

# **COURSE CATALOG** (not all courses are offered each semester or each year)

# **Concurrent Enrollment**

Students receive dual credits from WayPoint Academy & Weber State University

# Natural Environments of Earth (Geography 1000)

This course will cover the basic principles of physical science, and engage students in scientific inquiry. Students will investigate how geographers conduct research - including gathering data, analyzing data, making conclusions, and developing and modifying theories based on the results of scientific research. Geographers examine the relationships between humans and their environments. When not influenced by human activities, alterations to the physical environment occur very slowly; the broad patterns of atmospheric and oceanic circulation and of world climates, landforms, soils, vegetation, and physical landscapes remain relatively stable. Therefore, it is important to study the relationship between these physical characteristics and the humans that inhabit the environment, as these interactions heavily influence one another.

# Language Arts

Secondary Language Arts courses are grade level appropriate explorations in reading, writing and inquiry.

## English 7

In English 7 students will have the opportunity to read literature from several genres and will develop writing skills through research and inquiry options.

# English 8

English 8 focuses on multiple aspects of language arts and how they are incorporated into our everyday lives. Students will improve their reading, writing, speaking and listening skills by learning about research methods, writing techniques, literature analysis, discussion, peer evaluation, grammar and vocabulary.

### English 9

Students in English 9 will study novels, plays, poetry and articles to develop and improve critical thinking, reading comprehension, vocabulary and written expression. Students will have the opportunity to express their reactions to the characters, themes, and plots of the works examined in this course. Grammar, vocabulary, character development, plot points and symbolism are among the language and literary techniques students will have the opportunity to study. In this course, students will make connections between the themes and characters of literature and personal experiences.

# English 10

In English 10 students will explore short stories, novels, non-fiction essays, articles and informational texts. Students will examine these works by analyzing and evaluating literary elements, plot, character development and themes. Students will have the opportunity to develop their writing skills and creatively express themselves through multiple forms of writing. Students will make connections to the world, themselves and the literature they study.



# English 11

English 11 focuses on literature and writing. Comprehension of novels and pieces of literature will be aided by analyzing and evaluating the literary elements of plot, theme and character development. Students will continue to hone their writing skills by practicing various forms of writing, including personal narratives and analysis of literary texts. This course will allow students the opportunity to make real world connections to the literature through projects, discussion and formative writing assignments.

# English 12

English 12 focuses on literature and writing. Students will evaluate dramatic pieces, poetry, novels, short stories, works of nonfiction and informational texts. Students will conduct research and write on the connections between the modern world and the literature. Critical reading, analysis, writing and speaking are the focuses of this course.

# **Science**

## Integrated Science 7

In Integrated Science 7, students focus on the theme of structure. Physical, earth, and life science content are integrated into this curriculum. The concept of density is used to help understand that matter is sorted and distributed in an organized and structured way. Topics include structure of matter, structure of organisms and classification of living and nonliving things. Students learn that classification is a way to give a unique description to all things.

# **Integrated Science 8**

In Integrated Science 8, students focus on the theme of change. Physical, earth, and life science content are integrated in this curriculum. The concepts of chemical and physical change, as well as energy, force and motion are discussed. Upon completion, students should understand the relationship between energy and changes in matter.

# Earth Science

The theme for Earth Science is systems. Students will analyze concepts central to this theme in order to understand life on Earth, geological change, and the interaction of atmosphere, hydrosphere, and biosphere. Earth Science provides students with an understanding of how the parts of a system function, through the study of the Earth's cycles and spheres. Earth's place in the universe as well its internal structure, tectonic plates, atmospheric processes, and hydrosphere are explored to help understand how Earth science interacts with society. This course will provide students with science skills to make informed and responsible decisions. Students will learn how to explain cosmic and global phenomena in terms of interactions of energy, matter, and life.

### Biology

Students in the Biology course will investigate life and life systems, with a close examination of ecology, cellular biology, human physiology and evolution. Students will analyze the relationship between the structure and function of organisms. Students will investigate how interactions between organisms in an ecosystem are determined by the abiotic and biotic factors of the environment



# Chemistry

Chemistry is organized around major concepts of matter, structure, energy, and change. Students will examine principles and laws related to the composition, properties and changes of matter, changes in energy, and their real world applications. The chemistry course is designed to be interactive, providing students with the opportunity to utilize scientific inquiry through labs, collaborative projects, and higher order thinking. Upon completion students will be able to demonstrate a broad understanding of the importance of chemistry in their lives.

