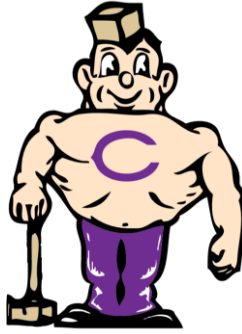


CANTON
HIGH
SCHOOL



COURSE
DESCRIPTIONS
2021 - 2022

CANTON HIGH SCHOOL GRADUATION REQUIREMENTS

Canton High School operates on a seven period day with students required to enroll in at least 6 classes (3 credits) each semester.

All students must earn 24 credits to graduate.

STUDENTS MUST EARN 6 CREDITS EACH YEAR TO ADVANCE TO THE NEXT GRADE LEVEL.

Each class passed equals .5 credit per semester.

MINIMUM SUBJECT REQUIREMENTS FOR GRADUATION

English - 4 credits

Science - 2 credits

Math - 3 credits Algebra I and Geometry-content are required

Social Studies - 2 credits American History (1.0), Civics (.5) and additional .5 credit Social Studies course

Health - .5 credit

Consumer Education - .5 credit in Resource Management, .5 credit in or Consumer Math 2, .5 credit in AgBusiness, 1.0 credit in Incubator OR .5 credit in Economics

Art, Music, Foreign Language, or Vocational Education - 1 credit

Driver Education -.25 credit

PE - taken every year (Juniors or Seniors may unless students qualify for exemption)

Community Service - 40 Hours (Can include Cum Laude, National Honor Society Service Hours, and Key Club)

Canton High School Community Service Requirement for Graduation

All students at Canton High School must complete 40 hours of community involvement (10 hours per year) as a requirement for graduation. Hours required for transfer students are pro-rated. Students will be restricted as to the type of community involvement hours accumulated according to the following activities:

School

Students will be allowed to earn up to 12 hours in this level. Activities would primarily include assistance of school personnel during the school day. Examples would be office helpers, library helpers, helping with a music contest or athletic event, individual teacher assistant, etc.

Family and Friends

Students will be allowed to earn up to 12 hours in this level. Activities would include assistance to family member or friends. Examples would be raking leaves, buying groceries, scooping snow, cleaning gutters, etc.

Community

Students will be allowed to earn up to 16 hours in this level. Activities in this level include specific activities that benefit an unrelated individual or specific community organization. Students can also develop their own community involvement activities that may count for hours. Examples of participation would be church activities, Friendship Festival, tutoring, Vacation Bible School, summer recreation, community betterment, attending city council or school board meetings, specific activities through 4-H scouting, Salvation Army, St. Jude, etc.

Community service hours assigned for committing a criminal offense may not be applied to school community service requirements.

Process for Submitting and Tracking Community Service Hours:

1. Obtain Community Service form from the office or print a copy from the CHS web page. Hours will be tracked by homeroom teachers.

Final documents will be reviewed by CHS Office.

Dual Credit Courses – courses where Canton High School students have the opportunity to earn high school credit AND college credit upon successful completion of the courses.

Canton High School students have the opportunity to earn dual credit without leaving the high school classroom. Students may take college level courses taught by Canton High School staff.

In addition, CHS and SRC have created a partnership that allows high school students in good academic standing to take college-level courses on Spoon River College's campus and receive both high school and

Dual Credit Courses

College English 101	(3 college hours at SRC)
College English 102	(3 college hours at SRC)
College Calculus	(5 college hours at SRC)
College Chemistry	(4 college hours at SRC)
College Speech	(3 college hours at SRC)
PreCalculus	(6 college hours at SRC)
College Stats	(3 College hours at SRC)
Introduction to Education	(3 College hours at SRC)

Vocational Courses with Dual Credit:

C.N.A	(7 college hours at SRC)
Cosmetology	(college hours at Innovations Design Academy)
College Welding	(6 college hours at SRC)
Manufacturing I and Manufacturing II	(6 college hours at SRC)

Weighted Courses

German III & IV	College Stats	Winds Band
Calculus	Honors Biology	Honors Algebra II
AP Chemistry	Honors English I	
Introduction to Education	Honors English II	
Biology II	Honors English III	
C.N.A.	Human Body Systems	
College Calculus	Physics	
College Chemistry	Spanish III & IV	
PreCalculus	Symphonic Band	
College Speech	Honors Physical Science	
College Welding	Medical Interventions	
English 101 & 102	Cosmetology	

SAMPLE SCHEDULES FOR MINIMUM REQUIREMENTS

- 9th
1. English I (1.0 credit)
 2. Math (1.0 credit)
 3. Physical Science (1.0 credit)
 4. PE (.5 credit)/Health (.5 credit)
 5. Elective
 6. Elective
 7. Study hall or Elective

- 10th
1. English II (1.0 credit)
 2. Math (1.0 credit)
 3. Biology (1.0 credit)
 4. P.E. (1 credit)
 5. Elective
 6. Elective
 7. Study hall or Elective

- 11th
1. American History (1.0 credit)
 2. English III (1.0 credit)
 3. PE (1.0 credit)
 4. Math
 5. Elective
 6. Elective
 7. Study hall or Elective

- 12th
1. Civics (.5 credit)
 2. PE (1.0 credit)
 3. English
 4. Elective
 5. Elective
 6. Elective
 7. Study hall or Elective

COLLEGE PREPARATORY PROGRAM

(Required by most Colleges and Illinois Universities and highly recommended by Canton High School).

ENGLISH	4 years (including English I, II, III, IV, College English, Creative Writing, Senior Lit., Public Speaking, Technical Writing and College Speech)
SCIENCE	3 years
SOCIAL STUDIES	3 years minimum (history and government emphasis)
ELECTIVES	2 years Art, Foreign Language, Music or Vocational Education (Foreign Language required in some cases)
MATH	3 years minimum (including Algebra, Geometry and Trigonometry)

Canton High School is involved in Tech Prep, which will help build a qualified work force for the future. Tech Prep integrates academic course work in high school with a rigorous concentration of technical education. For more information, see a Guidance Counselor.

Canton High School abides by state of Illinois and Federal law and as such does not discriminate on the basis of race, color, disability, national origin, sex or on the basis of age.

Joint Agreement Classes:

The following courses will be offered if there is sufficient interest and based on several other administrative factors. *If you are interested in one of the following courses, write the name of that course at the bottom of your work sheet, but register for a full load exclusive of this course.

1. **Cosmetology** – Innovations Design Academy

Seniors only 3 hours - 2 credits

Classes are held at Innovation's in afternoons.

Successful completion of this program provides up to 250 hours toward and 2000 hours required to become a licensed cosmetologist. The course is divided between classroom, practice lab experiences and live work on the Innovation's floor. Students will perform services on clients in the area of hair and skin care. Students will do a variety of activities in hair cutting, styling, and chemical services techniques. The Innovation's program

meets the requirements determined by law as outlined by the Illinois Beauty Culture Act. *Students must provide their own transportation. Approximate cost = \$900

2. Nursing Assistant (C.N.A.)

Juniors and Seniors 1 semester – 1 credit (high school) and 7 semester hours of Spoon River credit towards CNA Certificate.

The nursing assistant curriculum is designed to prepare those seeking employment as assistants to nurses in hospitals, nursing homes and home health settings. The program is completed over 1 semester. Class schedules may vary. Students successfully completing* the program will have met state requirements for certified nursing assistants (C.N.A.). It presents a unique opportunity for those wanting an entry-level position in the health care field. Students enrolled in this course also will receive seven hours of Spoon River College credit for this class.

*The Illinois Department of Public Health division of education and training maintains strict attendance and performance requirements to which FACS and SRC must adhere. Requirements for enrollment in this class include: 16 years of age, non-fingerprint background check, physical and immunizations (incl. 2 step TB test). Approximate cost = \$1600

3. Welding Technology I

Juniors and Seniors Full year - 2 credits (high school) and 6 semester hours of Spoon River College credit towards Welding Certificate

Students will be introduced to the theory, principles and applications of modern welding processes. Year one will include fundamentals and applications of shielded arc welding and TIG (gas tungsten arc)

Welding. Welding processes and techniques will be covered for flat, horizontal, vertical and overhead positions. Students will also develop proficiency in the use of related hand tools and measuring tools used in metal equipment will also be performed by students. Students successfully completing the class will earn 2 high school elective credits and 6 semester hours of SRC credit in Welding Technology for the following classes: WEL 101 Arc Welding 4 sem. hours, WEL 103 TIG Welding 2 sem. hours for a total of 6 hours. Pre-requisite: Canton High School Welding Course Approximate cost = \$1900

Welding Technology II

Full year - 2 credits (high school) and 6 semester hours of Spoon River College credit towards Welding Certificate

Students will be introduced to the theory, principles and applications of modern welding processes. Year two will include fundamentals and applications of MIG (gas metal arc) welding and advanced MIG/TIG welding in pipe welding applications. Safety procedures in the welding shop will be practiced. Maintenance of welding equipment will also be performed by students. Students successfully completing the class will earn 2 high school elective credits and 6 semester hours of SRC credit in Welding Technology for the following classes: WEL 102 MIG Welding 4 sem. hours, WEL 104 Advanced MIG Welding 2 sem. hours for a total of 6 hours.

To Complete the SRC Welding Certificate:

Upon successful completion of the two dual credit program in Welding the students would have twelve hours of the seventeen required for the SRC Welding Certificate Program. Students could take the remaining two courses on their own over the summer between their junior and senior year of through night classes are made available by SRC. The two additional courses required would be an Applied Math (GT 101) for 3 credits and a blueprint reading course (GT 150) for credits.



College-bound student-athletes who want to compete in NCAA sports at the Division I or II level need to meet certain division-wide academic standards. The NCAA Eligibility Center only considers “core courses” when determining eligibility. See the NCAA Eligibility Center’s website (<https://web3.ncaa.org/ecwr3/>) for more information.

NCAA APPROVED CORE COURSES AT CANTON HIGH SCHOOL		
ENGLISH COLLEGE ENGLISH 101 COLLEGE ENGLISH 102 COLLEGE SPEECH CREATIVE WRITING ENGLISH I-Standard or Honors ENGLISH II- Standard or Honors ENGLISH III- Standard or Honors PUBLIC SPEAKING SENIOR LITERATURE	MATHEMATICS ALG/TRIG/ADV ALGEBRA 1A-.5 Credit Max. ALGEBRA 1B-.5 Credit Max. B ALG 2/TRIG CALCULUS COLLEGE CALCULUS M ALG 2/TRIG M GEOMETRY M ALGEBRA PRE-CALCULUS COLLEGE STATISTICS	
SOCIAL SCIENCE AMERICAN HISTORY CIVICS MODERN WORLD PSYCHOLOGY SOCIOLOGY WORLD GEOG WORLD HIST A WORLD HIST B	NATURAL/PHYSICAL SCIENCE BIO 1-Standard or Honors BIO 2 BSAA (BIO STUDIES) CHEMISTRY CHEMISTRY AP COLLEGE GHEMISTRY EARTH SCIENCE PHYSICAL SCIENCE- Standard or Honors PHYSICS PLTW HUMAN BODY SYSTEMS PLTW PRIN. OF BIOMED. SC. PLTW PRIN. OF ENGINEERING PLTW MEDICAL INTERVENTIONS	ADDITIONAL CORE COURSES GERMAN I GERMAN II GERMAN III GERMAN IV SPANISH I SPANISH II SPANISH III SPANISH IV

SEQUENTIAL COURSES FOR AGRICULTURAL SCIENCE EDUCATION

9 th	Introduction to Agricultural Education
10 th	Agricultural Science (Soil, Plant & Animal Sciences)
11 th & 12 th	Agribusiness Mechanics & Technology ----- These classes combine both Agribusiness Leadership & Management ----- 11 th & 12 th grades and are offered
11 th & 12 th	Biological Sciences & Agricultural Applications -----every other year.

Agricultural Education prepares students for successful careers and a lifetime of informed choices in the agriculture, food, fiber, and natural resource systems. Today, the Agricultural Industry encompasses so much more than farming. Agriculture Education teaches students about innovation for the future through science, technology, and leadership. All students, regardless of agricultural background, are encouraged to take Agricultural courses.

CAREER OPPORTUNITIES

Whether students are preparing for college or getting ready to enter the workforce after high school, Agriculture classes are designed to teach students the skills needed so that they can meet their full potential in whatever direction they choose to pursue. Today, there are more agriculture-related jobs in the United States than in any other career field. Below are a few examples of college areas of study, as well as careers specific to the agricultural industry.

AREAS OF STUDY

- *Agricultural and Biological Engineering
- *Agricultural and Consumer Economics
- *Agricultural Leadership and Science Education
- *Animal Sciences (Veterinary Sciences)
- *Crop Sciences
- *Food Sciences & Human Nutrition
- *Horticulture
- *Natural Resource & Environmental Sciences
- *Technical Systems Management

OCCUPATIONAL CAREERS

- *Microbiologist, Botanist, Production Tech
- *Farm Manager, Financial Planner, Lawyer
- *Extension Officer, Agriculture Teacher
- *Veterinarian, Horse Rancher, Cattle Farmer
- *Grain Breeder/Researcher, Seed Salesman
- *Dietician, Nutritionist, Food Scientist
- *Florist, Landscape Designer
- *Conservation Officer, Soil Scientist
- *Diesel Technician, Welder, Electrician

AGRICULTURE EDUCATION CLASSES COURSES OFFERED

Course: AGRICULTURE BUSINESS MANAGEMENT – Meets Consumer Education credit for graduation

Duration: 1 year (every other)

Required for graduation: No

Credit: 1

Who may take this course: Juniors & Seniors

Description: The Agriculture Business Management course is designed to develop student's skills in areas of advanced agricultural business procedures, establishment of agricultural businesses, managing the agribusiness, communication techniques, career preparation, taxes marketing and advertisement, as well as sales techniques and strategies.

Upon completion of this course:

1. Recognize the different areas of agricultural marketing and advertising and sales.
2. Understand the law of supply and demand.
3. Recognize the agricultural impact on both national and world economics.
4. Understand agricultural policy and law.
5. Create career readiness through resume building and job interviews.
6. Engage in a job shadow experience.
7. Prepare and deliver a variety of different speech types.
8. Understand taxes within the U.S.

Prerequisite: Enrollment in FFA & SAE Record Book required

Fees: FFA Dues (subject to change annually)

Additional Requirement: Upon enrolling in an agriculture education course, students are also enrolled as members of the National FFA Organization. As a member of the organization, this allows students to participate in various Career Development Events, travel to conferences and workshops both in and out of state, and access to numerous scholarship opportunities. Participation in chapter fundraising will be required. Proof of parent insurance will be needed.

Course: AGRICULTURE MECHANICS AND TECHNOLOGY

Duration: 1 year (every other)

Required for graduation: No

Credits: 1

Who may take this course: Juniors & Seniors

Description: The Agriculture Mechanics and Technology course is designed to develop student's skills in areas of intermediate agricultural production procedures, establishment of agricultural mechanical skills, managing the agricultural production environment, applying workplace problem solving skills, as well as designing and implementation of production projects.

Upon completion of this course:

1. Understand and demonstrate proper shop safety and maintenance.
2. Understand and demonstrate proper tool maintenance.
3. Understand and demonstrate proper electrical maintenance.
4. Understand and demonstrate proper use of arc welding equipment.
5. Explore and understand modern agricultural technological/microcomputer applications
6. Create career readiness through resume building and job interviews.
7. Engage in a job shadow experience.
8. Engage in a shop project.

Prerequisite: Completion of Introduction to Agriculture & Agriculture Sciences & SAE Record Book required.

Fees: FFA Dues (subject to change annually) & shop project materials

Additional Requirement: Upon enrolling in an agriculture education course, students are also enrolled as members of the National FFA Organization. As a member of the organization, this allows students to participate in various Career Development Events, travel to conferences and workshops both in and out of state, and access to numerous scholarship opportunities. Participation in chapter fundraising will be required. Proof of parent insurance will be needed.

Course: AGRICULTURAL SCIENCE (Soil, Plant & Animal Sciences)

Duration: 1 year

Required for graduation: No

Credits: 1

Who may take this course: Sophomores, Juniors & Seniors (as long as student has completed Introduction to Agriculture)

Description: The Agriculture Science course is designed to build on the basic skills and knowledge gained from the introductory course. Further development in the course will focus on broadening student's skills in areas of advanced plant and soil science, greenhouse maintenance, applied math/science skills, and landscape design/implementation.

Upon completion of this course:

1. Identify the different types of soil characteristics.
2. Discover and research environmental impacts on agricultural related areas.
3. Determine and implement proper forestry management techniques.
4. Identify different plant forms, structures, and functions.
5. Understand and demonstrate proper horticultural production practices.
6. Understand and demonstrate proper greenhouse maintenance.
7. Identify specific areas of landscape management and design practices.
8. Understand and demonstrate proper landscape management and design practices.

Prerequisite: Completion of Introduction to Agriculture & SAE Record Book required.

Fees: FFA Dues (subject to change annually)

Additional Requirement: Upon enrolling in an agriculture education course, students are also enrolled as members of the National FFA Organization. As a member of the organization, this allows students to participate in various Career Development Events, travel to conferences and workshops both in and out of state, and access to numerous scholarship opportunities. Participation in chapter fundraising will be required. Proof of parent insurance will be needed.

Course: INTRODUCTION TO AGRICULTURAL SCIENCES

Duration: 1 year

Credit: 1

Who may take this course: Freshmen, Sophomores Juniors & Seniors (1st year Ag Students ONLY)

Description: The Introduction to Agriculture course is designed to provide an opportunity for students to explore the agricultural industry through its organizational structure, major components, economics importance, and job opportunities associated with the field. Areas of focus will be basic concepts in personal budgeting and financial records through agribusiness, along with an introduction to animal science, plant science, soil science, horticulture, agricultural resources, and agricultural mechanics.

Upon completion of this course:

1. Understand the history of agriculture in the U.S.
2. Understand the many areas of the agricultural industry.
3. Understand the numerous job opportunities available in the agricultural industry.
4. Understand and demonstrate basic knowledge of FFA procedures and activities.
5. Discover and have an understanding of basic livestock industries in the U.S.
6. Understand and demonstrate shop/greenhouse rules and practices.

Prerequisite: Completion of Introduction to Agriculture & SAE Record Book – Students will pick a Supervised Agricultural Experience Project during the course to carry on throughout their Agricultural Education coursework in high school.

Fees: FFA Dues (subject to change annually)

Additional Requirement: Upon enrolling in an agriculture education course, students are also enrolled as members of the National FFA Organization. As a member of the organization, this allows students to participate in various Career Development Events, travel to conferences and workshops both in and out of state, and access to numerous scholarship opportunities. Participation in chapter fundraising will be required. Proof of parent insurance will be needed.

