and windows, finishes, specialties, equipment, furnishings, special construction, mechanical, and electrical.

CNST 142 - Building Mechanical Systems 3
Basic understanding of components and design of major building mechanical systems. Topics include electrical, plumbing and HVAC systems in buildings. Design calculations for proper sizing of system components are discussed as well as the various methods and materials used in the construction of such systems.

CNST 148 - Construction Codes and Law 3
Course discusses legal requirements related to the design and execution of construction projects. The International Building Code is studied and upon completion of the course, the student will be capable of navigating this and many other similar reference manuals. Other legal aspects of the construction industry are discussed including, but not limited to, contract law as well as issues of liability.

CNST 160 - Statics and Strength of Materials 3
Prerequisite: MATH 108 or equivalent placement score or MATH 114. Course discusses the fundamentals of structural analysis and design. Materials and structural systems are discussed in terms of load bearing properties as well as economy of construction. The student will gain a greater understanding of how structures work as well as how choices are made regarding the selection of appropriate materials and systems to meet a given need.

CNST 162 - Construction Safety 3
A comprehensive discussion of job safety and best practices as they pertain to the construction industry. A general philosophy of safety awareness is achieved through study of specific hazards and case studies. Students learn to navigate OSHA regulations as well as legal implications on the construction industry.

CNST 175 - Construction Management Internship 4 to 8
Prerequisite: Consent of program coordinator. A cooperative work experience within the construction industry setting. Student will work as a management-level employee for an established construction related firm. Periodic site visits and employer interviews by the instructor will ensure that student is performing meaningful management level functions, and is generally meeting the expectations of the course.

Criminal Justice

CJ 101 - Introduction to Law Enforcement 3
Examines the history of policing in the United States and an overview of the relationship between law enforcement and the American society. This will include an examination of the duties of law enforcement officers, the operations of police agencies, police-community relations, the police subculture, and the need for police objectives to conform to constitutional procedures.

CJ 102 - Introduction to Criminal Justice 3
Examines the history, development and function of the criminal justice system in America. Will examine the three major components of the system - police, courts and corrections - as well as their interrelationships.

CJ 103 - Traffic Safety and Investigation 3
Prerequisites: CJ 102 and ENGL 101 with grades of C or higher. Introduces traffic control and accident investigation in modern cities; reviews principles of organizing and administering police units for traffic enforcement, accident prevention and safety education; presents basic techniques of accident investigation, analysis and interpretation.

CJ 104 - Criminal Investigation 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores and CJ 102. Theory, methods and procedures of criminal investigation with attention given to its historical origins, the investigator, organization and management of the investigative function, and various investigative methods such as crime scene investigation, techniques of interviewing, collection of evidence, suspect development, and case preparation.

CJ 105 - Criminal Law 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores and CJ 102. Examines criminal, common and statutory law with its application to the criminal justice system. Emphasis will be placed on the classification of crime and criminal behavior including the necessary elements and mental states of criminal acts. Will also examine criminal acts based on Missouri criminal statutes.

CJ 107 - Criminology 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores and CJ 102. Examines the various theories of criminal behavior and crime causation as well as the problems of treatment, corrections and control of crime. Will also look at patterns of crime, research methods and the response to criminal behavior.

CJ 109 - Juvenile Delinquency 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Examines the origins, philosophy and objectives of the juvenile justice system in America including the concept of juvenile delinquency and its causes, juvenile case dispositions and juvenile detention procedures. Will place close attention on the organization, function and jurisdiction of juvenile justice agencies and the application of the Missouri Juvenile Code.

CJ 111 - Introduction to Corrections 3
Fall semester only. Examines the history, development and present components of both institutional and community based corrections in America.

CJ 115 - Procedural Law 3
Prerequisite: CJ 102. Fall semester only. Examines the U.S. Constitution, court cases, statutes, and other sources of regulation in the field of criminal procedure. These regulatory documents will be examined and considered as to how they apply to criminal law and the administration of justice. Specific issues to be covered include search and seizure, interrogations and confessions, grand jury investigations, identification procedures, and the right to counsel.

CJ 118 - Criminal Justice Communications 3
Prerequisites: CJ 102 and ENGL 101. Spring semester only. Provides direction and guidance for students seeking entry-level careers in law enforcement and corrections with additional examination of written and verbal communications. Provides instruction concerning the reporting of factual information in an accurate and proper format. In addition to reinforcing basic writing tools, it will stress the components of typical police writing formats. Topics such as interviewing and interrogation techniques and courtroom testimony will also be covered. This course should be taken during the last semester of study if possible.

CJ 122 - Current Events in Criminal Justice 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores and CJ 102. Spring semester only. Provides an intensive examination of major issues affecting the criminal justice system and their interaction with society and the democratic process. Topics may include capital punishment, terrorism, drug abuse, and serial killers.

CJ 175 - Supervised Occupational Experience in Criminal Justice 4
Prerequisites: CJ 102 and consent of program coordinator. Provides students with the opportunity to observe and experience the operation of a selected agency within the criminal justice system. This program will require the student to spend a minimum of 160 hours with the agency during the semester as well as the completion of other requirements. This course does not meet as a regular class but does require correspondence with the instructor.

CJ 180 - Problems in Criminal Justice 1 to 3
Prerequisites: CJ 102 and consent of program coordinator. Independent study of a special problem in criminal justice under the direct supervision of a criminal justice instructor.

Dental Hygiene

DH 105 - Introduction to Dental Hygiene 6
Course is designed to acquaint the student with the professional, educational and therapeutic services of a dental hygienist and provide the background, knowledge and skills necessary to function in subsequent dental hygiene clinical courses.

DH 106 - Dental Clinical Emergencies 1
Course presents procedures to properly control bleeding, choking, possible broken bones, and other common medical emergencies as well as emergencies specific to the dental office. Information is also included concerning emergency medications used in the dental office. Adult, child and infant CPR, choking, and child and adult AED are included. Upon successful completion of this course, the student will receive certification from the American Red Cross for First Aid and certification from the American Heart Association for Health Care Provider CPR/AED.

DH 107 - Dental Radiography 2
Radiography equips the dental hygiene student with the skills necessary for exposing and processing dental radiographs. Biological and safety procedures are discussed and skills are practiced on mannequins prior to proceeding with clinical patient exposures. Students are also introduced to the basics of recognizing anatomical landmarks, pathologies and technique errors on dental radiographs. The student will also be exposed to digital radiography technology.

DH 109 - Oral Anatomy and Histology Lab 1
Course consists of a lab manual with handouts and activities that are congruous with the lecture presented by Interactive Television from Northcentral Technical College in Wausau, Wisconsin. Grading is based upon tooth identification through ID tests and several projects, including a skull project where the student will be drawing arteries and veins on a skull as well as molding with clay.

DH 110 - Clinical Dental Hygiene I 6
Prerequisite: DH 105. Course is designed to apply the basic principles of dental hygiene instrumentation and patient treatment in a clinical setting. Emphasis on evidence-based decision making is guided by the student's own research into the research and literature reviews. The principles of ultrasonic scaling, instrument sharpening and patient education will be introduced and built upon as the semester progresses. The student will also refine calculus detection. The student will be introduced to the concept of complete data assessment and use of the data to formulate patient care plans. Gingival, plaque and bleeding indices will be used to describe patient conditions. The clinical method of instruction and evaluation is competency-based.

DH 112 - Clinical Dental Hygiene II 4
Prerequisite: DH 110. Course continues skill development in the provision of dental hygiene care. Students continue clinical skill development by creating care plans which emphasize data assessment, analysis of risk factors and sequencing of care. The classroom portion will emphasize the management of patients with sensitivity, dental therapeutics and the delivery of locally applied antimicrobials. The clinical method of instruction and evaluation is competency-based.

DH 114 - Clinical Dental Hygiene III 8
Prerequisite: DH 112. Course continues skill development in the provision of dental hygiene care. Clinical emphasis will be on the treatment of periodontally advanced cases. The classroom portion will deal with the management of patients with special physical, mental, social, and emotional needs, and content regarding patients with medically compromised conditions. The clinical method of instruction and evaluation is competency-based.

DH 116 - Clinical Dental Hygiene IV 8
Prerequisite: DH 114. Dental hygiene skills will be perfected in this course. Non-surgical periodontal techniques and other supplemental care procedures will be emphasized in the classroom. Students will be encouraged to make clinical decisions based on the evidence and will learn to critically evaluate the literature. Didactic instruction will be case-based. The clinical method of instruction and evaluation is competency-based.

DH 118 - Principles of Periodontics 2
Biological and clinical aspects of periodontal health and pathology. An introduction to the supporting structures of the teeth will provide the foundation for understanding pathogenesis, histopathology and subsequent therapeutic treatment of periodontal diseases. The dental hygienist's role in recognition, prevention and treatment of periodontal diseases and maintenance of periodontal health is examined. The student will be immersed in a variety of educational settings and evaluation techniques through classroom cooperative learning and topic presentation as well as synthesis of knowledge with an actual clinic patient.

DH 119 - Advanced Periodontics Practicum .5
Course gives the dental hygiene student a firsthand experience in specialty practices of periodontists. Area periodontics and general practitioners will give of their time and expertise to guide the student through actual surgical procedures, such as periodontal surgery and implantology to solidify the conceptualization of the classroom experience.

DH 120 - Dental Biomaterials with Lab 2
Students will study the chemistry of biomaterials used in the oral cavity and how to discern what products to use when taking impressions, creating study models, polishing resin or alloy filling, and delivering dental sealants. Students will use alginate materials to take an impression and resins to produce a dental sealant. Other activities include personal mouth protection devices, placing a rubber dam, polishing a restoration, mixing cements, dental alloys and impression materials, as well as using periodontal dressing and removing sutures.

DH 124 - Applied Nutrition and Oral Health Education 2
Course will present the sources and uses of nutrients and provide a biochemistry background for the metabolism of these dietary components. The course will prepare the dental hygiene student to fulfill his or her role in oral health education as it relates to patient home care habits, motivation and dietary effects on the oral cavity. This is a hybrid course and meets four times on campus the second eight weeks of the semester.

DH 125 - Local Anesthesia 3
Course is designed to prepare dental hygiene students for the safe, effective administration of local anesthesia. Included are content areas in anatomy, physiology, pharmacology, and emergency management. Laboratory sessions provide actual experiences in administration of local anesthetics.

DH 126 - Community Dental Health 1
Provides a study of the principles of public health and the methods used in assessing, planning, implementing, and evaluating dental health programs. In addition, content will include basic principles of research.

DH 127 - Community Dental Health Lab 1
Prerequisite: DH 126. This course will allow the student to apply the basic principles of assessing, planning, implementing, and evaluating a community dental health program. The student will participate in health fairs, screenings, educational programs, and table clinic presentations. Two hours of community lab activities per week.

DH 130 - Pharmacology 2
Provides basic drug terminology, general principles of drug interactions, routes of administration, adverse reactions, and drugs that alter dental treatment. Emphasis will be placed on knowledge of drugs in the understanding of a patient health history and development of a care plan.

DH 132 - Dental Hygiene Ethics and Legal Issues 2
Designed to provide the student with knowledge of professional development, ethics and jurisprudence as related to clinical practice. Topics will include the basic principles of ethics, conflict management, state dental laws, and legal liabilities of health care professionals. Professional conduct and roles in professional organizations are fostered through knowledge of the code of ethics of the profession and political involvement. The Missouri State Jurisprudence test is the final for this course. This is a 10-week hybrid course.

Course Descriptions

Early Childhood Development

ECD 101 - Introduction to Early Childhood 3
Course is an overview of early childhood programs and curricula, historical and present, and an examination of qualities and skills necessary for working with young children. Observation of young children in various classroom settings will be incorporated into the course.

ECD 103 - Child Growth and Development 3
Provides a general understanding of the physical, social, emotional, language, and cognitive development of early childhood, and the importance of the environment and interrelationships on development.

ECD 107 - Child Nutrition, Health and Safety 3
Presents basic factors that affect child health including basic nutrition, clothing habits, health routines, hygiene, childhood diseases, first aid, and safety. Curriculum includes care facilities factors such as a safe, challenging learning environment and licensing requirements.

ECD 109 - Observation and Planning Assessment 3
Corequisites: ECD 101 and ECD 107. Course provides the student with opportunity to understand methods of observing children from birth to age 8, how to plan after observation, and make enhancements to curriculum based on assessment.

ECD 111 - Language Development Early Literacy 3
Presents the basic use of tools and materials that stimulate imagination, reasoning and concept formation in language developments. Students are given an overview of literacy experiences for young children throughout the day, the continuum of reading and writing development from birth and beyond, and specific ways to incorporate literacy into playing, reading, talking, writing, and learning.

ECD 115 - Child Social/Emotional Development 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Course is an overview of childhood behavior, interaction and relationships, environments and its effects on social and emotional development. Behavior and guidance concerns of children and problems facing adolescents and adults are addressed.

ECD 117 - Creative Expression and Play 3
Presents the development of creative expressions in the young child through activities such as music, art and dance, and their incorporation into the daily curriculum. The value of children's play and discovery as learning opportunities will be emphasized.

ECD 121 - Curriculum Strategies for Early Childhood 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores and ECD 101, ECD 107 and ECD 109. Course is an examination of techniques, learning activities and materials used to teach young children with an emphasis on planning and implementing a developmentally appropriate curriculum utilizing the Constructivist Theory.

ECD 125 - Introduction to Special Individuals 3
Presents an introduction to characteristics of exceptional individuals and educational history and theories with exceptional individuals, especially children. Study will include effects of disability on adjustment to home, school, community, and on families of young children. It will include an overview of federal and state systems of support for children with special needs.

ECD 127 - Parent/Teacher Interaction 3
Course presents the principles of child development with family relationships applied to group and individual work with parents. It is intended to help providers in developing skills that will help them effectively relate to parents. Topics will include: communication techniques, children's fears, discipline, nutrition, and school and community resources.

ECD 129 - Administration in Early Childhood Care 3
Prerequisites: ECD 101 through ECD 127. Course presents the operation of childcare facility including staff relations, budgeting, ordering, planning, and evaluation of center operations. Early childhood care center ethics, funding opportunities, licensing, curriculum, and parent involvement will also be incorporated into this course.

ECD 131 - Child Development Portfolio/ Assessment Preparation 3
Prerequisites: ECD 101, ECD 107 and consent of instructor. Corequisite: ECD 109. A step-by-step approach of the activities necessary to complete the degree requirements. Course is a review of the functional areas along with an emphasis on the general understanding of the physical, social, emotional, language, and cognitive development of early childhood. The competencies required and the assessment processes are considered important components of this course.

ECD 175 - Child Care Practicum 3
Prerequisites: ECD 101 through ECD 127 and consent of program coordinator. This capstone course puts early childhood skills and knowledge into practice in an early childhood setting.

Earth Science

EASC 101 - Introduction to Earth Sciences with Lab 5
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Course concentrates on understanding the earth's dynamic environments through the scientific study of processes and physical and human interactions related to geology, meteorology and astronomy. Lab includes introduction to minerals and rocks, fossils, fundamental principles of weather, and basic astronomy. Local field trips are included.

EASC 106 - Physical Geology with Lab 5
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Provides an understanding of the forces which were active in the formation of the earth, the processes whereby the surface of the earth is sculptured, the identity of earth materials, with the location and value of the earth's resources. Laboratory includes a study of minerals and rocks and the interpretation of topographic and geologic maps. Local field trips are included.

EASC 116 - Environmental Science 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Non-lab course introduces environmental concepts and problems. Topics will include basic ecology, human population ecology, natural resources, and pollution. Students will learn how man interacts with his environment.

EASC 120 - Introduction to Astronomy 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Non-lab course is an introduction to our present knowledge of the universe. Topics include the solar system, stellar astronomy and the structure of the universe.

