

Fertile-Beltrami
High School



COURSE OUTLINES

School Year 2022-2023

Art

Art 7

Length of Course: Quarter

The students are introduced to the visual elements of design and the principles of design. The students learn by using various mediums of art such pencil, clay, pastels, digital art etc.

Art 8

Length of Course: Quarter

The art course completes the second half of the middle school standard through hands on project work based on multi-media use. Techniques and appreciation of the art forms are taught through a curriculum that explores art throughout the world.

Art I

Grade Level: 9-12

Length of Course: Year

The course is designed to teach the basic fundamentals in a variety of 2D media: charcoal, pencil, pastels, pen & ink, etc. will be used during the first semester. Ceramics, watercolor, sculpture etc. will be used during the second semester. Art Discovery deals with art history as it progressed from the Stone Age to modern times. The class goal is to make the students become well rounded in all areas of art.

Art II

Grade Level: 10-12

Length of Course: Year

Prerequisite: Grade of "C" or above in Art I and approval of Instructor

Advanced techniques and more detailed compositions will be used. The student will be called upon to use more creative and imaginative ideas in project work. The class is semi-independent and the students will need to demonstrate the ability to organize and manage time on their own.

Art III

Grade Level: 11-12

Length of Course: Year

Prerequisite: Grade of "B" or above in Art II & approval of Instructor

The class requires the student to be self-motivated. The course involves an appreciation and more concentrated effort on project work. The class is more individualized and can be geared to the student's interest in a particular art field. Students will also share their skills by teaching a lesson to an elementary class.

Art IV

Grade Level: 11-12

Length of Course: Year

Prerequisite: Grade of "B" or above in Art III & approval of Instructor

The class requires the student to be self-motivated. The course involves an appreciation and more concentrated effort on project work. The class is more individualized and can be geared to the student's interest in a particular art field. Students will also share their skills by teaching a lesson to an elementary class.

Business, Computers and Technology

Personal Finance

Grade Level: 9-12

Length of Course: Year

This course is designed to help students manage their resources and to make good personal financial decisions. It provides students with the necessary consumer information to enable them to live productive lives as consumers. Topics covered include: budgeting, banking, credit, credit cards, taxes, insurance, investing, consumer purchasing, housing and retirement.

Word Processing 7

Length of Course: Quarter

Students will be instructed in beginning word processing skills with emphasis in proper formatting. The course will include network and computer basics instruction, working in Microsoft Word 2016 and Google Docs to create tables, personal business letters, and graphic layout/design. Students will be introduced to various web tools to enhance technology integration in all areas. In addition, students will create web pages using Google Sites and a short video using Windows Movie Maker. Students will also be introduced to coding using various coding websites. Emphasis will also be placed on computer and internet safety as they grow and learn in the world of technology. Students will continue to improve their keyboarding speed and accuracy through skill building.

Word Processing 8**Length of Course: Quarter**

Students will be instructed in word processing and media applications. The course will be a continuation of Word Processing 7 with instruction in typing business letters, letterheads, tables, brochures, and MLA style reports all while learning detailed formatting and graphic skills. Students will continue their experience with creating presentations and presenting. In addition, students will learn how to create spreadsheets using Google Sheets. Students will continue learning coding through various websites. The students will continue to improve their keyboarding speed and accuracy through skill building.

Computer Concepts/Career Education Grade Level: 9**Length of Course: Year**

This course is designed to attain core level instruction in Microsoft Windows, Internet and E-mail applications, Microsoft 2016 Office -- Word, PowerPoint, and Excel. Students will continue to explore technology and various web tools to enhance technology integration in all areas. One quarter of the class will be designated for career exploration through Minnesota Career Information Systems (MCIS). Our exploration will include self-assessments, career awareness, and options after high school, college exploration, resume writing, interview skills and performing a job shadow.