ART

COURSES AVAILABLE IN THE ART DEPARTMENT

Freshmen-Senior

Art I (1 year)

Juniors/Seniors only

Painting (1 year)

Sophomores-Seniors

2-D Design (1 semester)

3-D Design (1 semester)

Drawing I (1 year)

Career Opportunities in the Arts

Illustration

Advertising Illustrator

Package Designer

Publications Design & Illustration

(Magazine/Book Design, Editorial

Illustrator, Graphic Novelist,

Cartoonist, Technical Illustrator)

Photography

Photojournalist

Fashion Designer

Product/Food Photographer

Entertainment Design

Film/Animation Artist, Storyboard Artist

Concept Artist

Game/Digital/Multimedia Designer

Theater and Stage Design

Fine Artist

Sculptor, Painter, etc.

Ceramist

Jewelry Design

Environmental Design

Architecture

Interior and Display Design

Product & Fashion Design

Industrial Design-Product, Toy

& Automotive

Fashion Illustrator

Art Education

Museum Director/Curator

Gallery Owner/Director

Auction Galleries

Art Historian

Art Appraiser

Art Publications-writers and critics

Art Therapist

RECOMMENDED SEQUENCE

Careers in Art and Design

Freshmen

Art I

Sophomore

Drawing I

2-D Design

3-D Design

Junior-Senior

Drawing II

Painting

Course: ART I

Duration: 1 year – Instructor permission is REQUIRED to drop the course at the semester. Typically, only students receiving a grade of D or F will be considered.

Required for graduation: No

Credit: 1

Who may take this course: Freshmen, Sophomores, Juniors and Seniors

Description: This course is designed to give the student a basic understanding of art through the exploration of a variety of art materials. The class consists of lectures, reading and analyzing historically relevant artists, styles and techniques through written responses, classroom discussions and critiques. The students are expected to acquire both knowledge and skill in the field of art. Students will be expected to regularly submit sketchbook assignments designed to improve drawing skills.

The course content includes: The emphasis and use of the elements of design (line, color, space, texture and form) in art projects, emphasizing positive and negative space in a composition, creating a sculpture in clay and/or found materials, forming a hand-built piece of pottery, plan and design a mixed media collage, learning

and utilizing printmaking techniques to create an original print and recognizing the cultural, societal and personal value of art for self-expression.

Prerequisite: None

Homework: 3 hours per week

Special Projects: Sketchbook

Fee: None

Special equipment or materials - estimated cost: Supplies - \$10

Course: DRAWING I

Duration: 1 year – Instructor permission is REQUIRED to drop the course at the semester. Typically, only students receiving a grade of D or F will be considered.

Required for graduation: No

Credit: 1.

Who may take this course: Sophomore, Juniors, Seniors

Description: This year-long project-based course will provide students with opportunities to develop their drawing and observational skills through experimentation and exploration of a variety of drawing media. Drawing materials include graphite, colored pencil, charcoal, pastels, ink, and mixed media. This course is designed to encourage self-expression through specific concepts and projects exploring light and shade, composition, proportion, portraiture, figure, landscape drawing, still life, and societal issues. Students will participate in critiques and group discussions and learn about careers in the Creative Arts.

Upon completion of the course students will:

1. Develop and improve drawing and observational skills.
2. Strengthen visual language to improve communication of new imaginative ideas.
3. Create artwork that evokes a mood and engages the viewer.
4. Create challenging age appropriate artwork that demonstrates originality, imagination, and technical competence.
5. Participate in class critiques to reflect on personal and peer project successes and challenges.

Prerequisite: Art I

Homework: 2 hours per week

Special Projects: Opportunities to exhibit and compete are available.

Fee: None

Special equipment or materials - estimated cost: \$15

Course: DRAWING II

Duration: 1 year – Instructor permission is REQUIRED to drop the course at the semester. Typically, only students receiving a grade of D or F will be considered.

Required for graduation: No

Credit: 1.

Who may take this course: Juniors and Seniors

Description: This year-long project-based course will focus on improving and expanding upon previously learned drawing skills. An increased emphasis on individual creative expression through a variety of drawing methods will be explored. Students will also gain a better awareness of potential Creative Industries careers and develop a digital portfolio of artwork for college entrance or job opportunities.

Upon completion of the course students will:

1. Further develop drawing skills and individual expression through risk-taking, experimentation and creative inquiry.
2. Explore new visual concepts and demonstrate understanding through advanced drawing skills.
3. Understand ways in which art and creative expression is used to influence society.
4. Understand how the sensory, formal, and technical qualities perceived in an artwork interact to express ideas.
5. Engage in collaborative research and discussions on careers in art.

6. Verbalize personal preferences for a piece of art according to formal, sensory, and technical qualities.
7. Participate in class critiques to reflect on personal and peer project successes and challenges.
8. Compose and arrange a digital portfolio for college entrance or job applications.

Prerequisites: Art I, Drawing I

Homework: 3 hours per week

Special Projects: Opportunities to exhibit and compete are available.

Fee: None

Special equipment or materials - estimated cost: \$20/Dependent on individual student material needs

Course: TWO DIMENSIONAL DESIGN

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Sophomore, Juniors and Seniors. This course may only be taken by students who earned a "B" average or above in Art I. It may be repeated if the student maintained a "B" or above in ALL Art courses previously taken.

Description: This course emphasizes the elements and principles of two-dimensional design. It consists of drawing, painting, printing, digital imaging, photography and exploring careers in art. Approximately one half of the course consists of drawing with various media. The student will be required to keep a sketchbook in order to receive credit.

Upon completion of the course students will:

1. Learn the purposes of design & composition and apply knowledge gained through illustrative work.
2. Produce artwork that reflects an understanding of the basic principles of design.
3. Demonstrate proper care and use of basic design art equipment and tools.
4. Design and layout story illustrations and compositions utilizing the principles of design.
5. Emphasize line quality, direction and tonal values in drawings.
6. Use the following drawing techniques: linear, continuous line, gesture and contour.
7. Create a drawing that sets a mood through line, value and contrast.
8. Compose and manipulate original digital reference photographs in preparation for projects.
9. Make drawings in the following ways: realistic, surrealistic, nonobjective, landscape, interior, still-life and portraiture.

Prerequisite: Art I

Homework: 3 hours per week

Special Projects: Opportunities to exhibit and compete are available.

Fee: None

Special equipment or materials - estimated cost: \$12

Course: THREE DIMENSIONAL DESIGN

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Sophomores, Juniors and Seniors. This course may only be taken by students who earned a "B" average or above in Art I. It may be repeated if the student maintained a "B" or above in ALL Art courses previously taken.

Description: This course consists of a study of sculpture, pottery and 3-D forms. Various clay projects are made using many techniques in hand built pottery. The student may also have limited experiences on the potter's wheel. The student designs, makes the project and carries it through the glazing process.

Upon completion of the course:

1. Build clay forms using hand built techniques consisting of pinch, coil, slab and combination.
2. Wedge and prepare clay for pottery construction.
3. Develop surface textures on moist, leather hard or dry clay using the following methods: pressing, adding, slip trailing and cutting.
4. Glaze projects by brushing, dipping, pouring, spraying or dipping.
5. Load a kiln for both bisque and glaze firing.

6. Make projects using the additive and subtractive process.
7. Make projects using a modeling technique with plastic materials.
8. Make a project assembling materials to create a sculptural statement.

Prerequisite: Art I

Homework: 4 hours per week

Special Projects: Opportunities to exhibit and compete are available.

Fee: None

Special equipment or materials - estimated cost: \$9

Course: PAINTING

Duration: 1 year – Instructor permission is REQUIRED to drop the course at the semester. Typically, only students receiving a grade of D or F will be considered.

Required for graduation: No

Credit: 1

Who may take this course: Juniors and Seniors with a grade of “B” or above in Art I (This course may be repeated provided the student has earned a “B” or better the 1st semester.)

Description: The student will use watercolor, acrylic, water-based oils and mixed media within the creative projects. Students will also study the styles and techniques of various artists through online research and class/group discussions and critiques.

Upon completion of the course:

1. Apply the elements and principles of design in his/her painting.
2. Use color theory concepts to portray moods, feelings and ideas in painting.
3. Do a painting using the following media: water color, acrylics, water-based oils and mixed media.
4. Learn how to properly use and take care of painting equipment and tools.
5. Use a variety of tools including brushes, pallet knives, airbrush and other tools in painting.
6. Develop skill in demonstrating depth in a painting. (perspective, overlapping, color variation and textural techniques)
7. Paint in realistic, abstract, surrealistic and non-objective styles.
8. Create a variety of projects such as painting a themed stool or chair, a graffiti tag based on urban art, school murals, social commentary piece, etc.

Prerequisite: Art I

Homework: 4 hours per week

Special Projects: Opportunities to exhibit and compete are available.

Fee: None

Special equipment or materials - estimated cost: \$15 - first semester; \$10 - second semester

CONSUMER ED CREDIT COURSES

Course: AGRICULTURE BUSINESS MANAGEMENT – Meets Consumer Education credit for graduation

Duration: 1 year (every other)

Required for graduation: No

Credit: 1

Who may take this course: Juniors & Seniors

Description: The Agriculture Business Management course is designed to develop student’s skills in areas of advanced agricultural business procedures, establishment of agricultural businesses, managing the agribusiness, communication techniques, career preparation, taxes marketing and advertisement, as well as sales techniques and strategies.

Upon completion of this course:

1. Recognize the different areas of agricultural marketing and advertising and sales.
2. Understand the law of supply and demand.
3. Recognize the agricultural impact on both national and world economics.
4. Understand agricultural policy and law.
5. Create career readiness through resume building and job interviews.
6. Engage in a job shadow experience.
7. Prepare and deliver a variety of different speech types.

8. Understand taxes within the U.S.

Prerequisite: Enrollment in FFA & SAE Record Book required

Fees: FFA Dues (subject to change annually)

Additional Requirement: Upon enrolling in an agriculture education course, students are also enrolled as members of the National FFA Organization. As a member of the organization, this allows students to participate in various Career Development Events, travel to conferences and workshops both in and out of state, and access to numerous scholarship opportunities. Participation in chapter fundraising will be required. Proof of parent insurance will be needed.

Course: ECONOMICS (Meets Consumer Education requirement)

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Juniors and Seniors

Course Description: The economics content is designed to help students develop critical thinking skills through the understanding, application, and analysis of fundamental economic concepts. Students will be required to use and apply tools (graphs, tables, statistics, and equations) to their understanding of economic laws and principles. An emphasis will be placed on the United States' economic role in a local and global economy. Also, they will be expected to apply principles of economics to a wide variety of real-world and hypothetical situations.

Upon completion of this course students will:

1. Be able to know basic economic concepts and understand how economic problems are solved
2. Differentiate between macroeconomics and microeconomics and between the different types of economies that exist
3. Know and understand the importance of resources within an economic system
4. Gain a better understanding of the American financial system and the role they, as both consumer and potential investors, play in shaping our economy
5. Analyze how technological developments transformed the economy and created international markets
6. Evaluate the role consumers play in shaping a modern mixed economy
7. Explain the interdependence of various parts of the market economy
8. Evaluate the relationship between inflation and other economic indicators such as unemployment
9. Comprehend and apply the laws of supply and demand and the effect they have within a market economy
10. Understand the importance human capital plays in shaping economic systems and the impact skill sets and education will have on their career opportunities
11. Explain the steps the federal government takes to stabilize the health of the economy through both monetary and fiscal policies
12. Understand compound and simple interest and apply them to the principles of credit and borrowing
13. Apply the principles of income and money management to budgeting, insurance, saving, spending, and investing

Prerequisite: Should have at least a "C" cumulative grade point average

Homework: 2-3 hours per week

Special Project(s): Stock Market Simulation and/or Economic Problems Project

Fee: None

Special equipment or materials – estimated cost: None

Course: INCUBATOR - Meets Consumer Education credit for graduation

Duration: 1 year

Required for graduation: No

Credit: 1.0 awarded at the completion of Semester 1 and Semester 2

Who may take this course: Juniors/Seniors, Sophomores with teacher approval

Description: This year-long course is designed to get students excited about becoming true entrepreneurs by giving them the opportunity to create and fully develop their own product or service. Real-world entrepreneurs

and business experts will serve as coaches and mentors guiding student teams through the process of ideation, market research, and business plan development. Over the course of the year, student teams will learn about marketing, accounting, human resources, as well as the legal aspects of running a business to get them geared up for Pitch Week. Pitch Week helps to further fire the entrepreneurial spirit by putting student teams in front of actual investors so they can pitch their innovative idea to win funding and turn their wishful thinking into a reality.

Prerequisite: None

Special Projects: Create own business

Fee: None

Special equipment or materials – estimated cost: None

Course: RESOURCE MANAGEMENT - Meets Consumer Education credit for graduation

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Juniors and Seniors

Description: This class focuses on financial literacy. The EverFi Financial Literacy program is incorporated into the curriculum for this class. This is a National Financial Literacy certification program. Those students that pass this program receive a certificate for Financial Literacy. This certification is a positive on their resumes and college applications. This class covers basic economics; handling checking and savings accounts; understanding and figuring paychecks (gross & net pay, deductions); mortgages, loans & credit; budgeting basics; career goals (knowing what it will take and the means to achieve their goals); insurance (auto, health, life, etc.); investing; retirement; credit scores; consumer protection (understanding and protecting oneself from frauds, scams, identify theft and internet dangers). Students get a job, figure their paychecks and are paid electronically into their online banking accounts. They must pay their rent and all of the assorted bills they would have to pay as an independent adult. They must set up their budget, stay within their budget and learn to deal with unexpected expenses. They must set up short and long term financial goals, periodically assessing these goals throughout the semester to determine how they are doing in achieving their goals. The goal of this class is to prepare students for a solid financially responsible life after high school.

Prerequisite: None

Homework: 2 hours per week

Special Projects: None

Fee: None

Special equipment or materials - estimated cost: \$1

ENGLISH

All freshmen are required to take and successfully complete English I (A & B). All sophomores are required to take and successfully complete English II (A & B). All juniors must take and successfully complete English III—Composition and American Literature (A & B). Seniors have the following options for their required 1 – year credit: Public Speaking; College Composition 101; College Composition 102; College Speech 103; Creative Writing; Advanced Placement Literature and Composition (2 semesters); Technical Writing – 1 semester.

Course: CANTONIAN – YEARBOOK

Duration: 1 year

Required for graduation: No

Credit: 1

Who may take this course: Juniors and Seniors – Sophomores with teacher approval

Description: This year-long course provides students with journalism, photography, graphic design, and business skills to produce the yearbook for Canton High School. The publication strives to maintain a tradition of excellence in which the school and students can take pride. All staff members will be assigned duties outside of class during the school day, and after regular school hours.

Upon completion of the course:

1. Be able to accurately set copy into a word processing program on a computer.

2. Produce a high school yearbook.
3. Compose copy in good, journalistic style.
4. Set up a copy-ready and graphically correct layout on a "dummy" sheet.
5. Conduct a well-organized interview.
6. Design an eye-catching, creative layout.
7. Refine spelling, punctuation and grammar skills.
8. Identify and take a photograph with good composition.

Prerequisite: Consent of Instructor/Application

Homework: Varies with deadlines

Special Projects: A yearbook is published.

Fee: None

Special equipment or materials - estimated cost: The students may be out of the school building at various times during the school year for taking pictures, selling ads, etc.

Course: COLLEGE COMPOSITION 101 (Dual credit course only)

College Course: English 101 Composition I

Duration: 1 semester

Required for graduation: No

Credit: .5 high school and 3 hours college

Who may take this course: Juniors and Seniors

Description: This course is the basic course in composition including narrative, descriptive, expository, and argumentative writing. The various elements of the writing process are stressed and include development of a specific thesis. Attention is given to paragraph development, sentence construction, and other stylistic elements. At least two research papers will be required.

Upon completion of the course:

1. Formulate and narrow an idea suitable for development.
2. Develop and support a specific thesis in writing while considering both audience and purpose.
3. Plan a logical organizational pattern for writing which includes an awareness of an introduction, body and conclusion.
4. Improve competence of rewriting and editing.
5. Research a topic, prepare a suitable paper, and properly document sources.
6. Write papers following the guidelines of development in traditional rhetorical modes.
7. Examine ideas and analyze issues from a critical perspective.

Prerequisite: Must have received a "C" or better in high school English classes or receive instructor approval.

Homework: 3-5 hours per week

Special Projects: None

Fee: In-district college tuition for Spoon River College.

Special equipment or materials - estimated cost: All papers must be typed. Additional texts may be required by individual instructors. One package 3 x 5 lined note cards required for some sections.

Course: COLLEGE COMPOSITION 102 (Dual credit course only)

College Course: English 102 Composition II

Duration: 1 semester

Required for graduation: No

Credit: .5 high school and 3 hours college

Who may take this course: Juniors and Seniors

Description: This course seeks to refine the writing competencies stressed in College English 101. Areas of emphasis will be argumentation and research. Other elements stressed will include diction, tone and style.

Upon completion of the course:

1. Develop ideas logically; identify fallacies and avoid them.
2. Conduct research to assimilate information into a thesis for argumentation.
3. Develop papers of argumentation, which are adequately researched and logically supported.
4. Practice strategies used for writing essay examinations.
5. Understand and employ stylistic revision principles necessary to meet college standards of writing accuracy.

6. Gain appreciation of a wide range of writings and viewpoints.

Prerequisite: C or better in College English 101

Homework: 3-5 hours per week

Special Projects: None

Fee: In-district college tuition for Spoon River College.

Special equipment or materials - estimated cost: All papers must be typed. Additional texts may be required by individual instructors.

Course: COLLEGE SPEECH 103 (Dual Credit Course Only)

College Course: Com 103

Duration: 1 semester

Required for Graduation: No

Credit: .5 high school and 3 hours college

Who may take this course: Juniors and Seniors

Description: This course focuses on speech organization and delivery. Instruction includes the concepts of critical thinking, active listening, audience analysis, and the use of supporting material through cited research. A variety of different speech types will be explored.

Upon completion of course:

1. Students will demonstrate an understanding of the communication process and recognize effective and ineffective communication messages in public settings.
2. Students will utilize and identify effective persuasive strategies in communication and avoid common fallacies when developing a persuasive argument.
3. Students will formulate and narrow an idea suitable for development.
4. Students will develop and support a specific thesis while considering both audience and purpose.
5. Students will plan a logical organizational pattern for speaking which includes an awareness of an introduction, body, and conclusion.
6. Students will develop effective presentations that respond to the dynamics of the speaking situation, including audience analysis, and that demonstrate the tenets of sound organization and critical, cited research.
7. Students will deliver presentations in a clear and engaging manner.
8. Students will prepare and deliver a variety of different speech types.

Students will examine ideas and analyze issues from a critical perspective.

Prerequisite: Must have earned an average of a "C" or better in high school English classes or receive instructor approval.

Homework: 4 hours per week

Special Projects: None

Fee: In-district college tuition for Spoon River College. There will not be a textbook fee.

Course: CREATIVE WRITING

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Seniors

Description: This course is for those students interested in writing creatively for their own pleasure or for publication. The major emphasis is on writing short stories, poetry, and drama.

