## Course

## Description

## Book



## Multi-Culture Gender Fair Disability Sensitive Policy

Caledonia Area High School Staff and Students are committed to developing and maintaining an atmosphere of respect for all individuals regardless of race, social class, gender, age, religion, or physical/psychological conditions. We will not tolerate racism, cultural/ethnic discrimination, religious intolerance or harassment or "put-down" remarks about race, religion, social class, gender, ethnic background, age, sexual orientation or physical/psychological status of students or staff. We believe that the best and most effective learning for tomorrow's citizens and leaders takes place in a multi-cultural, gender fair and disability-sensitive environment.

## Non-Discrimination Policy

Caledonia Area Schools are committed to providing equal education and employment opportunities to all persons regardless of race, color, creed, gender, religion, marital status, national origin, or physical disability and to any other group or class against which discrimination is prohibited by State or Federal law, including Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and by any other applicable statutes and regulations relating to equality of opportunity.

# Caledonia Area High School <br> Course Book <br> "General Information" 

## A. Graduation Requirements

Students must fulfill the following requirements in order to be eligible for graduation from Caledonia Area High School.

## Class of 2015 \& Beyond

| Subject | Credits |
| :---: | :---: |
| English | 4 |
| Social Studies | 4 |
| Math | 3 |
| Science | 3 |
| Physical Education | . 5 |
| Health | . 5 |
| Arts | 1 |
| Careers or Intro to Ag , Food, Natural Recourses | . 5 |
| Personal Finance or Ag Business | . 5 |
| Management |  |
| Required Courses: | 17 |
| Electives: | 8 |
| Total: | 25 |

## B. Grade Point System

Letter grades are issued at the end of each quarter. These grades are translated into numerical values and averaged at the end of each semester for juniors and seniors. For freshman and sophomores, the values are averaged at the end of the year.
$\mathrm{A}=4.00$
$B-=2.67$
$\mathrm{D}+=1.33$
A- $=3.67$
$\mathrm{C}+=2.33$
$\mathrm{D}=1.00$
$\mathrm{B}+=3.33$
$\mathrm{C}=2.00$
D- $=0.67$
$\mathrm{B}=3.00$
$\mathrm{C}-=1.67$
$\mathrm{F}=0.00$

## C. Participation in Commencement

The commencement ceremony honors students who have earned a diploma through credits and/or successfully completed their IEP goals. Students who have not met all graduation requirements will be allowed to participate in commencement ceremonies on a case by case basis as determined by the principal.

## D. Withdrawal from Class

After the school year has started, class schedule changes will be made only in exceptional cases and should be done before the start of any semester.

## E. Post Secondary Enrollment Options Program

It is possible for juniors and seniors to attend college (four-year, two-year or technical) and receive credit from both the college and from Caledonia Area High School.

If you participate in PSEO, you will not receive a diploma until final grades have been received. It is the student's responsibility to orchestrate the PSEO process through Student Services.

## F. Online College Courses (PSEO)

- High School Juniors: Must have a 2.6 GPA or above OR ACT Reading score of 21 or higher or MCA Reading score of 1047 or higher.
- High School Seniors: Must have a GPA of 2.5 or above OR an ACT Reading score of 21 or higher or MCA Reading score of 1047 or higher.
**Students cannot take an online college class if it is offered as a concurrent enrollment class at CHS.


## G. Correspondence and Alternative Courses

Students who have failed courses or who lack sufficient credits for graduation, may employ alternative methods of gaining credit. See the school counselor for a list of options.

## H. Student Aide/Peer Tutor

Junior and senior students are allowed a maximum of one Student Aide/Peer Tutor per semester.

## ~ ARE YOU READY FOR ON-LINE LEARNING? ~

Below are the skills and/or qualities you will need in order to be successful in an on-line course. If you cannot answer yes to most of these questions, you may want to strengthen these skills before starting an online class.

DDo you have regular access to a computer with high-speed Internet, other than at school?
$\square$ Does your computer have the software you need to complete the course? Check with on-line school if you have questions.

Can you work well independently, without direct guidance from a teacher?
DDo you actively participate in your own learning (ex. You search for answers, question others, read what others have written, monitor your progress etc.)?
$\square$ Do you get things done on time without constant reminding or prodding?
Do you usually understand what you read?
Can you communicate well in writing?
-Will you ask questions to the online teacher about something you do not understand?

Remember: On-line learning is a great way to take classes that your regular high school may not offer and offers flexible scheduling options, BUT you must be an independent and responsible learner, being able to problem solve and learn without the close guidance of a teacher. If you have further questions related to whether online learning is a good choice for you, please see your school counselor or an online school advisor.

## concurrent enrollment courses

Concurrent Enrollment Courses are offered at Caledonia Area High School through Riverland Community College. Students who successfully complete these courses earn both high school and college credit. (It is the student's responsibility to contact their college of choice to make sure they will accept the credit(s) from Riverland. When applying to colleges, seniors will need to request their transcript from Riverland to be sent to the colleges they are applying to.

The following courses are offered to qualified students:
$>$ ENGL 1101 - Composition I
$>$ ENGL 2000 - Advanced Creative Writing
$>$ ENGL 1103 - Intro to Literature
$>$ SPCH 1100 - Fundamentals of Speech
> PSYC 1105 - General Psychology
$>$ CHEM 1000 - Introductory Chemistry
$>$ HIST 1030 - Modern World History
**College Credit is available through the University of Minnesota College in the Schools Program. Currently the Agriculture Department can offer the University's "CIS Animal Science" 4 credits. Students must be in the upper $50 \%$ of their class to enroll or have instructor approval.

## Riverland's Academic Requirements - Satisfactory Academic Progress

Link to Policy - https://www.riverland.edu/about-riverland/policies-and-procedures/satisfactory-academic-progresspolicy/

Students are required to remain in good academic standing with the college to continue in concurrent enrollment. This section will educate students, families, and high school partners about the academic standing requirements and what students should expect if they do not meet them.

Riverland requires two criteria to demonstrate good academic standing:

- 2.00 cumulative Riverland GPA AND
- $67 \%$ completion rate


## AGRICULTURE INDUSTRIAL TECHNOLOGY CAREER AND TECHNICAL EDUCATION

The Caledonia Area High School Agriculture, Food and Natural Resources Education Department provides students with elective courses in Career and Technical Education to meet the needs of an ever-changing world. Students not only could earn credit towards their high school diploma, but they can also earn college credit through the University of Minnesota, College in the Schools program, Articulation Certificates in selected areas of study are available and can be used in the Minnesota State, Community and Technical College System. The Agriculture, Food \& Natural Resources classes are made up of the three integral component parts of the complete Career and Technical Education Program which include: 1) Classroom instruction, 2) Intracurricular FFA membership and opportunities as well as 3) Supervised Agricultural Experiences- or work experiences which directly develop each student's interest in any of the seven AFNR Career Pathways.

College Credit is available through the University of Minnesota College in the Schools Program. Currently the Agriculture Department can offer the University's "CIS Animal Science" (ANSC1101) 4 credits.

Agriculture, Food \& Natural Resources Education elective areas of study will be determined by student preregistration. There are seven different Career Pathways within AFNR:

- Agribusiness Systems
- Animal Systems
- Environmental Service Systems
- Food Products and Processing Systems
- Natural Resources Systems
- Plant Systems
- Power, Structural and Technical Systems

The Courses offered at Caledonia Area Public Schools are:

- Intro to Ag, Food \& Natural Resources Careers
- Agribusiness, Sales \& Marketing
- Agricultural Economics
- Ag Leadership
- Companion Animal Care/Vet Science
- CIS Animal Science UM-Twin Cities ANSC1101
- Meat Science \& Processing
- Fish and Wildlife Management
- Natural Resources Management
- Horticulture \& Gardening
- Floriculture \& Design
- Landscaping \& Design
- Intro to Homestead Owners
- Intro to Ag Woods \& Construction
- Advanced Ag Woods \& Construction
- Intro to Ag Welding
- Advanced Ag Welding
- Intro to Small Gas Engines
- Advanced Engines
- Agricultural Mechanical Engineering
- Supervised Agricultural Experience Program
- $8^{\text {th }}$ Grade AFNR - Agriculture, Food \& Natural Resources


# AGRICULTURE INDUSTRIAL TECHNOLOGY CAREER AND TECHNICAL EDUCATION 

## Caledonia FFA

Students enrolling in Agriculture and Industrial Technology education courses will have the opportunity to become involved in the Caledonia FFA Chapter and be part of the nation's largest, most nationally recognized student organization. Students can participate and compete in Career Development Events applying the knowledge and skills they have learned in the classroom. These events are held at the local, regional, state, and national levels. Members can apply for scholarships and awards in various Supervised Experience Areas. Premier Leadership, Personal Growth Career Success, through Agriculture Education.

## Introduction to Ag, Food \& Natural Resources Careers

Course Length: Semester
Credit: $\quad .5$ \& Careers credit towards graduation
Prerequisite: None
Grade: 9-12

## Course Description:

This course of study is designed for students wishing to explore the different occupations, careers and interest areas in the field of Agriculture, Agribusiness, Food and Natural Resources. FFA activities will be strongly encouraged. Classroom instruction along with hands-on activities will assist students in learning about the opportunities that Agriculture, Food and Natural Resources has to offer. This course counts as a Careers Credit towards graduation.

## Agribusiness, Sales and Marketing

Course Length: Semester
Credit: . 5
Prerequisite: none
Grade: 9-12

## Course Description:

This course deals with agribusiness management in Minnesota. The topics will include and not be limited to Ag Ed-FFA-SAE, career opportunities in agribusiness - sales \& marketing, business establishment, organizing the business, problem solving \& the decision-making process, finances, earnings \& analysis of the business, taxation and schedules, economic principles, record keeping, human relations, employer - employee relations, sales presentations and credit \& lending. Research will be required or the completion of a Supervised Agricultural Experience Program Proficiency application, as well as public speaking activities for this course by all students. FFA membership is included, along with opportunities to compete in Career Development Events such as Farm Business Management.

# AGRICULTURE INDUSTRIAL TECHNOLOGY CAREER AND TECHNICAL EDUCATION 

## Agricultural Economics

Course Length: Semester
Credit: . 5
Prerequisite: none
Grade: 12

## Course Description:

Why is there world hunger or why is energy so expensive? How are natural resources distributed and how are wildlife populations managed? How does ethanol, or additional alternative uses for commodities, affect agriculture and food prices? Economics is the study of how people coordinate their wants and desires, given scarce resources and the decision-making mechanisms, social customs, and political realities of their societies. Decisions made by consumers, farmers, agricultural businesses, investors and the government interact to determine the allocation of scarce resources. Economics is a way of thinking about the world based on a set of principles that are useful for understanding almost any economic situation, from decisions that individuals make to the workings of highly complex international financial markets. The basics of supply, demand, price determination, world trade, public policy, and the economics of food safety will all be covered in this course. The economics of day-to-day living, saving and investing for your future, and the use of the stock market will also be included in this course. These concepts will be taught using handson learning activities, market simulations, and interactive group scenarios. FFA membership is included, along with opportunities to compete in Career Development Events such as Farm Business Management.

