



***St. John-Endicott  
High School  
Course Description Guide***

*Please refer to current year's schedule.  
Not all courses listed are offered every year.*

# MATHEMATICS

## **Algebra I**

Algebra will merge together a variety of concepts, procedures and processes in mathematics. Students will develop the ability to explore and solve mathematical problems, think critically, work cooperatively with others and communicate their ideas clearly as they work through these mathematical concepts and algebraic procedures. Topics for this course include a study of linear, quadratic and exponential functions as well as statistics. The content will be aligned with the Common Core State Standards (CCSS) in preparation of the 11<sup>th</sup> grade Smarter Balanced (SBAC) Exam, which will be a graduation requirement beginning with the class of 2019.

## **Geometry**

Students will explore the basic concepts and methods of Euclidean Geometry while deepening their understanding about plane and solid geometry. Course topics include reasoning and proof, line and angle relationships, two and three dimensional figures, coordinate plane geometry, geometric transformations, surface area and volume. The content will be aligned with the Common Core State Standards (CCSS) in preparation of the 11<sup>th</sup> grade Smarter Balanced (SBAC) Exam, which will be a graduation requirement beginning with the class of 2019.

## **Advanced Geometry**

This course is a challenging option designed for math-driven students exiting Algebra I to take a more rigorous geometry course. Students will explore the basic concepts and methods of Euclidean Geometry while deepening their understanding about plane and solid geometry. Course topics include reasoning and proof, line and angle relationships, two and three dimensional figures, coordinate plane geometry, geometric transformations, surface area and volume. The content will be aligned with the Common Core State Standards (CCSS) in preparation of the 11<sup>th</sup> grade Smarter Balanced (SBAC) Exam, which will be a graduation requirement beginning with the class of 2019.

## **Algebra II**

Building on their work with linear, quadratic, and exponential functions, students extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. Through the content and practice standards, students will experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Use of the graphing calculator is an integral part of this course. The content will be aligned with the Common Core State Standards (CCSS) in preparation of the 11<sup>th</sup> grade Smarter Balanced (SBAC) Exam, which will be a graduation requirement beginning with the class of 2019.

## **Advanced Algebra II**

This course is a challenging option designed for math-driven students exiting Geometry to take a more rigorous second year algebra course in preparation for Pre-Calculus. The content will be aligned with the pre-requisite material necessary for successful entry into Pre-Calculus along with the Common Core State Standards (CCSS) in preparation of the 11<sup>th</sup> grade Smarter Balanced (SBAC) Exam, which will be a graduation requirement beginning with the class of 2019.

## **Algebra III**

This course provides a bridge for students exiting Algebra II or Algebra II that are not prepared yet for the rigor of Pre-Calculus. The course will re-cover Algebra II concepts at a greater depth while offering additional topics such as trigonometry, statistics, and probability. The course will also provide flexibility to individualize additional content to meet the needs of the students in preparation for future College Algebra or Pre-Calculus courses.

## **MATHEMATICS - Continued**

### **Pre-Calculus**

The course is designed to take students beyond their 3rd year high school math course. This is an intensive course where students will develop conceptual understanding as well as computational skills essential to the study of Calculus. Numerical, graphical, and algebraic approaches will be used to help student's progress in developing analytical, critical reasoning, problem-solving, and communication skills. The course will include polynomial, rational, radical, exponential, logarithmic, and an emphasis on trigonometric functions. This course is a prerequisite to calculus and will be aligned with Central Washington University's Pre-Calculus 153 and 154 courses to provide our students the option of receive college credits if all requirements are met.

### **Calculus**

This course is for students who wish to understand the underlying concepts of calculus, its theory, techniques, and applications of differentiation and integration of the elementary functions. Graphing calculators will be used to develop concepts in addition to numerical analysis. The applications will include business and economics problems, physics and engineering problems, exponential growth and decay, and surface areas and volumes of solids. This course will be aligned with Central Washington University's Calculus 172 and 173 courses to provide our students the option of receive college credits if all requirements are met.

### **Business Math**

The goal of this course is to provide students with basic math skills needed to own a small business or handle personal finances. The course will give students basic skills in the following areas: Addition, subtraction, multiplication and division of fractions and whole numbers; Calculating gross and net pay; Using bank services including writing checks, reconciliation of bank statements and electronic banking; Calculating the cost of using credit cards and making loans; Preparing and using a budget; Calculating the cost of owning a home or a car; Calculating the cost of insurance and making investments; Analyzing business data (probability, charts & graphs, economic statistics; managing people and inventory; Determining the cost of making products for a business; Analyzing Income Statements and Balance sheets.

## **SOCIAL STUDIES**

### **Civics** (Required Semester Course)

Civics is the study of citizenship and government. This one-semester course provides students with a basic understanding of civic life, politics, and government.