Computer Applications (9 college credits)**Grade Level: 11-12 Length of Course: Year****Prerequisite for class: Computer/Career****Prerequisite for college credit: GPA of 3.0**

Computer Applications can be taken as 3 college courses for a total of 9 college credits. The courses are designed to attain an expert level instruction in the current version of Microsoft Word, PowerPoint and Excel. In addition, students will continue to enhance their technology skills, become accustomed to the business industry, and develop business communication and presentation skills. There is an opportunity for students to become Microsoft User Specialists by testing at the Core and/or Expert levels for Word, PowerPoint and Excel. These certification tests can be taken by arrangement at an area technical college with the test costs being the responsibility of the student. Certification in all areas five Microsoft Office Professional programs will earn the student the certification of Master Microsoft User Specialist. Students will create an electronic portfolio as their major project in this course.

**Web Design (3 college credits)
Semester****Grade Level: 11-12 Length of Course: Fall****Prerequisite for college credit: GPA of 3.0**

Web Design can be taken as a 3 credit college course. The Web Design (1st Sem) course teaches students to create web pages using HTML5 web design code, CSS style sheets and an intro to JavaScript. This is a project based course where students will practice what is learned in the classroom. By the end of the course, students will have the knowledge and ability to design a fully functional website with operational navigation, style and other interactive features. Brackets will be the program of choice when learning basic code in addition to using the Adobe Dreamweaver program for further design skills.

Video Editing (3 college credits)**Grade Level: 11-12 Length of Course: Spring Sem****Prerequisite for college credit: GPA of 3.0**

Video Editing can be taken as a 3 credit college course. The Video Editing (2nd Sem) course teaches the basics of creating video via iMovie and Final Cut Pro. The course will teach students how to capture good video footage, utilize how to use effective music and effects, and pull it together to make amazing video projects. Students will become proficient using digital still and digital video equipment, but most often they choose to use their phones for capturing footage. This is a project based course where students will practice and create what is learned in the classroom. Projects include a poem project, music video, movie trailer, 30 second commercial, and a final student choice project. Students are responsible for making the senior class video and the senior class slide presentation.

Advance Com Webmaster**Grade Level: 12 Length of Course: Year****Prerequisite: 2.0+ Web Design, & Video Editing, and have taken or currently taking Computer Applications**

Fertile-Beltrami Webmasters work for a business called Advance Com – Technology of the Up and Coming. Advance Com was created in 1999 by advanced business education students. The students maintain the FB Web Page, work with and support teachers with technology needs, work with area businesses to create, maintain and offer assistance with their business websites. Various video projects are done as well including the FB Newscast and an overseer of the GVT tricaster equipment. All income generated by Advance Com is given out as scholarships to seniors who are pursuing a business or technology related degree.

Intro to Business**Grade Level: 9-12****Length of Course: Year**

Students will be instructed on a variety of business topics. Business management, marketing, business law will be the main focus of the course. In this course, students will learn the basics of managing a business, the different types of productions, different types of business organizations, and how a business is managed. In addition students will learn about courts and the legal system, criminal law, tort law, contracts, employee law, and personal law.

Accounting I & II**Grade Level: 9-12****Length of Course: Year**

This course is designed to introduce the student to basic bookkeeping concepts that will allow the student to better understand the finances of a business and the world around us. The course is developed using double-entry accounting concepts in a manual system. Computerized accounting methods will be explored and used periodically during the course. Real life student business ideas will be encouraged by exposure to Shark Tank scenarios and projects. This course is strongly advised if the student is planning a post-secondary career in business or computers. College accounting is required in both majors and will be an extremely difficult course without high school background.

English**English 7****Length of Course: Year**

This is a comprehensive English course. Curriculum includes work in the following areas: literature, various types of writing, poetry, drama, grammar, and study skills.

English 8**Length of Course: Year**

Students will study literature from a variety of literature composed by authors from all over the world. Areas of study include short stories, poetry, drama, and the novel (varies each year). Short stories include a study of American folklore, an excerpt from the novel Flowers for Algernon, and a unit from authors of various backgrounds. Plays are studied by reading dramatized Greek myths and the dramatized The Diary of Anne Frank. The concept of the plot line and its elements will be reviewed and discussed throughout the year.