EASC 180 - Problems in Earth Science 1 to 3
Prerequisite: Consent of instructor. Independent study of a special problem in earth science under the supervision of a science instructor.

Economics

ECON 101 - Principles of Macroeconomics 3
Prerequisites: BSKL 015 and BSKL 064 or MATH 101 with grades of C or higher or equivalent placement scores. Examines the economy as a whole, with an emphasis on how scarcity affects a nation. Topics include: understanding and measuring economic growth, inflation, unemployment, monetary and fiscal policy, and exchange rates.

ECON 102 - Principles of Microeconomics 3
Prerequisite: ECON 101 with a grade of C or higher. Examines the price system and resource allocation, markets and efficiency, production costs, wage determination and the role of government in regulating and supplementing the pricing system. Special problems such as agriculture and health care may be introduced, time permitting.

ECON 180 - Problems in Economics 1 to 3
Prerequisite: Consent of instructor. Independent study of a special problem in economics under the supervision of an economics instructor.

Education

EDUC 205 - Teaching Profession with Field Experience 3
Prerequisite: ENGL 101 with a grade of C or higher or equivalent placement score. Course provides an opportunity to observe teaching and learning for 30 hours or more in pre K-12 classrooms. Students are introduced to the requirements for teacher preparation and certification. Students will examine characteristics of effective teaching. Course is designed to assist students in determining if a career in teaching is an appropriate goal.

Course Descriptions

EDUC 209 - Foundations of Education 3
Prerequisite: ENGL 101 with a grade of C or higher or equivalent placement score. Course examines the historical, philosophical, sociological, political, economic, and legal foundations of the American public education system. Students will explore the nature of school environments, design and organization of school curricula and characteristics of effective schools and instruction in grades pre K-12. Educational structures, practices and projections for the future will be studied.

EDUC 212 - Technology for Teachers 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Students will learn to integrate instructional technology into the pre K-12 classrooms. Students will study a variety of software programs, presentation technology and telecommunication tools. The focus will also be on social, ethical, legal, and human issues surrounding the use of technology.

EDUC 218 - Children's Literature 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Intensive introduction to various genres of literature for children and ways of presenting literature in preschool, elementary school or middle school.

EDUC 220 - Educational Psychology 3
Prerequisite: PSY 101 or PSY 102. Course is designed to help students relate the application of psychological principles to teaching, learning and assessment and the educational practice in pre K-12 classrooms. It will focus on the learner and the learning process, teacher characteristics, and classroom processes that increase student motivation. Student diversity and appropriate instructional strategies for students with special needs will also be introduced.

EDUC 228 - Education of Exceptional Learners pre K-12 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. This survey course is an introduction to the exceptional learners and their education in grades pre K-12. Students will attain knowledge, skills and dispositions that will enable them to work effectively with exceptional learners in general education or special education. The course will cover the adaptations of daily activities in inclusive classrooms.

EDUC 250 - Paraprofessional Educator Practicum 3
Prerequisites: ENGL 101 with a grade of C or higher and consent of program coordinator. The students will actively participate, under supervision, in a paraprofessional setting for a total of 60 hours. The student will be responsible for implementation of duties assigned by the internship supervisor.

English

ENGL 101 - English Composition I 3
Prerequisites: BSKL 010, BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Emphasizes planning, drafting and revising along with critical thinking and information management skills and their role in communicating concise written ideas to a range of audiences for a variety of purposes. Basic computer skills are essential for successful completion.

ENGL 102 - English Composition II 3
Prerequisite: ENGL 101 with a grade of C or higher. Combines the process writing techniques acquired in ENGL 101 with critical reasoning and research skills to emphasize the real-life relevance in the act of managing information. This includes retrieving it from a variety of sources and evaluating, analyzing and combining it with other sources to communicate ideas in meaningful and articulate writing. Basic computer skills are essential for successful completion.

ENGL 106 - Creative Writing 3
A study and practice in the techniques of writing poetry, fiction, nonfiction, and/or drama. Emphasis is placed on the recognition of those techniques in published works and their utilization in original work. Peer evaluation and individual conferences with the instructor are employed.

ENGL 110 - Business Communications 3
Prerequisites: BSKL 010, BSKL 015, and BSKL 020 with grades of C or higher or equivalent placement scores and CAPP 125. In-depth study of effective communication techniques and demeanor as applied in business situations. Topics may include the communication process, various business letters, oral presentations, and international communication.

ENGL 112 - Technical Writing 3
Prerequisites: BSKL 010, BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Explores the theory and practice of workplace writing, emphasizing both practical and individual and collaborative decision-making. Includes practice in writing instructions, proposals and reports.

ENGL 180 - Problems in Writing 1 to 3
Prerequisites: ENGL 101 with a grade of C or higher or equivalent placement score and consent of instructor. Independent study of a special problem in the area of research-based writing or creative writing under the supervision of an instructor in the department.

French

FREN 101 - Elementary French I 3
Prerequisites: BSKL 010, BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Begins the four basic skills of language communication: listening, speaking, reading, and writing. Includes an introduction to the French culture.

FREN 102 - Elementary French II 3
Prerequisite: FREN 101 or one year of high school French. Continuation of FREN 101 for further development of the four basic skills of language communication: listening, speaking, reading, and writing. Continues study of French culture.

FREN 201 - Intermediate French I 3
Prerequisite: FREN 102 or two years of high school French. This course continues the study of French language and culture with a focus on communication and proficiency.

FREN 202 - Intermediate French II 3
Prerequisite: FREN 201 or three years of high school French. This course continues the study of French language and culture with a focus on communication and proficiency.

FREN 210 - Special Topics in French 1 to 3
Prerequisites: FREN 101, FREN 102, FREN 201, FREN 202 and consent of instructor. Independent study under the supervision of a French instructor.

Geography

GEOG 101 - World Geography 3
Prerequisite: BSK 015 with a grade of C or higher or equivalent placement score. Survey of the major topical elements of geography with additional emphasis on environmental awareness and place-name geography. Designed for prospective elementary and social studies teachers, as well as general education students.

GEOG 103 - Introduction to GPS/GIS 3
Introduction to GPS/GIS is a project oriented survey course of Global Positioning Systems (GPS) and Geographic Information Systems (GIS). A portfolio of projects will be assembled and evaluated. These projects will include a student selected project.

Health

HLTH 101 - Personal Health and Fitness 2
Presents a basic knowledge of physical fitness and personal fitness, the human body, personal hygiene, food and nutrition, diet and weight control, mental health, alcohol, narcotics and drug abuse education, protection against communicable diseases, and other health hazards. Course fulfills wellness requirement for AA or AAS.

HLTH 102 - First Aid 2
Prepares the student to make appropriate decisions regarding first aid care in minor or life-threatening situations. Class focuses on basic first aid techniques and when to call the EMS. CPR and relief of airway obstruction of the adult, child and infant, as well as use of the AED for the adult and child, is included in the course. American Red Cross certification cards are given for First Aid and CPR upon completion of the class.

Health Occupations

HEOC 101 - Managing Medical Emergencies 1
Presents procedures to properly handle bleeding, choking, possible broken bones, and other common medical emergencies. CPR instruction approved by the American Red Cross is included. Upon successful completion of the Basic Cardiac Support training and first aid, cards of verification are awarded.

HEOC 135 - Allied Health Career Development .5
Focuses on developing allied health care career potential. The job search process is presented step-by-step. Guest speakers, group activities and mock interviews will be utilized and resumes will be constructed. Internet sites to assist in resume writing and job searches will be explored.

Course Descriptions

HEOC 140 - Technology and Health Care 3
Course focuses on providing a foundation of information management and processing principles used to support the data, and information and knowledge needs in the provision and delivery of nursing and health care. Examines using technology to improve the quality of health care as it is delivered to the client, utilized by the provider, and needed to meet the mission of an institution.

HEOC 150 - Certified Nurse Assistant I 3
The Certified Nurse Assistant training prepares individuals for employment in a long-term care facility, teaching skills in resident care under the direct supervision of a licensed nurse. Successful completion of HEOC 150, HEOC 153 and HEOC 155 will meet state requirements for CNA training. Additional state mandated requirements may be required to be employed as a CNA in a long-term care facility.

HEOC 153 - Certified Nurse Assistant II 3
Prerequisite: HEOC 150 with a grade of C or higher. This course includes topics such as basic nursing skills, fire safety, resident safety and rights, social and psychological problems of residents, and the methods of caring for the mentally confused residents, including those with Alzheimer's disease, in a long-term care facility.

HEOC 155 - Certified Nurse Assistant Clinical 2
Corequisite: HEOC 153. This clinical course provides 100 hours of on-the-job training with state-approved clinical supervisors in a long-term care facility. At the conclusion of this course, the student must pass a two-part, state-approved final examination. The two-part final examination includes a written or oral assessment and a practicum examination.

HEOC 158 - Certified Medication Technician 4
Prerequisite: Active listing on the Missouri CNA registry. This course prepares individuals for employment in a long-term care facility. The course teaches skills in administration of nonparenteral medications to assist LPNs or RNs in medication therapy. The course consists of at least 60 hours of classroom instruction. Upon successful completion of both this course and HEOC 160, the student will be eligible to take the final exam to become a Certified Medication Technician through the Missouri Department of Health and Senior Services.

HEOC 160 - Certified Medication Technician Clinical 1
Corequisite: HEOC 158. This course includes at least eight hours of clinical practice under direct supervision. The learner will participate in administering nonparenteral medications in a long term-care facility.

HEOC 162 - Home Health Aide 2
This course provides the student with basic care skills for families with unique health needs in the patient's home. The student will learn the goals of maintaining basic human needs, home management, nutrition, meal planning, adapting basic care activities, observing client's medication and special needs, as well as special procedures in emergency care.

HEOC 164 - Restorative Nurse Assistant 2
This course is designed to train aides to fulfill requirements for efficient rehabilitative care of residents in nursing homes. This course will provide participants with the opportunity to learn the rehabilitative philosophy and to work with departmental organizations and understand the role of the physical therapist and the proper techniques of body mechanics, transfers and ambulation.

HEOC 166 - Restorative Nurse Assistant Clinical 1
Corequisite: HEOC 164. This course includes clinical practice under direct supervision. The learner will participate in working with the physical therapist in a long-term care facility.

HEOC 168 - Social Services Director/Activity Director 5
This course provides an introduction to the long term-care setting and the various methods of providing recreation and social services in this setting. It includes information to provide understanding of the regulatory process and the Quality Assurance System in this setting. It will include study of human aging, an overview of social work practice, an introduction to recreation service provisions, and the federal and state regulations. At the end of the course, the successful student will be qualified to hold a position as an Activity Director or Social Services Director in a long-term care facility.

HEOC 170 - Level I Medication Aide 1
The Level I Medication Aide training program prepares individuals for employment as a Level I Medication Aide in residential care facilities and assisted living facilities. The program is designed to teach skills in medication administration of non-parenteral medications in order to qualify students to perform this procedure only in residential care facilities and assisted living facilities in Missouri. The curriculum content is a minimum of 16 hours which includes procedure and instructions in the following areas: basic human needs and relationships; drug classifications and their implications; assessing drug reactions; techniques of drug administration; medication storage and control; drug reference resources; and infection control.

HEOC 172 - Insulin Administration .5
Prerequisite: Current Misssouri CMT or LIMA Certificate. The Insulin Administration training program prepares medication technicians in a skilled or intermediate care facility or medication aides in a residential care facility or assisted living facility to administer insulin. The program is designed to present information on diabetes as it relates to symptoms and implications of proper or improper treatment and to teach skills in insulin administration in order to qualify students to perform this procedure in long-term care facilities in Missouri. The curriculum content includes procedures and instruction in the following areas: diabetes and its treatment and complications; types of insulin; techniques of insulin administration; and methods of monitoring blood sugar levels.

HEOC 180 - Problems in Health Occupations 1 to 3
Prerequisite: Consent of instructor. Independent study of a special problem in allied health under the supervision of an allied health instructor.

History

HIST 101 - US History Before 1877 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Survey of the political, economic and social development of the United States from its European origins through the Reconstruction Process. A study of the Missouri Constitution is included to meet the state's requirements in Senate Bill No. 4.

HIST 102 - US History Since 1877 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Survey of the political, economic, social, and military development of the United States from 1877 to the present. A study of the Missouri Constitution is included to meet the state's requirements in Senate Bill No. 4.

HIST 108 - World Civilization Before 1500 3
Prerequisite: BSKL 015 with a grade of C or higher or equivalent placement score. Survey of the political, social, military, cultural, and religious history of Europe, Asia and Africa from prehistoric man to 1500.

HIST 109 - World Civilization Since 1500 3
Prerequisite: BSKL 015 with a grade of C or higher or equivalent placement score. Survey of the political, social, military, cultural, economic, and ideological history of Europe, Asia and Africa from 1500 to the end of the Cold War.

HIST 180 - Problems in History 1 to 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores and consent of instructor. Independent study of a special problem in history under the supervision of the lead history instructor.

Industrial Electrical Maintenance

IEM 102 - Electric Fundamentals 3
Introduction to electrical theory. Topics include direct current, alternating current, electrical quantities and values, Ohm's Law, electric generation, energy conversion, magnetism, electromagnetism, series, parallel, and combination circuits.

IEM 104 - Electrical Power 3
Prerequisite: IEM 102 with a grade of C or higher. Continuation of electrical studies in AC, inductance, capacitance, reactance, power factor, and the application of electrical power in industry, single and poly-phase transformers, and WYE and DELTA systems.

IEM 106 - Industrial Mechanics 3
Principles and applications of industrial mechanics: tools, hardware, installation and maintenance of bearings, gear systems, belt drives, mechanical drives, principles of lubrication, vibration and alignment.

Course Descriptions

IEM 108 - Fluid Power Technology 3
Principles and applications of fluid power technology in industrial systems: operation, troubleshooting and maintenance of hydraulic and pneumatic pressure; flow, directional control, and electrical devices; conduits, pumps, compressors, actuators and ancillary devices; and conditioning and filtration of fluids. Critical thinking and analytical skills are emphasized.

IEM 110 - Digital Principles and Applications 3
Prerequisites: BSKL 015 and BSKL 061 with grades of C or higher or equivalent placement scores. Study of decimal, binary and hexadecimal numbering systems, Boolean algebra, basic logic, and truth tables. Circuits covered are FLIP-FLOPS, TIMERS, COUNTERS, and REGISTERS.

IEM 112 - Control Circuit Troubleshooting 3
Prerequisite: IEM 104 with a grade of C or higher. Introduction to the devices and components of industrial automation, sensors, switches, fluid power components, and combination of technologies in the systems of manufacturing and industrial processes. Primary emphasis on interpreting line diagrams and troubleshooting control circuits.

IEM 114 - Motor Controls 3
Prerequisite: IEM 112 with a grade of C or higher. Course is designed to teach students how to construct, troubleshoot and isolate malfunctions in various types of control circuits and motor starters; application and installation of control devices; and basic principles, operation, components and application of AC drives.

IEM 116 - Solid State Devices 3
Prerequisite: IEM 104 with a grade of C or higher. Comprehensive overview of solid state devices, and their basic principles and applications; the composition and operating characteristics of diodes, transistors, SCRs, DIACs, TRIACs, and solid state transducers; and the application of solid state devices in rectification of AC into DC, power supply filters, voltage regulation, industrial relays, sensors, and alarm systems. Students will install, build and troubleshoot circuits with solid state devices.

IEM 118 - Analog/Digital 3
Prerequisite: IEM 116. Covers the basic principles involving the use of analog integrated operational amplifiers in signal generation applications; integrated A/D, D/A converters and their applications; shift registers and their applications; and control and timing circuits and their applications.