## Ag Leadership

Course Length: Semester
Credit: . 5
Prerequisite: None
Grade: 9-12

## Course Description :

Students will gain Leadership experience. They will investigate and analyze group dynamics, leadership styles, goals, goal-setting, and parliamentary procedures. Students will practice media relations and will have opportunities to participate in taped radio broadcasts. Students will be up-to-date with all FFA activities and involvement to build upon the FFA Leadership activities and involvement within the Chapter and School District.

* Each and every student enrolled in this class will gain FFA membership as well as have a Supervised Agricultural Education program and keep bi-weekly evaluated AET SAEP work experience records on their specific SAE and have it count as part of the Caledonia High School's "Total Agricultural Education Program".


## Companion Animals / Veterinary Science

Course Length: Semester
Credit: . 5
Prerequisite: None
Grade: 9-12
Course Description:
This course is designed so students can better understand and care for their pets including dogs, cats, rabbits, birds, fish, and other small animals. Specific topics will include small animal anatomy, handling, feeding, housing and equipment, history, breeds, uses, grooming, training, diseases and ailments, and reproduction. FFA activities will be strongly encouraged. Classroom instruction along with hands-on activities will assist students in learning about the wonderful world of companion animals. FFA membership is included, along with opportunities to compete in Career Development Events such as Companion Animal / Vet Science.

# AGRICULTURE, FOOD \& NATURAL RESOURCES CAREER AND TECHNICAL EDUCATION 

CIS Animal Science -College in the Schools, University of Minnesota ANSC1101

Course Length:
Credit:
Prerequisite:
Grade:

## Semester

. 5 \& 4 semester credits from the University of Minnesota
Must be in the upper $30 \%$ of your class
10-12

## Course Description:

This is a University of Minnesota Animal Science (ANSC 1101) class that offers the opportunity to stimulate an interest and appreciation as to how scientific principles are applied to animal agriculture and companion animal care. Students are introduced to production systems of livestock, poultry, and other animals as well as gaining confidence and experience in animal husbandry techniques and ethical responsibilities that society has with livestock and companion animals. Students will experience two UM-St Paul laboratories that are mandatory and the use of their facilities that will contribute to their research. Students will be concurrently enrolled at the University of Minnesota and upon successful completion of this class; student will have four semester credits to their college UM-Twin Cities transcript. FFA membership is included, along with opportunities to compete in Career Development Events such as Dairy Cattle Evaluation, General Livestock Evaluation, Horse Evaluation, Poultry Evaluation and Milk Quality \& Products.

## Meat Science and Processing

Course Length: Semester
Credit: . 5
Prerequisite: None
Grade: 9-12
Course Description:
This course provides learning experiences in meat science and safety which all apply to practices used in the development of meat-type food products. Units of instruction include: safe and proficient meat animal production, humane handling, meat animal evaluation, live and post-mortem meat animal inspection, basic meat chemistry, methods of meat preservation, meat processing and safety, meat inspection, meat packaging, microorganisms in meats, meat quality assurance and meat components, proper safe handling and preparation guidelines for meat as food. Students will spend time developing and creating new meat products. You will also be provided the opportunity to experience meat animal harvest and the hands-on processing of those carcasses into food products at Stinson's Country Meats. FFA membership is included, along with opportunities to compete in Career Development Events such as the Meats, General Livestock and Poultry CDEs.

## Fish \& Wildlife Management

Course Length: Semester
Credit: . 5
Prerequisite: None
Grade: 9-12

## Course Description:

This is a class that is ideal for hunters, anglers, outdoor enthusiasts, and environmentalists alike. This course deals with natural resources and how we manage and conserve them. Natural resources including wildlife, forestry, wetlands, soil, water, fish, forestry, wetlands, invasive species, and other environmental resources will be studied. Specific wildlife species to be covered will be mammals, birds, fish, insects as well as reptiles and amphibians. Current issues in Fish and Wildlife management will also be a focus. This course will help students understand and make responsible decisions regarding the conservation (wise use) of our fish and wildlife resources. Hands-on activities will include taxidermy projects, fishing rod building as well as birdhouse construction. FFA membership is included, along with opportunities to compete in Career Development Events such as Fish \& Wildlife. There will be a course fee collected.

# AGRICULTURE, FOOD \& NATURAL RESOURCES CAREER AND TECHNICAL EDUCATION 

## Natural Resources Management <br> Course Length: Semester <br> Credit: . 5 <br> Prerequisite: None <br> Grade: 9-12

## Course Description:

This is a class that is ideal for hunters, anglers, outdoor enthusiasts, and environmentalists alike. This course deals with natural resources and how we manage and conserve them. Natural resources including wildlife, forestry, wetlands, soil, water, fish, forestry, wetlands, invasive species, and other environmental resources will be studied. This course will help students understand and make responsible decisions regarding the conservation of our natural resources. FFA membership is included, along with opportunities to compete in Career Development Events such as Soils, Forestry and Fish \& Wildlife.

## Horticulture \& Gardening

Course Length: Semester
Credit: . 5
Prerequisite: None
Grade: 9-12

## Course Description:

In this class, students will learn how plant growth and production occurs while designing and working with the school garden \& raised beds. Topics include plant reproduction, plant growth, house plant care, and an introductory background to floriculture (florist) flower production, landscaping and nursery management. Students will also have the opportunity to spend some class time in the school greenhouse. FFA membership is included, along with opportunities to compete in Career Development Events such as Floriculture and Nursery/Landscaping.
**This class is a prerequisite for Floriculture \& Design, Greenhouse, and Landscaping.

## Floriculture \& Design

Course Length: Semester
Credit: . 5
Prerequisite: $\quad$ Horticulture \& Gardening
Grade: 9-12

## Course Description:

In this class, students will learn about cut flowers and foliage along with the construction of centerpieces, corsages and boutonnieres, and other kinds of arrangements using cut, fresh flowers, plastic and silk flowers and other floral arrangement media. Students will learn the principles behind floral arrangements and practice skills learned, including seasonal arrangements. Students will assist with generating floral arrangements to be put on display around school on a weekly basis. FFA membership is included, along with opportunities to compete in Career Development Events such as Floriculture and Nursery/Landscaping.

# AGRICULTURE, FOOD \& NATURAL RESOURCES CAREER AND TECHNICAL EDUCATION 

## Landscaping

Course Length: Semester
Credit: . 5
Prerequisite: $\quad$ Horticulture \& Gardening
Grade:
9-12

## Course Description:

This course studies the principles of landscape design, selection and use of plant material, careers in landscaping, using construction materials, lawn installation, cost estimates and maintaining the landscape for homes and businesses. A number of class periods will be spent outdoors applying landscaping skills. FFA membership is included, along with opportunities to compete in Career Development Events such as Floriculture and Nursery/Landscaping.

## Introduction to Homestead Owners

| Course Length: | Semester |
| :--- | :--- |
| Credit: | .5 |
| Prerequisite: | None |
| Grade: | $9-12$ |

## Course Description:

Prepare yourself for renting or owning a homestead in the future by taking this Beginning Homestead Owners course. Students will learn a variety of topics including steps to buying a homestead, homestead construction and framing, electrical wiring for homestead buildings, homestead plumbing, how to roof, paint, fence, and many other homestead repair tips and tricks. Classroom learning will be reinforced with hands on lab projects, which include framing a wall, completing electrical work, painting, shingling, and more on storage, maintenance as well as livestock facilities. Basic homestead vehicle (homestead light trucks, UTVs, ATVs) maintenance as well as basic small engine operation and maintenance will also be covered within.

## Introduction to Ag Woods \& Construction

Course Length: Semester
Credit: . 5
Prerequisite: None
Grade: 9-12
Course Description:
Students will develop the beginning skills needed as an entry level into the Wood shop environment in the safe planning and safe constructing of small-medium agricultural projects and agricultural structures. Areas of instruction will include Ag carpentry and Ag woodworking. Students will be ultimately expected to plan and construct an Ag related project during the semester.

* Each and every student enrolled in this class will acquire FFA membership as well as have a Supervised Agricultural Education program and keep bi-weekly evaluated AET records on their specific SAE and have it count as part of the Caledonia High School's "Total Agricultural Education Program".


# AGRICULTURE, FOOD \& NATURAL RESOURCES CAREER AND TECHNICAL EDUCATION 

## Advanced Ag Woods \& Construction

Course Length:
Credit:
Prerequisite:
Grade:

Semester
. 5
Beginning Woods (min. C or better)
10-12

Course Description:
Students will learn more advanced uses of materials and machines above and beyond what was taught in beginning woods, with an emphasis on furniture construction. Cabinet construction, drawer construction, and raised panel door construction will all be covered in the class to prepare students in the construction of the project of their choice with instructor approval. Examples of possible student projects (projects need to be complex and detailed): a six-gun gun cabinet with raised panel or glass doors, a night stand with pull-out dovetailed drawer, a hope chest with decorative legs and raised panel sides, or anything else approved by the instructor.
**Lab Fee - Safety glasses are required for the class and will be provided. Any material used in the construction of a student's individual project will have to be purchased by the student, on the student's individual time, and brought into school by their own means of transportation. Project costs can range anywhere from $\$ 40.00$ to $\$ 350.00$ or more depending on the type of wood used and amount of wood used. Any wood that the student wants to purchase from the department may be done at the current lumber rate that is charged to the school. An additional shop fee will be charged to cover consumable supplies determined by project. Shop Fee $\mathbf{\$ 1 0 . 0 0}$

## Introduction to Welding

Course Length: Semester
Credit: . 5
Prerequisite: None
Grade: 9-12
Course Description:
The objective of this course is to help students develop competencies required by students to enter occupations in production agriculture and Ag shop skills. The areas of instruction will cover Safety, Planning, Metallurgy, Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Gas Welding and Cutting with Oxy-Acetylene, Tungsten Inert Gas (TIG) Welding, Plasma cutting, Welding using special techniques (Cast iron, Pipe welding, Hardfacing \& Gouging), Soldering, Welding Plastics, Workshop Techniques (Taps \& Dies and Drill bit Sharpening, and Basic Blacksmithing. Students will be required to perform / construct many smaller projects, which will contain a high percent of the course grade. Shop Fee \$25

## Advanced Welding

Course Length: Semester
Credit: . 5
Prerequisite: $\quad$ C or better in Introduction to Welding
Grade:
9-12

## Course Description:

The objective of this course is to help advance students beyond developing competencies required by students to enter occupations in production agriculture and Ag shop skills. The areas of instruction will advance further into Safety, Planning, Metallurgy, Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Gas Welding and Cutting with Oxy-Acetylene, Tungsten Inert Gas (TIG) Welding, Plasma cutting, Welding using special techniques (Cast iron, Pipe welding, Hard-facing \& Gouging), Soldering, Welding Plastics, Workshop Techniques (Taps \& Dies and Drill bit Sharpening, and Basic Blacksmithing. Students will be required to perform / construct many larger projects- either of their own or projects brought in or requested by school district residents which will account for a high percent of the course grade. Shop Fee $\$ \mathbf{2 5 . 0 0}$

# AGRICULTURE, FOOD \& NATURAL RESOURCES CAREER AND TECHNICAL EDUCATION 

## Introduction to Small Engines

Course Length: Semester
Credit:
Prerequisite: none
Grade: 9-12

## Course Description:

The course is designed to give students a strong working knowledge of small, single cylinder gas engines in the range of 3-8 horsepower. Students will learn about carburetor theory, magneto ignition systems as well as how to take measurements of various components, and then reassemble it as part of their course work. Two stroke as well as 4 stroke cycle engines will be covered. Students will learn the operational principles, maintenance, repair adjustments and service of the two- or four-cycle small gasoline engine. Shop Fee $\mathbf{\$ 1 0 . 0 0}$

## Advanced Engines

Course Length: Semester
Credit:
Prerequisite:
. 5
C or better in Small Engines
Grade:
9-12
Course Description:
The course is designed to give students an advanced working knowledge of small as well as large gas and diesel engines. Students will review through carburetor theory, magneto ignition systems, as well as how to take measurements of various components, and then reassemble it as part of their course work. Two stroke, four stroke cycle engines as well as diesel engines will be covered. Students will review the operational principles, maintenance, repair adjustments and service of the two- or four-cycle small gasoline engine. Diesel will also be covered in this course.