### **World History** (Sophomore Required – year course)

Students will develop understanding of world civilization, the development of society and how the past has affected the present. Students will be evaluated through quizzes, tests and projects.

### **US History** (Required – year course)

Students will explore American historical and cultural development in order to better understand the United States as it is today. Students will be evaluated through quizzes, tests and projects.

### **Current World Problems** (Required – semester course)

Students will study the problems and opportunities of the current world situation. This will include a study of world politics, technology and economics. Various conflicts in the world will be investigated along with the cultural and historical events underlying those conflicts.

### **Sociology**

Sociology will explore many social issues and topics that are relative to the world today including gender and racial inequality, gender identity, social class, age, politics, crime and others. This course will use a variety of resources including past and present Hollywood films to help explore assigned topics.

## ENGLISH LANGUAGE ARTS

### **English 9: Introduction to Literature and Writing**

This class will emphasize vocabulary development, composition, and literature appreciation. Students will gain composition proficiency by writing sentences, paragraphs, and essays. The study of the elements of language, along with the elements of fiction, poetry, and non-fiction, will increase students' understanding of literacy concepts and will provide topics for writing. Students will also engage in a short research project where they will learn to use effective research methods and to find relevant sources.

### **English 10: Types of Literature**

This course will continue to emphasize vocabulary development, composition and the knowledge of different types of literature. Students will be exposed to short stories, poetry, a novel, and a Shakespearean play throughout the course of the year. One aspect of this course will be a short speech unit where students will have the opportunity to work on public speaking skills. Students will also continue to expand research techniques by writing an argumentative research paper.

### **English 11: American Literature**

This class will focus on the basic themes and elements of American literature, including short stories, poetry, essays and novels. Another major element in this class is a medium length research paper on a career using effective research methods, relevant sources and proper citation.

### **Honors English 11: American Literature**

The focus of this course will be on understanding the development of the United States through the examination of literature. During the class students will be introduced to expository writing and literary analysis by examining and writing about the literary and historical topics introduced and discussed in class. This class integrates the study of literature, history, research skills, writing and higher-level thinking. Another major element in this class is a medium length research paper on a career using effective research methods, relevant sources and proper citation.

### **English 12: British Literature**

Students enrolled in this course will explore the basic themes and elements of some selected pieces of British literature, including essays, short stories, poetry and novels, with an opportunity to respond to some of these in writing. A requirement of this class would be the senior research project on a current event, which enables the student to show their ability to use effective research methods, relevant sources and proper citation. Students will present this paper to a panel in order to meet the graduation requirement set by the district and to show the knowledge they have gained on their topic.

### **Honors English 12: British Literature**

Students enrolled in this course will analyze, synthesize, and evaluate themes and elements of some selected pieces of British literature, including essays, short stories, poetry and novels, with an emphasis on responding to the literature in written form. A requirement of this class would be the senior research project on a current event, which enables the student to show their ability to use effective research methods, relevant sources and proper citation. Students will present this paper to a panel in order to meet the graduation requirement set by the district and to show the knowledge they have gained on their topic.

## SCIENCES

### **Physical Science**

Physical Science introduces the general introductory principles of physics and chemistry. Major areas covered include the organization and use of the periodic table; physical and chemical changes; nuclear reactions; temperature and heat; sound; light; electricity and magnetism; and work, force, and motion. An in depth understanding of the nature and structure of matter and the characteristic of energy are explored. In the laboratory, emphasis will be placed on developing skills of solving a problem systematically with a clear focus on variables and repeated trials. Student will plan and conduct research involving both classroom experimentation and literature reviews from written and electronic resources. Students are expected to do homework on a nightly basis be able to write extensive lab reports.

### **Biology**

Biology is the study of the living world, from the microscopic (bacteria) to the macroscopic (animals). In Biology it is important to attempt to understand life and life processes. This is a lab course that includes an in-depth approach to the scientific method, the chemical basis of life, cell structure and function, nucleic acids, heredity, growth ecology and evolution. These concepts apply to life at all levels of organization, no matter how simple or complex they may be. Lecture notes, projects and extensive laboratory work will enhance each section and prepare students for the EOC exam.

*Prerequisite: Physical Science*

### **Biology Honors**

An "85" or better in Physical Science is required in order to enter the honors class. This is an accelerated lab course that includes an in-depth approach to the scientific method, the chemical basis of life, cell structure and function, nucleic acids, heredity, growth ecology and evolution. These concepts apply to life at all levels of organization, no matter how simple or complex they may be. Lecture notes, projects and extensive laboratory work will enhance each section and prepare students for the EOC exam.