IEM 122 - Introduction to PLCs 3
Prerequisite: IEM 114 with a grade of C or higher. Introduction to hardware and software of Programmable Logic Controllers. Course is designed to instruct students in the operating system of PLCs, configuration of hardware and communications, number systems, logic circuits, and basic programming. The ability to perform basic computer operations is necessary.

IEM 124 - Intermediate PLCs 3
Prerequisite: IEM 122 with a grade of C or higher. Study of the interface between machine and controller, advanced programming functions and troubleshooting. Emphasis on developing programs and interfacing with industrial type devices.

IEM 126 - Industrial Safety 3
Comprehensive study of requirements and programs of 29 CFR 1910. Application of safe work practices to industrial maintenance and manufacturing. Topics selected based on student interest and industry emphasis.

IEM 128 - Maintenance Management 3
Study of contemporary maintenance management practices, statistical applications, Total Productive Maintenance, reliability-based procedures, predictive (PDM) and preventive (PM) maintenance, CMM systems, nondestructive testing, and project management.

IEM 130 - Principles of Refrigeration 3
Study of the principles of refrigeration, refrigerants, components, types of systems, operation, electrical controls, troubleshooting, servicing, and maintenance. Critical thinking and analytical skills are emphasized.

IEM 132 - Advanced PLCs 3
Prerequisite: IEM 124 with a grade of C or higher. Study of the hardware that is programmed with RSLogix 5000. This class is designed for students who already understand RSLogix 500 and are ready to advance to 'Tag' based programming.

IEM 134 - PLC Networks 3
Prerequisite: IEM 132 with a grade of C or higher. Course will cover the installation, operation, inspection, and maintenance of industrial

communication networks using serial RS232, Ethernet and databus. It will examine various interface devices used in communication and integration of these devices with computers, PLCs and Web-enabled technology.

IEM 136 - General NEC Requirements 3
Prerequisite: IEM 104 with a grade of C or higher. Students learn to understand and apply the code to general industrial applications, wiring and protection, wiring methods and materials, and general equipment. Based on the general requirements of the National Electrical Code (NEC).

IEM 138 - Power Distribution and Switchgear 3
Prerequisite: IEM 136. Course will cover the installation, operation, inspection, and maintenance of industrial power systems. Course will look at power distribution; switchgear and switchboard assemblies; motor control centers; voltage, current and instrument transformers; feeder circuits and busways; switches and circuit breakers; protective devices; regulating devices; and neutral and grounding systems. The National Electric Code (NEC) will be referenced as a guide for the proper wiring installation and operation of electrical power systems.

IEM 140 - Transformers and Motors 3
Prerequisite: IEM 104 with a grade of C or higher. Course examines the principles, construction, types, and applications of transformers and motors, including DC generators and motors, alternators and AC motors. Transformers and AC motors applications include single-phase and poly-phase, WYE and DELTA.

IEM 142 - Motion Control Systems 3
Prerequisite: IEM 132 with a grade of C or higher. Course will cover the installation, principle of operation, and application of integrated motion and sequential control devices. Study of the hardware and software architecture used in servo drives, motors and actuators to allow integrated motion in machine control. Provides in-depth training in multiple programming, installation and diagnostics tools used in motion control systems.

IEM 144 - Process Control 3
Prerequisite: IEM 132 with a grade of C or higher. Covers the dynamics of automatic controls used in industrial processes utilizing conventional feedback control by proportional, integral and derivative (PID Loops) modes of feedback. Examines the installation, operating principles, applications, and maintenance of the single-loop control devices and programming of the software used in PID Loops.

IEM 146 - Quality Management and Control 3
Study of quality management principles and quality control procedures. Students will study quality management from a historical perspective as well as current quality management techniques. Production quality control methods such as sampling, inspecting and testing used to insure accuracy and high standards in production quality will be studied.

IEM 148 - Inventory and Production Control 3
Study of production planning, scheduling, follow-up, and control of raw material, parts and finished goods inventories.

IEM 150 - Applications in IEM Problem Solving 1 to 4
Designed to allow a company to utilize an instructor to facilitate an actual problem or improvement project with a group of students or company employees, and for individualized special instruction by the instructor.

IEM 175 - IEM Internship 4 to 8
Prerequisites: Completion of 30 technical credit hours and consent of program coordinator. Application of work skills in a supervised work environment. Companies that sponsor internships provide the supervision. The college provides general guidance and works with the sponsoring company in developing an outline of the work experiences unique to the site. Course is designed to provide the student an opportunity to demonstrate work skills, work ethics and the ability to work with others. In addition to completing the training plan, the student must submit four to eight written technical reports.

IEM 200 - Technology Integration 3
Prerequisite: IEM 124 with a grade of C or higher. Course will evaluate student's skill and ability to design, develop and troubleshoot a simulated manufacturing production system. Students will build a working production system in a simulated workplace environment stressing teamwork and troubleshooting skills. The goal is to prepare a student for entry into the workforce as an IEM technician.

Course Descriptions

Literature

LIT 101 - Introduction to Literature 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Students will study fiction, poetry and drama. Special attention is given to literary terminology and critical analysis. Recommended but not required as a preparation for other courses in literature.

LIT 104 - Masterpieces Before 1650 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Students will examine selected works of continental European literature in translation from ancient, medieval and Renaissance movements.

LIT 105 - Masterpieces After 1650 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Students will examine selected works of various Asian, African and European literature in translation from the age of Europe's Enlightenment through the 20th century.

LIT 107 - American Literature 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Students will thematically study major American authors and works from the Colonial Period to the present, emphasizing development of concepts that have shaped American life and literature.

LIT 109 - English Literature 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Students will study major English authors, genres and works from Beowulf to the present.

LIT 114 - Topics in Literature 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Students will study a major writer, a literary type or a theme in literature. Specific subjects are announced each semester in which the course is offered.

LIT 180 - Problems in Literature 1 to 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores, LIT 101 and consent of instructor. Students independently study a special problem in literature under the supervision of an instructor in the department.

Machine Tool

MACH 101 - Introduction to Machining 4
Introduction to measuring tools used for work in machining or inspection. Introduces the proper setup and use of drilling machines, band saws and lathes. Applications include outside diameter turning, threading and tapering. Areas of study include safety, blueprint interpretation, hand tools, layout, and various gauges to complete and inspect a job.

MACH 102 - Lathe and Milling Machine Operations 4
Prerequisite: MACH 101. Continuation in the application of lathe operations including: inside diameter turning, threading and tapering. Introduces the proper use and setup of milling machines. Applications include squaring the machine and indicating angle pieces. Areas of study include: safety, blueprint interpretation, and the selection of cutters, feeds and speeds.

MACH 103 - Milling and Grinding Machine Applications 4
Prerequisite: MACH 102. Continuation of milling machine operations including: dividing heads, precise movement of machines, turntable operations, and keyways. Introduces surface grinders in squaring procedures. Areas of study include safety, blueprint interpretation and proper setup and use of milling attachments.

MACH 104 - Advanced Machining 4
Prerequisite: MACH 103. Introduces the use of the sine bar and sine plates on milling machines and surface grinders. Will present advanced applications of lathes, mills, grinders, and drill presses. Advanced projects will be timed. Areas of study include estimation of project time and bidding process.

MACH 106 - CNC Machining 3
Provides fundamental technical information and some practical experience necessary for programming, editing and operating numerically controlled machine tools.

MACH 109 - Advanced CNC Machining 3
Prerequisite: MACH 106. Provides technical information and considerable practical experience in preparation, setup and operation of wire EDM and CNC lathe. Digitizing on vertical machining center will be introduced. Tryout of programs, editing and improving programs will be emphasized.

MACH 112 - Machine Tool Equipment Repair 4
Prerequisite: MACH 106. Designed to teach correct procedures for repair and maintenance of machine tools. Study includes safety, repair and replacement of worn parts and diagnosis and repair of hydraulics, pneumatics and electrical components.

MACH 114 - Statistical Process Control 3
Designed around the process of plotting production results to determine if both product and process meet company standards. Encourages prevention, as opposed to detection of defects, in helping to eliminate costly repairs and scrap.

MACH 115 - Heat Treating and Metallurgy 3
Knowledge of heat treatable steel and alloys will be presented in this course. Study of the operation of heat treating and drawing furnaces, quenching mediums, color spectrum, and hardness testing is included. Students will become familiar with the process involved in making iron and steel, non-carbon diagrams and identification of ferrous and nonferrous metals.

MACH 175 - Machine Tool Internship 1 to 8
Prerequisite: Consent of program coordinator. Provides opportunity to work with a skilled machinist, to better understand skills and knowledge needed, and to determine how the student likes actual machine tool work.

MACH 180 - Problems in Machine Tool 1 to 3
Prerequisite: Consent of program coordinator. Independent study of a special problem in machine tool technology under the supervision of a machine tool instructor.

Mass Communication

MCOM 101 - Introduction to Mass Media 3
Presents a basic overview of the scope and role of the mass media in society. Course integrates media aids with creative assignments and field trips to help students become informed media consumers and gain cultural and global perspectives on the communication industry.

MCOM 112 - Introduction to Public Relations 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Overview of the principles and practice of public relations in private and public organizations. Includes analysis of how various organizations' communication philosophy and practices impact their productivity and effectiveness in society.

MCOM 114 - News Reporting I 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Includes the examination of news value, rights and responsibilities of the press, news gathering and reporting techniques, leads, interviewing, style, and specialized articles.

MCOM 115 - News Reporting II 3
Prerequisite: MCOM 114. Application of concepts and methods learned in News Reporting I, exploration of skills in researching and writing in-depth articles, and interaction with community leaders and media professionals are included.

MCOM 117 - Practical Journalism 1
Prerequisite: ENGL 101. Students will complete writing, editing and/or photography assignments. One hour credit each term for maximum of three hours.

MCOM 180 - Problems in Mass Communication 1 to 3
Prerequisite: Consent of instructor. Independent study of a special problem in mass communication under the supervision of an instructor in the department.

Mathematics

MATH 101 - Business Math 3
Prerequisite: BSKL 061 with a grade of C or higher or equivalent placement score. Practical approach to understanding the application of mathematics within the business environment. Emphasis is placed on developing mathematical solutions to problems in the areas of marketing, accounting, finance, and banking.

MATH 107 - Technical Math I 3
Prerequisite: BSKL 061 with a grade of C or higher or equivalent placement score. Topics include: scientific notation, variation, proportion, applied geometry, basic algebraic manipulations, and angles, sides and triangle relationships. Course will stress applications to practical problems as they apply to trade.

MATH 108 - Technical Math II 3
Prerequisite: MATH 107 with a grade of C or higher or equivalent placement score. Topics include signed numbers, formulas, algebraic functions, and trigonometry relationships. Course will stress applications to practical problems as they apply to trade.

Course Descriptions

MATH 112 - Intermediate Algebra 3
Prerequisite: BSKL 064 with a grade of C or higher or equivalent placement score. Topics include: properties of the real number system, scientific notation, equations and inequalities involving absolute value, graphs of linear equations and inequalities in the plane, systems of equations in two unknowns, rational exponents and radicals, radical equations, imaginary and complex numbers, quadratic equations and inequalities, and conic sections.

MATH 114 - College Algebra 3
Prerequisite: MATH 112 with a grade of C or higher or equivalent placement score. Topics include: properties of functions and their graphs, variation, solving polynomial equations, the fundamental theorem of algebra, properties of logarithms, logarithmic and exponential equations, exponential growth and decay, linear systems in more than two variables, matrices, and determinants.

MATH 116 - Finite Math 3
Prerequisite: MATH 112 with a grade of C or higher or equivalent placement score. Topics include: applications of linear functions, matrix algebra, linear programming with the simplex algorithm, theory of finite sets with applications of Venn diagrams, combinatorial analysis, and probability theory.

MATH 117 - Contemporary Mathematics 3
Prerequisite: MATH 112 with a grade of C or higher or equivalent placement score. Mathematical concepts with historical perspectives from various branches of mathematics including an introduction to set theory, logic, number theory, statistics, combinatorics, and geometry.

MATH 120 - Trigonometry 3
Prerequisite: MATH 114 or equivalent placement score. Corequisite: MATH 114. Topics include: radius vector, right triangle and unit circle definitions of trigonometric functions, trig identities, graphs, inverse trigonometric functions, trigonometric equations, DeMoivre's Theorem, and conics.

MATH 122 - Precalculus Math 5
Prerequisite: MATH 112 with a grade of C or higher or equivalent placement score. Topics include: algebraic, exponential, logarithmic, and trigonometric function; trigonometric identities, trigonometric equations and other selected topics of algebra.

MATH 125 - Calculus for Business 3
Prerequisite: MATH 114 with a grade of C or higher or equivalent placement score. A brief treatment of elementary calculus with applications to business and economics. Topics include: limits and continuity, derivatives and integrals of algebraic, exponential and logarithmic functions, compound interest, cost revenue and profit functions, and elasticity of demand.

MATH 127 - Business Statistics 3
Prerequisite: MATH 114 or MATH 116 with a grade of C or higher or equivalent placement score. Emphasizes data analysis, data production and statistical inference. Topics include: descriptive statistics, normal distributions, correlation and regression, design of samples and experiments, the central limit theorem, control charts, confidence intervals, and significance tests.

MATH 130 - Calculus and Analytic Geometry I 5
Prerequisites: MATH 122 with a grade of C or higher or MATH 114 and MATH 120 with grades of C or higher or equivalent placement scores. Topics include: limits, continuity, derivatives and integrals of algebraic and transcendental functions, and appropriate applications.

MATH 131 - Calculus and Analytic Geometry II 5
Prerequisite: MATH 130 with a grade of C or higher. Topics include: parametric and polar coordinates, methods of integration, series, and conic sections, and application of these topics.

MATH 132 - Calculus and Analytic Geometry III 5
Prerequisite: MATH 131 with a grade of C or higher. Topics include: parametric equations of lines and curves in space, vectors, calculus of vector functions, multivariable, differential and integral calculus, introduction to vector analysis, and application of these topics.

MATH 134 - Differential Equations 3
Prerequisite: MATH 132 with a grade of C or higher. Course presents linear differential equations with application, series solutions and LaPlace transforms.

MATH 180 - Problems in Math 1 to 3
Prerequisite: Consent of instructor. Independent study of a special problem in mathematics under the supervision of a mathematics instructor.

Marine Technology

MRN 101 Marine Systems Rigging I 6
Course provides a foundation of information and skills for a marine career.

MRN 105 Marine Ignition Systems 3
Outboard, inboard, inboard/outboard, and personal watercraft ignition systems are explored in this course.

MRN 107 Marine Starter and Charging Systems 2
This course follows the progression of starter and charging systems in the outboard, inboard/outboard and the personal watercraft.

MRN 109 Marine Cooling Systems 2
Course covers the systems used in the cooling process.

MRN 111 Marine Lubrication Systems 2
Course begins with the manual mixing of oil and fuel to provide lubrication, and progresses into the different automatic oiling systems.

MRN 113 Marine Engine Component and Precision Measuring 3
Course provides the technician with the skills to determine if an engine component is reusable.

MRN 115 Marine Shop Procedures and Business Operations 2
Properly completing a repair order, providing proper communication with the customer, keeping track of the unit(s) brought in for service, recording the diagnosis and repair process, and the date promised for repair completion.

MRN 117 Marine Engine Systems Analysis 2
Course covers proper break-in procedure.

MRN 119 Marine Systems Preventive Maintenance 4
Course covers maintenance items the technician must be responsible to complete.

MRN 121 Marine Power Transfer Systems 4
Transom plate and adapter systems, couplers, upper gear case, drive shaft housing, jet pumps, gear housings, strut bearings, and surface-piercing drive systems are part of the course.