## Agricultural Mechanical Engineering

Course Length: Semester
Credit: . 5
Prerequisite: Intro to Woods, Intro to Welding, Intro to Small Engines
Grade:
10-12
Course Description:
This course will consist of five major units: 1) Agricultural Tractor and Equipment 2) Engine Systems 3) Metal Fabrication 4) Electrical Circuits, Motors and Controls 5) Building Construction, Concrete, Masonry \& Plumbing. The major 'areas of focus' will include: 2024: Forage Harvester and 2025: Lawn Tractor/Mower.

## Subject Rotation:

Odd Years: Agricultural Tractor and Equipment: Utility Tractor- New Holland Workmaster 95, 105, or 120, Engine Systems (Large or Small Engines), Metal Fabrication - (Fuel Gas Welding \& Cutting \& problem solving only, MIG, \& Cold Metal. SMAW will be used for the skill development. Electric Motors, Controls, and Sensing Devices.
Concrete, Masonry, and Plumbing
Even Years: Agricultural Tractor and Equipment, Engine Systems: Large \& Small Engines, Metal Fabrication (SMAW, TIG, Plasma, Hot Metal) Electrical Circuits \& Building Construction. Shop Fee \$10.00

# AGRICULTURE, FOOD \& NATURAL RESOURCES CAREER AND TECHNICAL EDUCATION 

Supervised Agricultural Experience Program (SAEP)
Course Length: Semester
Credit:
Prerequisite: $\quad$ Pre-approval from Instructor \&
Have had yearly enrollment within Ag Classes and Active FFA Membership
Grade: 11-12

## Course Description:

This is a hands-on, real-world application of classroom instruction. Students must be Juniors or Seniors to enroll. SAE provides students with valuable life skills in areas such as employability, record keeping, marketing and entrepreneurship. Students will be required to continue their SAE experience learned in their Agriculture, Food \& Natural Resources courses. Students will be released from school to further their interests in AFNR with real life hands-on experiences within their future career interests. Students must have successfully completed AFNR courses each year leading up to their SAE enrollment. Students must have been active participants in Caledonia FFA and AET work experience record keeping. This is a student lead, Instructor and Employer supervised experience. Students must maintain a ' $73 \% \mathrm{C}$ ' in all courses during enrollment.

## Agribusiness Management \& Entrepreneurship

Course Length: semester
Credit: . 5
Prerequisite:
Grade: 9-12

## Course Description:

Small business is the backbone of the American economy. Agribusiness \& Entrepreneurship is the core class for the Agribusiness Pathway. Financial success in business operations often depends upon the managerial skills of the individual owner/operator. This course is designed to give students a background in the decision-making process and day-to-day financial management skills required to effectively operate a business. Through exploring business types, economics, marketing, and business planning management, students will be introduced to business communications, along with ethics \& social responsibility. Students will begin to develop a business plan where they will learn about financing, recordkeeping, accounting, staffing, taxes, and government regulations (all necessary for the protection of their businesses). Students then move into marketing, investigating how to persuade others to buy their products and services and learning how to manage an existing business.

# AGRICULTURE, FOOD \& NATURAL RESOURCES <br> CAREER AND TECHNICAL EDUCATION 

## (Middle School)

## $8^{\text {th }}$ Grade AFNR - Agriculture, Food \& Natural Resources

| Course Length: | yearlong class meets every other day. |
| :--- | :--- |
| Credit: | .5 |
| Grade: | 8 |

## Course Description:

This course of study is designed for 8th grade students to explore the different types of Agricultural Technology applications found in Agriculture, Food \& Natural Resources specifically within the seven AFNR Career Pathways which are:

1. Agribusiness Systems
2. Animal Systems
3. Environmental Service Systems
4. Food Products and Processing Systems
5. Natural Resources Systems
6. Plant Systems
7. Power, Structural and Technical Systems

Students will learn about the various types of technologies in the classroom, outdoors and in the shop. Students will become aware of the vast variety of career choices that are available in the AFNR areas. 8th grade students will be introduced to the FFA student organization and the opportunities and activities this organization has to offer. They will also be introduced to Career Planning and documenting their work experiences within the AET computerized record keeping system. Classroom instruction along with hands on activities will assist students in learning about the opportunities that AFNR has to offer. Shop Fee $\mathbf{\$ 1 0 . 0 0}$

## Animation I

Course Length: Semester
Credit: . 5
Prerequisite:
Grade: 9-12

## Course Description:

This course will explore traditional methods of animation such as Claymation, flip books, and more. Using Adobe Animate students will explore basic computer animation. Students will utilize drawing skills and design principles to create animations for the web and other digital formats. Also, students will learn about the history of animation and applications of animation.

## Ceramics I

Course Length: Semester
Credit: . 5
Prerequisite: None
Grade: 10-12

## Course Description:

This course will introduce the fundamentals of creating functional and sculptural clay objects. The course material and assignments will explore a variety of processes for creating clay vessels such as the pinch, coil, and slab methods. Students will also be expected to glaze their ceramic projects. If time allows, students will have the opportunity to experiment on the potter's wheel.

## Ceramics II

Course Length: Semester
Credit: . 5
Prerequisite: $\quad$ Ceramics I
Grade: $\quad 10-12$

## Course Description:

This course will build upon what was learned in Ceramics I. Advanced pinch, slab, and coil techniques will be taught. Emphasis will be placed upon ceramic history, aesthetics, and commercial applications. Students will also have significant amount of time to produce clay vessels on the potter's wheel. As a final project, students will be involved in a research project that includes a paper and a replica project of well-known ceramic artist or culture.

## Digital Photography and Video Production

Course Length:
Credit:
Prerequisite:
Grade:
Semester
. 5

## Course Description:

This course provides an overview of the creative and technical concepts of digital photography and video production. Students will develop an appreciation for digital imagery as a visual art form. An understanding of perception, structure and composition will be the primary goal. Focus will be on composition, balance, and storytelling. Photography will be enhanced using Adobe Photoshop.

## Graphic Design I

Course Length: Semester
Credit: . 5
Prerequisite: None
Grade: $\quad 10-12$

## Course Description:

In this course students will study the areas of communications and design. The Elements and Principles of Art will be studied while various other techniques and media will be explored. Students will be introduced to computer graphics using Adobe Photoshop and Illustrator, digital photography and scanning as tools for layout and design.

## Graphic Design II

Course Length: Semester
Credit:
. 5
Prerequisite: $\quad$ Graphic Design I
Grade: $\quad 10-12$

## Course Description:

This course will build upon what was learned in Graphics Design I. Students will further investigate design principles used with graphic communication. Adobe Photoshop and Illustrator will be used as students continue exploring more advanced layouts. Vocations using Graphic Design skills will also be explored.

## Intro to Art

| Course Length: | Semester |
| :--- | :--- |
| Credit: | .5 |
| Prerequisite: | None |
| Grade: | $9-12$ |

## Course Description:

Introduction to Art is designed for students who have had little experience in the visual arts. The emphasis of this class will be in developing each student's individual skills and exploring many techniques and media. This class will focus on the Principles and Elements of Art. Another area of focus will be with color theory.

## Intro to Drawing

Course Length: Semester
Credit: . 5
Prerequisite:
Grade: 9-12

## Course Description:

Students will be introduced to a variety of media, including pencil, pastel, charcoal, pen, ink, etc. Students will apply what they learn from the elements and principles of Art to still life, portraiture, and other projects.

## Intro to Painting

| Course Length: | Semester |
| :--- | :--- |
| Credit: | .5 |
| Prerequisite: | None |
| Grade: | $9-12$ |

## Course Description:

This class is designed to give students the opportunity to work with the following materials, skills and techniques: composition, watercolor paints, acrylic paints, and constructing a canvas. Most lessons taught in Intro to Painting will include color theory, art history and/or art appreciation. This course will focus on improving technical skills so all artistic abilities are welcome.

## Multicultural Arts

Course Length: Semester
Credit: . 5
Prerequisite: None
Grade: 9-12

## Course Description:

This course will develop students' understanding and appreciation of the values and traditions through the arts and crafts of many cultures. Projects will focus on styles and customs of Africa, Asia, Latin America, Australia, Europe and North America. Projects will be both 2D and 3D. This course is designed for students who have had little or no artistic experience.

## Advanced Art

Course Length: Semester
Credit: . 5
Prerequisite: Students need to have had at least two art classes and passed with a B or higher
Grade: 11-12

## Course Description:

Advanced Art is designed for students who want to continue their own personal exploration of art. This would be done in conjunction with the study History of Art. Students will receive a wide variety of art making experiences and this course would be an excellent opportunity for students who are considering a post-secondary experience in one of the many fields of visual arts to create an art portfolio for college submissions or scholarships.

# BUSINESS <br> <br> CAREER AND TECHNICAL EDUCATION 

 <br> <br> CAREER AND TECHNICAL EDUCATION}

## Intro to Accounting

Course Length: semester
Credit: . 5
Prerequisite:
Grades:
9-12

## Course Description:

This course is a practical introduction to accounting. Both the how and why of accounting are introduced to provide students a foundation of the "language of business". Accounting principles and practices will be covered in a procedural based instruction, providing for a hands-on learning experience for students. $* * *$ Participation in BPA (student organization) is encouraged.

## Intro to Accounting (Part 2)

Course Length: semester
Credit: . 5
Prerequisite:
Grades: 9-12

## Course Description:

This course is a continuation of the Intro to Accounting course that students took during the 2021-2022 and 20222023 school years. If you have not already taken part 1 of Intro to Accounting, you should not sign up for this course. You should sign up for the Accounting I course ( 2 semesters) below.
"Accounting is the language of business." An accounting background is a tremendous benefit to an individual when it comes to saving and investing, keeping accurate income tax records, and conducting numerous daily business transactions. However, this course is essential for those students who are considering a career in accounting, finance, business, or law.

In this course, students will begin by reviewing important concepts that they already learned in Intro to Accounting journalizing, posting to ledgers, preparing financial reports, and analyzing adjusting and closing entries.

After a thorough review, students will learn to record sales and cash receipts transactions, prepare subsidiary schedules, prepare, journalize, and post payroll, complete financial statements and post-closing trial balance.

If time allows, the students will prepare personal income tax returns. The students will complete a business simulation whereby they keep the accounting/financial records for a hypothetical business. This course requires neat and accurate work. It is suggested that students registering for accounting should have a $\mathrm{C}+$ average or better in math. ***Participation in BPA (student organization) is encouraged.

