

## Language Arts

### Mock Trials

Grade Level: 9 - 12

Course Length: Semester

Credit Count: .50 Speech/.50 English Elective or .50 Social Studies Elective

Are you interested in the legal system? Thinking of becoming a lawyer? Or do you just like a good debate? This class will explore the court system and trial procedure. During this class, students will work with a law firm to prepare cases, prep witnesses, and participate in trials. They will also stand in as witnesses and jury members during other cases. All students must participate as lawyers and witnesses! Students will be expected to read case files, which can be long.

### Philosophy Seminar

Grade Level: 9 - 12 Course Length: Semester Credit Count: .50 World Literature

Credit/Literature Elective/English Elective or .50 Social Studies Elective

This class will be taught using the Socratic method, where students read, write, and discuss classic and modern writings from the world's great philosophers. The class will include topics such as knowledge, reality, the mind, freedom, morality, ethics, beauty, and more. We will be reading different philosophers' ideas of each topic. Readings from well-known philosophers, such as Plato and Descartes will be used, along with more modern philosophers. ALL students will be expected to participate in small group and whole class discussions. Students will be assessed throughout the semester based on their participation and written essays. Come prepared to think and discuss.

### Intermediate Composition

Grade Level: 9-10

Course Length: Semester

Credit: .50 Intermediate Composition

Students will practice writing for different purposes with a focus on reviewing and improving the expository and persuasive essay. Students will also become familiar with citing sources using MLA, a standard method of documentation. Understanding writing as a process will be a major focus. Students will gain a working knowledge of the steps in this process, from pre-writing to publishing. Special emphasis will be placed on revision as well as building grammar and vocabulary skills.

### The Western

Grade Level: 9-12

Course Length: Semester Credit: American Literature

The Western is a genre that tries to encapsulate the spirit of the American experience. This class will follow the formation of the genre, looking at important short stories, novels, and movies. The class will also explore the impact this American genre has had on world storytelling.

### **Transformational Grammar**

Grade Level: 9-12      Course Length: Semester      Credit: English Elective

Do you believe sentence diagramming is boring, but think it might be secretly interesting? Well, here is the class for you! You will learn the most fascinating way to decipher Standard American English as well as ways to understand what goes where. Based on research of the brain, Transformational Grammar will help make sense of the way we speak and write.

### **Advanced Composition**

Grade Level: 11-12      Course Length: Semester      Credit: Comp. or English Elective

Advanced composition is a college-preparatory writing class that will focus on analysis, interpretation, research, documentation and assessment of sources, persuasion, and synthesis. The idea is to use a variety of sources and to make this as entertaining as possible. Projects and interactive assignments will form the basis of some of the writing, while others will be developed from reading.

### **Legends of the Round Table**

Grade Level: 9-12      Course Length: Semester      Credit: World Literature, Literature Elective, English Elective

King Arthur. Lancelot. Guinevere. These names have a magical place in the mythology of the Western world. So much so that there have been countless tellings, retellings, modernizations, and adaptations of their stories throughout the generations. This class will look through many of the different legends and how they have changed through time.

### **Magical Realism**

Grade Level: 9-12      Course Length: Semester      Credit: World Literature

This class will focus on works of literature that fall under the category of Magical Realism. Magical realism is a genre of fiction where magic takes place in the real world. Students will read novels and short stories from various cultures, as well as write and discuss these readings.

### **Comedy in Literature and Film**

Grade Level: 9-12      Course Length: one semester      Credit: .50 World Literature or Lit. Elective

This class will look at comedy in writing and film. Students will read books and excerpts from historical and modern examples of comedy including works from the Greeks, Shakespeare, David Sedaris, and more. Both non-fiction and fictional works will be explored using the Socratic method, along with other teaching methods. Time will also be spent looking at comedy in film. Cultural differences in what is funny verse or if there are things that are considered funny that cross cultural lines will be explored. Also we will look at how what is considered funny has changed over time and what is timeless. Students will be expected to read, write, and discuss during class.

# Science

## **Integrated Science**

Grade: 9-10                      Course Length: Year                      Credit Count: .50 Physical and .50 Life

This class will introduce to a wide range of physical phenomena on planet earth through hands on learning. Topics include motion, forces, ecology, environmental science. This class will help prepare you for biology and chemistry.