MRN 123 Marine Systems Troubleshooting 3
Course covers correct troubleshooting techniques.

MRN 125 Marine Fuel Systems 4
The course will cover the complexities of marine fuel systems and automatic oiling systems.

MRN 127 Marine Instrumentation Systems 2
Course promotes understanding the different manufacturer systems and sending units.

MRN 129 Marine Power Trim/Tilt Systems 2
Course will enable students to understand how hydraulic pumps can manage the pressure in a hydraulic system.

MRN 175 Internship 4
The internship consists of approximately 160 clock hours at an approved marine facility.

Medical Office

MEOF 101 - Medical Terminology I 3
Acquire a medical terminology vocabulary related to body systems necessary to communicate information in a medical office or hospital environment. Focuses on the principles of medical word formation, including the basic rules of building medical words, identifying suffixes, prefixes, and combining forms related to the structure and function of the associated systems of the body (gastrointestinal, respiratory, cardiovascular, skeletal, muscular, urinary) and radiology and nuclear medicine. Concentrate on pronunciation, spelling and definitions of medical terms. Course is a prerequisite for the dental hygiene and radiology programs and is a degree requirement for medical office administration majors.

MEOF 102 - Medical Terminology II 3
Prerequisite: MEOF 101. A continuation of MEOF 101. Focuses on identifying suffixes, prefixes, and combining forms related to the structure and function of the associated systems of the body (integumentary, hematology, immune, endocrine, nervous, male reproductive, female reproductive, oncology). Course is a degree requirement for medical office administration majors.

Course Descriptions

MEOF 103 - Job Shadowing in the Medical Office 1
Introduces medical office majors to the functions, routines and atmospheres of five different kinds of medical offices through observation.

MEOF 105 - Medical Office Procedures 3
Prerequisite: BSKL 014 with a grade of C or higher or equivalent placement score; CAPP 118 and MEOF 101 are recommended. Introduction of administrative office procedures in the medical office setting. Coursework includes several projects typically performed by medical office personnel.

MEOF 107 - Medical Transcription 3
Prerequisites: CAPP 118, MEOF 101 and OADM 118. Individualized course provides extensive transcription of medical dictation with emphasis on proofreading and producing error-free documents. Students will further develop their medical vocabulary as they transcribe medical reports.

MEOF 108 - Body Structure and Function for Medical Office Administration 3
Prerequisite: MEOF 101 preferred. Focuses on the complementary nature of human body structure and functions; homeostatic regulating mechanisms; and the interaction between humans and their environments including metabolic processes, responses to stress, pathological disorders, and phases in the human life cycle.

MEOF 110 - Clinical Assisting Techniques 3
Introduces the medical office assistant to basic clinical skills that may be observed or performed in physicians' offices. Legal implications as well as personal and patient safety are emphasized. (Requirements beyond this course are also required for AAMA certification)

MEOF 111 - Clinical Practicum 1
Prerequisites: MEOF 110 and consent of program coordinator. Provides an opportunity for students to experience hands-on training in a medical office setting. Students report to an instructor who evaluates their performance and are responsible for finding and making arrangements with a clinical site to complete the required 40 hours of on-the-job training.

MEOF 112 - Advanced Medical Transcription 3
Prerequisites: CAPP 118, CAPP 125 and MEOF 107. Individualized course includes extensive transcription of advanced medical dictation with a focus on increasing speed and accuracy. The course is designed to refine transcription skills to a competitive level by providing realistic and challenging dictated reports.

MEOF 118 - Procedure and Diagnosis Coding 3
Prerequisite: BSKL 014 with a grade of C or higher or equivalent placement score. Corequisite: MEOF 101. Course for medical office employees and medical office administration majors with an emphasis placed on accurate coding for maximum reimbursement. Extensive discussion and coursework with ICD-9-CM diagnosis and procedure coding including reading and interpreting medical reports for accurate coding.

MEOF 119 - Advanced Procedure and Diagnosis Coding 3
Prerequisites: BIO 103, BIO 207, BIO 208 and MEOF 118. Course for medical office employees and medical office administration students who wish to specialize in procedure and diagnosis coding. Students will receive advanced instruction in CPT-4 procedural coding as well as ICD-9-CM diagnosis coding. Coursework will include practical experience in reading, interpreting, and coding medical records and reports.

MEOF 121 - Documentation and Compliance 1
Prerequisites: MEOF 101 and MEOF 118. Teaches students proper documentation procedures for compliance with federal regulations for coding and billing.

MEOF 125 - Medical Skillbuilding 1
Prerequisites: MEOF 101 and CAPP 118. Individualized course to improve keyboarding accuracy and to increase keyboarding speeds required for medical transcription. To meet requirements for graduation, medical office administration degree candidates (except medical transcription majors) must achieve a grade of B or better and certificate candidates must achieve a grade of C or better.

MEOF 126 - Medical Skillbuilding for Transcription 1
Prerequisites: MEOF 101 and CAPP 118. Individualized course to improve keyboarding accuracy and to increase keyboarding speeds required for medical transcription majors. To meet requirements for graduation, medical transcription degree candidates must achieve a minimum grade of B.

MEOF 130 - Essentials of Pharmacology 2
Content provides basic concepts of pharmacology. Students will gain an understanding of drug categories, their actions and commonly used drugs in each category. For medical office majors only.

MEOF 182 - Medical Office Management Support Services Internship 3
Prerequisite: Consent of program coordinator. Provides an opportunity to gain experience by working in a medical setting. Students are responsible to a job supervisor and an instructor who evaluate their performance.

MEOF 183 - Medical Office Medical Transcription Internship 3
Prerequisite: Consent of program coordinator. Provides an opportunity to gain experience by working in a medical transcription setting. Students are responsible to a job supervisor and an instructor who evaluate their performance.

MEOF 184 - Medical Office Procedure and Diagnosis Coding Internship 3
Prerequisite: Consent of program coordinator. Provides an opportunity to gain experience by working in a medical coding setting. Students are responsible to a job supervisor and an instructor who evaluate their performance.

Music

MUS 100 - Fundamentals of Music 3
Corequisite: MUS 105. Rudiments of music (note names, scales, key signatures, rhythms, intervals, notation, and triads) with their application within the context of music theory.

MUS 101 - Music Appreciation 3
Introductory course concerned with the elements of music, the important musical masterpieces and the significant composers. A portion of the class time is devoted to listening to recordings of selected composers and performers. Not open to music majors.

MUS 103 - Music History and Literature I 3
Course surveys music history and literature from its beginnings through the Baroque era. Instrumental and vocal/choral genres and major composers will be studied. A significant portion of class time will be devoted to listening to recordings of appropriate music, composers and performers.

MUS 104 - Music History and Literature II 3
Course surveys music history and literature from the Classical era to the present. Instrumental and vocal/choral genres and major composers will be studied. A significant portion of class time will be devoted to listening to recordings of appropriate music, composers and performers.

MUS 105 - Fundamentals of Aural Training 1
Corequisite: MUS 100. This course will cover sight singing, solfege, and rhythmic, melodic and harmonic dictation.

MUS 106 - Music Theory I 3
Prerequisite: MUS 100. Corequisite: MUS 109. Basic materials including notation, rhythm and meter, scales, intervals, triads, and melodic analysis.

MUS 107 - Music Theory II 3
Prerequisite: MUS 106. Corequisite: MUS 110. This course covers primary and secondary triads and seventh chords, introduction of altered chords, modulation, and cadential figures.

MUS 108 - Music Theory III 3
Prerequisite: MUS 107. Corequisite: MUS 111. A continuation of the materials and the organization of music including modality, counterpoint and late 19th century harmonic functions.

MUS 109 - Aural Training I 1
Prerequisite: MUS 105. Corequisite: MUS 106. Students will continue improvement in sight singing, solfege, and rhythmic, melodic and harmonic dictation. Coordinated with Music Theory I.

MUS 110 - Aural Training II 1
Prerequisite: MUS 109. Corequisite: MUS 107. Students will continue improvement in site singing, solfege, and rhythmic, melodic and harmonic dictation. Coordinated with Music Theory II.

MUS 111 - Aural Training III 1
Prerequisite: MUS 110. Corequisite: MUS 108. Students will continue improvement in site singing, solfege, and rhythmic, melodic and harmonic dictation. Coordinated with Music Theory III.

MUS 112 - Small Instrumental Ensemble I 1
Prerequisite: Consent of instructor. Perform and study music written specifically for small instrumental music ensembles.

Course Descriptions

MUS 113 - Small Instrumental Ensemble II 1
Prerequisites: MUS 112 and consent of instructor. Second enrollment in Small Instrumental Ensemble.

MUS 114 - Small Instrumental Ensemble III 1
Prerequisites: MUS 113 and consent of instructor. Third enrollment in Small Instrumental Ensemble.

MUS 114B - Small Instrumental Ensemble IV 1
Prerequisites: MUS 114 and consent of instructor. Fourth enrollment in Small Instrumental Ensemble.

MUS 119 - Jazz Band I 1
Prerequisite: Consent of instructor. A select ensemble which performs jazz literature representing traditional, as well as most current forms of jazz.

MUS 120 - Jazz Band II 1
Prerequisites: MUS 119 and consent of instructor. Second enrollment in Jazz Band.

MUS 121 - Jazz Band III 1
Prerequisites: MUS 120 and consent of instructor. Third enrollment in Jazz Band.

MUS 122 - Jazz Band IV 1
Prerequisites: MUS 121 and consent of instructor. Fourth enrollment in Jazz Band.

MUS 136 - Applied Instrumental Lessons I 1 to 2
Performance-oriented study of the technique and literature associated with a specific musical instrument.

MUS 137 - Applied Instrumental Lessons II 1 to 2
Prerequisite: MUS 136. Second enrollment in Instrumental Lessons.

MUS 138 - Applied Instrumental Lessons III 1 to 2
Prerequisite: MUS 137. Third enrollment in Instrumental Lessons.

MUS 139 - Applied Instrumental Lessons IV 1 to 2
Prerequisite: MUS 138. Fourth enrollment in Instrumental Lessons.

MUS 140 - Guitar Class I 2
Practical study of the guitar designed for beginning students with less than one year of experience.

MUS 141 - Guitar Class II 2
Prerequisite: MUS 140. Designed to allow the student to continue studying guitar beyond Guitar Class I.

MUS 145 - Beginning Piano Class I 2
Study of the piano, especially for students without previous training.

MUS 146 - Beginning Piano Class II 2
Prerequisite: MUS 145. Continuation of skills learned in MUS 145.

MUS 147 - Intermediate Piano Class I 2
Prerequisite: MUS 146. Continuation of skills learned in MUS 146 with emphasis on specific piano proficiency skills.

MUS 148 - Intermediate Piano Class II 2
Prerequisite: MUS 147. Continuation of skills learned in MUS 147 with emphasis on specific piano proficiency skills.

MUS 150 - Applied Piano Lessons I 1 to 2
Prerequisite: One year of piano class or consent of instructor. Private piano lessons. Intended only for serious piano students.

MUS 151 - Applied Piano Lessons II 1 to 2
Prerequisite: MUS 150. Second enrollment in Piano Lessons.

MUS 152 - Applied Piano Lessons III 1 to 2
Prerequisite: MUS 151. Third enrollment in Piano Lessons.

MUS 153 - Applied Piano Lessons IV 1 to 2
Prerequisite: MUS 152. Fourth enrollment in Piano Lessons.

MUS 155 - Voice Class I 2
Study of vocal techniques and beginning vocal performance. Open to any interested students.

MUS 156 - Voice Class II 2
Prerequisite: MUS 155. Second enrollment in Voice Class.

MUS 160 - Applied Voice Lessons I 1
Prerequisite: One year of voice class or consent of instructor. Private voice lessons. Intended only for serious vocal students.

MUS 161 - Applied Voice Lessons II 1
Prerequisite: MUS 160. Second enrollment in Voice Lessons.

MUS 162 - Applied Voice Lessons III 1
Prerequisite: MUS 161. Third enrollment in Voice Lessons.

MUS 163 - Applied Voice Lessons IV 1
Prerequisite: MUS 162. Fourth enrollment in Voice Lessons.

MUS 165 - Chorale I 1
This large ensemble performs choral literature and representative works in various styles of choral composition. Open to all who enjoy singing.

MUS 166 - Chorale II 1
Prerequisite: MUS 165. Second enrollment in Chorale.

MUS 167 - Chorale III 1
Prerequisite: MUS 166. Third enrollment in Chorale.

MUS 168 - Chorale IV 1
Prerequisite: MUS 167. Fourth enrollment in Chorale.

MUS 170 - Small Ensemble I 1
Prerequisite: Consent of instructor. Perform and study music written specifically for small vocal ensembles.

MUS 171 - Small Ensemble II 1
Prerequisites: MUS 170 and consent of instructor. Second enrollment in Small Ensemble.

MUS 172 - Small Ensemble III 1
Prerequisites: MUS 171 and consent of instructor. Third enrollment in Small Ensemble.

MUS 173 - Small Ensemble IV 1
Prerequisites: MUS 172 and consent of instructor. Fourth enrollment in Small Ensemble.

MUS 175 - Chamber Singers I 1
Prerequisite: Consent of instructor. A select small chamber choir of mixed voices that performs chamber music from all historical periods.

MUS 176 - Chamber Singers II 1
Prerequisites: MUS 175 and consent of instructor. Second enrollment in Chamber Singers.

MUS 177 - Chamber Singers III 1
Prerequisites: MUS 176 and consent of instructor. Third enrollment in Chamber Singers.

MUS 178 - Chamber Singers IV 1
Prerequisites: MUS 177 and consent of instructor. Fourth enrollment in Chamber Singers.

MUS 180 - Problems in Music 1 to 3
Prerequisite: Consent of instructor. Independent study of a special problem in music under the supervision of a music instructor.

MUS 210 - Swing Choir I 2
Prerequisite: Consent of instructor. This group performs vocal jazz, show tunes and pop music. Students perform in college and community concerts as well as tours, clinics and other performance venues.

MUS 211 - Swing Choir II 2
Prerequisites: MUS 210 and consent of instructor. Second enrollment in Swing Choir.

MUS 212 - Swing Choir III 2
Prerequisites: MUS 211 and consent of instructor. Third enrollment in Swing Choir.

MUS 213 - Swing Choir IV 2
Prerequisites: MUS 212 and consent of instructor. Fourth enrollment in Swing Choir.

MUS 230 - Music in the Elementary School 2
Course includes basic music reading and singing skills, teaching techniques (general and music specific), understanding music curriculum content, and materials and methods for teaching music.

Networking

NET 102 - Networking I 3
Use and implementation of local area networks and network design.

NET 106 - Networking II 3
Presents the concepts of network security using the objectives covered in the certification test. Firewalls, viruses, physical security, server and client security, and preventing unauthorized attacks will be discussed.

NET 120 - Network Server 3
Prerequisite: NET 102 or NET 150 with a grade of C or higher. Course will cover the current popular server operating system. Topics include planning of a network, installation of hardware and software, management, client accounts, and troubleshooting. Course will be structured to the requirements for certification.

Course Descriptions

NET 126 - Network Client 3
Prerequisite: NET 102 or NET 150 with a grade of C or higher. Corequisite: NET 102 or NET 150. Study of the operating system used on today's workstations. Installation, administration, configuring files, security, and local and network printing will be presented from a network administrator's viewpoint. Troubleshooting and networking the operating system will be included.

NET 130 - TCP/IP-NT Server Enterprise 3
Covers the theory and application of an entire collection of protocols with applications for performing tasks such as e-mail, file transfers and terminal emulation. Packet structure and interpretation of data fields, network analysis and internetwork connectivity will be covered.

NET 134 - Web Server 3
Covers the installation, management and applications of a Web server. Students will create a Web page to be published on class Web site. No prior Web page knowledge is required. Web security will also be discussed.