# BUSINESS <br> <br> CAREER AND TECHNICAL EDUCATION 

 <br> <br> CAREER AND TECHNICAL EDUCATION}

## Accounting I

Course Length: year
Credit: 1
Prerequisite:
Grade: 9-12
Course Description:
"Accounting is the language of business." Everyone is faced with the need to earn a living. And living on what he or she earns. Knowledge of accounting can help one do both. In the Real World, Accounting Matters!

An accounting background is a tremendous benefit to an individual when it comes to saving and investing, keeping accurate income tax records, and conducting numerous daily business transactions. However, this course is essential for those students who are considering a career in accounting, finance, business, or law.

In this course, students will learn how to prepare ledgers, payroll records, analyze financial reports, and maintain the accounting records for a merchandising business. If time allows, the students will prepare personal income tax returns. The students will complete a business simulation whereby they keep the accounting/financial records for a hypothetical business. This course requires neat and accurate work. It is suggested that students registering for accounting should have a C+ average or better in math. ***Participation in BPA (student organization) is encouraged.

## Accounting II

Course Length: year
Credit: 1
Prerequisite:
Grade:
10-12
Note: If scheduling conflicts occur, students may take this course for .5 credit; however, it is advisable to enroll in the full course

## Course Description:

"Accounting is the language of business."
This course will include partnership and corporate accounting procedures, updating accounts by adjustment, accrual and deferral accounting procedures, advanced payroll accounting and inventory control. This class introduces students to the problem-solving capacity of the micro-computer. ${ }^{* * * P a r t i c i p a t i o n ~ i n ~ B P A ~(s t u d e n t ~ o r g a n i z a t i o n) ~ i s ~}$ encouraged. In the Real World, Accounting Matters!

Supervised Business Experience (SBE)
Course Length: semester
Credit: . 5
Prerequisite:
Grade:

## Course Description

Students with an interest in pursuing a career in a business-related field will be placed in area businesses and will receive training and job experience. In the Supervised Business Experience (SBA) class students will learn personal skills, decision-making skills, and employability skills that will help create a foundation for a future career in business. Students in the seminar portion of the course will research and learn about the career process, update a resume, and will prepare a cover letter. ***Participation in BPA (student organization) is encouraged. Participation in the course is for elective credit.
**Students must have taken prior business courses before placement and also must be member of BPA**

# BUSINESS <br> <br> CAREER AND TECHNICAL EDUCATION 

 <br> <br> CAREER AND TECHNICAL EDUCATION}

## Careers

Course Length:
Credit:
Prerequisite:
Grade:

semester<br>. 5<br>Sophomore<br>graduation requirement

## Course Description:

Students will evaluate and explore career opportunities based on their personal values, interests, skills and strengths. Students will also research post-secondary options to obtain career goals. Job search skills, employer expectations, and employment skills will be examined. ***Participation in BPA (student organization) is encouraged.

## Computer Applications

Course Length: semester
Credit: . 5
Prerequisite:
Grade: 9-12

## Course Description:

This is a semester long course that encompasses software applications and proper document formatting. The purpose of the class is to focus on features of word processing, spreadsheets and presentation software to make you a more proficient user of computer applications. In this class you will learn how to create properly formatted business/school related documents. ${ }^{* * * P a r t i c i p a t i o n ~ i n ~ B P A ~(s t u d e n t ~ o r g a n i z a t i o n) ~ i s ~ e n c o u r a g e d . ~}$

## Microsoft Office Suite

| Course Length: | 2 semesters |
| :--- | :--- |
| Credit: | 1 |
| Prerequisite: |  |
| Grade: | $9-12$ |

## Course Description

For students planning on pursuing higher education after high school. This track will focus on the Microsoft Office Suite, including Microsoft Word, Excel and PowerPoint. Students will be able to qualify to become Microsoft Office Certified. ${ }^{* * * * \text { Participation in BPA (student organization) is encouraged. }}$

## Personal Finance

Course Length: semester
Credit: . 5
Prerequisite: grad requirement
Grade: 11-12

## Course Description:

Understanding financial management concepts is an important life skill. From credit to insurance and taxes, it is important that students understand the consequences of their choices. Wisely managing their money, students become citizens that are more responsible. A thorough understanding of financial concepts, with practical application through activities and projects, will enable students to leave this course with applicable, useful skills for life. This course surveys the basic personal financial needs of most individuals and emphasizes the basics of budgeting, saving, checking, investments, credit, insurance, and preparing income tax returns. Students taking this course will learn to better prepare themselves for their financial futures. $* * *$ Participation in BPA (student organization) is encouraged.

# BUSINESS <br> <br> CAREER AND TECHNICAL EDUCATION 

 <br> <br> CAREER AND TECHNICAL EDUCATION}

## Hospitality and Tourism

Course Length: semester
Credit: . 5
Prerequisite: None
Grade: 9-12
Course Description:
This course aligns with the American Hotel and Lodging Educational Institute (AHLEI) curriculum, preparing students for certification through AHLEI. Students learn to identify operational practices important in lodging operations and the management decision-making processes involved in projecting costs, room pricing, and future demand. Topics include marketing strategies to increase room revenue, comparison of various types of facilities, importance of quality and service, the relationship between a hotel's operational departments, and event planning venues and services. ${ }^{* * * \text { Participation in BPA (student organization) is encouraged. } * * * \text { Participation in BPA (student }}$ organization) is encouraged.

## Hospitality and Tourism: Food \& Beverage

Course Length: semester
Credit: . 5
Prerequisite: $\quad$ Hospitality and Tourism - I
Grade: 9-12

## Course Description:

This is a management course. This course aligns with the American Hotel and Lodging Educational Institute (AHLEI) curriculum, preparing students for certification through AHLEI. Students learn to identify operational practices important in Food and Beverage Operations and the management decision-making processes involved in projecting costs for Food, Overhead and Labor Expenses. Topics include: The Restaurant Business, Food Safety and Sanitation, Responsible Food and Beverage Service, Event Management including banquets and catering.***Participation in BPA (student organization) is encouraged.

## Emerging Technologies

Course Length: semester
Credit: . 5
Prerequisite: None
Grade: 9-12
Course Description:
This is a semester course, which will feature new and emerging technologies. Students will explore some of the latest technologies available today. There will be projects that will include: 3D printing, Mobile Applications, Robotics, Programming, Drone Use. What can new technologies bring to personal and business communication, learning and knowledge? This course explores these issues and addresses the future of these technologies. Students in this class will learn basic programming and will have the opportunity to create mobile apps or a computer game.
***Participation in BPA (student organization) is encouraged.

# BUSINESS <br> <br> CAREER AND TECHNICAL EDUCATION 

 <br> <br> CAREER AND TECHNICAL EDUCATION}

## Business Law

Course Length: semester
Credit: . 5
Prerequisite: None
Grade:
9-12

## Course Description

Business and personal law impacts not only business, but the lives of young people and adults as well. In this course, students will achieve an understanding of legal principles that will be useful throughout their lives including ethical foundations of laws, constitutional rights, court systems, criminal and civil law, and contract law.

## Units/Topics Covered:

1. Laws and Their Ethical Foundation
2. Constitutional Rights
3. Court Systems
4. Criminal Law and Procedure
5. Civil Law and Procedure
6. Offer and Acceptance
7. Genuineness of Assent
8. Consideration
9. Legal Capacity to Contract

## Entrepreneurship - Running a Business

Course Length: semester
Credit: . 5
Prerequisite:
Grade: 9-12

## Course Description:

Persons of all ages, abilities and interests manage their own business or the business of others. Managers are responsible for the successful operation of their business and for the five functions of management - planning, organizing, leading, controlling and staffing. In this course, you will gain real life experience through a simulation of managing a business of your own. ${ }^{* * *}$ Participation in BPA (student organization)

## Emerging Leaders

Course Length: Semester
Credit: . 5
Prerequisite: None
Grade: 9-12
Emerging Leaders is a class that takes all of life's "little lessons" and wraps it all into one class with an business emphasis. Whether you are a member, captain, or officer of sporting or non-sporting teams, after school jobs, student organizations, or community \& school clubs, you can benefit from this course.
The goal of this class is to help you discover and develop in the 3 following areas: premier leadership, personal growth, and career success. The course content centers on helping you make good decisions, developing good habits, setting and achieving goals, and preparing for jobs. This is a Leadership course.

- Highly recommended for Student Athletes, Student Council Members, Club/Organization Officers, or any other leader or individuals desiring to have more leadership development and experiences.


# BUSINESS CAREER AND TECHNICAL EDUCATION 

## Intro to Business

Course Length: semester
Credit: . 5
Prerequisite: None
Grade: 9-12
Course Description:
This course introduces students to a variety of topics in the field of business.

## Topics covered:

- Economic Decisions
- Business Organization
- Entrepreneurship
- Marketing
- Financial Planning
***Participation in BPA (student organization) is encouraged.


## Sports and Entertainment Marketing

Course Length: semester
Credit: . 5
Prerequisite:
Grade:
10-12

## Course Description:

Sports and Entertainment Marketing introduces marketing and management functions and tasks that can be applied in amateur or professional sports or sporting events, entertainment or entertainment events, selling or renting supplies and equipment used for recreational purposes, product or services related to hobbies or cultural events, or business primarily engaged in satisfying the desire to make productive or enjoyable use of leisure time. ${ }^{* * * \text { Participation in }}$ BPA (student organization) is encouraged.

## Web Page Design

Course Length: semester
Credit: . 5
Prerequisite:
Grade: 9-12

## Course Description:

The students in this class will learn how to create web pages. This class learns how to code in XHTML. The class creates sample web pages using images, tables, links and color code. Students will be exposed to (CSS) Cascading Style Sheets.

In Quarter 2 students will design web pages for sample companies.

# BUSINESS CAREER AND TECHNICAL EDUCATION 

## Keyboarding \& Computer Applications

Course Length: semester
Credit: . 5
Prerequisite:
Grade:
9-12

## Course Description:

This class is intended for student who struggle with keyboarding, especially $9^{\text {th }}$ graders who are transitioning from iPad to Chromebooks. This is a semester long course that encompasses Google applications and proper document formatting. The purpose of the class is to focus on features of word processing, spreadsheets, drawing, forms and presentation software to make you a more proficient user of computer applications. In this class you will learn how to create properly formatted business/school related documents. ***Participation in BPA (student organization) is encouraged.

## Microsoft Word

Course Length: semester
Credit: . 5
Prerequisite: Keyboarding Skills Required - 35 wpm minimum or Keyboarding Computer Apps
Grade:
9-12

## Course Description

For students planning on pursuing higher education after high school. This track will focus on the Microsoft Word, Students will be able to qualify to become Microsoft Word Certified. ****Participation in BPA (student organization) is encouraged.

## Microsoft Excel \& PowerPoint

Course Length: semester
Credit: . 5
Prerequisite: Keyboarding Skills Required - 35 wpm minimum or Keyboarding Computer Apps
Grade: 9-12

Course Description
For students planning on pursuing higher education after high school. This track will focus on the Microsoft Excel and PowerPoint, Students will be able to qualify to become Microsoft Excel and PowerPoint Certified.
****Participation in BPA (student organization) is encouraged.

## CCLS 1010 Expanded First Year Experience (Concurrent Enrollment)

Course Length: semester
Credit: $\quad .75$ high school credit and 3 college credits
Prerequisite:
Grade:
10-12

## Course Description:

This course introduces and explores proven strategies and applications to help students achieve greater success in college and in life. Students will learn to make choices that promote responsibility, motivation, interdependence, and self-awareness. This course expands on the topics covered in CCLS 1000 but offers a more individualized, in-depth approach based on student needs.