## **Biology**

Grade Level: 9 - 12      Course Length: Year                      Credit Count: 1 Life Sciences

This course is designed to study life starting from the microscopic and moving into the macroscopic world. The class will emphasis using the scientific method for research, and content areas will include, but not be limited to: chemistry of life, cell structure, genetics, evolution, animal behavior, botany, and ecology.

## **PHYSICS**

**Prerequisite:** Algebra 1

**Grade Level:** 10 - 12    **Course Length:** Year                      **Credit Count:** Physical Science

Physics is a language that quantitatively describes everything; it is the truth. Do you need any other reason to take this class?! In Semester 1, we will learn how to combine real world experiments with mathematics to describe the world in terms of forces, energy, and movement. Our lab is equipped with software and hardware typical of many college labs in chemistry and physics so this class will give you meaningful experience collecting and analyzing real data. Who should take this class? College-bound students, curious individuals, philosophers, all medical practitioners, trades workers, athletes, feminists, sports therapists, engineers, inventors, financial professionals, mathematicians, pilots, hunters, physical laborers, drivers, etc...

## **Chemistry**

Grades: 10-12                      Course Length: yearlong                      Credit: Physical Science

A beginning course that includes a study of the following concepts: atomic structure, mole concept, chemical periodicity, writing formulas and equations, nomenclature of compounds, chemical bonding, use of symbols, physical and chemical properties, elements, mixtures and compounds, kinetic molecular theory of solids, liquids, and gasses. The second semester will include the concepts of oxidation, reduction, reaction rates, chemical equilibrium, acids, bases, pH, ionization, stoichiometry, heat of reactions, gas laws, molar concentration, solutions and solubility. Laboratory skills will include measuring mass, volume, temperature, pH, filtering, and titration.

## **Human Anatomy and Physiology**

**Prerequisites:** Biology

Grade Level: 10-12 Course Length: Year Credit: Life Science

This year long course is the study of the structure and function of the various portions of human anatomy and their corresponding physiologies. This course is recommended for those students who are interested in medical/health related careers.

## **Introduction to Astrophysics**

Grade Level: 10-12 Course Length: Year Credit: Advance Physics

aka...intro to astrophysics aka... physics through astronomy aka... how to observe, and infer, from the universe In this class, we will look to the stars (and ice, dust, galaxies, nebula, superstructure, etc) to quickly learn forces, kinematics, and energy along with a meaningful study of topics such as: -calculations in rotating systems -thermodynamics (heating and cooling) -nuclear physics -electromagnetic radiation Note: Students may or may not have taken physics, but should be comfortable with algebra 1-2

# MATH

## **ALGEBRA 1**

**Grade Level:** 7 - 12 **Course Length:** Year **Credit Count:** 1 High School Math  
(satisfies graduation requirement)

The course reviews and extends problem solving, data analysis, the use of technology (i.e., scientific calculator, graphing calculator, computer), the theory, use and understanding of the fundamental operations on real numbers, expressing quantitative statements in the language of algebra, solving equations and inequalities, polynomials, the use of rational expressions in equations, coordinate graphing, irrational numbers, solution of quadratic equations and related applications.

## **GEOMETRY**

Grade Level: 9 - 12 Course Length: Year Credit Count: 1 High School Math

This course is designed to prepare students for success in an algebra course. The emphasis will be on continued development of pattern recognition, computational skills, elementary algebra topics, geometric relationships, problems solving and the use of technology.

## **ALGEBRA II**

Grade Level: 9 - 12 Course Length: Year

Prerequisite: C or better in both Algebra I and Geometry Credit Count: 1 High School Math

This course includes problem solving, data analysis, the use of technology (i.e., graphing

calculator, computer), basic operations with polynomials, solving equations and inequalities, sequences and series, relations and functions, systems of equations in two and three variables, understanding and operations with matrices, irrational and complex numbers through the solution of quadratic functions and polynomial functions of higher than first degree, use and evaluation of the Euler number, and an introduction to logarithms.

### **Pre-Calculus**

Grade Level: 11 - 12 Course Length: Year

Year Prerequisite: C or better in both Algebra II and Geometry Credit Count: 1 High School Math

It's not rocket science – it's Pre-Calculus! This course will explore functions from a calculus perspective, power, polynomial, and rational function. We will revisit exponential and logarithmic functions before entering linear algebra and systems of equations in this exciting and wonderful course. Then we will engage most thoroughly in the trigonometric functions. Finally, we will finish off the course with a good portion of polar coordinates, complex numbers and limits and derivatives.