NET 135 - SQL Server System Administration 3
Prerequisite: NET 120 with a grade of C or higher. How to install, configure and administrate SQL Server. Topics covered include: configuring database options (capacity, connectivity and performance); automating data transfer and manipulation with Data Transformation Services (DTS) packages; using SQL Server replication services; managing security (authentication, logins, permissions, and alerts); monitoring and fine-tuning system performance; performing backups and restorations; clustering databases; supporting SQL Server in a clustered environment; implementing disaster recovery; and optimizing clustering performance.

NET 136 - Exchange Server Administration 3
Prerequisite: NET 120 with a grade of C or higher. Installing, configuring and administering Microsoft Exchange Server. Configure Microsoft Directory Services, administer groups and public folder solutions for Exchange Server. Deployment of mail clients such as Outlook and Outlook Web Access, as well as configuring recipient objects for e-mail, instant messaging and chat. Learn to troubleshoot messaging connectivity and how to resolve problems with clients, routing, foreign mail systems, and links between servers. Additional topics covered include: enhanced Exchange Server Security using v.3 certificates, virtual servers, and Key Management Server; optimizing messaging, collaboration and calendaring services; managing the Microsoft Web Storage System; and developing a backup and recovery plan for system and user data.

NET 137 - Internet Security and Acceleration 3
Prerequisite: NET 120 with a grade of C or higher. Student will learn to install the ISA Server and set up hosting roles, VPNs, dial-up connections, and an H.323 Gatekeeper. Additional topics will include: creating and administering access control and bandwidth policies; configuring clients for secure network address translations, firewall software and other services; managing arrays of multiple ISA Servers; applying forward and reverse caching for faster Web connectivity; monitoring server performance with alerts, logs, reports, and performance counters; and troubleshooting problems with access, network usage and security.

NET 138 - Network Directory Services 3
Prerequisite: NET 120 with a grade of C or higher. The planning, configuring and administering of Network Directory Services and infrastructure on a LAN. Topics include the installation and configuration of Domain Name System (DNS); the administration of the network users' environment and software using group policies; Remote Installation Services (RIS); management of users, groups, shared folders, and network resources; implementing network security and security troubleshooting; and monitoring and optimizing the Directory Services.

NET 140 - PC Hardware 3
Presents Microcomputer architecture, I/O, and systems operation. Other topics include peripherals, diagnostics, drives, memory, and maintenance procedures. Laboratory consists of troubleshooting selected computer systems.

NET 142 - PC Operating Systems 3
Study of computer operating systems to include Windows, Linux and DOS, with requirements of necessary hardware and known problems and features. Laboratory consists of installation, maintenance and repair of operating systems.

NET 150 - CISCO Networking 3
Online, instructor assisted beginning class in networking. Different LAN topologies, network devices, OSI layers, LAN installation, and considerations for implementation will be covered. Student will design, install and implement a network in the lab.

NET 151 - CISCO Router Basics 3
Prerequisite: NET 102 or NET 150 with a grade of C or higher. Introduction to the basic implementation and operation of network routers used in computer networks. Instructor lead and online instruction will be used in the material delivery. Lab will consist of installing, configuring and operating routers in a working network.

NET 152 - CISCO Switching Basics 3
Prerequisite: NET 151. Presents protocols used with CISCO routers and other devices on a small or large network. Material will be presented as online instruction with instructor assistance. Student will set up, configure and operate a router in the LAN environment.

NET 153 - CISCO WAN 3
Prerequisite: NET 152 with a grade of C or higher. Covers the networking environment as applied to a Wide Area Network (WAN), with Point-to-Point Protocol, ISDN, and Frame Relay will be used in a WAN with case studies of different applications. Student will implement a WAN and manage a network.

NET 158 - Network Firewalls 3
Prerequisites: NET 106, NET 151 and NET 152. Course will cover the functions, features and configuration of a firewall as applied in a network. Covers setup, management, traffic filtering, and VPNs. Students will configure and implement firewalls to protect the network from external threats. Hands-on course work is included in the course.

NET 175 - Network Administration Internship 4
Prerequisite: Consent of program coordinator. Designed for practical application in the operations of a network. Provides on-the-job training work experience in the area of computer networks. Student will be supervised and evaluated by the instructor.

NET 180 - Networking Project 1 to 3
Prerequisite: Consent of program coordinator. Independent study of a special problem in networking under the supervision of a CIS instructor.

Nursing

NURS 102 - CPR for Health Care Providers .5
American Heart Association course teaches health care providers how to recognize and respond to life-threatening emergencies such as respiratory arrest, cardiac arrest and foreign-body airway obstruction in infants, children and adults. The skills necessary to respond to these emergencies are demonstrated and practiced during the class.

NURS 103 - CPR Recertification .25
Prerequisite: NURS 102. Course is required to maintain American Heart Association CPR certification in the health care field. Upon successful completion, the health care provider will be issued a current CPR card from the American Heart Association.

NURS 110 - Personal Vocational Concepts 1
A required course for the PN certificate eligible first-year nursing student. Course is mandated by Missouri State Board of Nursing, and the requirements are outlined in the Missouri State Board of Nursing Statutes for the PN student. Course introduces behavioral concepts important to the nurse. History, role identification, responsibility, and legal aspects of the licensed practical nurse (and registered nurse) are included.

NURS 112 - Introduction to Psycho-Social Health 2
Introductory course assists the new nursing learner to basic concepts of wellness and illness, caring, communication techniques, and growth and development across the life cycle. Special circumstances, such as the impact of violence and abuse as well as the grieving process on the individual and family, will be explored during this class. Special treatment modalities such as medications will be discussed with regard to concepts of mental health.

NURS 114 - Fundamentals I 2
Course presents basic nursing skills that every nurse must master to provide competent nursing care. The course integrates knowledge from physical and behavioral sciences with clinical nursing skills.

NURS 117 - Fundamentals II 3
Course presents more advanced nursing skills that every nurse must master to provide competent nursing care. The nursing process is stressed as the framework for administering nursing care. Physical assessments, basic concepts of elimination, activity, rest, IV therapy medication administration, and technical skills are learned and practiced in this course. Classroom discussion, clinical simulation and lab practice are part of this course.

Course Descriptions

NURS 118 - Fundamentals II Clinical 1.5
Clinical course relates the concepts learned in NURS 114 and NURS 117 to the clinical setting. The learner will apply the basic nursing skills learned such as providing nursing care, performing a physical assessment, practicing communication techniques, and performing technical skills in the clinical setting. Documenting care provided will also be expected.

NURS 119 - Allied Health Pharmacology 3
This course is designed to introduce the allied health learner to the basic principles of pharmacology. Basic pharmacodynamic and pharmacokinetic principles of the most common drug classifications and selected drugs will be explored.

NURS 122 - Adult Health I 4
Basic nursing course addresses principles and nursing care for clients experiencing alterations in the respiratory system, cardiac system and the immune system, as well as clients with surgery and cancer.

NURS 124 - Adult Health II 4
Basic nursing course addresses principles and nursing care for clients experiencing alterations in neurological and gastrointestinal systems, as well as the client who has developed diabetes mellitus. Basic strategies for leadership and conflict resolution.

NURS 126 - Adult Health Nursing Clinical 3
Clinical course applies the basic nursing concepts to the clinical site setting. The learner will provide nursing care to the client and family with altered health status, relating laboratory findings, medications, and client response. IV therapy will be utilized in this clinical course.

NURS 128 - Adult Health III 2
Basic nursing course addresses principles and nursing care for clients experiencing alterations in endocrine, sensory, musculoskeletal, skin, and hematological systems.

NURS 130 - Adult Health Care Coordination Clinical 2
Clinical course capstones the first year's basic skills that include leadership, conflict resolution, coordinating client care, and applying basic nursing principles across the lifespan.

NURS 132 - Nutrition 3
Essential nutrient digestion, absorption, metabolism, and excretion are emphasized. Diet analysis and current issues in nutrition will aid the learner in applying the basic concepts to everyday situations throughout the life cycle.

NURS 134 - Nursing Care Childbearing Family 2
Course will focus on uncomplicated health care and wellness promotion for the family during the reproductive years including the newborn, the postpartum mother, the laboring client, and gynecological issues.

NURS 136 - Childbearing Family Clinical 1.5
The learner will participate in community and hospital activities to develop skills in family-centered care of the new family and the client with gynecological alterations. The learner will have learning opportunities to provide and observe labor and delivery, postpartum, newborn, and post operative gynecological care.

NURS 140 - Nursing Care Child Rearing Family 2
Course focuses on children and their families. Family-centered nursing care for the child experiencing transition through developmental stages and alterations in body systems or health promotion activities will be topics for discussion. There will be a variety of classroom activities.

NURS 142 - Child Rearing Family Clinical 1.5
The learner will participate in community and hospital activities to develop skills in family-centered care of children. Experiences will include health promotion activities in the community and nursing care of ill children in the hospital setting.

NURS 210 - Nursing Transition Course 2
Prerequisite: Acceptance to Year Two of the Associate Degree Nursing program. Building upon the knowledge obtained from the practical nursing curriculum, the advanced placement student reviews the philosophy, outcome-based curriculum and use of evidence-based practice. The student transitioning into the ADN program will have opportunities to demonstrate competencies in pharmacology (including dosage calculations), IV starts and maintenance, physical assessment, and more. Completion of the course with a B or better is required to continue in the ADN program.

NURS 213 - Introduction to Professional Nursing 2
Building upon the knowledge obtained from the practical nursing curriculum and incorporating current standards of practice for the entry level professional nurse, the learner's current leadership and management abilities are explored and enhanced. Exploration focuses on the roles and functions of the professional registered nurse in various health care settings. Topics of discussion include professionalism, leadership and management styles, delegation, priority setting, and leading and managing diverse populations and cultures.

NURS 215 - Complex Health: Mental Health 2.5
Building upon the knowledge obtained from the practical nursing curriculum, the nurse's role in promoting evidenced-based psychosocial integrity for the client and family and significant others are explored. Topics include the use of coping mechanisms, crisis intervention, therapeutic communication, psychopathology, and case management. Emphasis is placed on client education, available resources and strategies, and current trends in providing care in the community setting to promote community wellness.

NURS 216 - Complex Health: Mental Health Clinical 2
Focuses on managing clients in the mental health setting by incorporating current standards of evidence-based practice to the professional registered nurse role. Emphasis will be on planning and managing the care of a client in an inpatient mental health facility by participating and leading therapeutic groups. Application from NURS 215 will be demonstrated in the clinical settings.

NURS 219 - Complex Health: Elimination 3
Building upon the knowledge obtained from the practical nursing curriculum and incorporating current standards of practice for the entry-level professional nurse, complex features of selected diseases and disorders of the liver, gastrointestinal, and renal systems are discussed and explored. The discussions will be centered on the nursing process and the Gordon's Functional Health patterns framework. Topics will include pathophysiology and the medical and/or surgical management of the patient with these diseases or disorders. Cultural and psychosocial issues are also discussed.

NURS 221 - Complex Health: Nutrition/ Metabolic 2.5
Building upon the knowledge obtained from the practical nursing curriculum and incorporating current standards and evidence-based practice for the professional registered nurse, complex features of selected acid base, fluid and electrolyte disorders, complex diabetic disorders and injuries are discussed and explored. The discussions will be centered on the nursing process and the Gordon's Functional Health patterns framework.

NURS 227 - Complex Health: Family 3
Advances the learner's ability to provide evidence-based complex care for the newborn, pediatric and obstetric clients with complicated issues or at high risk for developing complications. Discussions will be centered around the nursing process.

NURS 228 - Complex Health: Family Clinical 1
Focuses on managing clients with complex health care needs and incorporates current standards of evidence-based practice to the professional registered nurse role. Emphasis is placed on problem-solving, advanced physical assessment techniques and time management activities. Application of the principles from NURS 227 will be demonstrated in the appropriate clinical settings.

NURS 230 - Complex Health: Adult Clinical I 1
In this clinical, the learner will begin to utilize and apply appropriate advanced nursing concepts from NURS 213 and medical surgical knowledge to the professional registered nurse role including principles of leadership and management where applicable.

NURS 231 - Complex Health: Adult Clinical II 1
In this clinical, the learner will continue to utilize and apply appropriate advanced nursing concepts from NURS 213 and NURS 221, as well as build upon NURS 230, to the professional registered nurse role including principles of leadership and management where applicable.

Course Descriptions

NURS 233 - Complex Health: Adult Clinical III **3**
Inpatient clinical course focuses on managing clients with complex health care needs. The learner will manage care for clients in ICU, ER and step-down units. There will be an emphasis on problem-solving, advanced physical assessment techniques and time management activities. Application of the principles from NURS 213, NURS 221, NURS 234, and NURS 237 will be demonstrated in the appropriate clinical settings while building upon NURS 230 and NURS 231 clinicals.

NURS 234 - Complex Health: Activity and Rest **3**
Building upon the knowledge obtained from the practical nursing curriculum and incorporating current standards of evidence-based practice for the professional registered nurse, complex features of selected cardiovascular, respiratory, and traumatic disorders and injuries are discussed and explored. The discussions will be centered on the nursing process and the Gordon's Functional Health patterns framework.

NURS 237 - Complex Health: Cognitive/ Perceptual **3**
Building upon the knowledge obtained from the practical nursing curriculum and incorporating current standards of evidence-based practice for the professional registered nurse, complex features of selected neurological diseases, disorders and injuries are discussed and explored. Corresponding pharmacological interventions will be discussed. The discussions will be centered on the nursing process and the Gordon's Functional Health patterns framework.

NURS 243 - Professional Nursing Capstone Clinical **2.5**
Focuses on the utilization and application of complex skills and knowledge gained from the associate nursing curriculum and incorporates current standards of evidence-based practice to the professional registered nurse role. Emphasis is placed on mastery of assessment, documentation, teaching, medication knowledge and administration, prioritization, time management, and communication with clients, families, staff, and peers. Application and demonstration of leadership, management, legal and ethical principles of delegation for the registered nurse in various community and acute care settings is also expected.

Occupational Therapy

OTA 200 - Foundations of Occupational Therapy **4**
Course presents an introduction to occupational therapy including history, philosophical base, values, ethics, practice framework, and clinical reasoning. Students will learn selected theories and frames of reference as they pertain to interventions in mental health, physical disabilities, pediatrics, and community practice areas. An overview of the occupational therapy process, including assessment, treatment planning, treatment implementation, and discontinuation of intervention will be presented. The role of occupational therapy in health care, community-based, and educational systems will be explored. Role delineation and collaboration of the occupational therapy assistant with other occupational therapy and health care personnel are discussed. This course includes visits to a variety of occupational therapy settings.

OTA 205 - Medical Conditions in Occupational Therapy **3**
This course presents the etiology and symptoms of medical and psychological clinical conditions across the lifespan that are commonly referred to occupational therapy services. Course content emphasizes the effects of trauma, disease and congenital conditions on the biological, psychological and social domains of occupational behavior. An exploration of cultural perspectives on disease and wellness will be included.

OTA 210 - Analysis of Occupations **2**
Observation, analysis and performance of human occupation in work, self-care, and play and leisure activities throughout the lifespan are emphasized. Students will select, analyze, adapt, grade, and use goal-directed, client-centered therapeutic activities and techniques to promote engagement in occupations. Skills in using the teaching-learning process with clients, families and others will be incorporated. The development of observation and data collection skills will be emphasized. Community experiences are provided for observation, interview, assessment, and relational skills with persons experiencing cross disabilities throughout the lifespan. Professional and therapeutic relationships encompassing holism are discussed.