### **Physics**

The physics course combines observation, experimentation, critical thinking and problem solving to teach students about the laws that govern the interaction of matter, energy and forces. Students will learn about important contributions scientists such as Galileo, Newton and Einstein have made to the discipline. Students will investigate various theories, principles and laws of physics and discover an appreciation for their significance in our everyday lives.

# Math

## Pre-Algebra

The Pre-Algebra course is designed to establish foundations of knowledge in the middle grades that students will connect to in their high school math courses. Students will develop an understanding of proportional relationships, operations with rational numbers and working with expressions and linear relationships, solving problems involving scale drawings and informal geometric constructions, and drawing inferences. Students will also focus on formulating and reasoning about expressions and equations, including modeling bivariate data with a linear equation, solving linear equations and systems of linear equations, using functions to describe quantitative relationships, analyzing two- and three-dimensional space and distance, and understanding and applying the Pythagorean Theorem.

### Algebra 1

The fundamental purpose of this course is to extend student knowledge of concepts learned in middle grades. A main focus of Algebra 1 is to develop an understanding of linear relationships and how they compare to other mathematical relationships, such as exponential. Students will work with irrational numbers, generate equivalent expressions, use formulas, simplify polynomials and begin to study quadratic relationships. The 4 themes of Algebra 1 are: (1) seeing structure in expressions; (2) arithmetic with polynomials and rational expressions (3) creating equations; and (4) reasoning with equations and inequalities.

### Geometry

The primary purpose of this course is to formalize and extend students' geometric experience from the middle grades. Students will explore move complex geometric situations and deepen their explanations of geometric relationships. One focus of high school geometry is plane Euclidean geometry. During high school, students use more precise definitions and develop careful proofs. Concepts of congruence, similarity, and symmetry are studied from the perspective of geometric transformation. Major themes in geometry include (1) congruence; (2) similarity, right triangles and trigonometry; (3) circles; (4) expression geometric properties with equations; (5) geometric measurement and dimension; and (6) modeling with geometry.



# Algebra 2

Building on experiences working with linear, quadratic and exponential functions, students extend their knowledge to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to hone their abilities to model situations and solve equations. This includes solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms.

# **Pre-Calculus**

The focus of Pre-Calculus is for students to develop a greater understanding of the fundamental concepts of functions. Students will build upon their knowledge of quadratic, exponential and logarithmic functions to include power, polynomial, rational, and trigonomic functions. Students will engage in the exploration of mathematical ideas, develop multiple strategies for analyzing complex relationships, and use graphing calculators to provide support in solving problems. Students will apply mathematical skills to real world examples.

# Calculus

This course is primarily concerned with developing understanding of the concepts of calculus and providing experience with its methods and applications. The courses emphasize a multirepresentational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally.

# **Social Studies**

# Geography for Life

Geography is a semester long course that includes both physical and cultural geography topics. Students examine various definitions of "place". Students will also learn about different types of ecosystems and biomes, and evaluate the characteristics of them based on their location on Earth. Students will analyze how natural events such as earthquakes, volcanic activity, tsunamis and erosion shape our planet and its landforms. Students will also evaluate how humans can modify the planet. Economic and political systems of the world will also be covered.

# World History

In this course, students will have the opportunity to examine historic and cultural events from various time periods in human history. Students will learn about early civilizations, then move on to studying cultures and events from classical civilizations such as Greece, Rome and China. In this section, students will analyze how interregional contact led to cultural diffusion and a period of exploration during the middle ages. Next, students will investigate how revolution and social change have altered civilizations. Students will finish the course by examining shift towards global integration in modern times.

# **US History**

In this course students will examine many facets of history, beginning with the founding of America and extending through the Cold War. Students will learn about the foundation of the United States government, the Civil War, and learn about the nation's reasons for entering the World Wars.



### American Government & Law

The goal of the US Government course is to foster a sense of civic responsibility in students. It supports students on their journey towards becoming informed, responsible participants of American society. Students will evaluate major ideas, protections and privileges, economic and political systems that influence the life of an American citizen.

# **Physical Education**

# Fitness for Life

Fitness for Life is a one semester, individualized, concepts-based course that is designed to give students the knowledge and skills necessary to self-assess, create, conduct, evaluate and redesign personal fitness programs. This course focuses on proper nutrition and the mastery of skills and concepts necessary to become monitors of their personal lifetime fitness. Through participation and analysis, students learn to compare the fitness benefits in a variety of activities. Students become proficient in the se of various assessments of fitness, measurement devices and exercise equipment, as well as web and community resources. Fitness testing will be used to establish individual baseline levels for designing fitness programs, to show improvement, and to provide students with personal information. Throughout the course students will keep activity journals and create a portfolio of their physical education.