Upon completion of the course:

1. Prepare a manuscript to submit for publication.
2. Write free verse and fixed form poems.
3. Write short stories with setting, mood, plot and characterization.
4. Gain an awareness of details through use of senses.
5. Be able to use imagination.
6. Develop a personal writing style and a critical awareness of overall style.

7. Learn to write creatively.
8. Write and perform a 5-10 minute one-act play.
9. Maintain a journal for compiling writing exercises and collecting ideas.

Prerequisite: Successful completion of English I, English II and English III

Homework: 2-4 hours per week

Special Projects: None

Fee: None

Special equipment or materials - estimated cost: 3-ring binder with loose-leaf paper required.

Course: ENGLISH I (A & B)

Duration: 2 semesters

Required for graduation: Yes

Credit: .5 for each semester

Who may take this course: All freshmen

Description: The course is designed for all students. Emphasis is placed on reading, writing, and communication skills. Reading selections from the following areas are covered: short stories, poetry, novels and plays.

Upon completion of the course:

1. Read, examine, and discuss a variety of literature including short stories, drama, poetry, articles, and novels.
2. Identify and define literary terms in short stories, poetry, plays, drama, and novels.
3. Review and analyze sentence structure, vocabulary, grammar and mechanics, and author's style in a variety of texts.
4. Create pieces of writing including literary analysis, one-pagers, poems, journal responses, and research essays.
5. Collect and evaluate writing.
6. Demonstrate the 4 C's: Collaborate, Communicate, Critical Think, and Create.
7. Utilize a variety of technology and presentation tools.

Prerequisite: None

Homework: 2-4 hours per week

Special Projects: None

Fee: None

Special equipment or materials - estimated cost: All major papers will be typed in MLA format.

Course: ENGLISH II (A & B)

Duration: 2 semesters

Required for graduation: Yes

Credit: .5 for each semester

Who may take this course: All sophomores

Description: This course is designed to give the students an understanding of standard English. They should also be able to write good essays, which use the grammar forms they will study. The course emphasis is on persuasive writing. This course will also examine oral communication, which covers speaking in personal, public, and persuasive situations in both small and large groups. Students will use listening, organizing, and explaining skills. Reading and discussing a novel is another major element of this course. The course emphasis is on literary analysis, with an introduction to argument.

Upon completion of the course:

1. Read, examine, and discuss a variety of literature including short stories, drama, poetry, articles, and novels.
2. Study and evaluate literature through a thematic lens that focuses on individual, societal, and global effects of mankind.
3. Review and analyze sentence structure, vocabulary, grammar and mechanics, and author's style in a variety of texts.
4. Participate in literature circles and build on-line book talks.

5. Create pieces of writing including, one-pagers, poems, journal responses, on-line discussions, personal narrative, character analysis, and an argumentative essay.
6. Collect and evaluate writing for an on-line portfolio.
7. Create lesson and plan a STREAM event for 4th graders.
8. Demonstrate the 4 C's: Collaborate, Communicate, Critical Think, and Create.
9. Utilize a variety of technology and presentation tools.

Prerequisite: Successful completion of English I.

Homework: 2-4 hours per week

Special Projects: None

Fee: None

Special equipment or materials - estimated cost: All major papers must be typed in MLA format.

Course: ENGLISH III—COMPOSITION AND AMERICAN LITERATURE (A & B)

Duration: 2 semesters

Required for graduation: Yes

Credit: .5 for each semester

Who may take this course: Juniors

Description: This course is intended to be a composition class that uses a wide variety of literature (both fiction and non-fiction) as a source for material. Emphasis will be placed on literature written by American authors.

Upon completion of the course:

1. Write expository, analytical and argument papers
2. Increase vocabulary skills
3. Write an argumentative research paper
4. Write a successful essay exam response
5. State ideas in a clear, consistent, logical manner
6. Avoid major sentence errors
7. Be able to present and defend ideas, both in front of a group and by written word
8. Be able to recognize the speaker, the author, the message, the support, and the effect of any piece of writing examined
9. Be able to recognize and discuss the values and beliefs of any literary movement presented/examined in class
10. Read from a variety of genres: Novels; Short Stories; Poetry; Drama; Non-Fiction

Prerequisite: Successful completion of English I and English II

Homework: 2-4 hours per week

Special Projects: None

Fee: None

Special equipment or materials - estimated cost: Students must type a variety of papers, including a research paper, in MLA format. Students may wish to purchase personal copies of novels (optional). Earbuds or headphones that have microphone capability are required.

Course: TECHNICAL WRITING

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Seniors

Description: This writing-intensive course is an English elective available to seniors. This is a one-semester class that will concentrate on technical writing and reading skills, which are invaluable to students as they apply to college and as they navigate career paths post-high school and post-college. Activities can include:

- Reading non-fiction pieces for understanding
- Writing resumes and cover letters
- Writing thank-you notes
- Writing letters of application for college and employment
- Writing workplace reports
- Writing & presenting on real-world topics while using technology

- Filling out college applications/employment applications
- Using technical information-gathering skills
- Using job databases
- Practicing presentation skills
- Conducting a useful web search
- Evaluating websites for reliability
- Composing clear and concise e-mails
- Practicing e-mail etiquette

Upon completion of the course, students will:

1. Improve communication skills, especially those required for college and workplace situations.
2. Improve research skills.

Prerequisite: Successful completion of English I, English II, and English III

Homework: 2 – 4 hours per week

Special Projects: Varies

Fee: None

Special equipment or materials - estimated cost: None

Course: PUBLIC SPEAKING

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Seniors

Description: Each week the student will prepare and present different types of speeches. Emphasis will be placed on preparing, practicing and presenting speeches, which show different types of speaking activities students may use in the future. Memorization of material may be required. Students will also learn about and practice audience etiquette.

Upon completion of the course:

1. Prepare a speech with a good introduction, body and conclusion from a variety of different speech types, including informative, persuasive, business and career speaking, and special occasion speaking.
2. Use the library to research a topic.
3. Express themselves orally without grammatical and usage problems.
4. Use appropriate gestures and body language.
5. Use full-sentence standard outline form.
6. Use effective delivery techniques (such as voice inflection, eye contact and proper audibility).
7. Prepare a 45-minute interview.
8. Prepare and deliver PowerPoint speech.

Prerequisite: Successful completion of English I, English II and English III

Homework: 2-4hours per week

Special Projects: None

Fee: None

Special equipment or materials - estimated cost: 3 x 5 lined note cards required. Stopwatch recommended.

Student devices will be used for research and presentations.

Course: SENIOR LITERATURE AND COMPOSITION

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Seniors

Description: This course will concentrate on the study of literature and will include activities in both composition and speech to enhance the material. The literary content will vary from semester to semester.

Upon completion of the course:

1. Improve reading, writing, listening and speaking skills
2. Write essay exams and essays
3. Analyze the value of literature, especially as it relates to self.
4. Improve command of literary terminology.

5. Conduct research for a research project.

Prerequisite: None

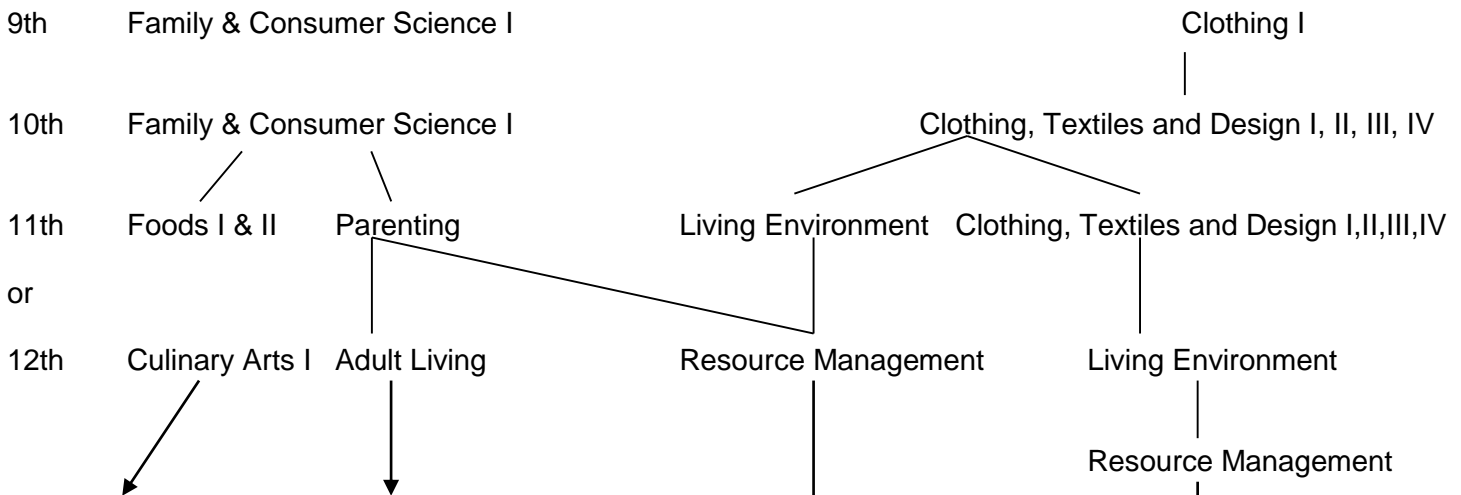
Homework: 2-4 hours per week

Special Projects: Will vary

Fee: None

Special equipment or materials – estimated cost: Students may wish to purchase a copy of novels read.

SEQUENTIAL COURSES FOR FAMILY & CONSUMER SCIENCE



The above classes prepare for careers in

Food Service	Child Care	Interior Design	Fashion Merchandising
Restaurant manager/owner	Fashion designer	Child care worker	Interior designer
Dietitians	Elementary teacher	Textile designer	Textile designer
Nutritionist	Nanny	Paper-hanger	Merchandise displayer
Cashier	Teacher aides	Upholsterer	Apparel worker
Chefs	Early childhood program director	Apparel worker	Tailor
Waiter/waitress	Family & Consumer Science Teacher		Furniture store manager
Dining room attendant	Fashion coordinator		
Employee	Day care center owner	Family & Consumer Science	Clothing store
Fast food worker		Teacher	
Teacher		Drapery designer	Family & Consumer Science Teacher
Bread & pastry baker			Seamstress
Cake decorator			Buyer
Grocery store employee			Bridal consultant
Family & Consumer Science Teacher			Alterations Specialist
Catering			Costume Designer for TV and movie
stage, production			

Some employees provide on-the-job-training, while some occupations require additional formal training. Students interested in pursuing one of the above mentioned careers should visit with the guidance counselors for more information. The above recommended sequence is fairly flexible. Check your course description booklet for prerequisites. Several courses in this department are helpful for student self-improvement and future survival skills.

Course: ADULT LIVING

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Juniors and Seniors

Description: This course is designed to assist individuals and families in achieving satisfaction through responsible participation as adults in the home, community and work place. Emphasis is placed on developing strategies for identifying values and setting goals. The course content includes the following duty areas: developing short and long-range goals, demonstrating goal-setting and decision-making skills, evaluating and adapting basic needs to assume roles and responsibilities, recognizing and following health practices that assist in coping, selecting and using resources to enhance individual growth and development, developing effective relationships to promote communication with others, and evaluating family and career changes as to the impact on individuals. Various resources to assist with life problems are explored.

Upon completion of the course:

1. Demonstrate respectful and caring relationships in the family and community, while developing the skills and strategies that focus on development techniques of workplace and careers.
2. Understand the decision making process.

Prerequisite: None

Homework: 1 hour per week

Course: CLOTHING, TEXTILES & DESIGN I

Duration: Full Year

Required for graduation: No

Credit: 1

Who may take the course: Freshman, Sophomores, Juniors and Seniors

Description: This is a hands-on project based course that will cover the basics of Design (elements, principles and proportions), beginning color theory and basic construction skills.

Students will learn to understand and interpret commercial sewing patterns. They will learn how to alter patterns to fit their individual figures. They will learn about various fabrics and textiles and how to choose the appropriate fabric for their projects. This class is individually paced. After the first basic project, the students will be able to choose their own projects. Students are encouraged to choose projects that fit with their interests. (Cosplay costumes, stuffed animals, specialty wear, wearable art, quilting, etc.)

Prerequisite: None

Homework: Work will be done in class. Homework is very rare.

Special Projects: The course is based on projects. Students will begin a new project upon the completion of each project. They will also be required to maintain their Notebook of samples, techniques and swatches.

Fee: None

Special equipment or materials – estimated cost: Students will be provided with a 3 ring notebook that contains the contents and areas of study for clothing construction, fashion design and textile studies. Materials and costs will depend on their choice of projects.

Course: CLOTHING, TEXTILES & DESIGN II

Duration: Full Year

Required for graduation: No

Credit: 1

Who may take the course: Sophomores, Juniors and Seniors

Description: This is a hands-on project based course concentrating on improving previously learned skills and learning new ones. They will continue adding to their reference notebook and begin basic alteration techniques. This will include making alterations for customers. Those students ready to take a design drawing to a garment will begin learning basic flat pattern work.

Students will begin training on the industrial embroidery machine – how to set up the embroideries, thread the machine, stabilize and hoop up the items to be embroidered and trouble shoot when things go wrong with the embroidery or the embroidery machine.

Prerequisite: Clothing I

Homework: Work will be done in class. Homework is very rare.

Special Projects: The course is based on projects. Students will begin a new project upon the completion of each project. They will also be required to maintain their Notebook of samples, techniques and swatches.

Fee: None

Special equipment or materials – estimated cost: Students will continue with their 3 ring notebook that contains the contents and areas of study for clothing construction, fashion design and textile studies. Materials and costs will depend on their choice of projects.

Course: CLOTHING, TEXTILES & DESIGN III

Duration: Full Year

Required for graduation: No

Credit: 1

Description: This is a hands-on project based course concentrating on improving previously learned skills and learning new ones. They will continue adding to their reference notebook.

Students will learn how to take a design sketch to a garment using basic flat pattern work. They will also learn draping techniques, working on half scale dress forms. Learn costuming for stage, cosplay, print, and film, athletic apparel, and formal wear. They will continue to learn alteration skills. Students will continue training on the embroidery machine and begin training in the embroidery business – cost out embroidery jobs, project proposals and cost estimates, billing procedures and customer service.

Prerequisite: Clothing I, II

Homework: Work will be done in class. Homework is very rare.

Special Projects: The course is based on projects. Students will begin a new project upon the completion of each project. They will also be required to maintain their Notebook of samples, techniques and swatches.

Fee: None

Special equipment or materials – estimated cost: Students will continue with their 3 ring notebook that contains the contents and areas of study for clothing construction, fashion design and textile studies. Materials and costs will depend on their choice of projects.

Course: CLOTHING, TEXTILES & DESIGN IV

Duration: Full Year

Required for graduation: No

Credit: 1

Description: This is a hands-on project based course concentrating on improving previously learned skills and learning new ones. They will continue adding to their reference notebook.

Students will build on previously learned skills; taking them up to the next level and incorporating tailoring and couture sewing skills. They will learn advanced alterations for men's wear, bridal and formal wear (these skills will prepare them for numerous in-demand jobs). They will continue learning and improving their design and draping skills. They will learn advanced flat pattern work and include pattern drafting skills. Those students interested in jobs in the fashion business will put together their portfolios for admittance into fashion design school or for job applications in the industry. They will develop and refine skills necessary for employment. They will learn and understand project development and management and receive further instructions in entrepreneurial skills and job opportunities in the business.

Prerequisite: Clothing I, II, III

Homework: Work will be done in class. Homework is very rare.

Special Projects: The course is based on projects. Students will begin a new project upon the completion of each project. They will also be required to maintain their Notebook of samples, techniques and swatches.

Fee: None

Special equipment or materials – estimated cost: Students will continue with their 3 ring notebook that contains the contents and areas of study for clothing construction, fashion design and textile studies. Materials and costs will depend on their choice of projects.

Course: CULINARY ARTS I

Duration: 1 year

Required for graduation: No

Credit: 1

Who may take this course: Seniors

The curriculum includes, but is not limited to, front-of-the-house duties as well as back-of-the-house duties. Activities provide instruction in menu development management skills, and catering. Students participate in culinary competitions and acquire industry recognized certifications needed to succeed in the industry and postsecondary education.

The Culinary Arts I curriculum provides students with the foundations for a comprehensive knowledge of the food service industry and with opportunities to build technical skills. Students examine and practice basic rules and procedures related to kitchen and food safety, kitchen sanitation procedures, and emergency measures. Students explore the purchasing and receiving of goods and study fundamental nutritional principles and guidelines. As they explore food-preparation techniques, students practice applying these techniques to the preparation and serving of basic food products. The curriculum places a strong emphasis on science and mathematics knowledge and skills.

Prerequisite: B+ average in Foods I and Foods II or B average in just Foods I and a recommendation from FCS teacher

Homework:

Special Projects:

Fee:

Special equipment or materials – estimated cost:

Course: FOODS AND NUTRITION I AND II

Duration: 1 semester each

Required for graduation: No

Credit: .5 each

Who may take this course: Juniors and Seniors

Description: This course includes basic classroom and laboratory experiences needed to develop knowledge and understanding of food principles and applied nutrition for all ages. The course content centers around the following areas: the Daily Food Guide, the Dietary Guidelines, food buying, safety, sanitation, and preparation techniques. Information related to careers in foods and nutrition is incorporated throughout the course.

Description: In this second orientation level foods and nutrition course, more attention is paid to food selection and preparation for special circumstances and dietary needs. Laboratory sessions are devoted to preparation of foods with specific characteristics. Course content should include the following broad areas of emphasis: careers in foods and nutrition, influences on food customs, diet and health, current nutritional issues, planning for special food needs, safety of foods, food purchasing, prevention of food-borne illnesses, conservation in providing food and food preservation. The application of the above-mentioned areas of emphasis to food service occupations stressed. This course provides an introduction to commercial food service, preparation and management.

Upon completion of the course: Foods I

1. Demonstrate principles of sanitation and safety as related to safe food handling practices and safe work habits in the kitchen.
2. Develop a working knowledge of basic recipe skills.
3. Exhibit teamwork and a working knowledge of basic food preparation skills.

Upon completion of the course: Foods II

1. Demonstrate procedures related to safety and sanitation, measuring, recipe usage and lab procedures.
2. Explore the science of nutrition as it relates to health, making food choices and food preparation.
3. Prepare food based on varying food nutrient classifications.
4. Demonstrate knowledge of workplace skills related to food and nutrition.

Prerequisite: Foods I

Homework: 1 hour per week

Special Projects: None

Fee: None

Special equipment or materials - estimated cost: \$6 per semester for students free choice labs.

Course: FAMILY & CONSUMER SCIENCE I (Introductory Survey)

Duration: 1 Year

Required for graduation: No

Credit: 1

Who may take the course: Freshman, Sophomores, Juniors and Seniors

Description: This program is an introduction and learning of basic skills in the various areas of Family & Consumer Science such as : Growth Mindset, Communication skills, Human Development, Design – as applied to fashion & interior design, Food Safety & Sanitation and Cooking Skills, Interpersonal and Family Relationships.