Grammar, vocabulary, and short composition activities will be linked to literature to enhance students' understanding. Other, longer, compositions will focus on the narrative essay, comparing & contrasting, and character sketching. In addition, students will learn to recognize useful and appropriate sources from both the Internet and other media.

English 9**Length of Course: Year**

Students will read a variety of literature focusing on longer texts for a great portion of the year. There will be a short story unit to begin the year, followed by a feature article writing assignment. Next comes the study of The Odyssey (abridged), and after that, poetry. From poetry, the focus will turn to Romeo and Juliet, and then to a descriptive essay written in the cumulative paragraph format; the essay unit includes several pre-writing and revising activities. To end the year, students will read To Kill a Mockingbird and write an analysis. As in 8th grade, grammar, vocabulary, and short compositions will pepper the curriculum.

English 10**Length of Course: Year**

English 10 differs from English 8 and 9 in that its focus is largely on American literature. The year begins with a study of the now-written oral traditions of the first Americans, and then continues to exploration journals and political documents. Once the Revolution is over, the focus shifts to a multi-genre examination of the early United States through the 1800s. Romanticism and Transcendentalism are covered in detail, and lead up to an in-depth unit on poetry. Poetry's culminating activity includes a research project that produces a paper and poster on a certain poet; students will be reminded of what constitutes an appropriate source, and will review how to spot inappropriate ones. From poetry, its back to short stories and then a novel (varies each year). After the novel comes a multi-genre exploration of Modernism, followed by the year's final unit on Arthur Miller's *The Crucible*. As in 8th and 9th grade, grammar, vocabulary, and shorter compositions are assigned throughout the year and linked to texts.

English 11/English Communications**Length of Course: Year****Prerequisite for college credit: 3.2 GPA; pass Accuplacer Test**

Semester 1 is a short story class, which is a literature-based study of classic American authors, with a variety of written and hands-on assessments. Study includes discussion of the film and its elements with each story.

Semester 2 is a communications course; one section is a high school level course, and one section is a college course. The college course is affiliated with M State- Fergus Falls. These courses are designed to teach upperclassmen the skills required to prepare and present a public address. We will focus on varying methods of addressing an audience in many different situations. Some speeches will be prepared well ahead of time and some will be prepared on short notice. All students will be required to give thoughtful and comprehensive critiques of their classmates' work. Most importantly, all speeches are a course requirement.

College Composition I & II (college credit)**Length of Course: Semester each****Prerequisite: 3.0 GPA; Grade of "B" or above on last English course**

This course offers students the opportunity to earn college credit while still in high school. It is currently affiliated with University of Minnesota Crookston, and closely follows that curriculum. The course requires students to write for a variety of purposes and emphasizes writing as a process.

English 12**Length of Course: Year**

This course is a literature-based study of contemporary fiction and nonfiction, with a variety of written and hands-on assessments. Study includes literary elements, vocabulary, comprehension, and analysis of the chosen literature. Students will be responsible for completing the assigned work on time, and utilizing the writing process for any paper assessments.

Foreign Language

Contact the school for the latest offerings.

Family and Consumer Science

Contact the school for the latest offerings.

Health and Physical Education**Health and Phy Ed 7****Length of Course: Quarter**

Topics to be covered include personality, emotions and decision making, endocrine and reproductive systems, growth and the body's cells, physical growth and change, emotional and social growth, dangers of illegal drugs, alcohol and drinking, and tobacco use. PE 7 is a quarter course designed to increase the general physical well being of the students from the elementary into the junior high years. There will be more emphasis on refinement of skills for accuracy and improvement.

Health and Phy Ed 8**Length of Course: Quarter**

Topics to be covered include mental health care: personality, stress management, suicide, social health care: families, violence prevention, communication techniques, preventing disease: understanding communicable diseases such as HIV and STI's, chronic disease and community health and safety: first aid, injury prevention. PE 7 is a quarter course designed to increase the general physical well being of the students from the elementary into the junior high years. There will be more emphasis on refinement of skills for accuracy and improvement as well as physical fitness maintenance.