# ENGLISH 

## English 9 /**Applied English 9

Course Length: year
Credit:
1
Prerequisite:

## Course Description:

Explore essential questions such as "Which is more powerful-hope or fear?" and "How much are your decisions influenced by others?" through short stories, novels, poetry, and plays in the genres of dystopian literature, Shakespeare, and more. One English 9 writing focus is supporting claims with textual evidence and critical thinking. Another focus is using figurative language and identifying parts of speech to strengthen writing. The speaking and listening skills are developed through scored discussions and presentation of student writing.

## English 10/**Applied English 10

Course Length: year
Credit: 1
Prerequisite:
Course Description:
English 10 students study American literature, which includes short stories, poetry, drama, and novels. Additionally, students will write short papers related to the literature studied and complete a research paper using the MLA style of documentation. The course includes a grammar unit. Students will view films which supplement the curriculum.

## English 11/**Applied English 11

Course Length: year
Credit: 1
Prerequisite:

## Course Description:

An examination of "The Hero's Journey" in various genres of literature, including Beowulf, starts the course with the question, "What makes someone a hero and what makes someone a monster? " The examination continues from historic literature to contemporary fiction and nonfiction. The writing focus is on crafting an argument essay with continued work on research using credible sources. Discussion skills and group presentations round out the speaking and listening skill development.

## ENGLISH

## English 12/**Applied English 12

Course Length: semester
Credit: $\quad 1.0$
Prerequisite:

## Course Description:

Note: Teachers will choose some of the following selections/activities to be incorporated into the language arts curriculum. The teacher's professional judgment will be used to make the final determination as to which specific selections/activities will be used, according to the needs of the students.

The literature we explore together in this class will be centered around the theme of what it means to be a hero. We will look into a number of literary works, both historical and contemporary to define what is traditionally thought of as heroic behavior, how the heroic ideal originated, how it applies to different cultures, how it has withstood the test of time, and how it differs from momentary glory. Works studied may include, but are not limited to The odyssey, Medea, Tartuffe, All Quiet on the Western Front. Various audio and visual accompaniments will be included. Students will also learn aspects of communication in small group and business settings including building interpersonal relationships, and group problem solving skills.
**Applied English is the same course description as above; the only difference is Applied English is a partnership of two teachers teaching the same course together. They build a trusting relationship where both the English teacher and the special education teacher share preparation and share responsibility for teaching all students. This co-teaching method is based in the delivering instruction jointly. They create and use formative and summative assessment with all students. Both the special education teacher and English teacher grade assessments jointly to determine grades. Both teachers are always working to assist all students. Each section of every lesson specifies roles for both teachers. This course is taught with the same standards and objectives with a focus on PUPIL learning, while making the necessary modifications and adaptations written in students' IEPs. The goal is to have every student be successful in this course.

## ENGL 1101 Composition I (Concurrent Enrollment)

Course Length: semester
Credit: $\quad .75$ high school credit and 3 college credits
Prerequisite:
Grade: 11-12

## Course Description:

This is an introductory college writing course designed to help students develop effective writing skills for college level work. Students learn to generate ideas and organize them into unified, coherent essays.

## SPCH 1100 Fundamentals of Speech (Concurrent Enrollment)

| Course Length: | semester |
| :--- | :--- |
| Credit: | .75 high school credit and 3 college credits |

Prerequisite:
Grade:

## Course Description:

This course focuses on the theory and practice of public communication including individual and group presentations. This course emphasizes audience analysis, organization, content development including topic selection and speaking ethics. Students will prepare and deliver a variety of both individual and group presentations and demonstrate an ability to apply research from diverse sources. Students should expect to reduce speech apprehension and develop self-confidence in their ability to communicate in public.

## ENGLISH

## Advanced Creative Writing (Concurrent Enrollment)

Course Length: semester
Credit: $\quad .75$ high school credit and 3 college credits
Prerequisite:
Grade:
11-12

## Course Description:

This is an introductory writing course in creative prose and poetry. In lecture/workshop format, students examine and evaluate creative writing models and peer writing, noting word choice, rhythm, character development and conflict. Students will create a portfolio of their writing to be shared in small groups and/or individual conferences.

## ENGL 1103 Introduction to Literature (Concurrent Enrollment)

Course Length: semester
Credit: $\quad .75$ high school credit and 3 college credits
Prerequisite:
Grade: 11-12

## Course Description:

This is an introductory literature course designed to increase a student's critical and analytical skills in reading.
Included is a study of literature by genre, the short story, drama, poetry and the novel. Emphasis in the selections is on American and English literature although some works in translation are read. Critical and interpretive papers are required.

## ENGL 1104 Composition II: Argument (Concurrent Enrollment)

Course Length: semester
Credit: $\quad .75$ high school credit and 3 college credits
Prerequisite:
Grade: 11-12

## Course Description:

This second semester composition course is designed as a continuation of ENGL 1101. It teaches the skills needed to write clear and coherent essays using different modes of expository prose such as process, comparison and contrast, classification, and definition. It will culminate in the study of argumentative writing in which the student learns to defend a position and argue a thesis with reason and evidence.

## Mass Communications

Course Length: semester
Credit: . 5
Prerequisite:
Grade: 9-12

## Course Description:

Mass communication course surveys the basic factors affecting mass communication in the digital age. These will include the history of mass communications and the relationship between mass media and society, marketing and design for various audiences, trends in print media (newspapers, magazines, books), visual media (photography, film, theatre), broadcast media (radio, television, streaming), and digital media (blogs, websites, social media). Also includes media law and ethics. Students will explore working with various types of media while developing project management skills.

# FOREIGN LANGUAGE 

## Spanish I

Course Length:
year
Credit: 1
Grade:
9-12


Course Description:
National Standards for Foreign Language Learning

- Communication: communicate in languages other than English
- Cultures: gain knowledge and understanding of other cultures
- Connections: connect with other disciplines and acquire information
- Comparisons: develop insight into the nature of language and culture
- Communities: participate in multilingual communities at home and around the world


## Spanish I, II, and III meet the National Foreign Language Standards

## Course Description:

Spanish I students develop listening, speaking, reading, and writing skills to be able to meet survival needs in the classroom dealing with personal and classroom events and functions. Emphasis is on oral communication. Students can show understanding and knowledge of America's Spanish heritage, of Spanish holidays and festivals, of Spanish history and of cultural differences and similarities between Spanish and American young people. It is suggested that the student have a C+ average or better in English from the previous two years or the approval of the instructor.

## Topical Outline:

- Greeting others and saying good-bye
- Introductions
- Asking for and giving names
- Expressing courtesy
- Spelling words
- Discussing health
- Recognizing formal and informal
- Asking for and stating place of origin
- Seeking and providing personal information
- Discussing location
- Identifying classroom objects
- Giving and taking instructions
- Using numbers 0-100
- Telling time
- Talking about and describing family and friends
- Stating Possession
- Making a phone call
- Talking about where and how to go somewhere
- Offering suggestions and invitations
- Talking about future
- Writing about family and friends and personal descriptions
- Expressing likes and dislikes and reporting information
- Study of Mexico, the customs, and the relationship with the United States Career possibilities, college requirements and placement testing


## FOREIGN LANGUAGE

## Spanish I (continued)

Student Activities:
Listening, reading, speaking, and writing
Group work, culture videos, tapes, and music and computer enrichment programs
Career Information:
The following skills, which are a good basis for any career, are taught:

- Written and oral directions
- Team work
- Organizational skills
- Self-discipline
- Ability to be adaptable
- Problem solving
- Accountability and dependability
- Decision making
- Computer skills
- Interpersonal skills like negotiating, teaching, and working with different cultures

Spanish is beneficial for the student who wishes to attend a four year college and a student who wants to work with people in any field. The importance of learning Spanish is discussed and career opportunities such as travel agent, court interpreter, receptionist, clerk, dispatcher, flight attendant, hotel and resort manager, and social services.

Students who study a foreign language score higher in math and science on the ACT and SAT tests. Students with two years of the study of another language score up to $12 \%$ higher on the SAT verbal exams: the score continues to rise at least 5\% for each additional year of language study. Most colleges and universities require two years of a foreign language for admittance, and some have now increased that to three years.

## FOREIGN LANGUAGE

## Spanish II

| Course Length: | year |
| :--- | :--- |
| Credit: | 1 |
| Prerequisite: | C+: Spanish I |
| Grade: | $10-12$ |



## National Standards for Foreign Language Learning

- Communication: communicate in languages other than English
- Cultures: gain knowledge and understanding of other cultures
- Connections: connect with other disciplines and acquire information
- Comparisons: develop insight into the nature of language and culture
- Communities: participate in multilingual communities at home and around the world


## Spanish I, II, and III meet the national standards at the appropriate level.

## Course Description:

Spanish II students continue listening, speaking, reading, and writing skills to be able to meet survival needs in the classroom dealing with personal and classroom events and functions. Emphasis is on oral communication. Students can show understanding and knowledge of America's Spanish heritage, of Spanish holidays and festivals, of Spanish history and of cultural differences and similarities between Spanish and American young people. It is suggested that the student have a C+ average or better in Spanish I or the approval of the instructor.

## Topical Outline:

- Discuss likes and dislikes on a variety of topics
- Expressing thoughts in the past
- Expressing thoughts in the future
- Expressing opinions
- Everyday activities
- Places in the city
- Transportation
- Asking and giving directions
- Discussing schedules - length of time
- Special days
- Entertainment
- Sports and recreation
- Identifying and ordering food
- Describing house and furnishings
- Using numbers 0-100.000.000
- Expressing quantity
- Using demonstratives
- Shopping - clothing
- Health \& body parts
- Personal information
- Study of Spain, the customs, festivals and the relationship with the United States
- Career possibilities, college requirements and placement testing


## FOREIGN LANGUAGE

## Spanish II (continued)

## Student Activities:

Listening, reading, speaking, and writing
Group work, culture videos, tapes, and music and computer enrichment programs

## Career Information:

The following skills, which are a good basis for any career, are taught:

- Written and oral directions
- Team work
- Organizational skills
- Self-discipline
- Ability to be adaptable
- Problem solving
- Accountability and dependability
- Decision making
- Computer skills
- Interpersonal skills like negotiating, teaching, and working with different cultures

Spanish is beneficial for the student who wishes to attend a four year college and a student who wants to work with people in any field. The importance of learning Spanish is discussed and career opportunities in the professional world (doctor, lawyer, social worker, nurse, teacher...) as well as many other job opportunities in the travel industry, court systems, hotel/resort management, and social services.

Students who study a foreign language score higher in math and science on the ACT and SAT tests. Students with two years of the study of another language score up to $12 \%$ higher on the SAT verbal exams: the score continues to rise at least $5 \%$ for each additional year of language study. Most colleges and universities require two or three years of a foreign language for admittance.

## FOREIGN LANGUAGE

## Spanish III

| Course Length: | year |
| :--- | :--- |
| Credit: | 1 |
| Prerequisite: | Spanish II |
| Grade: | $11-12$ |

## National Standards for Foreign Language Learning

- Communication: communicate in languages other than English
- Cultures: gain knowledge and understanding of other cultures
- Connections: connect with other disciplines and acquire information
- Comparisons: develop insight into the nature of language and culture
- Communities: participate in multilingual communities at home and around the world Spanish I, II, and III meet the national standards at the appropriate level.