### **STATISTICS**

Grade Level: 11 - 12 Course Length: Year

Prerequisite: C or better in both Algebra II and Pre-Calculus Credit Count: 1 High School Math

This course is designed to improve a basic understanding of descriptive and inferential statistics. Statistics is a High School Electives Course that includes the topics - measures of central tendency, standard deviation, combinations and permutations, probability, sampling, and various distributions. Emphasis is on applications of statistical concepts.

Social Studies

### **CALCULUS**

Grade Level: 9 - 12 Course Length: Year

Prerequisite: C or better in both Algebra II and Pre-Calculus Credit Count: 1 High School Math

This course is introductory college level material. The student is expected to meet this college level workload to be successful. This course includes the study of functions and graphs, derivatives and their application, analytic geometry, limits and continuity and includes the use of current technology.

## **Social Studies**

Alaska Studies

Grade level: 9-12

Course Length: Semester

Credit: .5 Alaska Studies

Alaska Studies is an in-depth exploration of the rich geographic and cultural background of the State and its people from the early Native peoples to the Russian era through Statehood to the present. This course will include examination of the physical geography, Native cultures, the political spectrum, and economic forces that have shaped contemporary Alaska. Alaska's role in the modern world and Pacific Rim will be examined.

### **WORLD HISTORY**

Grade Level: 9 - 12

Course Length: Year

Credit Count: World History

This course will focus on the world's history. The class will be organized thematically, with topics that include early hunter and gatherers, ancient civilizations, exploration, war and conflict, expansion, and the modern era. Geography, humanities, religions, government, economy, society, science, and technology are some of the themes/perspectives by which these areas of the world will be explored. Students will explore these topics through a variety of methods and material, including primary documents, simulations, and projects.

### **US History**

Grades 10-12

Course Length: Year

Credit: U.S. History

This year-long study of US History will begin with the French and Indian War and bring us to the present. While the potential class content is huge, we'll look at topics that are of particular interest to the class and spend more time on them where appropriate. Course work will include group work, cooperative group work, some lecture, and various other activities. Tests will be essay and some map work.

### **Government**

Grades 11-12

Course Length: Semester

Credit: US Government

This semester-long class will focus on the origins of government, the US Constitution, the structure of the Federal Government, participation and policy, civil rights, and foreign policy. Grades will be determined by participation, tests, and projects.

### **Social Studies Electives**

#### **PHILOSOPHY SEMINAR**

Grade Level: 9 - 12 Course Length: Semester Credit Count: .50 World Literature

Credit/Literature Elective/English Elective or .50 Social Studies Elective

This class will be taught using the Socratic method, where students read, write, and discuss

classic and modern writings from the world's great philosophers. The class will include topics such as knowledge, reality, the mind, freedom, morality, ethics, beauty, and more. We will be reading different philosophers' ideas of each topic. Readings from well-known philosophers, such as Plato and Descartes will be used, along with more modern philosophers. ALL students will be expected to participate in small group and whole class discussions. Students will be assessed throughout the semester based on their participation and written essays. Come prepared to think and discuss.

### **Psychology**

Grades 9-12 Course Length: Semester Credit: .50 Social Studies Elective

The study of the mind is one of the most intriguing of the social studies. We'll spend the semester learning the basics of the field of psychology as well as what the latest research tells us about the brain and human behavior. Students will be conduct experiments and be subjects of experiments themselves. Assessment will be based on quizzes, assignment/projects, and participation.

### **Law Studies/Mock Trials**

Grade Level: 9 - 12 Course Length: Semester

Credit Count: .50 Speech/.50 English Elective or .50 Social Studies Elective

Are you interested in the legal system? Thinking of becoming a lawyer? Or do you just like a good debate? This class will explore the court system and trial procedure. During this class, students will work with a law firm to prepare cases, prep witnesses, and participate in trials. They will also stand in as witnesses and jury members during other cases. All students must participate as lawyers and witnesses! Students will be expected to read case files, which can be long. Students will also look at our legal system and historical cases.

## **Spanish**

### **SPANISH I**

Grade Level: 7-12 Course Length: Year Credit Count: 1 World Language / Elective

¡Bienvenidos a todos! A fun introduction to the Spanish language and Spanish/Latin culture. You will have lots of fun learning to speak about yourself, your needs and what you like to do in a new language. Communication will be our emphasis.

### **SPANISH II**

Grade Level: 8-12 Course Length: Year Credit Count: 1 World Language / Elective

¡Bienvenido a tu segundo año de español! Vamos a hablar y leer mucho. También, vamos a estudiar el pasado. This year we will talk about family, friends and vacations. We will read a short novel and perform skits and oral presentations.