Health 9**Length of Course: Semester**

The course is a curriculum requirement with the following eight units to be explored: mental health, social health, nutrition, physical fitness, substance abuse, human development, preventing disease and community health and safety.

Physical Education 9**Length of Course: Semester**

PE 9 is a course designed to help students explore activities that enhance physical fitness, wellness and motor coordination. Activities will also be planned to improve student's team building and sportsmanship.

Life Fitness**Grade Level: 10-12****Length of Course: Semester**

Life Fitness is a course designed to help students develop physically. Activities for the class include weight lifting and group games that will keep students active.

Industrial Technology**Small Engines****Grade Level: 10-12****Length of Course: Semester**

Engine Mechanics is designed to present students with a basic understanding of all engine components, functions, and operation concepts. It emphasizes on hands-on approach to learning mechanical skills associated with the basic maintenance and repair of large and small engines. Many real-life examples are used throughout the course and laboratory participation in the Mechanics Shop is a requirement. A learn by doing attitude is adopted by the students.

Welding I/II**Grade Level: 9-12****Length of Course: Year**

The course provides the student with a technical understanding of arc welding fundamentals, welding safety, arc welding machines, electrode classifications, gas metal arc welding and gas welding. The course provides an excellent foundation for metal fabrication.

Structures & Computer Aided Drafting (CAD)/ Robotics**Grade Level: 9-12****Length of Course: Year**

A course dealing with study of planning, site preparation, layout, and construction of wood, concrete, and steel buildings. Computer aided drafting (CAD) will be an integral part of the course to develop plan views, layouts, elevations, and mechanical drawings. Students will develop skills in the use of CAD, understanding and skills in the area of flat and block concrete, structural materials and terminology, and construction procedures. In addition, students will receive instruction in electrical principles, wiring, controls, and plumbing.

Woods I/II**Grade Level: 10-12****Length of Course: Year**

Building Utilities is designed to give students a general understanding of the skills involved in building maintenance and construction. Including areas of site layout, concrete, plumbing, electricity, and construction. Woods is designed to develop basic skills in finished woodworking. The course emphasizes on hands-on approach to learning. Many real-life examples are used throughout the course and laboratory participation is incorporated. Students will be expected to create individual projects related to the course material. Students will be expected to pay for materials of projects, which they take home. A learn by doing attitude is adopted by the students.

FFA Leadership**Grade Level: 9-12****Length of Course: Semester**

Would you like a time where you can develop your leadership skills? Students enrolled in FFA leadership will develop speaking skills, cooperative learning, and career development. This class will also write the National Chapter Awards and Proficiency applications.

Math**Math 7****Length of Course: Year**

Math 7 is the second year of a three-year series called Math Connects. It is designed to integrate math with the real world. It teaches middle school concepts such as fractions, probability, geometry, exponents, order of operations, working with variables, integers, slope and rate of change, solving equations and coordinate graphing. It also develops reasoning, problem solving, and communication skills. There is emphasis on learning the vocabulary of math. The MN state standards are addressed throughout the year.

Algebra 8**Length of Course: Year**

This course will help students learn the important skills and concepts that prepare them for high school and beyond. It will develop reasoning, problem solving, and linear algebra skills.

Algebra II**Grade Level: 9****Length of Course: Year**

Students in Algebra II (9th grade) learn to solve problems using algebraic equations and graphs. Linear functions, graphing linear equations, quadratic functions, systems of equations, inequalities, and polynomials are the main topics preparing students for the next level, Algebra III.

Geometry**Grade Level: 10****Length of Course: Year**

Students in Geometry learn to use definitions, postulates, and theorems to solve problems. Topics covered dictated by the MN state standards are coordinate geometry, logic, properties of lines and angles, a study of triangles including right triangle trigonometry, polygons, circles, areas and volumes, and transformations. The unit on transformations and symmetry culminates in a hand-on project of making a tessellation.

Algebra III**Grade Level: 11****Length of Course: Year****Prerequisite: Grade of "C" or above in Algebra II; Instructor approval**

Algebra III takes the fundamentals learned in Algebra II and applies them to a variety of problem solving situations. In addition, it advances the student from linear algebra to non-linear algebraic concepts. It is a challenging course that prepares students for the Minnesota Comprehensive Assessment Test, as well as post-secondary math classes.