Upon completion of this course: FCS

1. Use Growth Mindset in their everyday life
2. Develop important communication skills for life
3. Introduce students to the elements of design as it pertains to clothing and interiors
4. Introduce students to the relationship between health and nutrition
5. Develop an awareness of the importance of healthy and balanced relationships in everyday life.

Prerequisite: None

Homework: Work will be done in class. Homework is very rare.

Special Projects: Basic Design Notebook and a Wedding Album

Fee: None

Special equipment or materials – None

Course: PARENTING

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Juniors and Seniors

Description: This course is designed to help students examine the responsibilities, satisfactions and stresses of parenthood. Many types of parenting situations are examined. Stress prevention and management and the work of community agencies that help parents deal with various types of parenting crises are emphasized. The course content includes the following duty areas: managing and organizing parenting by applying decision-making and goal-setting skills, discipline, applying the basic principles of the parenting process, practicing health and safety standards as related to parenting, providing experiences which encourage parents and children to maximize resources, encouraging human relations skills in children/adolescents and evaluating impact on parenting of family and career changes. Special attention is given to the needs of teenage parents and to the importance of readiness for parenthood.

Upon completion of the course:

1. Identify and explain the stages of fetal development.
2. Demonstrate an understanding of how the emotional and social development of a child shapes its future.
3. Describe and evaluate factors that are needed for a child to have good intellectual and emotional development and growth.
4. Analyze roles and responsibilities of parenthood.
5. Analyze the impact of personal, family and social development on parenthood.

Prerequisite: None

Special Projects: Participate in *1:1 Mentoring at an Elementary school*.

Fee: None

Course: RESOURCE MANAGEMENT (Meets Consumer Education graduation requirement)

Duration: 1 semester

Required for graduation: Requirement Option

Credit: .5

Who may take the course: Juniors and Seniors

Description: This class focuses on financial literacy. The EverFi Financial Literacy program is incorporated into the curriculum for this class. This is a National Financial Literacy certification program. Those students that pass this program receive a certificate for Financial Literacy. This certificate is a positive on their resumes and college applications. This class covers basic economics: handling checking and savings accounts; understanding and figuring paychecks (gross & net pay, deductions); mortgages, loans & credit; budgeting basics; career goals (knowing what it will take and the means to achieve their goals); insurance (auto, health,

life, home, etc.); investing; retirement; credit scores; consumer protection (understanding and protecting oneself from frauds, scams, identity theft and internet dangers). Students get a job, figure their paychecks and are paid electronically into their on-line banking accounts. They must pay their rent and all of the assorted bills they would have to pay as an independent adult. They must set up their budget, stay within their budget and learn to deal with unexpected expenses. The goal of this class is to prepare students for a solid financially responsible life after high school.

Prerequisite: None

Homework: Minimal

Special Projects: Life Project

Fee: None

Special equipment or materials – None

FOREIGN LANGUAGE

Course: GERMAN I

Duration: 1 year - Instructor permission is REQUIRED to drop the course at the semester. Typically, only students receiving a grade of D or F will be considered.

Required for graduation: No

Credit: 1

Who may take this course: Freshmen, Sophomores, Juniors and Seniors

Description: In the beginning Level I students study the basic vocabulary, grammar structure, and sound system of the language in order to understand, speak, read, and write in German. Authentic resources are used to aid in pronunciation and communication. The culture of the German-speaking people is also studied.

Upon completion of the course:

1. Comprehend the spoken language from vocabulary used in text.
2. Read and understand the language from material of this level.
3. Recognize correct sound patterns.
4. Write exercises manipulating grammatical items studied.
5. Know cultural elements of the German societies.
6. Be able to carry on a conversation within the framework of the vocabulary studied.

Prerequisite: None

Homework: 2 hours per week

Special Projects: Various cultural projects

Fee: None

Special equipment or materials - estimated cost: None

Course: GERMAN II

Duration: 1 year - Instructor permission is REQUIRED to drop the course at the semester. Typically, only students receiving a grade of D or F will be considered.

Required for graduation: No

Credit: 1

Who may take this course: Sophomores, Juniors and Seniors

Description: Second year German continues with the same learning experiences and activities as in German I. The student continues from the terminal point of German I.

Upon completion of the course:

1. Use and understand German in the text.
2. Write with an expanded vocabulary.
3. Read with improved ability.
4. Demonstrate a developing empathy for the German culture.
5. Form questions and answers based on familiar material.
6. Carry on an extended conversation using vocabulary studied.

Prerequisite: Completion of German I with a "C" average or permission of instructor.

Homework: 2 hours per week

Special Projects: Cooking, holiday cards and library research. Various cultural projects

Fee: None

Special equipment or materials - estimated cost: None

Course: GERMAN III

Duration: 1 year - Instructor permission is REQUIRED to drop the course at the semester. Typically, only students receiving a grade of D or F will be considered.

Required for graduation: No

Credit: 1

Who may take this course: Juniors and Seniors

Description: Third year German is continued practice in the basic skills of listening, speaking, reading and writing. Opportunities are given to expand individual interests in reading materials and cultural items. Short stories, plays, essays, poetry and biographies are read, using a varied vocabulary. German is used extensively in class during discussions and role playing. (Art, music, literature, sports, TV and movies are just a few of the topics studied during cultural immersion exercises.)

Upon completion of the course:

1. Use and understand the language and vocabulary used in the text.
2. Speak, read and write with improved ability and expanded vocabulary.
3. Understand and be understood by a native speaker.

Prerequisite: Completion of German I and German II with a "C" average or permission of instructor.

Homework: 2 hours per week

Special Projects: Current events, oral reports and library research

Fee: None

Special equipment or materials - estimated cost: None

Course: GERMAN IV

Duration: 1 year - Instructor permission is REQUIRED to drop the course at the semester. Typically, only students receiving a grade of D or F will be considered.

Required for graduation: No

Credit: 1

Who may take this course: Seniors

Description: Fourth year German is a continuation of the third year work. Third and fourth year classes are usually combined.

Upon completion of the course:

1. Read German with high comprehension.
2. Write with increasing complexity and an expanded vocabulary.
3. Converse in an extended conversation using vocabulary studied.
4. Understand German used in the text and supplemental materials.
5. Translate from English to German to demonstrate grammatical skills.
6. Acquire a greater understanding of the German culture.
7. Formulate questions and answers based on material read or discussed.

Prerequisite: Completion of German I, II, III with a "C" average or permission of instructor.

Homework: 2 hours per week

Special Projects: Oral reports, library research, and several poster projects.

Fee: None

Special equipment or materials - estimated cost: None

Course: SPANISH I

Duration: 1 year - Instructor permission is REQUIRED to drop the course at the semester. Typically, only students receiving a grade of D or F will be considered.

Required for graduation: No

Credit: 1

Who may take this course: Freshmen, Sophomores, Juniors and Seniors

Description: In the beginning Level I students study the basic vocabulary, grammar structure, and sound system of the language in order to understand, speak, read, and write in Spanish. Authentic resources are used to aid in pronunciation and communication. The culture of the Spanish-speaking people is studied.

Upon completion of the course:

1. Comprehend the spoken language from vocabulary used in text.
2. Read and understand the language from material of this level.
3. Recognize correct sound patterns.
4. Write exercises manipulating grammatical items studied.
5. Know cultural elements of the Spanish societies.
6. Be able to carry on a conversation within the framework of the vocabulary studied.

Prerequisite: None

Homework: 2 hours per week

Special Projects: Various cultural projects

Fee: None

Special equipment or materials - estimated cost: None

Course: SPANISH II

Duration: 1 year - Instructor permission is REQUIRED to drop the course at the semester. Typically, only students receiving a grade of D or F will be considered.

Required for graduation: No

Credit: 1

Who may take this course: Sophomores, Juniors and Seniors

Description: Second year Spanish continues with the same learning experiences and activities as in Spanish I. The student continues from the terminal point of Spanish I.

Upon completion of the course:

1. Use and understand Spanish in the text.
2. Write with an expanded vocabulary.
3. Read with improved ability.
4. Demonstrate a developing empathy for the Spanish culture.
5. Form questions and answers based on familiar material.
6. Carry on an extended conversation using vocabulary studied.

Prerequisite: Completion of Spanish I with a "C" average or permission of instructor.

Homework: 1 hour per week

Special Projects: Various cultural projects

Fee: None

Special equipment or materials - estimated cost: None

Course: SPANISH III

Duration: 1 year - Instructor permission is REQUIRED to drop the course at the semester. Typically, only students receiving a grade of D or F will be considered.

Required for graduation: No

Credit: 1

Who may take this course: Juniors and Seniors

Description: Third year Spanish is continued practice in the basic skills of listening, speaking, reading and writing. Opportunities are given to expand individual interests in reading materials and cultural items. Short stories, plays, essays, poetry and biographies are read, using a varied vocabulary. Spanish is used extensively in class during discussions and role playing. (Art, music, dance, literature, sports, TV and movies are just a few of the topics studied during cultural immersion exercises.)

Upon completion of the course:

1. Use and understand the language and vocabulary used in the text.
2. Speak, read and write with improved ability and expanded vocabulary.
3. Understand and be understood by a native speaker.

Prerequisite: Completion of Spanish I and Spanish II with a "C" average or permission of instructor.

Homework: 2 hours per week

Fee: None

Special equipment or materials - estimated cost: Minimal

Course: SPANISH IV

Duration: 1 year - Instructor permission is REQUIRED to drop the course at the semester. Typically, only students receiving a grade of D or F will be considered.

Required for graduation: No

Credit: 1

Who may take this course: Seniors

Description: Fourth year Spanish is a continuation of the third year work.

Upon completion of the course:

1. Read Spanish with high comprehension.
2. Write with increasing complexity and an expanded vocabulary.
3. Converse in an extended conversation using vocabulary studied.
4. Understand Spanish used in the text and supplemental materials.
5. Translate from English to Spanish to demonstrate grammatical skills.
6. Acquire a greater understanding of the Spanish culture.
7. Formulate questions and answers based on material read or discussed.

Prerequisite: Completion of Spanish I, II, III with a "C" average or permission of instructor.

Homework: 2 hours per week

Fee: None

Special equipment or materials - estimated cost: Minimal

HEALTH AND PHYSICAL EDUCATION

Course: HEALTH

Duration: 1 semester

Required for graduation: Yes

Credit: .5

Who may take this course: ALL Freshmen

Description: This course for high school students is planned to help establish sound health habits and attitudes by providing useful information, appropriate for individual and societal health needs now and in the future.

Upon completion of the course:

1. Demonstrate a knowledge of mental health and mental illness.
2. Demonstrate a knowledge of proper nutrition and the possible effect of poor nutrition.
3. Demonstrate a knowledge of different body systems and functions.
4. Demonstrate a knowledge of concerning the effect of tobacco, alcohol and other drugs on health.
5. Demonstrate a basic knowledge of common chronic diseases such as cancer and heart disease.
6. Demonstrate a knowledge of cardiopulmonary resuscitation procedures under the guidelines of the American Red Cross.
7. Demonstrate a basic knowledge of first aid procedures to follow in common first aid emergencies.
8. Demonstrate a very basic knowledge in areas of consumer and environmental health.
9. Demonstrate a knowledge of human sexuality.
10. Better understand self and the importance of and development of self-esteem.

Prerequisite: None

Homework: 1-3 hours per week

Special Projects: Health notebook and American Red Cross CPR training.

Fee: None

Special equipment or materials - estimated cost: \$2 for a loose-leaf notebook.

Course: PHYSICAL EDUCATION

Duration: 1 semester

Required for graduation: Yes

Credit: .5

Who may take this course: Freshmen, Sophomores, Juniors and Seniors

Description: Physical education is required of each student during each semester of enrollment unless the student applies for and receives an exemption during his/her Junior or Senior year. The course provides

students with instruction in a variety of recreational and physical fitness activities aimed at promoting an awareness of positive health-related habits.

Upon completion of the course:

1. Will be able to identify components necessary for a personal physical fitness program.
2. Can demonstrate or identify basic safety practices during participation in physical activities.
3. Be able to describe basic components of selected physical skills.
4. Will be able to describe or demonstrate various skills and activate appropriate ones in developing cardio-respiratory efficiency, flexibility, muscular strength and endurance.
5. Can demonstrate a variety of complex motor activities.
6. Will know criteria for selecting appropriate fitness services and sports products and the safe use of the equipment.

Prerequisite: None

Homework: None

Special Projects: None

Fee: Required: *Lock* (\$5), uniform shirt (\$10), uniform shorts (\$15) and approximately \$8 per semester for bowling.

Special equipment or materials - estimated cost: None

Course: PHYSICAL EDUCATION - STRENGTH TRAINING & CONDITIONING

Duration: 1 semester

Required for graduation: No, PE elective

Credit: .5

Who may take this course: Freshmen, Sophomores, Juniors and Seniors

Description: Physical Education elective designed for any student serious about reaching their physical maximum potential in strength and fitness. Emphasis will be placed on flexibility, agility, plyometrics, weight training and cardio vascular endurance. Students will set goals in all areas and record their individual progress throughout the semester.

Upon completion of the course:

1. Use and understand proper weight lifting technique.
2. Demonstrate a knowledge of various muscles and resistance exercises that would strengthen them.
3. Demonstrate a knowledge of a sound fitness plan.
4. Identify and apply the overload principle.
5. Show improvement in health-related fitness as demonstrated on a pre and post fitness test.

Prerequisite: Student must have a "B" or higher in regular physical education class. Maintain a grade of "B" or better to re-enroll.

Homework: None

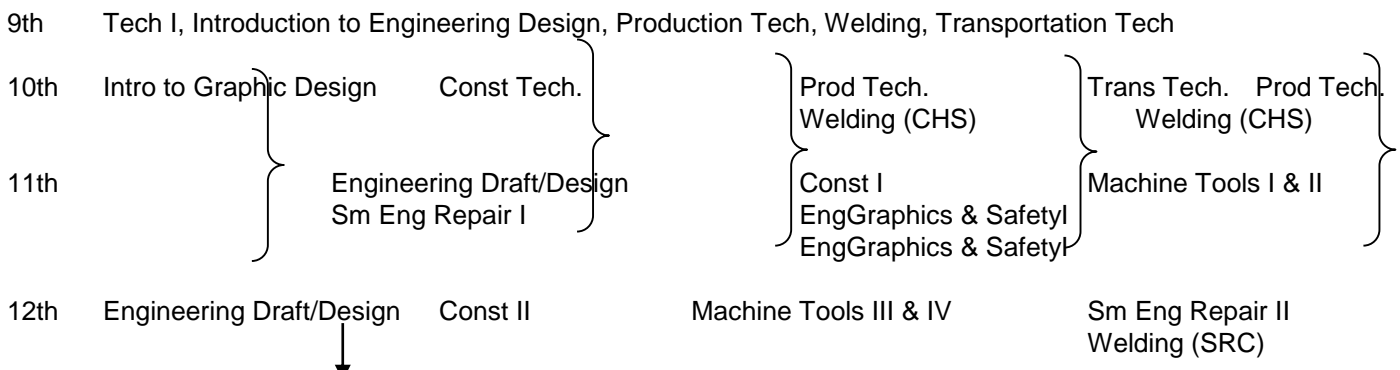
Special Projects: None

Fee: PE shirt, shorts and gym shoes.

Special equipment or materials - estimated cost: None

SEQUENTIAL COURSES FOR INDUSTRIAL TECHNOLOGY DEPARTMENT

Girls and boys are encouraged to take technology classes because of the growing opportunities for employment.



↓		↓	↓	↓
The above classes prepare for careers in . . .				
Drafter	Home Repair	Machinist	Mechanic	Welding Machine Operator
CAD/CAM	Remodeling	Tool & Die Maker	Mechanic Helper	Solderer and Brazier
Plant Layout	Building Contractor	Machine Operator	Garage/Dealer Mech	Cutter
Architect	Carpenter's Helper	Computer Programmer	Service Manager	Welding Inspector
Layout	Construction Worker	Welder	Parts Manager	Pipe Fitter
Tool Design	Building Maintenance	CNC Operator	Salesman	Underwater Welder
Interior Design	Carpenter	Assembler	Heating/A.C.	Welding Sales
Mech. Engineer	Heating/A.C.	Pattern Maker	Brake Technician	Welding Teacher
Circuit Board Designer	Civil Engineer	Steel Fabricator	Body Repair Person	Welding Supervisor
Technology Teacher	Electrician	Mechanical Engineer	Gas Station Manager	Boiler Maker
Theater/Stage Design	Technology Teacher	Manufacturing Tech	Technology Teacher	
Illustrator		Technology Teacher		

Some employers provide on-the-job training, while some occupations require additional formal training. Students interested in pursuing one of the above mentioned careers should visit with the guidance counselors for more information.

The above sequence is flexible: however, Technology I is highly recommended your Freshmen year. Consult your course description booklet for prerequisite courses.

Course: BUILDING TRADES I

Duration: 1 year

Required for graduation: No

Credit: 2

Who may take this course: Juniors and Seniors

Description: This course provides experiences related to the construction of residential buildings and related structure. Planned learning activities will allow students to become knowledgeable of principles and related to masonry, carpentry and finish work. Instruction will include safety principles and practices, recognition of standard lumber sizes, foundation layout methods, building concepts and procedures, local, state and national codes, cost estimating and blueprint reading. The course is designed to foster a more in-depth awareness and understanding of the construction trades. The additional time students spend in class will give them more exposure to career opportunities through an expanded variety of learning activities such as: site preparation, basic foundation layouts, constructing small buildings, installing utilities, finish work and some building maintenance.

Upon completion of the course:

1. Identify various types of hand carpentry tools.
2. Be able to operate most common carpentry portable power tools.
3. Identify wood working machines and safety rules.
4. Understand the local specification code.
5. Identify basic parts of a residential house.
6. Solve minor framing problems.
7. Learn the basic knowledge of carpentry related to plumbing, electrical, masonry and heating fields.
8. Learn the basic to pre-fabrication of home building.
9. Will have OSHA 10 card.

Prerequisite: Passing Construction Tech with a "D" or better.

Homework: OSHA 10 training

Special Projects: None

Fee: Pay for materials used for student's project.

Special equipment or materials - estimated cost: Safety glasses, boots, weather appropriate clothing and proof of insurance. Broken or lost tools must be replaced!

Course: BUILDING TRADES II

Duration: 1 year

Required for graduation: No

Credit: 2

Who may take this course: Juniors & Seniors

Description: This course provides learning experiences related to the construction and repair of building structures and related utilities. Planned learning activities will emphasize the development of more advanced knowledge and skills than those provided in Construction I. Students technical skills experiences will include instruction and activities in safety principles and practices, performing maintenance control functions, joining pipes, building water distribution lines and drains, installing and maintaining plumbing fixtures and systems, installing switch and outlet boxes, light fixtures and service entrances, roughing in and trimming out electrical devices and appliances, preparing foundations and footings, constructing residential chimneys and fireplaces, laying, jointing and pointing brick, and advanced building and construction methods and codes. All learnings experiences are designed to allow the student to acquire job-entry skills and knowledge. These job-entry skills are all reinforced in the construction of a building.