## Individualized Lifetime Activities

Students are required to participate in and self-monitor their regular physical activity. Examples of activities covered include canoeing, yoga, hiking and climbing.

### Foundations of Art I

It is designed to provide an overview of Visual Arts while studying a broad variety of art tools and materials. With an emphasis on studio production, this course is designed to develop higher level thinking, art-related technology skills, art criticism, art history, and aesthetics.

### Foundations of Art II

Foundations of Art II is designed to provide an overview and introduction to Visual Arts through studying a variety of art tools and materials. With an emphasis on studio production, this course is designed to develop higher level thinking, art-related technology skill, art criticism, art history, and aesthetics. Builds on the Foundations of Art I curriculum.

# **Career Technical Education**

# Food and Nutrition I

This course is designed for students who are interested in understanding the principles of nutrition and in maintaining a healthy lifestyle. Students will learn multiple aspects of kitchen management, food safety, cooking vocabulary, tools, and equipment. Attention will be given to the selection and preparation of food and personal health and well-being.

# <u>Art</u>



## Food and Nutrition II

This course prepares students to understand the principles of food preparation, safety, sanitation, management and consumerism used in the home and food industry. Nutrition principles and applications will be emphasized.

## Food and Nutrition Science

This course teaches scientific principles and how those principles can be applied to improve the health of individuals and families. Instruction is given concerning the physical, microbiological, and chemical principles that affect the food we eat.

# **Electives**

## Academic Support

The Academic Support class is designed to allow students extra class time for homework, assistance on assignments and credit recovery courses by a licensed teacher.

### Astronomy

This elective class is an introduction to astronomy. Topics covered include the Big Bang Theory, the life cycle of stars, the formation of the solar system, the motion of objects, and space exploration.

### **Creative Writing**

This English elective course teaches the skills and strategies necessary to write creatively. Students will develop their own works of fiction by learning and using the elements of creative writing: plot, character development, dialogue, description, scene, transition, and point of view.

### **Current Issues**

Current Issues is the study of current social, economic, and political topics. The course will also cover how these areas of society have been impacted by or have impacted technology, energy, health, education, immigration, human rights, world conflicts, ideological struggles, developing countries, the quality of life, international trade, agricultural production, the world debt crisis and many other issues.

### Digital Photography

This course is an introduction to digital photography and teaches students effective camera and editing software use, artistic design, processing and careers, with a brief history of photography.

### **Economics**

This course focuses on the study of economic problems and the methods by which societies solve them. It examines the characteristics of the market economy of the United States and its function in the world. It helps students develop opinions based on economic principles and provides opportunities to share those opinions with their peers as they discuss current events.

# First Aid & CPR

This course is designed to prepare students to earn their first and CPR certifications. Students are involved in lectures, presentations, and hands-on activities.



## Journalism

This English elective course emphasizes the skills and knowledge required to produce a newspaper, and students contributed to WayPoint's monthly newsletter. Students conduct interviews, write articles and edit submissions for publication.

## Life Skills

The Life Skills class's focus is to help students learn communication and critical thinking skills through cooperative learning projects, as well as to assist with strengthening the school community. This purpose is accomplished by providing a system of aesthetic, physical, and cognitive education that enriches the individual lives of students, and strengthens their executive functioning skills through the completion of activities. The focus will shift throughout the school year, and activities will center on the Mindful Completion Model for various aspects of student life at WayPoint, including (but not limited to) academics, culinary arts, and the recreation program.

### Modern Mathematics

Students enrolled in this math elective course will study a variety of current mathematical topics, focus on quantitative analysis, and develop skill in problem solving and analytical thought through application of mathematical ideas and skills.

### Philosophy

This social studies elective course is an introduction to philosophy. Students will read philosophical texts, identify and evaluate arguments, as well as construct arguments of their own. This class promotes critical thinking, reading and writing, and invites conversation and discussion among students.

#### **Probability & Statistics**

We will be exploring the world of probability and statistics. The course will begin with review of the basics from middle school and work up through the high school standards. The focus of the course will be how to use calculations to interpret and analyze data. Students will be expected to write throughout the course and draw conclusions based on evidence.

#### Science Research

This elective class is a general introduction to the practice of science. This course provides students with an overview of the scientific method and process, particularly within the context of observation-driven investigations. We will examine the steps of crafting scientific questions and hypotheses, research design, experimentation and data collection, data analysis, interpretation and presentation. Students will become familiar with the nature of scientific theory and consider the role played by theory in the practice of science.

#### Studio Art

This art elective course is designed for highly motivated art students to demonstrate an advanced understanding of design principles. Students work closely with the instructor to develop criteria and requirements for projects that allow students to prove mastery.