**College Algebra
(college credit)****Grade Level: 12****Length of Course: Semester****Prerequisite: Meet Northland College's requirements for college credit**

This course covers basic algebraic operations, linear and quadratic equations and inequalities, variation, functions and their graphs, binomial expansion, theory of equations, rational equations, conic sections, exponential and logarithmic functions, and systems of equations.

Trigonometry and Pre-Calculus Grade Level: 12 Length of Course: SemesterPrerequisite: Grade of “C” or above in Algebra III; Instructor approval

A rigorous course that explores many new topics and extends those topics previously studied. Students will see many real-world applications of the topics studied. The topics covered involve many trigonometric relationships that have been derived from triangle relationships.

Consumer Math Grade Level: 10-12 Length of Course: Year

Students will improve basic math skills that are needed in everyday experiences and study related consumer issues. This course is organized according to consumer application, using basic skills involving decimals, fractions, percents and proportion. Problem solving experiences are given that are necessary to become successful consumers.

Music**General Music 7** Length of Course: Quarter

In this class the students study the elements of music—rhythm, melody, harmony, tone, color, and style through listening, creating, and responding to music.

General Music 8 Length of Course: Quarter

This is a continuation of General Music 7, where students continue studying the elements of music.

Junior High Band Grade Level: 7-8 Length of Course: Year

This class is designed for students that enjoy playing an instrument. They continue to work on the fundamentals that they learned in elementary band and advance towards more difficult pieces of work.

Junior High Choir Grade Level: 7-8 Length of Course: Year

This course is designed for students that have a desire to sing and to learn very basic vocal concepts. The students usually perform three times a year during the Fall, Christmas, and Spring Concerts.

9th Grade Choir Length of Course: Year

This class is a continuation of the basics of vocal technique, but in more depth. There is a lot more individual work with the students focusing on increase of range, improvement in tone, and reading of parts. Students are also eligible for contest work and will also perform in the choral concerts.

Senior High Band Grade Level: 9-12 Length of Course: Year

This class is a continuation of junior high band, but in more depth. There is individual work and students are eligible for contest work and will perform in band concerts.

Senior High Choir Grade Level: 10-12 Length of Course: YearPrerequisite: Audition with Choir Instructor

Students do not need any earlier participation in a choir as long as the student is able to match tones and is interested in learning to sing and enjoy music. This choir advances into more difficult work in the areas of development of tone, proper breathing and diction, development of the ear, and reading and enjoying of more difficult literature. The senior high students are very active in contest work. They perform in concerts and some groups are also involved in community events. All Senior High Choir Members are expected to complete individual practice, attend all public performances and festivals, and have individual lessons.

Science

Life Science 7

Length of Course: Year

Chemistry of Living Things, Plant & Animal Cells, Classification of Living Things, Immune System-Disease, Protists & Fungus, Plant Kingdom, Animal Kingdom, Human Anatomy, Tissues & Systems, Bones & Muscles, Digestive Systems, Circulatory Systems, Nervous System, Tissue and Systems, Integument System, Skeletal System, Muscular System, Nervous System, Sensory System, Circulatory System.

Earth Science 8

Length of Course: Year

Students shall gain an understanding of the study of the earth. Included in this study will be the various roles of earth scientists, the scientific method, the metric system, structure of the earth, earth models, mapping the earth's surface, plate tectonics, minerals of the earth's crust, types of rocks, the atmosphere and weather, and the solar system.

Physical Science

Grade Level: 9

Length of Course: Year

Students shall gain an understanding of the study of physical science. Included in this study will be the study of measurement (metric system), motion and forces, acceleration and momentum, energy and work, thermal energy, states of matter, classification of matter, chemical reactions, and acids and bases.

Biology

Grade Level: 10

Length of Course: Year

Prerequisite: Passing grade for Physical Science

General Biology, Classification of Living Things, Cell Biology, DNA/RNA, General Genetics, Human Genetics, Botany, Invertebrate Zoology.