Upon completion of the course:

1. Identify various types of hand carpentry tools.
2. Be able to operate most common carpentry portable power tools.
3. Identify wood working machines and safety rules.
5. Understand the local specification code.
6. Identify basic parts of a residential house.
7. Solve minor framing problems.
8. Learn the basic knowledge of carpentry related to plumbing, electrical, masonry and heating fields.
9. Learn the basic to pre-fabrication of home building.

Prerequisite: Passing Building Trades I

Homework: OSHA 10 training

Special Projects: Participate in a Work Base Learning experience.

Fee: Pay for materials used for student's project.

Special equipment or materials - estimated cost: Safety glasses, boots, weather appropriate clothing and proof of insurance. Broken or lost tools must be replaced!

Course: CONSTRUCTION TECHNOLOGY

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Sophomores, Juniors and Seniors

Description: This course is designed to foster an awareness and understanding of construction trades. Through a variety of learning activities, students are exposed to many career opportunities in the building fields, including site preparation, foundations, building structures and finishing and servicing structures.

Upon completion of the course:

1. Safely use and operate power construction equipment.
2. Plan and construct small projects.
3. Solve basic home maintenance problems.
4. Identify basic type of wood joints.
5. Complete a bill of materials for a project.
6. Identify and use most common hand woodworking tools.
7. Identify and demonstrate basic construction procedures.
8. Solve basic construction mathematical problems.

Prerequisite: Technology I with a "C" or better or Teacher approval.

Homework: Varies

Special Projects: Projects are required

Fee: Cost of materials used.

Special equipment or materials - estimated cost: \$3 - \$8 for safety glasses. Proof of insurance is required. Lost tools must be replaced.

Course: ENGINEERING DRAFTING AND DESIGN

Duration: 1 year

Required for graduation: No

Credit: 1

Who may take this course: Sophomores, Juniors & Seniors

Description: This course is designed to prepare students who have an interest in a career in engineering, drafting/CAD/CAM design, technical illustration, computer animation, architecture, interior design, machine tool design, industrial management, science and industrial technology. Student will be introduced to two-dimensional drafting software and introduced to three-dimensional parametric modeling.

Upon completion of this course:

1. Interpret and understand 2D and pictorial designs.
2. Draw, edit, and modify various drawings and drawing files.
3. Develop and use symbol libraries.
4. Plot, import and export drawings.
5. Create individual 3D parametric models.
6. Create simple residential floor plans.
7. Use software to design, build, test, and evaluate various structures.

Prerequisite: A "B" or better in Communication Technology, or a "C" or better in 2D or teacher permission.

Homework: Varies

Special Projects: Yes

Fee: None

Special equipment or materials - estimated cost: Computer disk.

Course: ENGINEERING DRAFTING AND DESIGN II

Duration: 1 year

Required for graduation: No

Credit: 1.0

Who may take this course: Sophomores, Juniors & Seniors

Description: This course furthers the learning and skills begun in Engineering Drafting and Design I. This course focuses primarily on using the 3D parametric modeling software to design advanced parts, multiple part assemblies, and three-dimensional buildings.

Upon completion of this course:

1. Develop and create advanced 3D component files.
2. Visualize and build multiple component 3D projects.
3. Design and produce customized products.
4. Analyze 3D components to determine stress and displacement.
5. Produce full scale residential house plans.
6. Render complete virtual house tours.

Prerequisite: A "B" or better in Computer Aided Drafting or teacher permission.

Homework: Varies

Special Projects: Yes

Fee: None

Special equipment or materials - estimated cost: Computer disk.

Course: ENGINEERING GRAPHICS AND SAFETY (DUAL CREDIT COURSE)

College Course: HS110 Safety and the Workplace and GT 103 Engineering Graphics

Duration: 1 semester

Required for graduation: No

Credit: .5 High School and 3 Hours College

Who may take this course: Juniors and Seniors

Description: This is a course designed to foster an awareness and understanding of print reading and safety in the workplace. Through a variety of learning activities, students are exposed to engineering drawings and workplace safety issues.

Upon completion of the course:

1. Be able to add, subtract, multiply and divide fractions, decimals, and metric units
2. Determine the location, length, size, and contour of welds specified on a drawing as well as the type of filler metals and welding procedures required.
3. Be familiar with the different set-up tools and their applications.

4. Be aware of skills and knowledge required by metal working trades and occupations.
5. Apply safety procedures in the work area.
6. To understand principles, responsibilities, and techniques for compliance in a safety program.
7. To have the working knowledge of the American Welding Society Symbols for welding.
8. Explore the welding field.

**This class will meet requirements towards the Machine Tools Operations Certificate and the Welding Certificate at Spoon River College.

Prerequisite: Pass placement test at required level and Welding or Machine Tools 1 or Teacher approval.

Homework: Varies

Special Projects: Yes

Fee: SRC per credit hour charges apply, Cost of materials used.

Special equipment or materials – None

Course: INTRODUCTION TO ENGINEERING DESIGN (PLTW)

Duration: 1 year

Required for graduation: No

Credit: 1

Who may take this course: Freshmen and Sophomores

Description:

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software, and use an engineering notebook to document their work.

This course consists of four areas of study: Production Technology, Transportation/Energy Utilization Technology, Communication Technology and Construction Technology. Students will explore concepts by completing activities at learning stations covering resources, technical processes, industrial applications, technological impact, as well as career information related to the areas of study. After development of basic skills through the activities, students will participate in a group project which will apply the principles used by industry in the development of consumer products. This activity will include research and development, marketing, production, planning/processes and distribution. The activities in Technology I will combine the benefits of multimedia teaching and learning through the use of books, videos, computers and hands-on laboratory experience. All students must pass Safety Tests.

Upon completion of the course:

1. Know the basic concepts of each area.
2. Understand the job opportunities of each area.
3. Identify and use the common tools used in these areas.
4. Construct projects in certain areas.

Prerequisite: None

Homework: Varies

Special Projects: Yes

Fee: Cost for materials used - approximately \$20-\$30.

Special equipment or materials - estimated cost: \$5 - \$10 for safety glasses. Proof of insurance is required. Broken or lost tools must be replaced!

Course: INTRODUCTION TO GRAPHIC DESIGN

Duration: Full Year

Required for graduation: No

Credit: 1.0

Who may take this course: Freshmen, Sophomores, Juniors and Seniors

Description: Intro to Graphic Design is a yearlong, project-based class where students will develop skills in graphic design, print production, and interactive design using industry-standard tools. Students will explore graphic design, photography, print and layout design, interactive design and production. Each project adds more challenging skills to foundation abilities. To simulate a professional work environment, students will gradually migrate design work from an individual process to a group process, focused on projects of all variations. The class structure is primarily studio-oriented and project-based, although there may be readings

assigned and some required writing. The hands-on “doing” of design will be supplemented with lectures, demonstrations, video, online research and critiques.

Prerequisite: none

Homework: Extra lab time may be required for some projects.

Fee: None

Course: MANUFACTURING I

Duration: 1 year

Required for graduation: No

Credit: 2 (high school) and 6 semester hours at Spoon River College

Who may take this course: Juniors and Seniors

Description: This course provides a study of two major areas of industry (manufacturing and production) students will be introduced to efficient use of tools, techniques, resources and production systems used to produce goods. Students will learn about industry as an economic institution to organize and use resources to produce goods and services. Students will learn about production processes which include casting and molding metal, precision machining and welding methods. Students will have the opportunity to construct projects from raw materials. Students will operate different kinds of metal machine tools, and use arc, mig and gas welders. This course will allow additional time for the students to perform recordkeeping activities, maintenance of tools and equipment activities related to the manufacturing area.

Upon completion of the course:

1. Operate lathes, drill press, milling machines, grinders and cut-off saws.
2. Observe safety procedures in all areas of work.
3. Apply the principles of precision measurement.
4. Apply principles of precision machining.
5. Read and interpret basic blueprints.
6. Apply principles of new technology.
7. Fabricate projects.
8. Operate a gas, arc, tig and mig welding machine.
9. Will have OSHA 10 card.

Prerequisite: A "C" or better average in Production Technology or teacher permissions.

Homework: 2 hours per week

Special Projects: Approved projects. Participate in a Work Base Learning experience.

Fee: Cost of materials used.

Special equipment or materials - estimated cost: \$3 - \$8 for safety glasses. Proof of insurance is required.

Provide some welding equipment: boots, sleeves, gloves. Broken or lost tools must be replaced!

Course: MANUFACTURING II

Duration: 1 year

Required for graduation: No

Credit: 2 (high school) and 6 semester hours at Spoon River College

Description: This course will offer experiences that expand upon competencies achieved during Manufacturing I. The class is designed to give the students the opportunity to specialize in specific areas of manufacturing such as: machine tool set-up and operation, welding, quality control, computer numerical control programming and automatic machine set-up. This will be possible because of the additional class time students have due to the additional class period. Course content will include the following areas: CNC programming, advanced machine set-up and operation, computer numerical control machining, and maintenance and repair of machinery

Upon completion of the course:

1. Apply all operations on lathes.
2. Cut gears on the milling machine.
3. Describe abrasives and grinding wheel.
4. Apply methods of grinding metal.
5. Heat treat metal.
6. Write computer numerical control programs.
7. Explore employment opportunities in machining occupations.

8. Use CNC equipment.

9. Operate welding machines.

Prerequisite: A "C" or better average in Manufacturing I or teacher permission.

Homework: Varies

Special Projects: Approved projects. Participate in a Work Base Learning experience.

Fee: Cost of materials used.

Special equipment or materials - estimated cost: \$3 - \$8 for safety glasses. Proof of insurance is required.

Provide some welding equipment: boots, sleeves, gloves. Broken or lost tools must be replaced!

Course: MOBILEMAKERS

Duration: Full Year

Required for graduation: No

Credit: 1.0

Who may take this course: Sophomores, Juniors, Seniors

Description: Over the course of a year, students will learn professional software using the Swift programming language. Beginning with the fundamentals, students are guided through the development of a variety of apps of growing complexity, culminating in the development of a custom app of their own design. While geared toward the beginning programmer, this course requires a high level of dedication in order to successfully master the challenging concepts that are covered.

Prerequisite: None

Homework: Extra lab time may be required.

Special Projects: Create 7-8 apps for iOS

Fee: None

Special equipment or materials – estimated cost: None

Course: PRODUCTION TECHNOLOGY

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Sophomores, Juniors and Seniors

Description: This is a course designed to foster an awareness and understanding of manufacturing. Through a variety of learning activities, students are exposed to many career opportunities in the field of metal working and industrial production. Experiences with materials, processes, tools, equipment, safety procedures and welding will be covered.

Upon completion of the course:

1. Operate lathes, drill press, milling machines, grinders and cut-off saws.
2. Use precision measuring tools.
3. Layout, cut and fabricate a project.
4. Be aware of skills and knowledge required by metal working trades and occupations.
5. Apply safety procedures in the work area.
6. Explore the welding field.

Prerequisite: Passing Technology I with a "C" or better or teacher approval.

Homework: Varies

Special Projects: Class production projects

Fee: Cost of materials used.

Special equipment or materials - estimated cost: \$3 - \$8 for safety glasses. Proof of insurance is required.

Broken or lost tools must be replaced!

Course: SMALL ENGINE REPAIR I

Duration: 1 year

Required for graduation: No

Credit: 2

Who may take this course: Sophomores, Juniors & Seniors

Description: Small engine repair is an instructional program that prepares individuals to troubleshoot, service, and repair a variety of small internal-combustion engines, involving both two and four cycle engines used on portable power equipment.

Upon completion of the course:

1. Understand safety procedures in the lab.
2. Identify and use hand tools.
3. Troubleshoot problems and make repairs.
4. Identify and describe the parts of an engine.
5. Make precision measurements.
6. Demonstrate knowledge of a variety of small engines.

Prerequisite: Transportation Technology or teacher permission.

Homework: Varies

Special Projects: Labs

Fee: None

Special equipment or materials - estimated cost: \$3 - \$8 for safety glasses. Proof of insurance is required.

LOST TOOLS MUST BE REPLACED! Old clothes to wear in lab. Have small engines to work on.

Course: SMALL ENGINE REPAIR II

Duration: 1 year

Required for graduation: No

Credit: 2

Who may take this course: Juniors & Seniors

Description: This course will be designed to provide the student with the opportunity to complete specialized study in the service and repair of small engines and related systems. Some of these areas may include chain saw repair, snowblower repair, snowmobile repair, generator repair, motorcycle repair, etc.

Upon completion of the course:

1. Understand safety procedures in the lab.
2. Troubleshoot problems and make repairs.
3. Make precision measurements.
4. Troubleshoot electrical and starting systems.
5. Troubleshoot ignition systems.
6. Troubleshoot and service drive train and chassis systems.
7. Explore employability skills.

Prerequisite: Small Engine Repair I or teacher permission.

Homework: Varies

Special Projects: Labs

Fee: None

Special equipment or materials - estimated cost: \$3 - \$8 for safety glasses. Proof of insurance is required.

LOST TOOLS MUST BE REPLACED! Old clothes to wear in lab. Have small engines to work on.

Course: TECH I

Duration: 1 year

Required for graduation: No

Credit: 1

Who may take this course: Freshmen, Sophomores, Juniors & Seniors

Description: This course consists of four areas of study: Production Technology, Transportation/Energy Utilization Technology, Communication Technology and Construction Technology. Students will explore concepts by completing activities at learning stations covering resources, technical processes, industrial applications, technological impact, as well as career information related to the areas of study. After development of basic skills through the activities, students will participate in a group project which will apply the principles used by industry in the development of consumer products. This activity will include research and development, marketing, production, planning/processes and distribution. The activities in Technology I will combine the benefits of multimedia teaching and learning through the use of books, videos, computers and hands-on laboratory experience. All students must pass Safety Tests.

Upon completion of the course:

1. Know the basic concepts of each area.
2. Understand the job opportunities of each area.
3. Identify and use the common tools used in these areas.
4. Construct projects in certain areas.

Prerequisite: None

Homework: Varies

Special Projects: Yes

Fee: Cost for materials used - approximately \$20-\$30.

Special equipment or materials - estimated cost: \$5 - \$10 for safety glasses. Proof of insurance is required.

Broken or lost tools must be replaced!

Course: TRANSPORTATION TECHNOLOGY

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Sophomores, Juniors and Seniors

Description: A classroom theory and laboratory course covering transportation systems which handle both people and other materials. Aspects of these systems such as design, principles of testing and principles of operation will be studied. Nine weeks will be spent studying and working on small gasoline powered engines.

Upon completion of the course:

1. Design, test and race a prototype car.
2. Design, build and test a prototype aircraft.
3. Understand material handling systems.
4. Understand design principle for a body moving through an environment.
5. Identify and describe the parts of an engine.
6. Understand basic electricity as applied to transportation systems.
7. Disassemble, assemble and tune an engine.
8. Make precision measurements.
9. Trouble shoot problems and make repairs.
10. Identify and use hand tools.
11. Understand safety procedures in the lab.

Prerequisite: Passing Technology I with a "C" or better or teacher approval

Homework: Varies

Special Projects: Lab projects

Fee: Cost of materials used.

Special equipment or materials - estimated cost: \$3 - \$8 for safety glasses. Proof of insurance is required.

Broken or lost tools must be replaced!

Course: WELDING

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Sophomores, Juniors and Seniors

Description: Students will be introduced to the theory, principles and applications of modern welding processes. The class will include fundamentals and applications and safety of shielded arc welding. Welding processes and techniques will be covered for flat, horizontal, vertical and overhead positions. Students will also develop proficiency in the use of related hand tools, equipment and measuring tools used in the field of welding.

Upon Completion of this course:

1. Demonstrate appropriate safe work habits when operating Oxyfuel and electric welding equipment and function safely in a welding environment
2. Perform welding operations with appropriate process on various metals and situations
3. Perform metal layout processes
4. Display manipulative skills with various welding processes to assure adequate weld integrity and appearance

5. Know basics fundamentals of math and measurements
6. Demonstrates professional and ethical work behavior
7. Be able to weld in (flat, horizontal, vertical and overhead)
8. Be able to cut metals using (Oxyfuel and, Plasma Arc) cutting process
9. Use varies hand and power tools safely

Prerequisite: Passing Technology I with a "C" or better or teacher approval

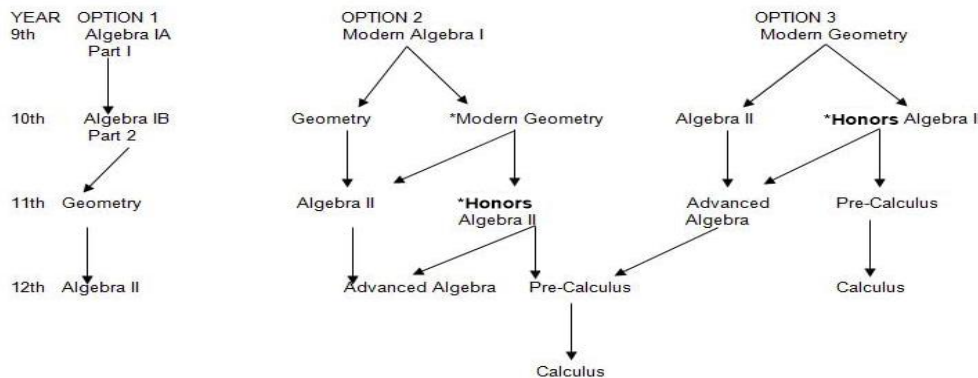
Homework: Some

Special Project: Varies

Fee: \$10

Special Equipment or materials- estimated cost: \$3-\$8 for safety glasses. Proof of insurance is required. Provide some welding equipment: boots, jacket and gloves. Broken or lost tools must be replaced!

Math



*Option 2 ~ if a student wants to complete through Calculus they will have to take both Modern Geometry and Modern Algebra II during their 10th grade year (with department approval only)

**Option 3~Algebra I is offered at IMS for incoming Freshmen who have the goal of completing Dual Credit Calculus their Senior year. (3 credits~ Freshmen, Sophomore and Junior years required)

Course: ALGEBRA IA (Co-taught)

Duration: 1 year

Required for Graduation: Depends on course sequence

Credit: 1

Who may take this course: Freshman (based on 8th grade teacher recommendation only)

Description: This course is for the student who wants a basic understanding of some Algebraic concepts. The emphasis will be simplifying algebraic expressions and setting up and solving basic algebraic equations.

Upon completion of this course:

1. Add, subtract, multiply and divide positive and negative numbers.
2. Simplify algebraic expressions.
3. Solve equations using algebraic properties.
4. Solve word problems using algebraic equations.
5. Add, subtract, multiply and divide polynomials.
6. Factor polynomial expressions.
7. Simplify algebraic fractions.