OTA 215 - Mental Health and Psychosocial Practice 4
Course presents the role of the occupational therapy assistant in the psychosocial area of occupational therapy practice. Students will learn selected frames of reference, and explore the effects of psychosocial dysfunction on areas of occupation. Students will learn skills necessary to assess, implement and document intervention in a variety of mental health settings. Client factors, including culture and diversity, therapeutic interactions and methods are studied. Students will develop skills in administering individual and group interventions, professional communication, conflict negotiation, and advocacy. Course activities, site visits and Level I fieldwork opportunities will enable students to participate in and apply psychosocial principles to practice.

OTA 220 - Pediatric and Adolescent Practice 4
Treatment of pediatric and adolescent conditions. Normal and delayed development of the infant, child and adolescent are explored. The lab component incorporates theoretical principles and provides opportunities for students to develop assessment, intervention planning and implementation, and documentation skills to address a range of childhood sensory-motor, cognitive, and psychosocial performance deficits. Students will learn to adapt the environment, tools, materials, and occupations to meet the self-care, work and play, and leisure needs of the pediatric and adolescent population. Lab activities, site visits and Level I fieldwork opportunities will enable students to participate in and apply pediatric and adolescent treatment principles to practice.

OTA 250 - Functional Kinesiology 2
In this course, students use and apply their knowledge of anatomy and physiology to study muscle groups and their function relative to performing various activities. Analysis of functional movement patterns required for work, self-care, play, and leisure activities is emphasized. Manual muscle testing, range of motion, goniometry and basic transfer skills are practiced. Principles of energy conservation, joint protection and work simplification are presented. Prevention, health maintenance and safety procedures relevant to functional mobility are reviewed.

OTA 255 - Physical Disabilities Practice 4
The course provides in-depth opportunities for students to develop assessment, intervention planning, intervention, and documentation skills to address a wide range of adult and geriatric physical disabilities and conditions typically treated by occupational therapy and occupational therapy assistants. Topics include but are not limited to stroke, spinal cord injury, fractures and joint replacements, head injury and dementias. The use of splinting, orthotics, modalities, and assistive technology in treatment will also be presented. Students will learn to adapt the environment, tools, materials, and occupations to meet the self-care, work and play, and leisure needs of the adult and geriatric population. Lab activities, site visits and Level I fieldwork opportunities will enable students to participate in and apply physical disabilities treatment principles to practice.

OTA 260 - Community Practice 3
Class activities, site visits and Level I fieldwork opportunities will enable students to participate in and apply occupational therapy assessment and intervention principles to a wide range of community settings including vocational, vocational rehabilitation, home health, and emerging community practice areas. Emphasis will be on community settings in the students' state and geographic region. The course also provides a broad exposure to the social, political, legislative, economic, and cultural factors that influence service delivery.

OTA 265 - Ethics, Management and Leadership 3
Course focuses on the occupational therapy assistant's role in managing and directing occupational therapy services. It covers ethical provision of services, departmental operations, program development, supervisory requirements, personnel development and supervision, professional team building, quality assurance, compliance with regulations, reimbursement, and national and state credentialing requirements. Techniques for developing a resume and job interview skills are practiced. The importance and responsibility for on-going occupational therapy assistant professional development, ethical practice, contributing to research and evidence based practice, attention to emerging practice issues and areas, and international perspectives are explored.

OTA 270 - Professional Skills 3
Course is designed to foster practical professional skills in critical thinking, using literature to make evidence-based practice decisions and recommendations, and using theory to guide practice. Practical skills needed for assessment, goal planning, intervention planning, documentation, discharge planning, other professional written and verbal communication skills, therapeutic use of self, consumer and professional advocacy, and ethics in daily practice will be emphasized.

OTA 290 - Level II Fieldwork A 8
Full-time clinical fieldwork experience in mental health, physical disabilities, geriatric, pediatric and/or community-based practice working under the supervision of an OTR and/or COTA. Focus is on achieving entry-level competence in planning and implementing interventions. Requires 40 hours per week for eight weeks. Level II Fieldwork A must be completed within 12 months following completion of academic coursework. All academic and fieldwork courses must be completed prior to graduation.

OTA 295 - Level II Fieldwork B 8
Full-time clinical fieldwork experience in mental health, physical disabilities, geriatric, pediatric and/or community-based practice working under the supervision of an OTR and/or COTA. Focus is on achieving entry-level competence in planning and implementing interventions. Requires 40 hours per week for eight weeks in an area of clinical practice that is different from Level II A Fieldwork. Level II Fieldwork B must be completed within 12 months following completion of academic coursework. All academic and fieldwork courses must be completed prior to graduation.

Office Administration

OADM 116 - Records and Database Management 3
Prerequisite: CAPP 125. Management of paper, film and computer records is studied, and techniques for solving records and database management problems are discussed. Microsoft Access software is used in completion of computer projects.

OADM 118 - Transcription Skills 3
Prerequisite: BSKL 020 with a grade of C or higher or equivalent placement score. Consists of a concentrated drill and discussion of business English usage, punctuation and style as applied to transcription of business correspondence.

OADM 121 - Calculators 1
Prerequisite: MATH 101 is recommended. Individualized course designed to teach touch operation of 10-key printing and display calculators along with their special timesaving features. Emphasis is placed on speed and accuracy.

OADM 123 - Professional Business Leadership 1
Applied course in professional leadership to bring business and education together in a positive working relationship.

OADM 125 - Skillbuilding for Office Support Services 1
Prerequisite: CAPP 118 is recommended. Individualized course designed to improve accuracy and speed. Office support services certificate candidates must achieve a grade of C or higher in order to complete graduation requirements for the program.

OADM 127 - Skillbuilding for Office Management 1
Prerequisites: CAPP 118 and CAPP 119 are recommended. Individualized course designed to improve accuracy and speed. Office management degree candidates must achieve a grade of B or higher in order to complete graduation requirements for the program.

OADM 132 - Office Management for Assistants 3
Prerequisites: ACCT 109 and CAPP 166 or OADM 116. Corequisite: ACCT 109. Capstone course for office support services professional certificate. Course includes activities and information in human relations, personal and professional qualities, decision-making, office supervision, incoming and outgoing mail, minutes, office procedures, work ethics, time management, appearance, record keeping, office organization, personnel management, and demeanor.

OADM 134 - Office Management for Administrators 3
Prerequisites: ACCT 109, CAPP 160, CAPP 164, CAPP 166, and OADM 116. Corequisites: ACCT 109, CAPP 160, CAPP 164, CAPP 166, and OADM 116. Capstone course for the AAS in Business Management with Office Management Specialty. Course includes activities and information in human relations, personal and

professional qualities, decision-making, office supervision, incoming and outgoing mail, minutes, office procedures, work ethics, time management, appearance, record keeping, office organization, personnel management, and demeanor.

OADM 175 - Office Management Internship 3
Prerequisites: OADM 134 with a grade of C or higher and consent of program coordinator. Corequisite: OADM 134. An on-the-job work experience which provides the student the opportunity to work in an office environment. Students are evaluated by the instructor and employer.

Pharmacy Technology

PHRM 105 - Pharmacy Technician I 3
Prerequisite: BSKL 014 with a grade of C or higher or equivalent placement score. MEOF 101 recommended. The purpose of this course is to introduce the student to the fundamentals and knowledge necessary to take the PTCB exam. Contents of this course include a brief history of pharmacy and how it has evolved to today's pharmacy, drug regulation and control, pharmaceutical terminology, factors that make up a prescription, pharmaceutical calculations, and different routes and formulations of various medications.

PHRM 107 - Pharmacy Technician II 3
Prerequisite: PHRM 105 with a grade of C or higher. The purpose of this course is to further provide the student necessary information needed for the PTCB exam. Contents of this course include compounding, biopharmaceutics and other factors affecting drug activity, utilizing appropriate resources, inventory management, and financial issues. This course will also go further in depth to the different areas of pharmacy where a pharmacy technician is needed.

PHRM 109 - Pharmacology for Pharmacy Technicians 3
This course introduces basic pharmacological principles needed by pharmacy technicians, including basic understanding of the drug action, how antagonists and agonists work, the significance and meaning of blood concentration-time profiles, and other aspects of pharmacology suited for pharmacy technicians.

PHRM 111 - Practicum for Pharmacy Technicians 3
Prerequisite: Consent of instructor. This capstone course puts pharmacy technician skills and knowledge into practice in a working retail or hospital pharmacy.

PHRM 115 - Pharmacology Certification 3
Content of the course will cover the nationally accredited and state-licensed program and prepare students for the PTCB exam to achieve their CPhT designation.

Philosophy

PHIL 101 - Introduction to Philosophy 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. An introduction to the history, persons and perspectives related to the theory of the nature, methods and limits of knowledge. The student will be challenged to deal with concepts such as reality, truth, ethics, reason, and metaphysics.

PHIL 102 - Ethics 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. An intriguing and informative examination of significant moral issues and the ethical theories surrounding them. Students will develop valuable skills of critical thinking and expression while learning to recognize and more effectively address difficult moral issues that arise in today's society.

PHIL 104 - Living Religions 3
Prerequisite: BSKL 015 with a grade of C or higher or equivalent placement score. Survey of living religions of the world. Study will focus on Buddhism, Hinduism, Islam, Judaism, and Christianity.

Physical Education-Activity

PEAC 124 - Varsity Basketball - Men 1
Prerequisite: Consent of athletic director. Participation in the men's varsity basketball program.

PEAC 125 - Varsity Basketball - Women 1
Prerequisite: Consent of athletic director. Participation in the women's varsity basketball program.

Course Descriptions

Physical Education-Professional

PPRO 101 - Sports Officiating I 2
Includes lectures, readings, class discussions, and field experience in the officiating of fall sports, including football, soccer, basketball, etc.

PPRO 102 - Sports Officiating II 2
Includes lectures, readings, class discussions, and field experience in the officiating of spring sports, including softball, baseball, volleyball, etc.

PPRO 104 - Care and Prevention of Athletic Injuries 3
Introduction to athletic training and its administrative procedures and problems. Includes prevention and care of injuries and other special considerations.

PPRO 106 - Introduction to Physical Education in the Elementary School 2
Recommended for sophomore physical education majors and elementary education majors. The study of special methods and materials to be used in the teaching of elementary school physical education. Topics include: class organization and teaching procedures and opportunities for integrating the physical education program with the school curriculum.

PPRO 108 - Philosophy of Sports 2
Study of motivation, skill and physical learning behaviors in physical education and athletics. Special problems of coaching athletics, specifically dealing with motivational, mental and behavioral problems.

PPRO 180 - Problems in Professional PE 1 to 3
Prerequisite: Consent of instructor. Independent study of a special problem in professional physical education under the supervision of a physical education instructor.

Physical Science

PHYS 103 - Introduction to Physical Science 3
Prerequisites: BSKL 015, BSKL 020 and BSKL 064 with grades of C or higher or equivalent placement scores. Introductory course that covers the basic concepts of chemistry, physics and astronomy. Not open to students with college credit in PHYS 105 or higher level course.

PHYS 105 - College Physics I with Lab 5
Prerequisite: MATH 112 with a grade of C or higher or equivalent placement score. Designed to meet the requirements of the various pre-professional courses. Topics include mechanics, wave motion and heat.

PHYS 106 - College Physics II with Lab 3
Prerequisite: PHYS 105 with a grade of C or higher. Continuation of PHYS 105. Covers electricity, magnetism, optics, and modern physics.

PHYS 118 - General Physics I with Lab 5
Prerequisite: MATH 130 with a grade of C or higher. Corequisite: MATH 131. First course in calculus-based physics for the science and engineering student. Topics include mechanics, oscillatory motion and thermodynamics.

PHYS 119 - General Physics II with Lab 5
Prerequisite: PHYS 118 with a grade of C or higher. Continuation of PHYS 118. Topics in the field of electromagnetism will be covered.

PHYS 125 - Technical Science 4
Prerequisite: MATH 107 with a grade of C or higher or equivalent placement score. Designed to help students develop a better understanding of physics as it applies to the operation of machinery. Topics include: measurement, applied geometry, mechanics, fluids, waves, simple machine, energy and power, heat and temperature, electricity, and magnetism.

PHYS 180 - Problems in Physics 1 to 3
Prerequisite: Consent of instructor. Independent study of a special problem in physics under the supervision of a science instructor.

Political Science

POLS 101 - American/National Government 3
Prerequisite: BSKL 015 with a grade of C or higher or equivalent placement score. Survey course of the American government and political systems. Particular attention is given to the government's origins, politics, the branches of government, and policy making. The Missouri Constitution is included to meet the requirements of Senate Bill No. 4.

POLS 102 - Missouri Constitution .5
Prerequisite: BSKL 015 with a grade of C or higher or equivalent placement score. Designed to meet requirements of Senate Bill No. 4. Intended for students testing out of history or government courses or transferring these course from another state. Course is available on an individual basis.

POLS 103 - Introduction to Political Science 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Study of the nature of government, politics, the state, relations among nations, and the areas of political science. Students will make a preliminary examination of governmental institutions and selected political theories with an emphasis on basic principles, concepts and characteristics of governments around the world. Does not meet requirements of Senate Bill No. 4.

POLS 175 - Political Science Internship 4
Prerequisite: Consent of instructor. On-the-job work experience provides an opportunity for the student to work in a state government office.

POLS 180 - Problems in Political Science 1 to 3
Prerequisite: Consent of instructor. Independent study of a special problem in political science under the supervision of a political science instructor.

Psychology

PSY 101 - General Psychology 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Introduction to the scientific study of behavior and mental processes. Includes a survey of historical and current theories, theorists and perspectives in psychology. Goals include increasing critical thinking and intellectual curiosity about psychological phenomenon and provides a basis for further study in the field. Topics may include: neurology, sensation and perception, consciousness, learning, psychometrics, personality development, and mental illness and wellness.

PSY 102 - Child Psychology 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Investigation into the interaction of biological and environmental factors affecting the physiological, intellectual and emotional development of the child from conception through adolescence.

PSY 104 - Psychology of Personal Adjustment 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Overview of the major theories, concepts and principles in psychology that can be applied to personal and social adjustment. Topics include: self-esteem, motivation, stress management, and others. Students will learn practical skills that will enhance their ability to effectively deal with life's challenges.

PSY 115 - Human Sexuality 3
Prerequisite: ENGL 101 with a grade of C or higher or equivalent placement score. Corequisite: ENGL 101. An exploration of the sociological, biological and psychological aspects of human sexuality. Topics will include anatomy, social understandings of sexuality, genetics, gender, reproduction, contraception, STDs, sexual violence, human sexual behavior, and sexual orientation. Same as BIO 115 or SOC 115.

PSY 180 - Problems in Psychology 1 to 3
Prerequisites: PSY 101 with a grade of C or higher and consent of instructor. Independent study of a special problem in psychology under the supervision of a psychology instructor.

PSY 210 - Lifespan Development 3
Prerequisite: PSY 101 with a grade of C or higher. Spring semester only. A study of major theories of psychological development during infancy, childhood, adolescence, and adulthood. Topics include physical, psychosocial and cognitive development across the lifespan giving consideration to cultural and individual variations. Drawing on the work of both classic and current research, research methodology in developmental psychology is reviewed. The aim is to provide a conceptual foundation for understanding human development across the lifespan.

PSY 220 - Abnormal Psychology 3
Prerequisite: PSY 101 with a grade of C or higher. Fall semester only. A study of the historical and cultural context of abnormal behavior and diagnosis of mental disorders. Topics include a survey of the causes and treatment of major mental illness such as mood disorders, anxiety disorders, substance abuse, schizophrenia, and personality disorders.

Course Descriptions

Radiologic Technology

RAD 100 - Radiologic Technology Prep Workshop .5
Applicants who meet minimum eligibility requirements upon application to the Radiologic Technology program will be invited to the workshop. If invited, the applicant must attend the workshop to be considered for the Radiologic Technology program. The workshop will inform potential students of all aspects of the program and review program requirements. A test is administered to evaluate essential academic skills.