Anatomy and Physiology I/II

Grade Level: 11-12 Length of Course: Semester each (Year)

(college credit)

Prerequisite: Meet Northland College's requirements for college credit

Tissue and Systems, Integumentary System, Skeletal System, Muscular System, Nervous System, Sensory System, and Circulatory System.

Chemistry I

Grade Level: 10-12

Length of Course: Year

Prerequisite: Passing grade for Algebra II (9th grade)

Since Chemistry is the study of the composition of substances and the changes they undergo, students shall gain an understanding of how these processes take place. To reinforce these ideas, students will perform numerous laboratory experiments and observe teacher demonstrations.

Advanced Chemistry

Grade Level: 11-12

Length of Course: Year

Because Chemistry affords unlimited opportunities in so many fields, any student planning on attending college or considering anything in the medical field, should seriously consider taking chemistry in their junior or senior year. This is a look at Chemistry in a more in-depth way. It is more advanced and considered a college preparatory class.

Environmental Science/Zoology

Grade Level: 11-12 Length of Course: Year

This class will study the environment vs. man as well as man vs. the environment. Several topics and labs will be explored including air pollution, water quality testing, toxicity testing, water/wastewater treatment, solid waste management and soil analysis. Other topics include the weather and climate, earthquakes, tornadoes, hurricanes, tsunamis and super tsunamis, volcanoes and super volcanoes, water cycle, endangered species and others.

Physics

Grade Level: 12

Length of Course: Year

Students shall gain an understanding of the relationships between matter and energy. The sequence of topics progresses from concepts developed back in the time of Galileo and Newton to modern time. Experiments and demonstrations are employed to verify many of the basic relationships.

Social Sciences

History 7**Length of Course: Year**

Students will examine the history of the United States from its beginnings as colonists of Britain through the Civil War. We will look at how our founding fathers created a country that is the model for many people today and how that idea was nearly destroyed when people within the country fought each other. The class will help students understand who we are as a country and why we are able to do and have the freedoms afforded to us.

Geography 8**Length of Course: Year**

The students will study where places are and be able to read and locate places and things on a map. They will also gain knowledge of how landforms are created and why people and items are located in particular places and how those places influence our lives.

Civics/Geography**Grade Level: 9****Length of Course: Year**

This course is designed to help students achieve a basic understanding of the government of the United States and of the rights and responsibilities of American citizenship. Students will understand how the American Government is organized at the local, state, and federal level. Students will also be informed as to what their role in their government is in relation to their citizenship.

U.S. History**Grade Level: 10****Length of Course: Year**

Students will examine the history of the United States from the late 19th Century to today. We will look at how the events, concepts, and people helped influence the diverse ideals or beliefs of the country in the historical development of the U.S. We will also look at the role the U.S. has played in major world events and how we remain a world power today.

Psychology (for college credit)**Grade Level: 11-12****Length of Course: Semester****Prerequisites: Passing of Accuplacer; JR GPA of 3.2/SR GPA of 2.8**

Students discuss the basic principles of Psychology, and learn to recognize the emotions and responses of a person. Students will also study the major psychologists and the various psychological methods. We will also partake in various psychological experiments throughout the semester.

Sociology (for college credit)**Grade Level: 11-12****Length of Course: Semester****Prerequisites: Passing of Accuplacer; JR GPA of 3.2/SR GPA of 2.8**

Sociology looks at how the person interacts with others. Students attempt to understand human behavior and society. Students will also participate in various discussions to gain new avenues and views into human society.

World History/World Geography**Grade Level: 11****Length of Course: Year**

World History will provide an analysis of the development of civilizations, social, political, religious, economic, scientific, and technological forces among civilizations, global interaction and interrelationships, to provide a framework for understanding the modern world.

Economics/Government**Grade Level: 12****Length of Course: Year**

The goal of Economics is to address the basic economic problems faced by all societies and how they solve these problems. The effective solution of major problems must be preceded by knowledge of economics and its analytical tools.