Prerequisite: 8th grade teacher recommendation

Homework: 2 – 4 hours per week
Special Projects: Various
Fee: None
Special equipment or materials: scientific calculator \$12-\$25

Course: Technical Math
Duration: Semester
Required for Graduation: Depends on course sequence
Credit: 1

Who may take this course: Depends on course sequence and if student has met pre-requisites.
Description: This course is for the student who wants a basic understanding of some Algebraic concepts. The emphasis will be algebraic functions, linear equations, inequalities, quadratic functions, numbering systems, percentages, ratio and proportion, exponentials, and Metric & English measure. Algebra and Geometry applications of these topics are considered. Development of problem-solving skills is a primary objective of the course.

Prerequisite: Algebra I A ~ classroom or recovery credit prior to enrollment and enrolled in industrial tech/consumer science course pathways

Homework: 2 – 4 hours per week
Special Projects: Various
Fee: Optional semester Dual Credit: cost of 3 semester hours at Spoon River College (approximately \$250 - \$300) and cost of textbook (approximately \$90)
Special equipment or materials: scientific calculator \$12-\$25

Course: GEOMETRY
Duration: 1 year
Required for graduation: Depends on course sequence
Credit: 1

Who may take this course: Depends on course sequence and if student has met pre-requisites.
Description: A hands-on approach to geometry stressing solutions to problems involving lines, triangles, quadrilaterals and other geometric figures with little emphasis on proofs.

Upon completion of the course:

1. Recognize basic figures of geometry.
2. Identify and prove congruency of triangles.
3. Recognize and label quadrilaterals and find area and perimeter.
4. Use knowledge of right angles.
5. Know some properties of circles.
6. Construct basic plane figures with compass and straight edge.

Prerequisite: Algebra I ~ classroom or recovery credit prior to enrollment.

Homework: 2 -3 hours per week
Special Projects: Various
Fee: None
Special equipment or materials - scientific calculator \$12-\$25

Course: ALGEBRA II WITH TRIGONOMETRY
Duration: 1 year
Required for graduation: Depends on course sequence
Credit: 1

Who may take this course: Depends on course sequence and if student has met pre-requisites.
Description: Algebra II includes a review of the skills from Algebra I, essential topics for a second year course and basic introduction to trigonometry. Emphasis is on equation solving and its application to word problems. Upon completion of this course a student will be equipped to pursue additional education in a vocational, technical or non-mathematical area of study. This course teaches most of the basic skills required for college algebra.

Upon completion of the course:

1. Perform operations of Algebra, recognize properties of real number system.

2. Solve linear, quadratic and higher degree equations.
3. Apply algebra methods in solving word problems.
4. Simplify polynomials.
5. Solve and graph solutions to systems of equations and inequalities.
6. Solve problems involving exponential and logarithmic equations.
7. Recognize and work with basic trigonometry and use these skills to solve related problems.

Prerequisite: Algebra I and Geometry ~classroom or recovery credit prior to enrollment.

Homework: 4 hours per week

Special Projects: Various

Fee: None

Special equipment or materials - scientific calculator \$12-\$25

Course: MODERN ALGEBRA I

Duration: 1 year

Required for graduation: Depends on course sequence

Credit: 1

Who may take this course: Depends on course sequence and if student has met pre-requisites.

Description: This course is for the student who wants a thorough understanding of algebra. The emphasis is on setting up and solving various types of equations. This course is geared toward students that plan to obtain post-secondary schooling.

Upon completion of the course:

1. Add, subtract, multiply and divide positive and negative numbers.
2. Simplify algebraic expressions.
3. Solve equations using algebraic properties.
4. Add, subtract, multiply and divide polynomials.
5. Factor expressions.
6. Solve fractional equations.
7. Solve inequalities.
8. Graph linear equation.
9. Simplify radicals.
10. Solve systems of equations.
11. Solve quadratic equations.
12. Set up and solve word problems.

Prerequisite: None

Homework: 2-4 hours per week

Special Projects: Various

Fee: None

Special equipment or materials - scientific calculator \$12-\$25

Course: MODERN GEOMETRY

Duration: 1 year

Required for graduation: Depends on course sequence

Credit: 1

Who may take this course: Depends on course sequence and if student has met pre-requisites. **Sophomore ~who want to double up on math classes to get to Calculus as a Senior will need to complete a request application that will be reviewed and approved by the Math department. Applications will need to be submitted and approved PRIOR to scheduling dual classes.**

Description: The study of the relationships between lines, points, triangles, rectangles, circles and other geometric figures. Introduces logic through proofs using postulates and theorems

Upon completion of the course:

1. Recognize basic figures of geometry.
2. Write direct and indirect proofs.
3. Identify and prove congruency of triangles.
4. Define quadrilaterals and find areas and perimeters.
5. Use knowledge of right angles and trigonometry functions.

6. Know the properties of circles.
7. Construct plane figures with compass and straight edge.
8. Find surface area and volume of solids.
9. Recognize various transformations in coordinate graphing.

Prerequisite: "B" or better in Modern Algebra I or a "C" with department recommendation.

Homework: 2-3 hours per week

Special Projects: Various

Fee: None

Special equipment or materials - scientific calculator \$12-\$25

Course: HONORS ALGEBRA II WITH TRIGONOMETRY

Duration: 1 year

Required for graduation: Depends on course sequence

Credit: 1

Who may take this course: Depends on course sequence and if student has met pre-requisites.

Description: Modern Algebra II continues the study of essential algebra topics at an advanced level. It introduces topics such as logarithms, trigonometry, and conic equations. This course is necessary for anyone entering mathematics or a related area in college. Emphasis is on a practical application of algebraic theory.

Upon completion of the course:

1. Identify and use properties of real number systems.
2. Solve linear, quadratic and higher degree equations.
3. Apply algebra methods in solving word problems.
4. Simplify polynomials and work with polynomial functions.
5. Solve and graph solutions to systems of equations and inequalities.
6. Using matrices to solve systems of equations.
7. Perform operations with complex numbers.
8. Solve problems involving logarithms and exponential functions.
9. Use trigonometry to solve problems.
10. Use and apply conic functions.

Prerequisite: Modern Algebra I, Modern Geometry with a "B" or better or recommendation from Math Department.

Homework: 5 hours per week

Special Projects: Various

Fee: None

Special equipment or materials -scientific or graphing calculator \$12 - \$85

Course: ADVANCED ALGEBRA (Transitional)

Duration: 1 year

Required for graduation: Depends on Course Sequence

Credit: 1

Who may take this course: Depends on course sequence and if student has met pre-requisites.

Description: Advanced Algebra will emphasize the applications of mathematical concepts covered in previous math courses. Upon completion of this course, a student will be equipped to pursue additional education in a vocational, technical or non-mathematical area of study.

Upon completion of the course:

1. Simplify algebraic expressions ranging from the simple to the complex.
2. Graph a variety of functions and inequalities.
3. Apply his/her knowledge of algebra to solve problems.
4. Solve linear, quadratic and systems of equations.
5. Use the laws of exponents and logarithms to aid in solving equations.
6. Use trigonometric functions to solve related problems.

Prerequisite: Completion of Algebra II OR Department recommendation ONLY for students that have completed Modern Algebra II.

Homework: 3-5 hours per week

Special Projects: Various

Fee: None

Special equipment or materials -scientific or graphing calculator-\$12 - \$85.

Course: PRE-CALCULUS (Semester 1~ College Alg SRC MAT 125 & Semester 2~ Trigonometry SRC MAT 126)

Duration: 1 year

Required for graduation: Depends on Course Sequence

Credit: $\frac{1}{2}$ credit per semester

DUAL CREDIT OPTION: Semester 1 of Pre-Calculus would be 3 credits earned as “College Algebra: MAT125” at SRC and semester 2 would be 3 credits earned as “Trigonometry: MAT126” at SRC.

Who may take this course: Depends on course sequence and if student has met pre-requisites.

Description:

Semester 1: Topics taught include linear and quadratic functions, higher-degree polynomial and rational function, combinations of functions, inverse functions, graphs and graphical transformations, exponential and logarithmic functions, circles, complex numbers, systems of equation and the Binomial Theorem.

Semester 2: Topics taught include trigonometric functions and applications, graphing trigonometric functions, inverse trigonometric functions, trig identities, simplifying trig expressions, solving trig equations, the Laws of Sine and Cosine, areas of triangles, polar coordinates, vectors and De Moivre’s theorem.

Upon completion of the course:

1. Apply algebra knowledge to solve real world problems.
2. Graph various two variable equations and determine pertinent information about those graphs.
3. Solve exponential equations.
4. Solve logarithmic equations.
5. Apply trigonometry to solve real world problems.
6. Solve and graph trigonometric equations.
7. Calculate the probability of a given event occurring.

Pre-requisite: This class requires a C or better in Modern Algebra 2 or completion of Advanced Algebra. Dual Credit option requires minimum SAT / Accuplacer score.

Homework: 4-5 hours per week

Special Projects: Various

Fee: Cost of 3-6 semester hours at Spoon River College (approximately \$250 - \$500)

Special equipment or materials-scientific calculator \$12 -\$25, students who will be taking further math courses in college should consider buying a graphing calculator - \$85 - \$125

Course: COLLEGE CALCULUS (SRC~MAT 151)

Duration: 1 year

Required for graduation: No

Credit: 1

DUAL CREDIT OPTION: 5 semester hours at Spoon River College

Who may take this course: Depends on course sequence and if student has met pre-requisites.

Description: The study of the derivative and integral of elementary functions with applications and analytic geometry.

Upon Completion of this course:

1. Identify, evaluate, graph, and analyze functions (including logarithmic and exponential) and be able to combine any two functions to find composite function.
2. Determine the existence of a limit and evaluate a limit.
3. Understand and explain the concepts of continuous and differentiable functions.
4. Use the definition of the derivative to find derivatives of functions.
5. Find derivatives of functions such as polynomial, rational, trigonometric, exponential and logarithmic functions using rules of differentiation such as the power rule, the product rule, the quotient rule, and the chain rule.
6. Differentiate implicitly
7. Apply derivatives to solving problems such as finding equations of tangent lines, locating critical points, and solving word problems involving related rates and relative extrema.
8. Identify one-to-one functions and find the inverses of such functions.

9. Use derivatives to determine where a function is increasing, decreasing, concave up, and concave down.
10. Use the first and second derivative tests to find all relative and/or absolute extrema, and be able to identify points of inflection.
11. Apply derivatives to solving word problems involving the maximization or minimization of functions.
12. Use Newton's Method to find zero of a function and solve equations.
13. Understand and apply Rolle's Theorem and the Mean-Value Theorem.
14. Understand and apply the Fundamental Theorem of Calculus.
15. Evaluate definite and indefinite integrals with and without substitution, and be able to apply integration to solving word problems.
16. Find the area under a curve and between two curves using integration and/or numerical approximations involving sums of areas of rectangles.
17. Use integration to find volumes and surface areas of objects formed by revolving planar regions around the x and y axes, and also to find the arc length along a curve.

Prerequisite: An "A" or "B" in Pre-Calculus, minimum SAT / Accuplacer score

Homework: 4-6 hours per week

Special Projects: Various

Fee: Cost of 5 semester hours at Spoon River College (approximately \$350 - \$450) and cost of textbook (approximately \$90)

Special equipment or materials - scientific calculator \$12 -\$25, students who will be taking further math courses in college should consider buying a graphing calculator - \$85 -\$12

Course: COLLEGE Statistics (SRC Stats 132)

Duration: Semester

Required for graduation: No

Credit: .5

DUAL CREDIT OPTION: 3 semester credit hours at Spoon River College

Who may take this course: Senior Only~ Depends on course sequence and if student has met pre-requisites.

Description:

From the Illinois transfer website: "This course focuses on statistical reasoning and the solving of problems using real-world data rather than on computational skills. The use of technology-based computations (more advanced than a basic scientific calculator, such as graphing calculators with a statistical package, spreadsheets, or statistical computing software) is required with an emphasis on interpretation and evaluation of statistical results. Topics must include data collection processes (observational studies, experimental design, sampling techniques, bias), descriptive methods using quantitative and qualitative data, bivariate data, correlation, and least squares regression, basic probability theory, probability distributions (normal distributions and normal curve, binomial distribution), confidence intervals and hypothesis tests using p-values.

Prerequisite: A student in this course should be college-ready in mathematics" –

This is an introductory course in statistics taught at Canton High School for dual credit through Spoon River College. In this course students will learn about descriptive methods (frequency distributions, graphing, and measures of location and variation), basic probability theory (sample spaces, counting, factorials, combinations, permutations, and probability laws), probability distributions (normal distributions and normal curve, binomial distribution, and random samples and sampling techniques), statistical inference (estimation, hypothesis testing, t-test and chi-square test, and errors), and correlation and regression.

Prerequisite: Seniors ONLY, who has completed one semester of Pre-Calculus or Advanced Algebra with a C or better and minimum SAT / Accuplacer score

Homework: 4-6 hours per week

Special Projects: Various

Fee: Cost of 3 semester hours at Spoon River College (approximately \$250 - \$300) and cost of textbook (approximately \$90)

Special equipment or materials - estimated cost: \$12 - \$25 for scientific calculator.

Course: Applied Mathematics (SRC GT 150)

Duration: Semester

Required for graduation: Depends on course sequence.

Credit: .5

DUAL CREDIT OPTION: 3 semester credit hours at Spoon River College

Who may take this course: Depends on course sequence and if student has met pre-requisites. Option 2 and Option 3 students see industrial tech department for pre-requisite details.

Examines topics in numbering systems, percentages, ratio and proportion, exponentials, and metric and English measure. Algebra and geometry applications of these topics are considered. Development of problem-solving skills is a primary objective of the course.

Prerequisite:

Homework: 4-6 hours per week

Special Projects: Various

Fee: Cost of 3 semester hours at Spoon River College (approximately \$250 - \$300) and cost of textbook (approximately \$90)

Special equipment or materials - estimated cost: \$12 - \$25 for scientific calculator.

MUSIC

Course: COLOR GUARD

Duration: 1st Quarter

Required for graduation: No

Credit: .25

Who may take this course: Freshmen, Sophomores, Juniors and Seniors

Description: The Color Guard performs with the marching band, providing visual support by marching, dancing and utilizing various hand-held equipment. Most Guard members will have Study Hall during the band period second quarter. Attendance at weeklong band camps in June and August, and weekly evening rehearsals are a required part of this course. Participation is permitted by audition only.

Upon completion of the course:

1. Function as a member of a performing group.
2. Perform in public.
3. Developed basic movement and equipment skills through fundamental studies and working on repertoire for marching shows.
4. Understand basic aspects of performance observation and analysis.
5. Survey a variety of visual art forms, shape, color, and movement

Prerequisite: Members are chosen by audition in the spring before the school year in question.

Homework: Practice as necessary to perform music.

Special Projects: Evening/Weekend Rehearsals, Competitions, and additional performances

Fee: Band fee as prescribed by the school district.

Special equipment/materials: \$25 Flag/Accessory Fee, \$30 Shoe fee, \$150 Uniform fee, proper clothing (athletic clothes and shoes), Dot Books, Black and White Electrical Tape

Course: CONCERT BAND

Duration: Full Year

Required for graduation: No

Credit: 1.0

Who may take this course: All Grade Levels

Description: Concert Band is for high school instrumentalists who are continuing to develop technique and mastery of one's instrument. Music ranges from medium-easy to medium-advanced difficulty. All band members are in one of three groups at Canton High School, either the Concert Band, Symphonic Band, or Wind Ensemble. Students must audition to become a member of any group. All bands rehearse and perform a variety of wind ensemble literature throughout the semester. All band members are required to participate in marching band and play in pep band as well, unless another school activity conflicts with the pep band schedule (i.e. cheerleading, basketball). Members of the concert band will also perform at the Spring Band Concert. Students have the opportunity to perform at the state solo/ensemble contest as well.

Upon completion of course:

1. Function as a member of a performing group.
2. Perform as a musician in public.

3. Learn intermediate musical techniques.

4. Improve music reading skills.

5. Perform medium-easy to medium-advanced concert band music.

Prerequisite: Previous playing experience or approval of band director. Players must audition to become a member of the Concert Band.

Homework: Practice instrument to perform with the band. Prepare for written/playing tests as needed. Participate in all after school marching band practices.

Special projects: Marching Band Competitions, Band Concerts and any additional performances.

Fee: None

Special equipment/materials: Student must have his/her own instrument accompanied by music supplies (reeds, oils, sticks, etc.) School instruments will only be provided on an individual basis and with approval of director.

Course: CONCERT CHOIR

Duration: 1 year

Required for graduation: No

Credit: 1

Who may take this course: Freshmen, Sophomores, Juniors and Seniors

Description: Concert Choir is designed for any student who wishes to sing in a mixed chorus with four parts (soprano, alto, tenor and bass). The class will focus on basic music skills as well as basic vocal technique.

Students will study and learn to sing in a variety of languages and styles of music. Music selected for this class will be everything from classic to pop and from the 16th century to the 20th century. Concert Choir performs several times throughout the year.

Upon completion of the course:

1. Function as a member of a performing music ensemble.
2. Read music in the treble and bass clefs.
3. Improve sight-singing/music reading skills.
4. Demonstrate proper singing posture.
5. Use proper breath support and control.
6. Use proper diction as it applies to singing in a variety of languages.
7. Perform in college or university chorus.

Prerequisite: None

Homework: Practice as necessary to perform music; occasional other assignments.

Special Projects: All public performances and optional solo and ensemble/organization contest.

Fee: None

Special equipment or materials - estimated cost: None

Course: JAZZ BAND

Duration: 1 semester

Required for graduation: No

Credit: .50

Who may take this course: Band members who have auditioned to participate.

Description: The Canton High School Jazz Ensemble is an "early-bird" class which begins in the late Fall.

Students in the ensemble will study the style of jazz and being to learn improvisation techniques which will lead them into performance opportunities. Membership is limited to students who have auditioned for placement.

The class will be held during the "early-bird" period. After-school rehearsals will be scheduled as well.

Upon completion of this course:

1. Learn basics of big band style jazz performance.
2. Learn basics to jazz improvisation.
3. Perform as a musician in public.
4. Exposure to various jazz styles.

Prerequisite: All members must audition.

Homework: Practice to perform at highest ability level.

Special events: Various performances including contests, festivals, and concerts.

Fee: None

Special needs: Jazz band shirt to be worn for all performances. The cost is approximately \$25, but changes year-to-year.

Course: MARCHING BAND

Duration: 1st Semester

Required for graduation: No

Credit: .5

Who may take this course: Freshmen, Sophomores, Juniors and Seniors.

Description: The Canton High School Marching Band is a competitive music ensemble which is an exciting opportunity with an extensive rehearsal and performance schedule. The material taught is based on contemporary corps style marching. Students will represent our program and community a variety of performance in the community and in the state. Marching band members are also required to attend summer rehearsals. After marching season, the band devotes it's time to preparing music for the Winter Concert and pep music for the following semester. Players will also have an opportunity to audition for the Illinois Music Educators Association district concert festival.

Upon completion of the course:

1. Function as a member of a performing group.
2. Perform as a musician in public.
3. Identify and perform medium to advanced rhythm patterns.
4. Read and perform intermediate concert band music.
5. Perform advanced marching techniques.
6. Increase scale and chord vocabulary.
7. Have opportunity to audition for advanced performance groups.