## Course Description:

Spanish III students continue listening, speaking, reading, and writing skills to be able to meet survival needs in the classroom dealing with personal and classroom events and functions. Emphasis is on oral communication. Students can show understanding and knowledge of America's Spanish heritage, of Spanish holidays and festivals, of Spanish history and of cultural differences and similarities between Spanish and American young people. It is suggested that the student have a C+ average or better in Spanish II or the approval of the instructor.

## Topical Outline:

- Directions
- Commands
- Comparing quality, quantity, and size
- Chores and everyday activities
- Feelings, wishes, and preferences
- Shopping and negotiating a price , using money
- Future plans
- Health
- Household items
- Measurements
- Occupations
- Personal history
- Describing people, places and things
- Travel \& survival words
- Spanish art and literature
- Cervantes and Don Quijote
- Study of Central and South American countries, the customs, festivals and the relationship
- with the United States
- Career possibilities, college requirements and placement testing


## Student Activities:

Listening, reading, speaking, and writing
Group work, culture videos, tapes, and music and computer enrichment programs

## FOREIGN LANGUAGE

## Spanish III

## Career Information:

The following skills, which are a good basis for any career, are taught:
-Written and oral directions
-Teamwork
-Organizational skills

- Self-discipline
- Ability to be adaptable
-Problem solving
- Accountability and dependability
-Decision making
- Computer skills
$\bullet$ Interpersonal skills like negotiating, teaching, and working with different cultures
Spanish is beneficial for the student who wishes to attend a four year college and a student who wants to work with people in any field. The importance of learning Spanish is discussed and career opportunities in the professional world (doctor, lawyer, social worker, nurse, teacher...) as well as many other job opportunities in the travel industry, court systems, hotel/resort management, and social services.

Students who study a foreign language score higher in math and science on the ACT and SAT tests. Students with two years of the study of another language score up to $12 \%$ higher on the SAT verbal exams: the score continues to rise at least $5 \%$ for each additional year of language study. Most colleges and universities require two or three years of a foreign language for admittance

## MATH SEQUENCE CHART

## Essential Information:

- Students must complete three math credits for high school graduation.
- By completing one of the sequences below, students will complete all Minnesota High School Math Standards which are required for graduation.
- Sequence Two is designed for students who may pursue a career requiring mathematics beyond high school. Teacher discretion and earning at least a "Meet" on the 8th grade Math MCA are necessary. Furthermore, students will need to earn at least a "B+" each semester to continue in Sequence Two.
- Courses marked with an asterisk are elective courses which do not cover Math Standards and are not required for graduation.
- Colleges vary on entrance requirements for Mathematics, please check with your interested colleges for requirements.

| Grade | Sequence One | Sequence Two |
| :---: | :---: | :---: |
| 9 | Geometry | Advanced Geometry |
| 10 | Algebra 2 | Advanced Algebra 2 |
| 11 | Functions, Statistics, \& Trigonometry | Precalculus |
| (Advanced Func, Stat, \& Trig) |  |  |
| 12 |  | * Calculus |

## Geometry

Course Length: year
Credit: 1
Prerequisite: Linear Algebra
Grade:
9

## Course Description:

Geometry focuses on the study of points, lines, planes, angles, polygons, circles; and the surface areas and volumes of 3-dimensional figures. Students will learn the language and logic of Geometry with justification, and will write formal proofs. They will also explore transformations, congruence, similarity, and right triangle trigonometry. Application of skills and solving real-life problems will be a focus. A scientific calculator is required, and TI-30XIIS is recommended.

## Advanced Geometry

Course Length: year
Credit: 1
Prerequisite: Linear Algebra (earned at least a B+ each semester) and must Meet on the 8 th Grade Math MCA
Grade: 9

## Course Description:

Advanced Geometry focuses on the study of points, lines, planes, angles, polygons, circles; and the surface areas and volumes of 3-dimensional figures. Students will learn the language and logic of Geometry with justification, and will write formal proofs. They will also explore transformations, congruence, similarity, and right triangle trigonometry. Application of skills and solving real-life problems will be a focus. Advanced Geometry will cover concepts more quickly and deeper than Geometry. A scientific calculator is required, and TI-30XIIS is recommended.

## Algebra 2

Course Length:
year

Credit:
Prerequisite:
1
Grade:

Geometry
10

## Course Description

Algebra 2 focuses on learning the basic skills of functions, specifically applying and solving quadratic equations and functions. Students will continue building on the number system using real and complex numbers within the polynomial functions. Additional basic skills include working with exponents, inequalities, and radical expressions and applying these skills to several nonlinear functions and real-world applications. All algebraic parent functions will be covered in Algebra 2. A scientific calculator is required and the TI-30XIIS is recommended.

## Advanced Algebra 2

| Course Length: | year |
| :--- | :--- |
| Credit: | 1 |
| Prerequisite: | B+ or above in Math 8 |
| Grade: | 10 |

## Course Description:

This course is a continuation of Algebra 1. It is recommended for all students who are willing to work independently. Its emphasis is on quadratic functions and covers topics including factoring, completing the square and the quadratic formula. Topics in probability will be summation, permutation and combinations. Exponents, inequalities, radical expressions and real-world applications are included. Additional topics in this course include polynomial, exponential, logarithmic, radical, and rational functions. Scientific calculator of TI-30XIIS solar is required. Graphing calculator will be used extensively and a TI-83Plus or TI-84 is recommended.

## Functions, Statistics, \& Trigonometry (FST)

Course Length: year
Credit: 1
Prerequisites: Algebra 2 and Geometry
Grade: 11-12

## Course Description

Functions, Statistics, \& Trigonometry is an extension of Algebra 2 which includes covering the transcendental functions, trigonometry, and an introduction to probability and statistics. Students will begin with a review of equations and functions and then connect basic skills to all parent functions. The transcendental functions covered are exponential and logarithmic functions along with the trigonometric functions. Application of skills and solving reallife problems will be a focus. Basic probability and statistics will be introduced, specifically concepts of measures of center and location along with measures of spread in statistics. Scientific calculator of TI-30XIIS solar is required.

## Pre-Calculus (Advanced FST)

| Course Length: | year |
| :--- | :--- |
| Credit: | 1 |

Prerequisite: Advanced Algebra 2
Grade: 11-12

## Course Description:

Pre-Calculus is an extension of Advanced Algebra 2, students will learn about the transcendental functions, trigonometry, and an introduction to probability and statistics. Students will begin with a review of equations and functions and then connect basic skills to all parent functions. The transcendental functions covered are exponential and logarithmic functions along with the trigonometric functions. Problem solving and the application of skills will be essential.. Basic probability and statistics will be introduced, specifically concepts of measures of center and location along with measures of spread in statistics. This course will cover the same concepts as Functions, Statistics, and Trigonometry and will cover them more quickly and deeper. Scientific calculator of TI-30XIIS solar is required.

## Calculus

Course Length: 1 year
Credit: 1
Prerequisite: Pre-Calculus
Grade: 12
Course Description:
This course is designed for students interested in mathematics, engineering, science, life science or business. Topics in the calculus curriculum include limits \& continuity, derivatives, application of derivatives and integration. Students should have a thorough understanding of all algebraic and transcendental functions and the essential skills needed to simplify, evaluate, and solve in a mathematical situation and real-life application. Scientific calculator of TI-30XIIS solar is required.

# MISC. ELECTIVES 

## Peer Tutor

Course Length: semester
Credit: . 5
Prerequisite:
Grades: 9-12

## Course Description:

This is a high school course in which strong role models in academics, study skills, and behavior work with other students as tutors. They will act as peer tutors one period a day for peers in need. The role will be to assist students in academic achievement by meeting them on a daily basis to clarify learning problems and work on study skills.

## Social Skills

Course Length: semester
Credit: . 5
Prerequisite:
Grade:

## Course Description:

Students in social skills course will be learning techniques from the school counselors to assist other students in their learning and social skills behavior. They will spend most or all of their time supporting these students with needs, teaching the techniques to the students. Elementary school-aged children especially need the one-on-one help as they learn social skills and what is expected of them in school. The high school students will help the elementary students understand and follow social cues and directions, provide additional help and teach the techniques. Students will be required to have their own transportation to and from the Elementary School.

## Student Aide

Course Length: semester
Credit: . 5
Prerequisite:
Grade: 11-12

## Course Description:

A student aide may be assigned to any faculty member to assist in duties needed. The students need to have prior approval from that faculty member. Their duties may include but are not limited to the following:

Reinforce Instruction
Prepare Materials and Equipment
Perform Clerical Work
Supervise Students
Assist Special Needs Students

# MISC. ELECTIVES 

## Work Based Learning

Course Length: semester
Credit: . 5
Prerequisite:
Grade: 12

## Course Description:

Students will leave school during a designated period/periods to go to their employment sight. The students will be immersed in one of the MN career fields, clusters and pathways based on their interest. They will be able to apply decision-making process in real work situations by analyzing individual career-related strengths, experiences, skills integrating technical knowledge and evaluating job performances. Students will be evaluated by employer and staff mid-term and final. Students need to have their own transportation to their employer.

## Yearbook

Course Length: semester
Credit: . 5
Prerequisite: none
Grade: 11-12

## Course Description:

Through the planning, marketing/selling, editing, and distribution of the yearbook, students will develop skills in technology, business, organization, management, and leadership. Students must be willing to take pictures during school and at after-school events for page creation.

## Foods I

Course Length: 1 semester
Credit: . 5
Prerequisite:
Grade: 9-12

## Course Description

This course is designed to introduce students to basic kitchen skills/safety/science, teach nutrition facts about commonly consumed foods, convey the importance of time management/meal planning/grocery budgets as well as experiment with new flavors and foods. There is a $\$ 25$ course fee.

## Global Foods

Course Length: 1 semester
Credit: . 5
Prerequisite:
Grade: 9-12

## Course Description

Examine how culture influences nutrition and wellness regionally as well as internationally. Learn new cooking techniques, develop an understanding of staples foods for different regions, menu planning employing knowledge of traditions and food availability, identifying herbs/spices/seasonings, as well as explore different career opportunities in the culinary arena. There is a $\$ 25$ course fee.

## MUSIC

## Concert Choir

$\begin{array}{ll}\text { Course Length: } & \text { year } \\ \text { Credit: } & 1\end{array}$
Prerequisite:
Grade:
9-12

## Course Description

The concert choir is a full year course which students will receive one credit, which meets everyday for 45 minutes. It is open to any student in grades $9-12$ who enjoys singing. The course focuses on the rehearsal and performance of serious choral literature from the Renaissance period through the 20th Century. Both sacred and secular music will be performed. Also covered in this course will be practical and useful fundamentals of music theory when appropriate. The concert choir will appear publicly throughout the year beginning with the Holiday Concert in December to graduation in June.


## Senior High Band

Course Length: year
Credit: 1
Prerequisite: $\quad$ Successful completion of 8th Grade Band or instructor approval
Grade: $\quad 9-12$

## Course Description:

The Senior High Band includes students in grades 9-12. Students will perform challenging literature written for concert band. The Senior High Band will perform at least 3 times a year in band concerts, at the Memorial Day Program and Commencement. Students are graded on class participation, attendance (class and performances) and projects.