RAD 102 - Orientation to Radiologic Technology 2
Overview of the foundations in radiologic technology and the practitioner's role in the health care delivery system. The student will prepare to become an active member of that health care delivery system and also gain an appreciation for the professional organizations and their functions.

RAD 106 - Clinical Education I 3
Radiology students will complete between 1200 and 1300 clinical contact hours over the course of the program to ensure clinical competence. To assist students in complying with financial aid guidelines, the clinical credit hours have been equally assigned to the five program clinical education courses. Over the life of the program, this equates to approximately 80 contact hours per one college credit hour. Supervised clinical rotations will be performed at assigned clinical sites. Clinical education provides the student with the opportunity to practice the skills and theory taught in the classroom. The "Five Steps to Clinical Competency" allow the student to progress in competency exams, while practicing patient care and professionalism. Exam performance, professionalism skills and critical thinking will be evaluated in this course. As clinical education progresses throughout the program the student will move from basic to more advanced rotations at the clinical site.

RAD 108 - Clinical Education II 3
Radiology students will complete between 1200 and 1300 clinical contact hours over the course of the program to ensure clinical competence. To assist students in complying with financial aid guidelines, the clinical credit hours have been equally assigned to the five program clinical education courses. Over the life of the program, this equates to approximately 80 contact hours per one college credit hour. Supervised clinical rotations will be performed at assigned clinical sites. Clinical education provides the student with the opportunity to practice the skills and theory taught in the classroom. The "Five Steps to Clinical Competency" allow the student to progress in competency exams, while practicing patient care and professionalism. Exam performance, professionalism skills and critical thinking will be evaluated in this course. As clinical education progresses throughout the program the student will move from basic to more advanced rotations at the clinical site.

RAD 110 - Clinical Education III 3
Radiology students will complete between 1200 and 1300 clinical contact hours over the course of the program to ensure clinical competence. To assist students in complying with financial aid guidelines, the clinical credit hours have been equally assigned to the five program clinical education courses. Over the life of the program, this equates to approximately 80 contact hours per one college credit hour. Supervised clinical rotations will be performed at assigned clinical sites. Clinical education provides the student with the opportunity to practice the skills and theory taught in the classroom. The "Five Steps to Clinical Competency" allow the student to progress in competency exams, while practicing patient care and professionalism. Exam performance, professionalism skills and critical thinking will be evaluated in this course. As clinical education progresses throughout the program the student will move from basic to more advanced rotations at the clinical site.

RAD 112 - Clinical Education IV 3
Radiology students will complete between 1200 and 1300 clinical contact hours over the course of the program to ensure clinical competence. To assist students in complying with financial aid guidelines, the clinical credit hours have been equally assigned to the five program clinical education courses. Over the life of the program, this equates to approximately 80 contact hours per one college credit hour. Supervised clinical rotations will be performed at assigned clinical sites. Clinical education provides the student with the opportunity to practice the skills and theory taught in the classroom. The "Five Steps to Clinical Competency" allow the student to progress in competency exams, while practicing

patient care and professionalism. Exam performance, professionalism skills and critical thinking will be evaluated in this course. As clinical education progresses throughout the program the student will move from basic to more advanced rotations at the clinical site.

RAD 114 - Clinical Education V 3
Radiology students will complete between 1200 and 1300 clinical contact hours over the course of the program to ensure clinical competence. To assist students in complying with financial aid guidelines, the clinical credit hours have been equally assigned to the five program clinical education courses. Over the life of the program, this equates to approximately 80 contact hours per one college credit hour. Supervised clinical rotations will be performed at assigned clinical sites. Clinical education provides the student with the opportunity to practice the skills and theory taught in the classroom. The "Five Steps to Clinical Competency" allow the student to progress in competency exams, while practicing patient care and professionalism. Exam performance, professionalism skills and critical thinking will be evaluated in this course. As clinical education progresses throughout the program the student will move from basic to more advanced rotations at the clinical site.

RAD 120 - Radiographic Procedures I 3
Students will learn and practice the proper steps in the completion of radiographic exams. Radiographic anatomy, radiation protection and patient care skills are reinforced. Students are introduced to basic film critique. This course will cover exams of the chest, abdomen and extremities. This course is a portion of the five steps to clinical competency and must be completed with a score of 85 percent or better.

RAD 122 - Radiographic Procedures II 3
Students will learn and practice the proper steps in the completion of radiographic exams. Radiographic anatomy, radiation protection and patient care skills are reinforced. Students are introduced to basic film critique. This course will cover exams of the thorax and spine, as well as contrast studies. This course is a portion of the five steps to clinical competency and must be completed with a score of 85 percent or better.

RAD 124 - Radiographic Procedures III 3
Students will learn and practice the proper steps in the completion of radiographic exams. Radiographic anatomy, radiation protection, and patient care skills are reinforced. Students are introduced to basic film critique. This course will cover exams of the skull and facial bones. This course is a portion of the five steps to clinical competency and must be completed with a score of 85 percent or better.

RAD 128 - Patient Care 3
Provides the student with the knowledge and skill to effectively monitor, assess and care for patients in the diagnostic imaging environment. Instruction will focus on the basic concepts of routine and emergency patient care procedures, infection control, standard precautions, and the legal and ethical aspects of professional radiologic technology.

RAD 130 - Radiation Production and Characteristics 3
An overview of electricity, electromagnetic theory, circuitry, x-ray generation, production, interaction, and the basic characteristics of natural radiation.

RAD 134 - Radiographic Exposures and Quality Control 3
Introduction to factors involved in quality image production, the correlation of these factors and their control. The steps, chemistry and equipment involved in processing radiographic film will be included. Students will identify and evaluate acceptable limits for equipment operation.

RAD 136 - Radiation Protection 2
Student radiologic technologists must be able to protect patients and themselves from overexposure to radiation. Students learn about dose limits for radiation workers, proper shielding for patients and exam rooms, as well as radiation monitors and detectors.

RAD 140 - Radiologic Pharmacology 3
Overview of the foundations of pharmacology, including pharmacokinetics, pharmacodynamics, pertinent laws, and safety issues. Students will gain an understanding of drug categories, their actions, and commonly used drugs in each category. Additionally, this course will emphasize contrast media commonly used in medical imaging, routes of administration and venipuncture techniques.

Course Descriptions

RAD 142 - Trauma and Advanced Imaging 3
Builds on the positioning knowledge developed in the radiographic procedures courses. Advanced imaging techniques and approaches for imaging injured patients will be discussed. Radiographic anatomy, radiation protection and patient care skill will continue to be stressed. This course is a portion of the five steps to clinical competency and must be completed with a score of 85 percent or better.

RAD 144 - Radiation Biology 2
Reinforcement of the varieties of interactions between ionizing radiation and living cells. Acute and chronic effects of radiation are described.

RAD 146 - Imaging Equipment 3
Presents information about various recording media, emphasizing fluoroscopy, image intensification and automatic exposure devices. Advanced imaging equipment will also be discussed, including: computed tomography, digital radiography, ultrasound, magnetic resonance imaging, mammography, special procedures, nuclear medicine, and radiation therapy.

RAD 150 - Radiographic Pathology 3
Introductory course on pathology provides student with basic understanding of disease processes as they relate to radiographic procedures. It will include facts, etiology, symptoms, treatments, and radiographic appearance of many diseases and discussion of how one must adjust the radiographic technique for each of these disorders.

RAD 152 - Image Analysis 3
Use knowledge of anatomy, positioning and exposure factors to critique radiographs and determine if radiographs are of proper diagnostic quality. After a judgment is made, the student must determine which factors require change.

RAD 154 - Sectional Anatomy 3
Apply knowledge of systemic human anatomy to determine the sectional relationships of human organs, vessels and tissues. Knowledge of cross-sectional anatomy reinforces prior anatomical knowledge and leads to a greater understanding of modalities such as CT, MR and ultrasound.

RAD 170 - Preparing for Professionalism 3
Integration of all aspects of diagnostic radiologic technology with emphasis on procedures, technique, radiation protection, positioning, radiographic anatomy, and patient care. A series of review tests will be administered, enabling the students to identify their strengths and weaknesses. Students will prepare for employment through development of interview skills and creation of resumes.

RAD 180 - Problems in Radiologic Technology 1 to 3
Prerequisite: Consent of program coordinator. Independent study course designed to allow the students to more deeply research specific areas of radiologic technology that are of interest to them under the supervision of a radiologic technology instructor. They will also explore more advanced health care degrees and/or the managerial opportunities available to radiologic technologists.

Real Estate

REAL 105 - Principles of Real Estate 3
An introduction to the study of real estate. Topics include legal issues, markets and market analysis, real estate finance and investment analysis, taxation, appraisal of real estate, brokerage, legal description, land-use control, and property management.

REAL 107 - Real Estate Law 3
Study of rights and interest in land, legal description, types of ownership, deeds, contracts, wills and descent, liens and mortgages, rights and obligations of landlords and tenants, zoning and land use restrictions, and the role of brokers.

REAL 110 - Introduction to Finance 3
Financing business, consumer, and government activity; stocks, bonds, real estate, and financial markets; risk, insurance, inflation, cash and income management; capital accumulation and appreciation.

REAL 112 - Appraisal of Real Estate 3
Introduction to the theory and application of real estate valuation methods. Includes data collection and analysis, neighborhood and regional analysis, land and building description and function, highest and best use analysis, land valuation, improvement valuation, as well as market trends and influences.

Renewable Energy Technology Biomass

RETB 105 - Biomass/Biofuels Energy Generation 3
Prerequisite: RETB 110 with a grade of C or higher. This course covers energy generation systems that use biomass, biofuels, and bioproducts, including plastics and chemicals for power generation. It provides discussion concerning demand, technology issues, policy and regulatory factors. Specifically discussed are systems that capture landfill gases for power generation.

RETB 110 - Power Plant Systems 3
This introductory course will give an overview of power plant operations, functions and terminology. The course will prepare the student to understand the operations of most power plant systems, have a working knowledge of the terminology, and understand the similarities and differences between conventional power plants and renewable energy power plants. Topics will include fossil fuels, boilers, turbines, feedwater heaters, ash removal, condensate, controls, instrumentation, carbon emissions, and monitoring.

RETB 115 - Plant Boilers and Operations 4
Prerequisites: MATH 108 and RETB 110 with grades of C or higher. This course introduces the student to boiler operations and covers the types of boilers including those fired with renewable fuels, startup and shutdown procedures, monitoring systems, and emergency procedures. It covers the steam cycle in a steam generation plant, auxiliary equipment and maintenance requirements.

RETB 120 - Turbines and Generators 3
Prerequisite: RETB 110 with a grade of C or higher. This course will cover the operation of power turbines, basic turbine components and turbine driven generators. Discussions will also cover fuel requirements, maintenance requirements, engine controls, and emergency procedures.

RETB 125 - Power Plant Chemistry with Lab 5
Prerequisite: RETB 115 with a grade of C or higher. This course introduces water treatment, environmental protection systems, and chemistry unique to renewable energy power systems. Topics will include treatment systems, demineralization, pollutants, wastewater, waste treatments, and recovery systems.

RETB 175 - Biomass Generation Internship 8
Prerequisites: Completion of 30 technical credit hours and consent of program coordinator. Application of work skills in a supervised work environment. Companies that sponsor internships provide the supervision. The college provides general guidance and works with the sponsoring company in developing an outline of the work experiences unique to the site. Course is designed to provide the student an opportunity to demonstrate work skills, work ethics and the ability to work with others. In addition to completing the training plan, the student must submit four to eight written technical reports.

Renewable Energy Technology Solar

RETS 102 - Introduction to Renewable Energy 3
Prerequisite: BSKL 014 with a grade of C or higher or equivalent placement score. This course discusses the definition of renewable energy and gives an overview of the associated technology. It outlines the basic principles of energy production from solar, wind and biomass systems, and their applications in both urban and rural environments. Emphasis is on how renewable energy technologies work and their practical use.

RETS 106 - Introduction to Solar Photovoltaic Systems and Solar Radiation 1
This course provides the students a basic understanding of different types of solar energy technologies, how PV systems compare to other systems, and the advantages and disadvantages of installing a PV system. Also discussed are the differences between solar power and solar energy and why this is important in solar installations. The student will learn to evaluate factors affecting the sun's apparent position and how solar radiation and climate data are used in sizing and estimating performance for PV systems.

RETS 110 - Solar Photovoltaic Site Planning, Components and Configurations 2
Prerequisite: RETS 106 with a grade of C or higher. Course will cover process of determining potential array locations and factors that must be considered and discussed with customers. Students will understand the purposes and functions of components of PV systems, and what various energy sources can be interfaced with PV systems. Construction and features of PV modules, current-voltage characteristics and parameters, and how a PV device converts light to electricity will be covered.

Course Descriptions

RETS 114 - Solar Photovoltaic System Design 3
Prerequisites: MATH 108 and RETS 110 with grades of C or higher. Students will learn to determine the system energy and power requirements from a load analysis, and how to calculate the critical design parameters based on monthly load and insulation information. Key considerations for integrating arrays on buildings and other structures and how to differentiate between the various types of mounting configurations and their features. Knowledge of electrical codes, regulations and practices applicable to PV systems. Students will learn to calculate voltage and current limits and how to determine appropriate conductor ampacities and overcurrent protection ratings for various circuits.

RETS 118 - Solar Photovoltaic Balance of Systems 2
Prerequisite: RETS 110 with a grade of C or higher. Students will learn to identify major battery components, functions, discharging and charging characteristics, and differentiate between types and classifications of batteries. Functions and features of charge controllers and charge controller applications and installation will be covered. Students will learn to identify basic waveform types and properties and what types are used in PV systems.

RETS 122 - Solar Photovoltaic Utility Interconnection, Permitting and Inspection 1
Prerequisite: RETS 114 with a grade of C or higher. This course teaches how to identify applicable codes and standards for utility interconnection, how PV systems affect utility operations, and how to differentiate between load-side and supply-side interconnections. Students will understand the common requirements for permit applications and applicable articles of the NEC for both general electric system requirements and PV-specific requirements.

RETS 126 - Solar Photovoltaic Instrumentation and Metrology 3
Prerequisite: RETS 110 with a grade of C or higher. This course addresses instrumentation and measurement tools, techniques and methods used in renewable energy production systems. Types of measurements will include electrical, optical, thermal, physical, chemical, structural, and mechanical. Hands-on training with students will be included to demonstrate proficiency with various techniques and devices.

RETS 130 - Practical Solar Photovoltaic Electric Applications and Experience 8
Prerequisite: RETS 122 with a grade of C or higher. This course is a combination of study and hands-on practical applications of the NEC 2008 codes in PV systems, NABCEP certification studies, OSHA training, and practical inspection experience. Students will supervise at least two actual PV installations.

RETS 134 - Solar Photovoltaic Commissioning, Maintenance, Troubleshooting and Economic Analysis 1
Prerequisite: RETS 130 with a grade of C or higher. Students will learn the steps for commissioning new PV systems, how to maximize array output battery health and other operations, troubleshooting PV systems, and how to develop a maintenance plan based on system configurations, installation, and location. Discussed are incentive options, how to calculate present and future costs, and making a comparison of energy-production systems based on total life-cycle costs.

RETS 175 - Solar Photovoltaic Internship 6
Prerequisites: Completion of 30 technical credit hours and consent of program coordinator. Application of work skills in a supervised work environment. Companies that sponsor internships provide the supervision. The college provides general guidance and works with the sponsoring company in developing an outline of the work experiences unique to the site. Course is designed to provide the student an opportunity to demonstrate work skills, work ethics and the ability to work with others. In addition to completing the training plan, the student must submit four to eight written technical reports.