Prerequisite: Previous playing experience is required. Incoming freshmen will need approval from the middle school band director. For continued participation, students will need approval from the high school band director. Marching band members are required to be enrolled in concert/symphonic band during the spring semester prior to the marching band season (sophomores, juniors, and seniors).

Homework: Practice instrument to perform with the band. Prepare for written/playing tests as needed.

Special Projects: Evening/Weekend Rehearsals, Competitions, and additional performances

Fee: Band fee as prescribed by the school district.

Special equipment/materials: Student must have his/her own instrument accompanied by music supplies (reed, oils, sticks, etc.); school instruments will only be provided for the instrument families outside of normal instrumentation (i.e. Mellophone, Battery, etc.). Students will need to buy various accessories including shoes, gloves, and instrument supplies.

Course: MUSIC APPRECIATION

Duration: 2nd Semester

Required for graduation: No

Credit: .5

Who may take this course: Sophomores, Juniors and Seniors

Description: The course is designed to enable students to appreciate a variety of music, and to better understand the structural and emotional elements of music. The course is comprised of an introduction to music: the history of music with emphasis on Baroque, Classical, Romantic, Contemporary, American and World music; musical instruments and aesthetics of music. Special emphasis will be placed on listening to a variety of musical styles.

Upon completion of the course:

1. Students will have been exposed to several types of music.
2. Students will have a basis for further music listening activities throughout their lives.

Prerequisite: None

Homework: 1-2 hours per week and various special reports

Special Projects: Reports

Fee: None

Special equipment/materials: None

Course: MUSIC THEORY

Duration: 1st Semester

Required for graduation: No

Credit: .5

Who may take this course: Juniors and Seniors

Description: The course is designed to give the student a basic understanding of music theory. The course will include study of musical notation, scales, intervals, chords and musical style. Structural elements of music will also be covered, including sound, harmony, melody, rhythm, texture and musical form. Music listening and ear training will be included.

Upon completion of the course:

1. Students will have basic knowledge of the various processes involved with music composition.
2. Students will have the opportunity to compose music.

Prerequisite: Band or Chorus member or previous experience reading music as approved by instructor.

Homework: Varies

Special Projects: Varies

Fee: None

Special equipment/materials: Music staff paper book: ~\$7.

Course: SYMPHONIC BAND

Duration: Full Year

Required for graduation: No

Credit: 1.0

Who may take this course: All Grade Levels

Description: The Symphonic Band is the intermediate instrumental ensemble offered at Canton High School. Students who demonstrate levels of maturity and mastery of their instrument will be selected to be a member of this ensemble. Music difficulty ranges from medium-advanced to advanced. Due to the challenge of the music, students are expected to practice more than those involved in other ensembles. All band members are in one of three groups at Canton High School, either the Concert Band, Symphonic Band, or Wind Ensemble. Students must audition to become a member of any group. All bands rehearse and perform a variety of wind ensemble literature throughout the semester. All band members are required to participate in marching band and play in pep band as well, unless another school activity conflicts with the pep band schedule (i.e. cheerleading, basketball). Members of the symphonic band will perform at IHSA State Competition and Canton High School Band Concerts. Students have the opportunity to perform at the state solo/ensemble contest as well.

Upon completion of course:

1. Function as a member of a performing group.
2. Perform as a musician in public.
3. Learn intermediate to advanced musical techniques.
4. Improve music reading skills.
5. Perform medium-advanced to advanced concert band music.

Prerequisite: Previous playing experience or approval of band director. Players must audition to become a member of the Symphonic Band.

Homework: Practice instrument to perform with the band. Prepare for written/playing tests as needed. Participate in all after school marching band practices.

Special projects: Marching Band Competitions, IHSA State Competition, Band Concerts, and any additional performances.

Fee: None

Special equipment/materials: Student must have his/her own instrument accompanied by music supplies (reeds, oils, sticks, etc.) School instruments will only be provided on an individual basis and with approval of director.

Course: WIND ENSEMBLE

Duration: Full Year

Required for graduation: No

Credit: 1.0

Who may take this course: All Grade Levels

Description: The Wind Ensemble is the advanced instrumental ensemble offered at Canton High School. Students who demonstrate levels of maturity and mastery of their instrument will be selected to be a member of this ensemble. Music difficulty ranges from medium-advanced to collegiate. Due to the challenge of the music, students are expected to practice more than those involved in other ensembles. All band members are in one of three groups at Canton High School, either the Concert Band, Symphonic Band, or Wind Ensemble. Students must audition to become a member of any group. All bands rehearse and perform a variety of wind ensemble literature throughout the semester. All band members are required to participate in marching band and play in pep band as well, unless another school activity conflicts with the pep band schedule (i.e. cheerleading, basketball). Members of the Wind Ensemble will perform at IHSA State Competition and the Canton High School Band Concerts. Students have the opportunity to perform at the state solo/ensemble contest as well.

Upon completion of course:

1. Function as a member of a performing group.
2. Perform as a musician in public.
3. Learn advanced musical techniques.
4. Improve music reading skills.
5. Perform medium-advanced to collegiate concert band music.

Prerequisite: Previous playing experience or approval of band director. Players must audition to become a member of the Wind Ensemble.

Homework: Practice instrument to perform with the band. Prepare for written/playing tests as needed. Participate in all after school marching band practices.

Special projects: Marching Band Competitions, IHSA State Competition, Band Concerts, and any additional performances.

Fee: None

Special equipment/materials: Student must have his/her own instrument accompanied by music supplies (reeds, oils, sticks, etc.) School instruments will only be provided on an individual basis and with approval of director.

Science

The science department offers a range of classes in physical, earth, and the biological sciences to prepare students to meet the academic and careers needs of the students. All students are required to earn 2 credits in science for graduation (it is recommended that college bound students earn 3 credits). Students may choose their science credits based on their interest of study to fulfill the requirements. Students may opt to take 2 science courses in 1 school year with the exception of taking Biology/Biology II, Biology and Chemistry/College/AP Chemistry at the same time. Below are the recommended courses a student would want to take to prepare for the intended career pathway listed.

CHS Science Department Career Pathways

Engineering or Architecture	Physical Science (Honors or Regular)	Principles of Engineering*	Physics*	
Pharmacy	Physical Science (Honors or Regular)	Chemistry* Biology (Honors or Regular)	AP/College Chemistry*	Physics*
Medical	Princ. of Biomed Sci Biology (Honors or Regular)	Biology 2* Chemistry*	Human Body Sys* AP/College Chemistry*	Medical Interventions* Physics*
Veterinarian	Biology (Honors or Regular)	BSAA (Ag Science)	Chemistry*	Physics*
Conservation or Geology	Earth Science	Biology (Honors or Regular)	BSAA (Ag Science)	
Non-Science College Bound	Biology (Honors or Regular)	Physical Science Chemistry*		
Work-Force bound student	Earth Science	Biology		

*This course requires a pre-requisite

Course: EARTH SCIENCE

Duration: 1 year

Required for graduation: No

Credit: 1

Who may take this course: Freshmen, Sophomores, Juniors, and Seniors

Description: A study of the earth, with concentration in geology, plate tectonics, astronomy, map interpretation, weathering & erosion and earth history.

Upon completion of the course:

1. Recognize the complexities of the changing earth and construction.
2. Understand the processes behind volcanism, mountain formation and earthquakes.
3. Understand how the earth has changed over time.
4. Recognize the forces of weathering and erosion and how they change the earth's surface.
5. Recognize common rocks and minerals and their origin.
6. Read and construct data tables, graphs and other information and analyze data.
7. Know how the solar system and universe is organized.
8. Understand the methods used and reasons for studying astronomy.
9. Read and interpret maps including topographical and physical maps.
10. Apply scientific theories to the earth that surrounds us.

Prerequisite: None

Homework: 1-3 hours per week

Special Projects: labs, models & collections

Fee: None

Course: PHYSICAL SCIENCE

Duration: 1 year

Required for graduation: no

Credit: 1

Who may take this course: Freshmen, Sophomores and Juniors

Description: Physical Science is a hands-on learning experience of several disciplines in science (see below) for the general student. Students are encouraged to see the interconnections of themes in science through classroom learning and experimentation. The content of physical Science is based on the National Science Education Standards.

The laboratory emphasis identifies this course as a satisfactory elective for college bound students.

Upon completion of this course students will gain an understanding of:

1. How science works
2. Chemical and material behavior
3. Energy, electricity and forces
4. The environment, Earth and the universe

Prerequisite: Credit in Algebra I or current enrollment in Modern Algebra I

Homework: 1-3 hours per week

Fee: None

Course: PHYSICAL SCIENCE - HONORS

Duration: 1 year

Required for graduation: no

Credit: 1

Who may take this course: Freshmen and Sophomores

Description: Physical Science - Honors is a hands-on learning experience of several disciplines in science (see below). Students are encouraged to see the interconnections of themes in science through classroom learning and experimentation. The content of Physical Science - honors is based on the National Science Education Standards.

The laboratory emphasis identifies this course as a satisfactory elective for college bound students.

Upon completion of this course students will gain an understanding of:

1. How science works

2. Chemical and material behaviors
3. Energy, electricity and forces
4. The environment, Earth and the universe
5. Molarity & molecular behavior

Prerequisite: Credit in Algebra I or current enrollment in Modern Algebra I

Homework: 1-3 hours per week

Fee: None

Course: BIOLOGY I

Duration: 1 year

Required for graduation: No

Credit: 1

Who may take this course: Freshmen, Sophomores, and Juniors

NOTE: This course may not be taken by an individual who has received or is currently obtaining credit in Principles of Biomedical Science (PBS)

Description: Biology I is an introductory survey course of living things. Basic biological principles will be stressed through a variety of laboratory experiments and activities. The course content is environmentally oriented and stresses mankind's relationship with the world in which we live.

The laboratory emphasis identifies this course as a satisfactory elective for college bound students.

Upon completion of the course:

1. Identify basic tools of science.
2. Understand basic living & non-living composition of environmental components.
3. Understand the scientific model of problem solving and apply these concepts.
4. Explain the basic hierarchical structure/classification concepts of organisms in the scientific kingdoms.
5. Understand cellular replication of cells.
6. Understand basic principles of heredity.
7. Understand the evidence of evolution and the natural selection principles of adaptation to the environment.
8. Identify the major biomes of the world and study their importance.
9. Discuss the living & non-living relationships that exist to establish a stable environment.
10. Discuss effect humans and technologies have on the natural world around us.
11. Examine and recognize characteristics of simple/complex Animals.

Prerequisite: None

Homework: 3-4 hours per week

Special Projects: Lab dissections & experiments

Fee: None

Course: HONORS BIOLOGY I

Duration: 1 year

Required for graduation: No

Credit: 1

Who may take this course: Freshmen and Sophomores

Description: Honors Biology is designed to acquaint the student with the major biological principles associated with living things. The course content is environmentally oriented and stresses mankind's relationship with the world in which we live. Curiosity, creativity and problem solving are encouraged to meet the functional needs of all students. This is an accelerated college prep course designed for students interested in the field of Science.

The laboratory emphasis identifies this course as a satisfactory elective for college bound students.

Upon completion of the course:

1. Describe the structures and functions of basic biochemicals.
2. Understand cellular replication.
3. Protein synthesis – understand cellular biochemistry as it is related to protein synthesis.
4. Explain basic principles of genetic inheritance.
5. Describe the structure & function of various animals; simple to complex.
6. Understand the concept of biological evolution.

7. Discuss genetic engineering, DNA synthesis, and Bioethics.

Prerequisite: None

Homework: 4 hours per week

Special Projects: laboratory dissections/*models, collections and chromatography.

Fee: None

Course: BIOLOGY II

Duration: 1 year

Required for graduation: No

Credit: 1

Who may take this course: Sophomores, Juniors and Seniors

Description: Biology II is the study of human anatomy and physiology. The structure and basic function of human organ systems are examined and compared to those of a fetal pig, a traditional dissection specimen.

This is a college-prep course.

Upon completion of the course:

1. Experiment with the basics of scientific method.
2. Perform several lab techniques & procedures.
3. Demonstrate basic lab analysis writing skills.
4. Identify the structural anatomy & basic physiology of the 11 human systems.
5. Perform an organized dissection of a mammal and compare it to human anatomy.
6. Identify the stages of embryology as they relate to the human body.
7. Discuss ethical and real world issues as they relate to the human body.

Prerequisite: A "B" or better in Biology, OR a "C" or better in PLTW-principles of biomedical science or TEACHER APPROVAL

Homework: 3-4 hours per week

Special Projects: Mammal dissection; laboratory activities and research projects.

Fee: None

Special equipment or materials needed: household materials for various projects throughout the year

Course: PLTW: Principles of Biomedical Science

Duration: 1 year

Required for Graduation: No

Credit: 1

Who may take this course: Freshmen, Sophomores, and Juniors. *This class may be taken in place of Biology 1 or Honors Biology 1

Note: This is a problem-based course; students will need to be present and take an active role in order to be successful in the course. Attendance and participation are critical to success in this course. Additionally, students should be self-directed learners and skilled in collaboration as this course does not follow traditional teaching practices. This course may not be taken by an individual who has received or is currently obtaining credit in Biology I.

Description: Are you interested in a career in the medical field? Principles of Biomedical Science will allow students to use medical and biological principles to solve a mysterious case involving the death of a fictional person. Students will be introduced to human physiology, basic biology principles, medicine practices, and research processes to investigate autopsy reports, examine medical history records, and explore medical treatments that might have prolonged the person's life.

The laboratory emphasis identifies this course as a satisfactory elective for college bound students.

Upon completion of the course students will be able to:

1. Identify the roles hormones play within the human body
2. Explain the role blood sugar and diet play in diabetes
3. Utilize genetic and inheritance principles to explore a potentially genetically inherited disease within the victim
4. Identify malfunctions within the cardiovascular system which may have led to the victim's death
5. Utilize basic biological principles involving gram staining and bacterial morphology to determine how an infectious disease was passed throughout a community.
6. Explain how lifestyle choices play a role in our daily circumstances

7. Interpret evidence left behind at a crime, summarize findings from lab reports, and interpret medical history records to determine the death of a fictional individual.

Prerequisite: None

Special Projects: dissection of mammalian organs, numerous laboratory activities, and research projects

Special equipment or materials: Calculator (\$5-\$85); Goggles (\$5); house hold materials may be needed to complete projects/activities

Course: PLTW: Human Body Systems

Duration: 1 year

Required for Graduation: No

Credit: 1

Who may take this course: Sophomores, Juniors, and Seniors

Special Note: This is a problem-based course; students will need to be present and take an active role in order to be successful in the course. Attendance and participation are critical to success in this course. Additionally, students should be self-directed learners and skilled in collaboration as this course does not follow traditional teaching practices.

Description: Human Body Systems will examine basic human anatomy and physiology while looking at the interactions of the human body systems as they explore identity, power, movement, protection, and homeostasis. Students will build organs and tissues on a skeletal manikin, use data acquisition software to monitor body functions such as muscle movement and respiration, and take on the roles of biomedical professionals to solve real-world medical cases. HBS focuses more on the physiology of the human body.

Upon completion of the course students will be able to:

1. Identify the body systems and functions that all humans have in common
2. Identify modes of communication within the human body
3. Map the functions of key regions within the brain
4. Identify the roles hormones play within the human body
5. Explain how external stimuli are interpreted within the body (focus on the human eye)
6. Build a comprehensive training program for a student athlete
7. Diagnose breathing problems within an individual
8. Complete simulated urinalysis tests to determine the functionality of the human kidney
9. Design medical interventions to solve a fictional medical case study.

Prerequisite: A "C" or better in Principles of Biomedical Science or a B or better in Biology I

Special Projects: dissection of mammalian organs, numerous laboratory activities, and research projects

Special equipment or materials: Calculator (\$5-\$85); Goggles (\$5); house hold materials may be needed to complete projects/activities.

Course: PLTW: Medical Interventions

Duration: 1 year

Required for Graduation: No

Credit: 1

Who may take this course: Juniors, and Seniors

Special Note: This is a problem-based course; students will need to be present and take an active role in order to be successful in the course. Attendance and participation are critical to success in this course. Additionally, students should be self-directed learners and skilled in collaboration as this course does not follow traditional teaching practices.

Description: Students follow the life of a fictitious family to investigate how to present, diagnose, and treat disease. Students explore how to detect and fight infection, screen and evaluate the code of human DNA, evaluate cancer treatment options, and how to help the body prevail when the organs in the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

Upon completion of the course students will be able to:

1. Identify an unknown infectious disease and form an action plan for patient with disease
2. Explain how hearing loss can result from an infectious disease
3. Perform an Enzyme-linked Immunosorbant Assay (ELISA)
4. Explain how genetic engineering can help manufacture viable vaccinations

5. Examine the available types of genetics testing and screening of an unborn child and suggest recommendations to the fictitious parents
6. Extract own DNA perform electrophoresis to determine own phenotype of PTC gene
7. Design and build a model prosthetic arm
8. Design medical interventions to solve fictional medical case studies.

Prerequisite: A "C" or better in Human Body Systems or an A or better in Biology II

Special Projects: numerous laboratory activities, and research projects

Special equipment or materials: Calculator (\$5-\$85); Goggles (\$5); house hold materials may be needed to complete projects/activities.

Course: CHEMISTRY

Duration: 1 year

Required for graduation: No

Credit: 1

Who may take this course: Sophomores, Juniors and Seniors

Description: Chemistry is the study of matter and the changes that it undergoes. In this class students will be given opportunities to describe the properties of matter, to measure matter and make calculations based on these measurements, and to do chemistry in the laboratory.

Upon completion of the course:

1. Recognize and demonstrate an understanding of basic chemical principles.
2. Write chemical formulas and equations.
3. Use mathematics in problem solving.
4. Apply proper laboratory techniques and safety.
5. Analyze laboratory data.

Prerequisite: Credit in Algebra 1 and Physical Science or Teacher Permission (*Note – college bound students who do not intend to major in science may take this course without having taken physical science with teacher permission)

Homework: 3 hours per week

Special Projects: None

Fee: None

Special equipment or materials: Calculator (\$5-\$85); Goggles (\$5).

Course: COLLEGE/ADVANCED PLACEMENT CHEMISTRY

Duration: 1 year

Required for graduation: No

Credit: 1.5 high school and 4 semester hours as General Organic Bio Chemistry I (Chem 160) at Spoon River College

Who may take this course: Juniors and Seniors

Note: Students must take both semesters to earn college credit.

Description: A survey of the basic principles and terminology of chemistry. Topics include: Atomic Theory, Bonding Stoichiometry, Kinetic Theory, Solutions, Rates of Reactions and Acid-Base Theory.