*Prerequisite: Physical Science*

### **Advanced Biology**

This is a comprehensive introductory college level course in Biology for students with exceptional interest and motivation in science. Students are expected to perform sophisticated laboratory experiments, do outside reading, achieve a high degree of mastery of the subject and express their understanding in clear, coherent writing. Central Washington University College in the High School credit may be earned for SC1101 & SC1201.

*Prerequisite: Honors Biology and Chemistry (may be taken concurrently)*

### **Biology of Agriculture**

This class covers a broad range of agriculture science subjects including plant science, genetic engineering, aquaculture, environmental, food, technology, animal and soil sciences. Research and labs on current issues are done.

### **Chemistry**

Chemistry is a course based on regular laboratory investigations of matter, chemical reactions, and the role of energy in those reactions. Students enrolled in Chemistry compare, contrast, and synthesize useful models of the structure and properties of matter and the mechanisms of its interactions. In addition, students enrolled in this course are expected to: (1) gain an understanding of the history of chemistry, (2) investigate chemical questions and problems, with an emphasis on solving both quantitative as well as qualitative problems, which will require a solid understanding and use of algebraic concepts. (3) Learn and practice laboratory safety.

*Prerequisite: Algebra II or enrolled concurrently and Biology.*

## **SCIENCES – Continued**

### **Honors Chemistry**

An "85" or better in Honors Biology or "90" or better in Biology is required. This is an accelerated chemistry course based on laboratory investigations of matter, chemical reactions, and the role of energy in those reactions. Students enrolled in Chemistry compare, contrast, and synthesize useful models of the structure and properties of matter and the mechanisms of its interactions. In addition, students enrolled in this course are expected to: (1) gain an understanding of the history of chemistry, (2) investigate chemical questions and problems, with an emphasis on solving both quantitative as well as qualitative problems, which will require a solid understanding and use of algebraic concepts. (3) Learn and practice laboratory safety. It is expected that students will do homework on a nightly basis and do extensive laboratory reports.

*Prerequisite: Algebra II or enrolled concurrently and Honors Biology.*

### **Physics**

The goal of physics is to prepare students to understand the world around them. This course should give all students a great preparation for further courses in college and increase students ability to problem solve. Topics covered include: motion in one and two directions, forces and the laws of motion, work and energy, momentum and collisions, circular motion and gravitation, fluid mechanics, heat, vibrations and waves, sound, light, reflection, and refraction.

## **BUSINESS EDUCATION**

### **Introduction to Technology** (Freshmen Requirement)

This one-year computer course emphasizes learning the keyboard, organizing and typing letters, creating reports, using databases, developing PowerPoint, and utilizing spreadsheets in correct formats.

### **Accounting I**

This one-year course emphasizes double entry accounting for business and personal use. In addition, students learn how to use computers for accounting procedures.

### **Accounting II**

This one-year course follows Accounting I and focuses on the computer application partnerships, corporation, and cost accounting. This independent course can be taken any period during the year with teacher's permission.

### **Money Management/Career Decision Making** (Senior Requirement)

This one-year course prepares students to survive financially when they leave home. Areas covered include: values economics, credit, buying skills, insurance, income tax, investments, automobiles, housing, and careers. The career section prepares students for post-secondary educational opportunities and the world of work.

### **Computers in Business**

This one-year course emphasizes computer applications for business and personal use. The course covers programming in BASIC, word processing, database, reports, graphics, spreadsheets, Hyperstudio, web page design, and PowerPoint.

### **Business Math**

The goal of this course is to provide students with basic math skills needed to own a small business or handle personal finances. The course will give students basic skills in the following areas: Addition, subtraction, multiplication and division of fractions and whole numbers; Calculating gross and net pay; Using bank services including writing checks, reconciliation of bank statements and electronic banking; Calculating the cost of using credit cards and making loans; Preparing and using a budget; Calculating the cost of owning a home or a car; Calculating the cost of insurance and making investments; Analyzing business data (probability, charts & graphs, economic statistics; managing people and inventory; Determining the cost of making products for a business; Analyzing Income Statements and Balance sheets.

## **FINE ARTS**

### **Band**

Students will learn the many aspects of instrumental music through individual and group performances, contests, and parades. Music theory, pep band, concert band, and marching band are the subjects and activities covered throughout the year. This class will fulfill the Fine Arts requirements for graduation.

### **Jazz Band**

This class meets from 7:15-7:55 am on a set monthly schedule. Students will learn the many styles of instrumental jazz music including, but not limited to: swing, be-bop, Latin, big band, and will have the chance to perform solos. Students must be enrolled in band to enroll in jazz band. By permission only.

### **Studio Art**

Students will explore the elements of art and principles of design. The Class will examine important artists and artistic movements. Students will create a personal sketchbook for practice and development. Topics will include basic drawing techniques, color theory, introductory painting, and the foundations of sculpture.