# P.E. \& HEALTH 

## Fitness for Life

Course Length: semester
Credit: . 5
Grade: 10-12
Prerequisite: $\quad$ Students need to have successfully completed Physical Education

## Course Description:

This course will give students an opportunity to participate in fitness and recreational activities related to lifelong physical activity. Students will gain an understanding of fitness components, healthy behaviors/attitudes, and why fitness is an important aspect in daily living. The course will include individual and small group games/activities. Classroom activities may include, but are not limited to: running, walking, flexibility activities, aerobics, fitness programming, bowling, volleyball, basketball, softball/baseball, tennis, and biking. Enrolled students must be willingly prepared to be physically active for 80 minutes of exercise.

## Physical Education 9

Course Length: Year
Credit: . 5
Grade: 9th grade requirement

## Course Description:

-to provide an extensive array of activities with an abundance for every student to be successful
-to allow students to experience competitive and noncompetitive activities as well as team and individual sports -to develop skill interest and the appreciation for the need of life-long learning, activity and recreation -to provide physical activity that will enable each student to monitor desired goals.

## Advanced Physical Education

| Course Length: | semester |
| :--- | :--- |
| Credit: | .5 |
| Grade: | $11-12$ |
| Prerequisite: | Students need to have successfully completed Physical Education 9. |

## Course Description:

This course provides an elective beyond the sophomore year for juniors and seniors to continue physical education activities and to deal with the elements of fitness. Primary objectives are to further understanding and knowledge of physical fitness activities. Each student will design there own fitness program and follow through with their program.

## P.E. \& HEALTH

## Health 9

Course Length: year
Credit: . 5
Grade: 9th grade requirement
Course Description:
Make informed decisions that enhance individual, family and community health in all six priority areas. Focus on you, the individual, and the interrelationship of your level of health and the way you live. Apply what you have learned to your own health by taking a more active role in caring for yourself.

## Topic Outline:

I. Promote:
A. Healthful nutrition \& dietary practices
B. Physical fitness
C. Healthy decision making
D. Proper public speaking techniques

## II. Reduce \& Prevent

A. Tobacco Use
B. Drug/Alcohol Use
C. Intentional \& Unintentional injuries
D. HIV/STD/Unintentional pregnancies
E. Nutrition (Dieting practices and eating disorder prevention)

## Student Activities:

1) 
2) 
3) 

Study several health issues/problems and make informed decisions on each
Create a plan for an in-depth study of the six priority health areas
Present findings of research projects to the class through class presentations

Assessment:
Analyzing how health maintenance and disease prevention decisions are influenced by media, technological advances, interpersonal communication and immediate and long-term factors.

## Advanced Health

Course Length:
Credit:
Grade:
Prerequisite:
Course Description:
Make informed decisions that enhance individual, family and community health in all six priority areas. Focus on you, the individual, and the interrelationship of your level of health and the way you live. Apply what you have learned to your own health by taking a more active role in caring for yourself.
Topic Outline:
A. Mature Life, Aging \& Death
-Students will study the issue of aging \& death
B. Dating \& Relationships
-Students will learn what is proper in dealing with relationships. They will make decisions on healthy and unhealthy relationships.
C. CPR
-Students will study correct life saving techniques and have the opportunity to become certified in performing CPR. This option may vary according to availability.
D. Career Exploration
-Students will examine a career of their choice in the field of health
E. Diseases of the human body
F. Disabilities of the human body

# P.E. \& HEALTH 

## Exercise \& Nutrition

Course Length: semester
Credit: . 5
Grade: $\quad 10-12$
Prerequisite:
Course Description:
This course is designed to provide a broad understanding of the basic principles of nutrition and some of the issues and controversies surrounding this body of knowledge. It will identify the essential nutrients and their functions, as well as describe nutritional behaviors that promote optimal nutrition and disease prevention throughout the life cycle. Energy balance, nutrition for fitness, and food safety will be included.

## Weightlifting

Course Length: semester
Credit: . 5
Grade: 10-12
Prerequisite:

## Course Description:

This course is designed to give students the opportunity to learn weight training concepts and techniques used for obtaining a high level of physical fitness. Students will learn the basic fundamentals of weight training, strength training, aerobic training, and overall fitness training and conditioning. Course includes both lecture and activity sessions. Students will be empowered to make wise choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime.

## Activity Administration/Leadership \& Officiating

Course Length: semester
Credit: . 5
Grade: 11-12
Prerequisite:

## Course Description:

This course is designed to equip upper-class students (Grade 11-12) with the knowledge and skills necessary for activity administration and leadership. Students will learn how to effectively officiate and manage various aspects of organized sports and events.

## SCIENCE

## Introduction

The Science Department at CHS is striving to meet the state standards in their course offerings. These standards include:

1. The nature of scientific ways of thinking and change in scientific knowledge over time.
2. Design and conduct scientific investigation.
3. Understand the relationship between science and technology and how both are used.
4. Recognize the historical and cultural context of scientific endeavors and how they influence each other.
5. Understand the nature of matter including its forms, properties, and interactions.
6. Describe chemical reactions and the factors that influence them.
7. Understand the nature of force and motion.
8. Understand the forces of nature and their application.
9. Understand that the interactions of the atmosphere, biosphere, lithosphere, and space have resulted in ongoing change of the Earth system over geologic time.
10. Investigate the impact humans have on the environment.
11. Explain the causes and effects of the Earth's atmospheric and hydrologic processes.
12. Relate the formation and components of our solar system to the conditions necessary for life.
13. Use astronomical data to reveal the structure, scale, and changes in the stars, galaxies, and universe over time.
14. Comprehend that all living things are composed of cells and that the life processes in a cell are based on molecular interactions.
15. Classify, compare, and contrast the diversity of organisms on Earth and their modes of accommodating the requirements for life.
16. Describe how the environment and interactions between organisms can affect the number of species and the diversity of species in an ecosystem.
17. Explain how inherited characteristics are encoded by genes.
18. Understand how biological evolution provides a scientific explanation for the fossil record of ancient life forms, as well as for the striking molecular similarities observed among the diverse species of living organisms.
19. Describe and explain the cycling of matter and flow of energy through an ecosystem's living and non-living components.
20. Understand how all organ systems, including the nervous system, interact to maintain homeostasis.

Although the first science test will be based on life science, along with the history and nature of science contents, we are required to meet all the above standards through our courses.

## SCIENCE

## Earth and Environmental Science

Course Length: year
Credit: 1
Grade: 9 (required)

## Course Description:

Earth Science introduces the student to astronomy, geology, weather and climate. Additional topics include identification of rocks and minerals, reading topographic and geologic maps, study of glaciers, shorelines, earthquakes and earth-shaping forces. Students make extensive use of the Earth Science Reference Tables to analyze information. Students develop an understanding of interactions and interdependence within and between earth systems and biological systems, atmospheric systems, water systems, geologic systems, energy systems, and space.

## Biology I

Course Length: year
Credit: 1
Grade: 10 (required)

## Course Description:

Biology I is an introductory course in Life Science. Through lecture, activities, dissections, and experiments; students will gain an understanding of the living world and themselves. Emphasis is placed on basis biological concepts, the cell, metabolism, reproduction, heredity and genes, classification of organisms, dissections, life cycles, basic biological reactions, ecology and change.

## Chemistry I

Course Length: year
Credit: 1
Prerequisite: Algebra I and Physical Science
Grade: 11 (required)

## Course Description:

Chemistry is a year-long course that engages students in the composition, interactions, and mathematical representations of matter. Topics in this course will be based on the NGSS and Minnesota state science standards. A multi-dimensional teaching approach offers a grounding experience that connects material to real-world phenomena. Argument-driven lab activities provide frequent opportunities to examine chemical and physical behavior first hand and learn to draw conclusions from evidence.

## Astronomy

| Course Length: | semester |
| :--- | :--- |
| Credit: | .5 |

Prerequisite:
Grade: $\quad 10-12$

## Course Description:

This is a study of our universe from formation to eventual demise. We will study our own solar system with a survey of the spacecraft that have and will study the planets and their satellites. The process that powers the stars and what that means about their evolution are examined. Techniques used to study stellar and galactic structure and the nature of the cosmos are explored.

## SCIENCE

(Electives)

## Chemistry II

Course Length: year
Credit: 1
Prerequisite: $\quad$ Chemistry I, Algebra I, and Algebra II recommended
Grade: 12
Course Description:
Students will continue to build on their model of matter and energy. The laboratory component of this course is hands-on and designed for science students to learn how to make qualitative and quantitative observations about physical and chemical phenomena, make calculations, and test their own reasoning. Students will acquire skills in laboratory techniques designed to help reinforce and build upon the concepts presented in the lecture portion of the class.

## Anatomy and Physiology

| Course Length: | year |
| :--- | :--- |
| Credit: | 1 |
| Prerequisite: | Biology I |
| Grade: | $11-12$ |

## Course Description:

The purpose of this course is to introduce the human body. Topics covered include, orientation of the body, histology, the skin, skeleton, cardiovascular systems, muscular system, and all the major organ systems. Laboratory experiences include microscopes and dissections.

## Environmental Science

| Course Length: |  |
| :--- | :--- |
| Cremit: | .5 |

Prerequisite:
Grade: $\quad 10-12$

## Course Description:

Environmental Science is the study of natural ecosystems, human impacts on the environment, and sustainable management of the Earth's resources. It includes the study of the environment around our school. Students will understand the role of organisms in a balanced ecosystem, energy flow and cycles, communities, biome types, human societies, viewpoints, population issues, food, energy, and pollution. This course is suitable for anyone.

## Forensic Science I

Course Length: semester
Credit: . 5
Prerequisite:
Grade:
10-12

## Course Description:

Forensic Science is the application of scientific principles to law. Forensic Science is unique in that it will include aspects from several scientific disciplines including Biology, Physics, Chemistry, and Anatomy. Students will engage in many lab-based activities including fingerprinting, blood and DNA analysis, crime scene processing, document analysis and anthropology. The course ends with a mock crime scene where students apply knowledge gained throughout the course to solve a crime.

# SCIENCE <br> <br> (Electives continued) 

 <br> <br> (Electives continued)}

## Forensic Science II

Course Length: semester
Credit: . 5
Prerequisite:
Grade:

## Course Description:

Forensic Science is the application of scientific principles to law. Forensic Science is unique in that it will include aspects from several scientific disciplines including Biology, Physics, Chemistry, and Anatomy. Students will engage in and go in more depth with many lab-based activities including hair analysis, toxicology, crime scene processing, impressions, soil and glass as well as fiber analysis. The course ends with a mock crime scene where students apply knowledge gained throughout the course to solve a crime. You do not need to take Forensics 1 in order to take Forensics 2.

## Applied Chemistry/Physics

Course Length:
year
Credit: 1
Prerequisite: Algebra I is helpful, but not necessary
Grade:

11-12

## Course Description:

This course is an exploration of Physics and Chemistry of everyday life. Students will be introduced to several concepts in Physics/Chemistry through lab activities and experiences. A hands-on approach will be the emphasis of this course that teaches the basics of these physical sciences.

## Physics

Course Length: year (offered e/o year)
Credit: 1
Prerequisite: Algebra II/Advanced Math (recommended)
Physical Science
Chemistry I (recommended)
Grade: $\quad 11-12$

## Course Description:

The purpose of this course is to increase student awareness of the practical application of physics in everyday life and to help them understand the concepts of physics that lie within all other sciences. Experimentation will be used to develop an understanding of concepts and skill in measurement. Related career opportunities are discussed via chapter inserts, videos, news articles and student presentations.