Upon completion of the course:

1. To define the basic measurables of science and to express and convert to units within the International System of Units using the Factor-label method.
2. To understand the basic classifications of matter, the symbols of elements, atomic weights, formula weights, and their applications to chemical compounds.
3. To discuss and use a modified Bohr model of the atom to explain the organization of the elements, the Periodic Law, and prediction of compound formation.
4. To explain ionic bonding and covalent bonds within the context of modern bonding theory.
5. To explain the periodicity of certain properties in terms of a modified Bohr model of the atom.
6. To apply the rules of nomenclature to form the names of chemical compounds.
7. To describe the gaseous state and apply the basic laws of gases to ideal gases.
8. To solve problems of chemical stoichiometry by the mole method.
9. To describe the liquid and solid states of matter and their properties.
10. To explain the factors which lead to and affect these states of matter.

11. To describe the basic types of chemical reactions and explain how each type of reaction occurs.
12. To apply the definition of acids and base by the Arrhenius, Bronsted-Lowry and Lewis theories and express the strengths and weaknesses of each system.
13. To recognize the structures and apply the basic rules of nomenclature to the basic families of organic compounds.

Prerequisite: An "A" or "B" in Chemistry; SRC COMPASS test (pending ACT/SAT score)

Homework: 4-6 hours per week

Special Projects: None

Fee: Cost of 4 semester hours at Spoon River College (approximately \$250 - \$300)

Special equipment or materials: scientific calculator - graphing calculator recommended (\$12 - \$85)

*STUDENTS WILL NEED TO FILL OUT APPROPRIATE PAPERWORK AT THE BEGINNING OF THE TERM TO DECLARE FROM WHICH COURSE THEY ARE OBTAINING CREDIT.

STUDENTS WANTING TO OBTAIN COLLEGE CREDIT WILL BE REQUIRED TO PAY THE CURRENT SRC TUITION FOR CLASS.

Course: PLTW: Principles of Engineering

Duration: 1 year

Required for graduation: No

Credit: 1

Who may take this course: Sophomore, Juniors and Seniors

Description:

Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.

Pre-requisite: Credit in Algebra II (or current enrollment with teacher approval)

Homework: 1 hour per week

Special Projects: Various

Fee: None

Course: PHYSICS

Duration: 1 year

Required for graduation: No

Credit: 1

Who may take this course: Sophomores, Juniors and Seniors

Description: Physics is the study of our physical world. This class will study motion, energy, light, sound, electricity, and magnetism. Physics is by nature mathematical. Companion elective: Physics of Technology. (see next description).

Upon completion of the course:

1. Solve problems graphically and mathematically.
2. Recognize and use the fundamental units of physics.
3. Recognize the different energies in our world.
4. Conduct physical experiments in a scientific and safe manner.
5. Analyze data and see if experimental evidence verifies theory.
6. Recognize the link between magnetism and electricity.
7. Think and predict future major energy sources.

Prerequisite: A "C" or better in Modern Algebra II or a "B" or better in Basic Algebra II

Homework: 3-5 hours per week

Special Projects: Various

Fee: None

Special equipment or materials - estimated cost: Scientific calculator (\$15).

SOCIAL STUDIES

2 credits of Social Studies are required to graduate from Canton High School. 1.5 of these credits must include American Government and American History; an additional .5 elective credit. The department also requires 3 credits for the college preparatory program. 1.5 of these credits must include American Government and American History; and an additional 1.5 elective credits.

Recommended Sequence

Freshmen - electives: World Geography, World History (A), and/or World History (B).

Sophomores -electives: World Geography, World History (A), World History (B), or Sociology.

Juniors - American History (required) and any of the following electives if needed: Economics, World Geography, World History (A), World History (B), Sociology, Psychology or Modern World.

Senior - Civics (required) and any of the following electives if needed: Economics, World Geography, World History (A), World History (B), Sociology, Psychology or Contemporary Social Problems

As indicated above, the sequence is flexible for any of the electives; however, students should check for prerequisites.

Course: AMERICAN HISTORY

Duration: 2 semesters

Required for graduation: Yes

Credit: 1

Who may take this course: Juniors and Seniors

Description: American History at Canton High School uses the Odyssey course design which primarily focuses on the history of the 20th century. We will attempt to cover the history of the U.S. in the 20th century to the present in depth focusing on the Progressive Era, 1920's, major world conflicts, and on those events which are most relevant to today's high school student.

Upon completion of the course:

1. Identify major ideas that have influenced the course of American History particularly in the 20th century.
2. Understand the basic systems and functions of our government.
3. Demonstrate how past historic occurrences have influenced current events.
4. Develop an ability to judge and evaluate sources of information.
5. Learn to appreciate the roles played by various American personalities.
6. Learn to appreciate the cultural, ethnic, and social history of America.
7. Understand America's role in world affairs.
8. Acquire a basic knowledge of the current relationship between the U.S. and the world and how this has evolved.
9. Understand the role of labor unions, various business organizations and the government in meeting the goals of our free enterprise system.

Prerequisite: None

Homework: 2-4 hours per week

Special Projects: Yes

Fee: None

Special equipment or materials - estimated cost: Posterboard, colored pencils and Internet access.

Course: CIVICS

Duration: 1 semester

Required for graduation: Yes

Credit: .5

Who may take this course: Senior Status

Description: Civics is a study of the foundations of American government, our rights as a free people, the structure of the United States Constitution, state government, local government and the constitution of the state of Illinois. *The U.S. Constitution/government test will be administered during this course. Passing the U.S. Constitution/government test must be achieved to meet graduation requirements.*

Upon completion of the course:

1. Demonstrate a knowledge of the U.S. Constitution and the structure of the U.S. Government.
2. Show an understanding of his basic rights and due process of law.
3. Show an understanding and demonstrate his knowledge and skill in voting and election processes.
4. Demonstrate a knowledge of the law-making process in the U.S. Congress.
5. Display a knowledge of the workings of the executive branch of the U.S. Government.
6. Display an understanding of criminal and civil law, and the entire legal process from arrest to the court procedure.
7. Demonstrate a knowledge of state and local government with an emphasis on the functions of each governmental body and its financial structure.
8. Display a knowledge of current and world events.
9. Display a knowledge of writing skills.

Homework: 5-6 hours per week

Special Projects: Yes

Fee: None

Special equipment or materials - estimated cost: Posterboard, 3 ring binder and Internet access.

Course: ECONOMICS (Meets Consumer Education requirement)

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Juniors and Seniors

Course Description: The economics content is designed to help students develop critical thinking skills through the understanding, application, and analysis of fundamental economic concepts. Students will be required to use and apply tools (graphs, tables, statistics, and equations) to their understanding of economic laws and principles. An emphasis will be placed on the United States' economic role in a local and global economy. Also, they will be expected to apply principles of economics to a wide variety of real-world and hypothetical situations.

Upon completion of this course students will:

14. Be able to know basic economic concepts and understand how economic problems are solved
15. Differentiate between macroeconomics and microeconomics and between the different types of economies that exist
16. Know and understand the importance of resources within an economic system
17. Gain a better understanding of the American financial system and the role they, as both consumer and potential investors, play in shaping our economy
18. Analyze how technological developments transformed the economy and created international markets
19. Evaluate the role consumers play in shaping a modern mixed economy
20. Explain the interdependence of various parts of the market economy
21. Evaluate the relationship between inflation and other economic indicators such as unemployment
22. Comprehend and apply the laws of supply and demand and the effect they have within a market economy
23. Understand the importance human capital plays in shaping economic systems and the impact skill sets and education will have on their career opportunities
24. Explain the steps the federal government takes to stabilize the health of the economy through both monetary and fiscal policies
25. Understand compound and simple interest and apply them to the principles of credit and borrowing
26. Apply the principles of income and money management to budgeting, insurance, saving, spending, and investing

Prerequisite: Should have at least a "C" cumulative grade point average

Homework: 2-3 hours per week

Special Project(s): Stock Market Simulation and/or Economic Problems Project

Fee: None

Special equipment or materials – estimated cost: None

Course: PSYCHOLOGY

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Junior or Senior

Description: The purpose of this course is to acquaint the student with the basic ideas of human behavior which, in turn, should enable the student to better understand himself/herself and others. The major theories of psychology are studied including the study of learning, intelligence, stress, adjustment mechanisms, mental health and illness, personality development, as well as, physical, emotional and intellectual development. In addition to this, the experimental method is also explored.

Upon completion of the course:

1. Understand the learning process.
2. Understand how human behavior develops.
3. Understand the effects of stress.
4. Understand the perspectives or schools of thought used in psychology.
5. Acquire a basic knowledge of important theories in psychology.
6. Acquire a basic knowledge of abnormal psychology.

Prerequisite: Junior or Senior

Homework: 2 hours per week

Special Projects: Yes

Fee: None

Special equipment or materials - estimated cost: 3 ring binder and Internet access.

Course: SOCIOLOGY

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Sophomore, Junior and Senior

Description: The purpose of this course is to acquaint the student with a study of society. Man's group life is exploring and human behavior is studied as the interaction of individuals within groups. The nature of culture, norms, values, deviance, roles, status, relationships, social institutions, socialization, stratification, social problems and social movements are studied.

Upon completion of the course:

1. Know the nature of culture and how it is transmitted.
2. Know the formation and enforcement of norms and values and understand the concept of deviance from those norms and values.
3. Understand roles, status, relationships and primary and secondary groups.
4. Understand the basic social institutions.
5. Understand the process of socialization in children, adolescents and adults.
6. Understand problems within the social structure such as racism, poverty, etc.
7. Understand socialization and the concept of controlled environments.
8. Understand the process of social stratification and the concept of open and closed systems.

Prerequisite: None

Homework: 2 hours per week

Special Projects: Yes

Fee: None

Special equipment or materials - estimated cost: Posterboard, 3 ring binder and Internet access.

Course: WORLD GEOGRAPHY

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Freshmen, Sophomores or Instructor Permission

Description: World Geography is a study of the world, its physical characteristics, its countries, its peoples and cultures.

Upon completion of the course:

1. Use maps to locate points on the earth's surface. "Where is it?"
2. Demonstrate knowledge of physical and human characteristics of place. "What is it like there?"
3. Demonstrate knowledge of the relationship between people and their environment.
4. Demonstrate an understanding of how people and places are connected.
5. Demonstrate an understanding of why and how people define regions of the world. "How is a place similar to and different from other places?"
6. Apply geography to interpret the past, the present, and plan for the future.

Prerequisite: None

Homework: 1 - 2 hours per week

Special Projects: Yes

Fee: None

Special equipment or materials - estimated cost: 3 ring binder, posterboard and Internet access.

Course: WORLD HISTORY (A)

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Freshmen, Sophomores, Juniors and Seniors

Description: World History (A) is a survey of the people, events and ideas that have shaped the world we live in starting with the beginning of planet earth and ending with the middle ages. The subject matter covered will include the study of Ancient History, both western and eastern; the study of the Middle Ages including Asia, the Middle East and Africa; and the study of the early Modern Period in Europe.

Upon completion of the course:

1. Discuss the achievements of the earliest civilizations - Egypt, Sumer, Persia, India and China.
2. Compare the World's great religions and their impact upon the people of the world today.
3. Understand the rich Greek heritage which has had a deep influence upon human thought.
4. Understand the rise and fall of the Roman Empire and its contributions to the modern world.
5. Understand the great contributions given to the world by the Islamic culture and the great Empires of West Africa.
6. Relate occurrences of the past to the present.

Prerequisite: None

Homework: 2-4 hours per week

Special Projects: Yes

Fee: None

Special equipment or materials - estimated cost: Posterboard, 3 ring binder and Internet access.

Course: WORLD HISTORY (B)

Duration: 1 semester

Required for graduation: No

Credit: .5

Who may take this course: Freshmen, Sophomores, Juniors and Seniors

Description: World History (B) is a survey of the people, events, and ideas that have shaped the world we live in starting with the Renaissance and ending with the present. The subject matter covered will include the Age of Revolution, Imperialism and Nationalism, World War II, the Cold War, and the CONTEMPORARY SOCIAL PROBLEMS.

Upon completion of the course:

1. Understand the role of monarchs and how they contributed to cultural development and to revolution.
2. Understand the anatomy of a revolution and understand the effects of the English, American, and the French Revolutions.
3. Understand how Nationalism and Imperialism created the great nations and how these concepts may have created World War I.

4. Understand the effects World War I had on the world.
5. Understand why dictators came into power and how they maintained power.
6. Understand the effects World War II had on the world.
7. Understand the effects of the Cold War upon our present age.
8. Appreciate the accomplishments in art, music, literature, and inquiry brought about by the Renaissance.
9. Understand the tremendous impact the Reformation had upon human kind.

Prerequisite: None

Homework: 2 hours per week

Special Projects: None

Fee: None

Special equipment or materials: Posterboard, 3 ring binder and Internet access.

Course: MODERN WORLD

Duration: 1 Semester

Required for Graduation: No

Credit: .5

Who may take this course: Juniors & Seniors

Description: Students examine and analyze complex contemporary social problems. The major topics include the application of sociological theory to local, national, and international social problems, including the environment, poverty, crime, violence, drug abuse, and inequality.

Upon completions of this course:

Students will:

1. analyze the objective and subjective nature of social problems
2. evaluate the structural and individual components of social problems
3. apply sociological theoretical perspectives to social problems

PLANNED SEQUENCE OF TOPICS AND/OR LEARNING ACTIVITIES

1. definition of social problems
2. application of conflict and functionalist theory to social problems
3. application of symbolic interaction theory to social problems
4. application of research methods to social problems
5. structural components of social problems
6. individual components of social problems

ASSESSMENT METHODS FOR COURSE LEARNING GOALS

The assessment of course learning goals is based on classroom discussions, written exams, assignments, papers, and projects.

Prerequisite: World Geography or Sociology (recommended but not required)

Textbook: none

Homework: 1 to 2 hours a week

Special Project: Yes

Fee: None

Special equipment or materials: news source, 3 ring binder, and internet access

SPECIAL COURSES

Course: Computer Science Essentials I (PLTW)

Duration: 1 year

Required for Graduation: No

Credit: 1

Who may take this course: Sophomores, Juniors & Seniors

Description: With emphasis on computational thinking and collaboration, this year-long course provides an excellent entry point for students to begin or continue the PLTW Computer Science K-12 experience.

Computer Science Essentials will expose students to a diverse set of computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence. In Computer Science Essentials, students will use visual, block-based programming and seamlessly transition to text-based programming with languages such as Python to create apps and develop websites, and learn how to make computers work together to put their design into practice. They'll apply computational thinking practices, build their vocabulary, and collaborate just as computing professionals do to create products that address topics and problems important to them.

Pre-requisite: None

Homework:

Special Projects:

Fee:

Special equipment or materials:

Course: CO-OP WORK STUDY

Duration: 1 year

Required for graduation: No

Credit: 2

Who may take this course: Seniors

Description: This program is designed to provide vocational training experiences through regular part-time employment in the community and occupational in-school instruction. Through the training agreement of the student, employer, parent and coordinator agree on the requirements of the program. The student's in-school classes are taken in the morning with the student reporting for work at his/her training station after the scheduled classes are complete. Through the training plan, part of the training agreement, a format of individual learning experiences and job tasks to be undertaken at the job site will be cooperatively determined for each student. A minimum of 15 hours a week on-the-job training is required, with more hours possible. Each student in this program will meet daily with the teacher-coordinator for one period of class related instruction. The teacher-coordinator will provide the on-the-job coordination and supervision.

Upon completion of the course:

1. Complete a sample application form and resume sheet.
2. Identify and understand the proper way to interview for a job.
3. Understand the relationship between employee-employer and co-workers.
4. Select products using price comparison.
5. Identify various forms of credit and insurance.
6. Identify safety health and hygiene rules for general industry.
7. Identify career and education opportunities in their own career.
8. Follow the procedure for filing income tax.
9. Identify the skills necessary for job promotion.
10. Perform at an acceptable level on the job.

Prerequisite: None

Homework: 1 hour per week

Special Projects: None

Course: DRIVER EDUCATION

Duration: 1 semester

Required for graduation: Classroom - yes and BTW - no

Credit: .25

Who may take this course: Any student between the ages of 15 and 21.

Description: The course is divided into two phases: the classroom, which consists of a minimum of 30 hours of traffic laws and safe driving procedures for the safe, efficient and economical use of automobiles and motor-driven cycles on our highway transportation system, and the practice driving phase, which consists of a

minimum of 6 hours of instruction in regular traffic in actual control automobile. A lab fee of \$75 is due before the students is allowed to take the behind the wheel portion.

Upon completion of the course:

1. Be aware of the relationship between a driver's physical, mental and emotional characteristics.
2. Understand driver's limitations, especially their own.
3. See mistakes of other drivers and pedestrian problems.
4. Be aware of the motor vehicle handling capabilities and limitations.
5. Understand the skills required for safe driving.
6. Understand the relationship of many road conditions and driving problems so they know why we have traffic controls.
7. Drive safely under all road and weather conditions.
8. To let students know how in the future they too can help improve traffic, laws and driving practices.

Prerequisite: Student must be between 15-21 years old. Must pass 8 courses the two previous semesters.

Homework: Mostly done in class.

Special Projects: None

Fee: \$20 for instruction permit to State of Illinois during the classroom and \$75 for lab fee when Behind The Wheel is completed.

Special equipment or materials - estimated cost: None

Course: Principles of Computer Science II (PLTW)

Duration: 1 year

Required for Graduation: No

Credit: 1

Who may take this course: Juniors & Seniors

Description: Do you like to logic problems, puzzles, or tinkering around on computers? Principles of Computer Science builds on the coding concepts established in Computer Science Essentials and enables students to use Graphical User Interfaces on some of the coding languages they have already been using, along with offering a deeper dive into computer science.

Pre-requisite: Must pass Computer Science Essentials with C or better

Homework:

Special Projects:

Fee:

Special equipment or materials – estimated cost:

Course: INDEPENDENT STUDY

Duration:

Required for graduation: No

Credit:

Who may take this course: Juniors and Seniors

Description: The Independent Study option allows juniors and seniors, with a special interest in a subject, to pursue that area of interest in more detail or greater depth than the existing curriculum provides. Students who wish to undertake an independent study, the following are required:

- Independent Studies cannot be taken in lieu of a scheduling conflict
- Does not include weighted courses or honors courses
- Complete the "Independent Study" form located in the Guidance Office
- Obtain parent, teacher, administrator, and counselor approval of the course
- Write a course description with the teacher – Student, parent, and teacher are to sign and present the course description to administration for approval
- Be scheduled into a full period course with a teacher
- Attend that course every day

Successful completion of an independent study will result in a grade of "P" (Pass).

Course: INTRODUCTION TO EDUCATION (DUAL CREDIT)

Duration: 1 year

Required for graduation: No

Credit: 1

Who may take this course: Seniors

Description: This course provides an introduction to the American education system and as teaching as profession. Throughout the course students will be offered a variety of perspectives on education including: historical, philosophical, social, legal, and ethical issues in a diverse society. A study of organizational structure and school governance will also be included. A minimum 15 hour clinical component is required for this class. A clear background check is mandatory in order to complete the course/state required 15 clinical component for each class. The cost of the background check will paid through Canton High School. *Spoon River College dual credit can be achieved for Introduction to Education.*