### **Sculpture:**

This class will focus on 3 dimensional compositions techniques namely additive and subtractive sculpture, casting and assemblage. Students will review the elements of art and the principles of design. Students will create a personal sketchbook for practice and development. Topics will include planning and maquette models, papier-mâché, ceramics, mold making, casting, found object and site-specific sculptures.

### **Digital Design**

This class will focus on the software and techniques used by commercial artists. Students will review the elements of art and the principles of design. Students will create artistic resume and portfolio of work. Topics will include typography, printmaking, logo, packaging, storyboard design, cartooning and introduction into 3-D rendering/ CAD drawing techniques.

## **WORLD LANGUAGES**

### **Spanish I**

In addition to learning the language, students will learn about other ways of thinking and doing, i.e. the development of and appreciation of another culture. There is also a heavy emphasis on grammar, so students will gain a better understanding of English as well.

### **Spanish II**

This class is a continuation of Spanish I. Therefore a prerequisite of passing Spanish I with a “C” or higher is highly recommended. The material in Spanish I will be reviewed and continued. Conversational Spanish will still be emphasized while equal time will be given to “book learning,” that is a formal study of the language and vocabulary, grammar, and reading.

# VOCATIONAL AGRICULTURE

## **AG 1/2**

This class offers leadership instruction, history of the FFA, and introduction to animal science, small engines operation/repair, computer usage, natural resources and conservation, water, forestry, air, soil, wildlife and energy resource management. This class offers soil conservation, tool care and maintenance, large engine operation and repair, metalworking, crop production, land management, computer usage and welding.

## **Basic Production Science/Advanced Production Science (AG3/4)**

This class offers electrical wiring, plumbing, soldering, advanced welding, advance metal working, integrated pest management, hydraulics, machinery care, electrical motors, tractor power, and individual projects.

## **Wood Shop**

The focus is on the understanding of building construction, (rafters, roofs, walls, floors, interior finishing, exterior finishing) concrete, drafting, blueprint reading, and woodworking (projects, finishing, tool usage).

## **Agriculture Business**

This class offers the development of skills in word-processing, drafting, accounting practices for agriculture, spreadsheets, introduction to electronics, and construction and operation of robots.

## **Horticulture**

The class offers introduction to exploring the field of horticulture, plant taxonomy, plant their function and parts, environmental requirements for growth, seeds, trees, flowers, pest control, greenhouse management, landscaping, gardens, small fruits, lawn and turf grasses, and floral design.

## **Speech/Debate**

This class offers the practices of writing speeches, speaking, presentation and research of topics for debate with debate forms.

## **Applied Math**

This class offers math problem solving techniques, estimating, measuring, using graphs, charts, tables, dealing with data, lines, and angles, shapes two and three dimensions, ratios, and proportions, scale drawings, signed numbers and vectors, precision, accuracy and tolerance, powers and roots.

## **Biology of Agriculture**

This class covers a broad range of agriculture science subjects including plant science, genetic engineering, aquaculture, environmental, food, technology, animal and soil sciences. Research and labs on current issues are done.

## **Ag Production**

This is a shop project class. Pre requisite: Previous Ag class experience or Ag teacher approval



## **HEALTH & PHYSICAL EDUCATION**

### **Health** (Required Course)

The health semester will focus on developing “healthy” attitudes, lifestyles and decision-making skills. The course is based around the true definition of health, which includes social, mental and physical health. Emphasis will be placed on physical fitness, nutrition, stress awareness/management, the body systems and the effects of drugs, alcohol, smoking, and other personal habits on body systems.

### **Sports Psychology**

Sport psychology is an interdisciplinary science that draws on knowledge from many related fields including biomechanics, physiology, kinesiology and psychology. It involves the study of how psychological factors affect performance and how participation in sport and exercise affect psychological and physical factors.<sup>[1]</sup> In addition to instruction and training of psychological skills for performance improvement, applied sport psychology may include work with athletes, coaches, and parents regarding injury, rehabilitation, communication, team building, and career transitions.

### **Sports Medicine**

Course designed for students interested in athletic training, physical therapy, medicine, fitness, physiology of exercise, kinesiology, nutrition, and other sports medicine related fields.

### **Fitness:**

The class will cover a variety of sports and recreational activities providing the basics in skill development and rules for each sport. Primary emphasis on fitness, skill development and aerobic training.

### **Advanced Conditioning:**

This class is designed to meet the needs of any student desiring to improve his/her fitness level through individualized and/or class conditioning. This class includes, but is not limit to the following: progressive weight training, circuit training, aerobic/cardiovascular workout, and flexibility progression.