## Zoology

Course Length: semester
Credit: . 5
Prerequisite: Biology 1
Grade: 11-12

## Course Description:

The purpose of this course it to provide an overview of the animal kingdom. Students will carry out detailed studies of each group of animals, accompanied by labs, activities and dissections.

## SCIENCE

## (Electives continued)

## Current Issues: Science Edition

Course Length: 1 semester
Credit: . 5
Prerequisite:
Grade:
10-12

## Course Description <br> WHAT IS HAPPENING RIGHT NOW? WHY IS IT HAPPENING? HOW DOES IT AFFECT ME?

This course is designed to be an examination of science concepts to analyze world events and answer these questions. Topics are focused on making the connections between science and technology and their impact on the quality of our lives. Students will use their understanding of scientific concepts to analyze various forms of media, hypothesize possible solutions, and evaluate science fiction.

Current news stories will also serve as context for developing and mastering 21st Century Skills that include:

1. Critical Thinking and Problem Solving
2. Creativity and Innovation
3. Communication and Collaboration
4. Analyzing and Interpreting Data

## Aquatic Science

Course Length: 1 semester
Credit: . 5
Prerequisite:
Grade:
9-12

## Course Description

Aquatic Science is a semester long high school level course, with the possibility of a second semester if wanted. Students will study a variety of topics that include but are not limited to components of an aquatic ecosystem; origin and use of water in a watershed; stream and lake ecology (including the Mississippi); relationships among aquatic ecosystems and habitats; changes within an aquatic environment; local aquatic species as well as species found all over the US. This semester will focus mainly on freshwater environments along with the basics of marine biology.

## Course Goals

Students will gain an overall understanding of aquatic ecosystems including saltwater and freshwater ecosystems and the flora and fauna found in them. They will also learn about the geological formations that form the Earth's oceans \& rivers, and the effect these bodies of water have on weather. Students will also acquire the necessary skills, responsibilities and knowledge to be good stewards of freshwater and marine environments.

## CHEM 1000 Introductory Chemistry (Concurrent Enrollment)

Course Length: Year
Credit:
1 high school credit and 4 college credits
Prerequisite:
Grade: 11-12

## Course Description

This is a laboratory science course for students not intending to major in chemistry or science. Topics include atomic theory, and structure, chemical bonding, chemical accounting (mass and volume relationships), acids and bases, as well as an introduction to organic biological compounds.

# SCIENCE <br> (Electives continued) 

## Biotechnology

Course Length: 1 semester
Credit:
. 5
Prerequisite:
Grade:
11-12

## Course Description

Biotechnology is the merging of technology and biology. The products of biotechnology are utilized in most people's lives every day. The biotechnology industry is in rapid growth with the number of career opportunities growing. In this course we will learn laboratory skills by studying microbiology and DNA through a series of skills-based lab exercises. The course will center on contemporary topics in biology and biotechnology including microbiology, pathology, forensics and criminalistics, and genetic technologies. The focus will be on examination and understanding of various topics in the Biotechnological world around them and the way the quality of life can be improved through modern biological techniques.

## Exploring Computer Science

Course Length: 1 semester
Credit: . 5
Prerequisite:
Grade:
9-12

## Course Description

An introduction to computer science and relevant ideas related to technology. Over the course of the semester, we will explore topics related to programming, the internet, digital information, robotics and cyber security.

## Geology

$\begin{array}{ll}\text { Course Length: } & \text { semester } \\ \text { Credit: } & .5\end{array}$

## Prerequisite:

Grade: $\quad 10-12$

## Course Description:

We begin with the formation of the solar system and the Earth's place within it. We will then move onto an examination of the processes and materials that make up the solid Earth. Topics included are mineralogy and rock formations, Karst topography, glaciers and other processes that shape the land. There is an emphasis on historical geology topics of both relative and absolute dating.

# SCIENCE <br> <br> (Electives continued) 

 <br> <br> (Electives continued)}

## Science of Our National Parks

Course Length: 1 semester
Credit: .5
Prerequisite:
Grade: 11-12

## Course Description

Our national parks are full of amazing, unique landscapes and wildlife. In this course, you will take a series of virtual field trips to discover the rich history, differing environments, and abundant wildlife found throughout our national parks, as we look at the different issues facing our parks today.

## Chemistry of Materials

Course Length: semester
Credit: .5 chemistry
Prerequisite:
Grade:
10-12

## Course Description:

When designing and building a new product one of the key decisions is out of what kind of material should it be made. In this course, we will learn about the chemistry of metals, ceramics, and plastics and how the bonds in these materials give them their unique properties. We will also examine ways to modify those properties to fit specific applications.

## Physics of Toys

Course Length: semester
Credit: .5 (physics)
Prerequisite: Algebra 1
Grade: $\quad 10-12$

## Course Description:

In this course we will study the motion of different kinds of toys. We will measure and predict how the motion of an object is affected by its shape, size, materials, and method(s) of propulsion.

## The Science of Superheroes

Course Length: semester
Credit: . 5
Prerequisite:
Grade: $\quad 9-12$

## Course Description

"Is that really possible?" will be the question you ask in this course. The Science of Superheroes will unlock the mysteries of Spider-Man's senses, Superman's strength, and the X-Men's DNA. Discover what is possible and what pushes the limits of science.

## SOCIAL STUDIES

## Civics

Course Length: year
Credit: 1
Prerequisite:
Grade: 11 (required)

## Course Description:

Civics is the study of citizenship and government.

## American History

Course Length: year
Credit: 1
Prerequisite:
Grade: 10 (required)
In this course, we will discover the history of America chronologically from North America becoming the United States, through the 9/11 era and Terrorism.
Objectives of the course include:

1. Learning how to discover and evaluate resources of different styles in order to draw conclusions to how and why events in American history have occurred.
2. Evaluate tendencies of historical events and themes which seem to cycle, or continue to reoccur.
3. Draw connections to how events which have happened hundreds of years ago, and yesterday, have shaped the world we live in today here in Caledonia, MN.

## Human Geography

Course Length: year
Credit: 1
Grade: 9/11 (required)

## Course Description:

The objective of this course is to give the students an understanding of the role of geography in their life. The approach is aimed at establishing an intellectual foundation that will enable a lifelong and life sustaining geographical imagination. This course will meet the high school geography requirement of the University of MN and all MN State Universities. This class will answer the questions of WHERE and WHY to the following physical \& cultural phenomena throughout the year:

| Population | Migration | Folk and Popular Culture |
| :--- | :--- | :--- |
| Language | Religion | Ethnicity |
| Political Issues | Resource Problems | Landforms |
| Location (Latitude/Longitude) | Biomes |  |

## SOCIAL STUDIES

## World History

Course Length: 1 semester
Credit: . 5
Prerequisite:
Grade: 12 (required)
Course Description:
World History covers early civilizations up until the modern era. We will be taking a European focus while also investigating other areas of the world. We will infuse geography, literature, artifacts, and primary resources into our learning. We will be taking a survey viewpoint which is looking at the picture during our learning process. This class is a requirement for graduation.

## Economics

Course Length: semester
Credit: . 5
Prerequisite:
Grade: 12 (required)

## Course Description:

Students learn fundamental concepts of microeconomics and macroeconomics. This course is relevant for all high school students because it deals with things we must do in our daily lives as adults: buying things, working and probably most important - making choices. Students should be better decision makers after taking this course because the curriculum encourages them to think like an economist when they make choices- "If I do this, what is the opportunity cost? What do I give up? What do I gain?"

## Introduction to Sociology

Course Length: semester
Credit: . 5
Prerequisite:
Grade:
11-12

## Course Description:

This Sociology course is designed to introduce students to the scientific study of the development, structure, and functioning of human society in our times. We will start by learning how to study society through a sociological lens and learn different research methods used within the field. We will then explore social groups, conformity, social control, inequity, institutions and prisons, deviance and crime, race and gender, inequalities, etc.

The primary task of this course is to learn to view societies, and people, from an objective standpoint. That is, viewing individuals and groups, and their relationship with others, and discovering why people and groups do the things they do.

# SOCIAL STUDIES 

(ELECTIVES)

## PSYC 1105 College General Psychology (Concurrent Enrollment)

Course Length:
Credit:
Prerequisite:
Grade:
semester
.75 high school credits and 3 college credits
11-12

Course Description:
This course introduces the student to general topics in psychology and is designed to provide an overview of the field of psychology and human behavior. Topics include psychology as a behavioral science, the scientific method, biological foundations of behavior, sensation, perception, consciousness, learning, memory, thinking, language, intelligence, motivation, emotion, lifespan development, social psychology, stress and coping, and a brief overview of psychological disorders and therapies.

## HIST 1030 College Modern World History (Concurrent Enrollment)

Course Length: 1 semester
Credit:
.75 high school credit \& 3 college credits
Prerequisite:
Grade: 11-12

## Course Description:

This survey course examines world history from the late nineteenth-century to the present. It focuses on the decline of European global domination, the world wars, the Cold War, "Third World" liberation movements and the rise of nonEuropean powers.

## Contemporary Issues

Course Length: semester
Credit: . 5
Prerequisite: None
Grade: 10-12

## Course Description:

In this course students will focus on an array of domestic and international issues. Exposure to such issues will directly relate to social, political, and environmental factors and implications. The focus of this course will be to understand the history, current issues, and complications of domestic and international issues pertaining to the United States and other nations. Students will be presented with contrasting viewpoints and asked to analyze issues in depth while developing their own opinions regarding current topics.

## History Through Sport

Course Length: semester
Credit: . 5
Prerequisite: None
Grade: 11-12

## Course Description:

This history elective class will examine the development of sport(s) in America. Our historical study will focus on helping students gain a better understanding of the inner relationship that sport has social, economic, cultural and political forces that are at work in the United States as well as the world. We will examine the historical context as well as the significance of gender, race, ethnicity, and social class.

# SOCIAL STUDIES <br> (ELECTIVES, cont.) 

## Current Events

Course Length: Semester
Credit: . 5
Prerequisite None
Grade: 9-12

## Course Description:

This class is designed to provide students with the opportunity to discuss, understand, and explore local, national, international, political, economic and social issues in a respectful, meaningful, and active way. Throughout the term, students will stay up to date on current issues and trends. Because the subject of this class is current events, topics will vary considerably depending on the current news cycle. Students will be challenged to form, adapt, and defend their opinions on a variety of topics.

## Mindset, Growth \& Leadership

Course Length: semester
Credit: . 5
Prerequisite: None
Grade: 11-12

## Course Description

This course is designed for students who are looking to engage in self-improvement, effective leadership, and developing a growth mindset. The structure of this course will require students who are self-driven and highly motivated individuals. Students should expect to engage in daily conversations and/or written reflection based on the analysis of leaders and leadership theories throughout history. Ultimately, students will leave this course better prepared to take on challenges and opportunities that will be presented to them in life.

Some Units of study include:

- Leadership Theory Analysis
- Defining leadership
- Evaluating leaders in history
- Leadership in Sport
- Leadership in Workplace
- Parental leadership
- Mindset
- Psychology of Growth vs Fixed Mindset
- Mindfulness
- Grit
- Growth
- Goal Setting Strategies
- Action Plans for Self-Improvement
- Leadership in Practice