Renewable Energy Technology Wind

RETW 102 - Introduction to Wind Energy 2
This course provides the students an understanding of the various wind energy systems, their applications, and the development of the wind industry - past, present and future. Also addressed are the various types of wind turbines and their applications, and environmental and economic issues related to wind energy production.

RETW 106 - Wind Energy Project Operations 2
This course introduces the student to industry operations, maintenance and safety standards associated with wind turbine operations. Students will learn daily operations, reporting and documentation requirements, and use of monitoring systems. Field trips to operational facilities are included.

RETW 110 - Wind Turbine Mechanical Systems 3
Prerequisite: IEM 102 and MATH 108 with grades of C or higher. This course provides a detailed look into the mechanical and electrical parts of the wind turbine. Students will learn the internal operations of a wind turbine to include gearboxes and other mechanical and electrical systems involved in transferring wind power into electricity generation.

RETW 114 - Wind Power Generation and Transmission 3
Prerequisite: RETW 110 with a grade of C or higher. Students are introduced to and learn how the wind turbine generates electricity, and the interconnection of this electricity to high voltage transmission systems.

RETW 118 - Wind Systems Troubleshooting and Repair 3
Prerequisite: IEM 138 and RETW 110 with grades of C or higher. This course studies troubleshooting techniques and repairs associated with installation, maintenance and operations of wind turbines. Inspection and repair of the electro-mechanical systems, and airfoil and composite repair will be included.

RETW 122 - Wind Project Site Selection 2
Prerequisite: RETW 114 with a grade of C or higher. This course provides the various aspects and events that apply to construction of wind energy projects, including the use of cranes and rigging. Students learn methods and requirements for developing and locating projects. Environmental and economic considerations are discussed.

RETW 175 - Wind Energy Internship 4
Prerequisites: Completion of 30 technical credit hours and consent of program coordinator. Application of work skills in a supervised work environment. Companies that sponsor internships provide the supervision. The college provides general guidance and works with the sponsoring company in developing an outline of the work experiences unique to the site. Course is designed to provide the student an opportunity to demonstrate work skills, work ethics and the ability to work with others. In addition to completing the training plan, the student must submit four to eight written technical reports.

Service Education

SRVE 102 - Emerging Leaders 1
Prerequisite: Consent of instructor. Fall semester only. An introduction to leadership philosophy including leadership styles and ethics as they apply to the campus and the community. A 20-hour service learning component and participation in a fund-raising activity are required.

SRVE 104 - Service Learning and Leadership 3
Prerequisite: Consent of instructor. Spring semester only. Various leadership themes and principles are examined as students complete service hours and learning activities in community, campus and urban settings.

Sociology

SOC 100 - General Sociology 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Introduction to the basic principles, concepts, research strategies, and empirical findings representative of the field today. Explores the relationships of individuals and groups in the context of broader social patterns. Establishes a basis for further study in the field. Course topics may include gender and racial inequality, deviance, economic and political institutions, social mobility, and concepts related to current social and cultural change.

SOC 101 - Social Problems 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Examines objective social conditions that have been defined as social problems. The course focuses on gaining factual and theoretical knowledge to build better explanations for the existence and persistence of social problems in light of social controls and democratic values. Topics covered include racial inequality, gender stratification and poverty.

Course Descriptions

SOC 102 - Marriage and Family 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Explores the role of the individual in marriage and the family, functions of dating and courtship, variations in family forms, and marriage breakdown and alteration are also examined. Topics covered include the nature of family as a demographic, historic, ideological, economic, and legal entity.

SOC 103 - Introduction to Social Work 3
Prerequisite: BSKL 015 with a grade of C or higher or equivalent placement score. Provides the student with background knowledge of the field, an overview of social problems and social services and methods of social work practice.

SOC 115 - Human Sexuality 3
Prerequisite: ENGL 101 with a grade of C or higher or equivalent placement score. Corequisite: ENGL 101. An exploration of the sociological, biological, and psychological aspects of human sexuality. Topics will include anatomy, social understandings of sexuality, genetics, gender, reproduction, contraception, STDs, sexual violence, human sexual behavior, and sexual orientation. Same as BIO 115 or PSY 115.

SOC 120 - American Diversity 3
Prerequisites: BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Overview of global and American diversity resulting from cultural interactions, especially in the areas of art, government, economics, and religion, as well as a historical perspective. Students will gain a greater understanding of diversity from an individual and community perspective.

SOC 180 - Problems in Sociology 1 to 3
Prerequisite: Consent of instructor. Independent study of a special problem in sociology under the supervision of a sociology instructor.

Spanish

SPAN 101 - Elementary Spanish I 3
Prerequisites: BSKL 010, BSKL 015 and BSKL 020 with grades of C or higher or equivalent placement scores. Begins the four basic skills of language communication: listening, speaking, reading, and writing. Includes an introduction to the Spanish culture. Concentrates on the present indicative tense with the class conducted primarily in Spanish.

SPAN 102 - Elementary Spanish II 3
Prerequisite: SPAN 101 or one year of high school Spanish. Concentrates on the preterit and imperfect tenses and reflexive constructions for students to further enhance their ability to listen, speak, read, and write. Class is conducted primarily in Spanish.

SPAN 103 - Intermediate Spanish I 3
Prerequisite: SPAN 102 or two years of high school Spanish. Emphasizing the subjunctive mood, two perfect tenses, and further development of speaking and writing skills. Relevant topics will be discussed each week; students will write two compositions and make one cultural presentation. Class is conducted primarily in Spanish.

SPAN 104 - Intermediate Spanish II 3
Prerequisite: SPAN 103 or three years of high school Spanish. Emphasizes the conditional and future tenses, and the imperfect subjunctive mood. Includes Spanish movies, literature and history with emphasis on discussion and writing. Class is conducted primarily in Spanish.

SPAN 120 - Spanish for the Medical Profession 3
Prerequisite: MEOF 101. Beginning course for students with no background in Spanish. A concentration on terminology and phraseology for personnel in allied health professions. Students will be able to engage in basic Spanish conversation related to their current or future vocations. Course is a general education elective only for medical office majors.

Speech and Theatre

SPTH 101 - Public Speaking 3
Study and practice of basic techniques involved in generating, designing, delivering, and evaluating ideas for speech situations facing adults of our society.

SPTH 103 - Small Group Communication 3
Presents the communication process as it relates to small group behavior, including the study of principles, methods and forms of discussion used in small groups.

SPTH 105 - Interpersonal Communication 3
Presents theories, principles and techniques of communication as they apply to one-to-one, small groups and conference interaction.

SPTH 107 - Introduction to Theatre 3
Introductory hands-on course where students examine the major contributors to the theatrical event: the director, actor, scene designer, and lighting designer.

SPTH 110 - Stagecraft and Lighting 3
Basics of set construction, painting, scene design, lighting design, and wood shop safety. Students will be required to spend 30 clock hours outside class time with direct involvement in operation of specialized theatre equipment. Required course for speech and theatre majors and minors.

SPTH 111 - Acting I 3
Intensive study of the techniques of acting with concentration on bodily movement, balance, diction, voice, and characterization.

SPTH 113 - Basic Oral Interpretation 3
Includes development of the voice as an instrument of expression and analysis and performance of basic interpretive material and forms of literature.

SPTH 115 - Theatre Practicum 1 to 3
Includes student participation in plays, either in performance or backstage work. No more than four credit hours of Theatre Practicum may be applied toward an Associate of Arts degree.

SPTH 119 - Stage Makeup 3
Provides a hands-on look at stage makeup. Students will learn the basics of corrective, old age and effects makeup and what is required in creating a character.

SPTH 120 - Stage Voice 3
Course is designed to improve and enhance the skills necessary for excellent stage vocal production. Instruction includes ways to control and relax the breath, the main source of vocal excellence. Course will emphasize increasing breath release as it relates to vocal support and vocal flexibility in regard to musical range and emotional expression.

SPTH 125 - Theatre History 3
An introductory examination of theatre as a living and viable artistic medium. Course examines the historical development of the following areas: the audience; dramatic literature and structure; the role of the actors, directors, designers, and technicians.

SPTH 180 - Problems in Speech or Theatre 1 to 3
Prerequisite: Consent of instructor. An independent study of a special problem in speech or theatre under the supervision of a fine arts instructor.

Student Success

SS 100 - New Student Orientation .5
Prerequisite: Consent of instructor. Designed to provide interactions with other students, staff and faculty which will help students get a sense of the campus culture, and how to conduct business with the college. Emphasis upon assisting new students with the understanding of how to use the different online elements.

SS 101 - Success 101 1
Designed to enable new students to make a smooth transition into college life and ultimately be successful with their educational and career goals. Topics include building relationships with students and instructors, learning the resources available to students, and strategies for successful learners.

SS 104 - College Skills 3
Designed to enhance the college learning experience and prepare students for personal and professional success. Concepts presented include: time management, managing change, setting and achieving goals, and thinking in ways to create success. Note-taking, library research, test taking, and study skills are also included.

SS 108 - Career Choice 1
Designed to guide students who may be undecided about a college major or related career plans. Emphasis upon making connections between self and the world of work and between academic and career planning.

SS 110 - Speed Reading 1
Prerequisite: BSKL 015 with a grade of C or higher or equivalent placement score. May be repeated two additional times for credit toward a degree. Designed to help students build skills needed for rapid, flexible and efficient reading.

SS 112 - Library Research Methods 1
Course teaches how information is produced and organized and how to locate and evaluate information. Concepts included: defining research topics, locating information using print and non-print resources, and critically evaluating information.

Course Descriptions

SS 114 - Computer Skills for College 2
Designed to build a foundation of basic computer skills necessary to be successful within an educational setting. Topics include basic computer functions, and functional navigation and practical application of Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Internet, e-mail, mySTAR, SFCC Online and Elluminate.

SS 120 - Employment Strategies 1
Prerequisite: BSKL 014 with a grade of C or higher or equivalent placement score. Designed to help students develop employment search skills and career growth potential.

Web Development

WEB 112 - Web Utilities 1
Students will discover the increased functionality and flexibility of creating effective Web content. The fundamental utilities of creative Web pages will be presented. Course will explore the vast areas of Web programming. Attention will be given to concepts most commonly encountered when using utility software.

WEB 113 - Web Design 1
Comprehensive look at the basic tools used for creating successful and practical Web pages through the use of Web design tools. Course is the foundation for Web page design. Course presents knowledge of Web design to prepare students for other courses and the job market. No previous knowledge of HTML or Web design is needed.

WEB 114 - Web Scripting 3
This course covers the use and implementation of client-side scripting languages to create interactive Web-based applications. Students will use VBScript, JavaScript and other scripting languages as appropriate to create dynamic Web applications.

WEB 116 - Web Development 3
Course is designed as a capstone course for students who have completed Database Management and Visual Basic.Net. The course is designed around the completion of a group project which will have an Access database processed using Active Server Pages technology. Students should already have a strong understanding of Access and Visual Basic because the new concepts covered in this course will mainly address the Web development aspects of the applications.

WEB 117 - Advanced Web Development 3
Prerequisite: WEB 116 with a grade of C or higher. Course gives instruction in the creation of dynamic Web pages through a variety of formats. These methods may include, but are not limited to, ColdFusion, PHP, ASP, XML , and FTP.

WEB 118 - Web Graphics 3
Course provides extensive instruction into the creation and manipulation of graphics files through the software package Adobe Photoshop. Course is aimed at the Photoshop beginner who wants to create sophisticated graphics while having fun. Subjects covered will include an overview of the Photoshop screen, the toolbox, palettes, and the option bar. Special emphasis on text, layers and photo treatment will also be discussed.

WEB 120 - XML 3
Course covers the use and implementation of XML standards in Web page creation. XML is a language for storing and delivering information on the Web. Students will learn the basic concepts of XML and how to apply these to develop dynamic HTML documents that maximize the use of browser capabilities.

WEB 125 - Introduction to Digital Video 1
This course is the first in a series of three video design courses that will teach techniques for creating multimedia presentation videos. Students will receive instruction in the construction of interactive DVD video presentations through the use of multiple design formats and software. Students must purchase a mass DVD storage device. This class may be taken independently of WEB 126 and WEB 127.

WEB 126 - Introduction to Digital Authoring 1
This course is the second in the series of video design classes. Students will learn techniques for video editing, authoring, interfacing, and compression of multimedia presentations. Included will be the instruction of transferring data and information into a DVD format. This class may be taken independently of WEB 125 and WEB 127.

WEB 127 - Digital Production Methods 1
This course is the third in the series of video design classes. Students will focus on the final stages of DVD presentation fundamentals and implementation, adding music to the final product, and pushing the media into a final format. This class may be taken independently of WEB 125 and WEB 126.

WEB 175 - Web Development Internship 4
Prerequisite: Consent of program coordinator. Provides on-the-job work experience in Web development. Student will be supervised and evaluated by the instructor.

Welding

WELD 101 - Welding Technology I 4
Basic course beginning with instruction in the technical knowledge and skills required for oxyacetylene cutting, oxyacetylene welding, shielded metal arc welding, and gas metal arc welding. A minimum of two lecture hours per week will include subjects such as safety, metallurgy, welding equipment, and other technical knowledge applicable to the welding industry.

WELD 102 - Welding Technology II 4
Prerequisite: WELD 101. Basic course using the American Welding Society (AWS) D1.1 Structural Welding Code, with AWS welder qualifications included. The course of study includes out of position welding on plate with the shielded metal arc and gas metal arc processes. The plasma arc cutting process is introduced.

WELD 103 - Welding Technology III 4
Prerequisite: WELD 102. Advanced technical welding course utilizing the American Society of Mechanical Engines Section (ASME) 9 code for pipe welding with ASME welder qualification included. The course of study is the welding of pipe, using the shielded metal arc process in all positions.

WELD 104 - Welding Technology IV 4
Prerequisite: WELD 103. Advanced technical welding course structured primarily for specialized welding operations requiring a high degree of skill. Students will study the use of gas tungsten arc welding of ferrous and nonferrous metals in all positions according to the applicable code.

WELD 115 - Print Reading for Welders and Machinists 3
Study of symbols, industry standards, measurement systems, terminology, prints and diagrams associated with work performed by professional welders and machinists, including the interpretation of tool and die, machine prints, welding symbols and prints, and related technologies.

WELD 180 - Problems in Welding 1 to 8
Prerequisite: Consent of program coordinator. An independent study of a special problem in welding under the supervision of a welding instructor.

Wellness

WELL 116 - Building Fitness for Life I 1
Course offers a comprehensive plan for utilizing fitness training as a means to lifetime wellness. Students explore nutritional needs, stress management and prevention of disease.

WELL 117 - Building Fitness for Life II 1
Prerequisite: WELL 116. Course expands the student's knowledge and ability to develop a comprehensive plan of lifetime wellness utilizing fitness training.

WELL 118 - Aerobics .5 to 1
Complete fitness program designed to combine exercise and fun.

WELL 119 - Low Impact Aerobics 1 to 1.5
Fitness program designed for anyone who wants to minimize the risk of injury but still enjoy an aerobic workout.

WELL 121 - Women and Health 1
Course is designed to provide the individual with the tools to improve a woman's health status. Historical trends in health care regarding women are discussed as well as methods for facilitating change. Personal choices and their effects on health and wellbeing are identified. Topics include, but are not limited to: reproductive and gynecological concerns, nutrition, exercise, weight loss, bone health, women's concerns, heart disease, sexuality, and abuse.

WELL 122 - Applied Wellness 1
A different type of physical education activity class that can be enjoyed by any or all students on campus regardless of age or physical condition. It is designed to provide students with theoretical and practical experiences focusing on the relationship of lifestyle to productivity and quality of life.