### **SPANISH III**

Grade Level: 9-12 Prerequisite: Spanish II or approval from teacher Course Length: Year  
Credit Count: 1 Elective credit (upon completion of second semester students receive  
.5 social studies elective credit)

Continuaremos hablar, leer y escribir el español. Mucha participación oral con presentaciones orales, música, composiciones y una novela. We will be studying grammar through reading of a short novel, short stories and current events.

#### **SPANISH IV+**

Grade Level: 10-12 Prerequisite: Spanish III or approval from teacher Course Length: Year  
Credit Count: 1 Elective credit

Leeremos cuentos hispanos y los eventos actuales. Estudiaremos la gramática avanzada. Todos van a dar presentaciones orales. This semester we will focus on developing interpretive and interpersonal language skills.

## **Electives**

#### **PHYSICAL EDUCATION (PE)**

Grade Level: 7 - 12 Course Length: Semester Credit Count: .50 Physical Education

This Physical Education class will provide each student with the opportunity to participate in a comprehensive program consisting of skill development, team sports, and physical fitness activities. The students will receive instruction in rules, skills, and strategies associated with the different sports as well as learning experiences involving physical conditioning activities. The class will promote the spirit of cooperation, leadership, fair play, and friendly competition.

#### **DRAWING & DESIGN**

Grade Level: 7 - 12 Course Length: Year Credit Count: .50 Elective Class Fee: \$25

Supplies: Students will also need to provide materials as instructed after the first day of class.

Introductory course to drawing materials (pastels, crayon, paint and mixed media, pencil, pen and ink, charcoal), drawing techniques such as contour, gesture, perspective, shading and design concepts. Studio course emphasizing the principles of composition, color theory, value and tonal studies. May be taken 4 times.

#### **Digital Photo**

Grades 7-12

Course Length: Semester Credit: Elective

Digital Art and Photography I is an exciting, fast paced course designed to expose students to a variety of digital art and photography projects. These projects will examine the following topics and much more: depth of field, portraiture, selective focus, composition, decisive moments, self-portraiture, and student choice. Students will discover tips for taking exceptional photographs, while learning strategies to manipulate their photos in digital art programs.



Furthermore, students will observe a variety of digital artists and photographers from around the world. At the end of this course students will gain a deeper understanding of contemporary digital art, as well as, photography by creating a portfolio of their digitally created artwork.

### **Peer Leadership**

Grade level: 9-12      Course Length: Semester      Credit: Elective ½ credit

Peer leadership will have four sections including leadership styles and skills, community leadership, leadership levels, and leading the way. Each of these will have interactive projects and activities led by students to develop skills for community building at Steller and for their future careers.

### **Robotics and coding**

Grade level: 9-12      Course Length: Semester      Credit: Science Elective

The future will be made by creators, not consumers. This class will help you gain experience with the code that runs the modern world! We will use the Arduino platform (and optionally, Raspberry Pi) to provide ways for students to get experience making real things happen with programming and basic coding. Skills taught include: -making electronic circuits -soldering wire, components, etc -programming in languages such as Processing and/or Circuit Python -managing workflow from design to prototyping -using electronics to make something happen (robotics)

### **PASSAGES**

Grade Level: 9 - 12 Course Length: Semester Credit Count: .50 Elective

This semester-long class is a unique Steller graduation requirement, which allows students to expand their understanding of an area of personal interest. This class will allow students to pursue personal passions and interests, while teaching good research, writing, and speaking skills that they can use throughout their education. Students will write course proposals in any of the following areas: adventure, career exploration, creativity, community involvement, logical inquiry, or practical skills.

### **Peer Taught Dystopian Literature (with Emily McKenzie)**

Grade Level: 9-12

Course Length: Semester

Please Note Credit Count: **Elective Elective; English Elective upon completion of additional work and the “Petition for Credit” form within the first week of class.**

This class will be reading different pieces of literature to discover what a dystopia is and how the idea changes throughout time and from person to person. In addition to reading, there will be an emphasis on writing to express ideas and thoughts gleaned from the reading. Some of the literature in this course is very mature, so you will need a mature mindset going into this class.

### **Introduction to Dance**

Grades: 7-12

Credit: PE

Learn the basics of dance and body movement. Students will be introduced to various styles of dance including ballet, jazz, partner dance, and much more.