

# ELECTIVE OFFERINGS 2021-2022

## Activity

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### **Community Mentorship 7600 (0.5 credit)**

Discover an exciting career or develop an interested hobby through work with a professional in the field. YOU decide an area you want to explore and we find a mentor in the community who is just right for you! Students and mentors meet during after-school hours for a minimum of 25 hours throughout the year. Students also spend 20 hours researching their area of interest on their own. Group meetings with fellow students are held in school once a month during lunch. Students plan, develop, and complete projects that reflect the real-world work of professionals and present those projects at an evening celebration towards the end of the school year. An application must be submitted.

## Art

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### **Studio Art 6100**

Students will experience a variety of art making techniques and processes that will emphasize the organization of the elements of art and principles of design. In addition, description and critical analysis of artwork will be stressed. The Studio Art course addresses a broad range of art related issues and media including the relevance of art history. Materials to be used will be, but not limited to, pencil, marker, watercolor, acrylics, tempera, color pencil, pastel, scratch board, clay, and collage. Projects will include work from observation and the imagination. Studio Art is a foundation course for all students grades 9 - 12 seeking a major sequence in Art for graduation. This one credit course corresponds to the New York State syllabus and addresses the learning standards for the arts.

### **Sculpture 6165**

This is a foundational art course revolving around three-dimensional media. Students will explore a variety of materials and learn basic techniques to construct structurally sound sculptural artworks. Some media included, but not limited to, are cardboard, paper-mâché, clay, and wire. In addition to creating artworks, this course also involved thorough brainstorming (drawings with annotations), researching artists, writing reflections, and analyzing artworks using learned art vocabulary.

### **Digital Art 6101**

**PREREQUISITE:** 1.0 Art Credit

This introductory design course teaches core skills using the industry standard for Digital Art - Adobe Creative Cloud. This is one of the most powerful programs for professional artists in the field today. You will use what you learn to express yourself in original digital drawings and artwork. This course will focus on the Adobe programs of Lightroom, Photoshop, Illustrator, and InDesign. If time allows, students will be encouraged to explore the other programs included such as After Effects, Bridge, and Animate. Students will learn digital camera use, image manipulation, computer illustration techniques, graphic design, visual literacy, copyright law, and the principles and elements of art in composition. Art and cultural movements will be examined as they relate to specific projects.

### **Drawing & Painting 6110**

**PREREQUISITE:** 1.0 Art Credit

Students are expected to demonstrate technical skills, creative growth, and an increased mastery in concept, composition, and execution of ideas. Students will explore a variety of drawing and painting techniques and processes that will emphasize the organization of the elements of art and principles of design, as well as, quality. The Drawing and Painting course addresses a broad range of 2-dimensional art related issues and media. Materials to be used will be, but not limited to, pencil, charcoal, marker, Conte, chalk pastel, oil pastel, color pencil, watercolor, tempera, acrylics, oils, and collage. Work to be performed will include work from observations and the imagination. In addition, students will be

encouraged to develop their own personal ideas and engage in critical thinking and problem solving, as well as, critical analysis of artwork.

### **Adv. Drawing & Painting 6112**

**PREREQUISITE:** Drawing & Painting

Students will explore studies in observation and creative expression through a variety of drawing and painting processes, techniques and mediums including, but not limited to, graphic, charcoal, chalk pastel, oil pastel, color pencil, tempera, acrylic, watercolor, oil and mixed media. Advanced techniques and skills in drawing and painting applications will be explored, as well as the development of thematic bodies of work and artistic statements, resulting in a broad range of work that is both teacher and student driven.

### **Photography 6119**

**PREREQUISITE:** Studio Art or Drawing for Design

During this course students will explore the world of Photography; both the Art and Science of creating an image. First semester will consist primarily of the process of black and white film development. Students will learn how to use a 35mm camera, load film, develop film, and create enlargements. We will study and explore photograms, pinhole cameras, the history of photography, and well-known photographers of both past and current. During the second semester digital photography will be explored, as well as, software for developing and editing photographs such as Adobe Photoshop. Throughout the year you will learn how to create photographic works through use of light, equipment, and composition. There are 35mm cameras in the Art Department for students to use. You may sign these out once you have learned how to use the equipment correctly and care for it. If you have your own 35mm camera you may use that as well. In addition, to the mechanical aspects, students are urged to improve their understanding of the aesthetic qualities of photographic composition, design, and mood producing visual qualities.

## **Business**

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### **Intro to Business 6203**

This course will introduce you to the world of business and help prepare you for the future. Skills acquired in this course are designed for all students-regardless of future endeavors. This course introduces students to how business functions in today's society and will provide a foundation for other business courses. Throughout the semester, our class will explore a variety of aspects the world of business has to offer including, but not limited to...forms of business ownership, ethics, decision-making, and business from a global perspective. In addition, students will participate in a variety of hands-on projects and business simulations that will help develop critical analytical skills. This course has a work-study component that allows students to earn 1.0 credit for being employed now or in the future.

### **College Comp Skills/BUS 171 6204**

Gain college credit while learning essential computer skills used in the world of business and in college. This course is designed for students to fully utilize the Microsoft Office Suite—Excel, PowerPoint, Word and Access. Students will begin by learning proper computer keyboarding techniques to type more efficiently and with better accuracy and will go on to learn about formatting business documents, creating and editing spreadsheets, database management, and how to make business presentations. Students will leave this course with business and computer skills imperative for their future college coursework or any workplace. BUS 171 is a college bridge course available for college credit through SUNY Ulster. The cost of registration with SUNY Ulster for 3.0 credits is \$195 or \$15 for students on free/reduced lunch.

### **AP Computer Science 6706 (1 credit business, math, or science)**

**PREREQUISITE:** Intro to Computer Science or passed Algebra I with a B or better.

The purpose of this course is to prepare students for the Advanced Placement Computer Science Principles exam in May. The test is part of a nationally recognized program in which students may earn college credit by taking an accelerated class while still in high school. This course will give students the opportunity to explore several important topics of computing using their own ideas and creativity.

Students will explore how computing and technology can impact the world around them, learn and apply the foundations of computer science to address real-world problems, pursue personal interests in digital projects that showcase their creativity. Students will complete two performance tasks during the course. The purpose of the AP course is to prepare students for the AP exam in May. The cost for the AP exam is approximately \$94.

### **Marketing 6216**

Have you ever purchased a product, seen a commercial, or watched the show Shark Tank? If so, you have been exposed to marketing. Marketing is the action of promoting and selling products. In this introductory business course, students will learn that marketing is more than just advertising. It involves the invention and development of new products, determining prices, finding out what customers really want, how to make a profit, and getting products from the manufacturer to the end user. Students will gain experience in business, explore careers in marketing, and find out what it takes to be an entrepreneur.

### **Advanced Marketing 6217**

**PREREQUISITE:** Marketing

This course allows for individualized study of marketing topics. Students can choose topics of study such as: tourism, fashion merchandising, marketing management, product planning, employee training, entrepreneurship, or others. Assignments and projects may include: writing a business plan, researching and analyzing marketing campaigns, completing a written D.E.C.A. event, or managing the school store.

### **Money Management 6245 (1 credit business or math)**

Looking to make a fortune in your career? Then this course is for you! Students in this course will develop successful financial goals and go through a finance simulation where they take care of their finances, invest and plan for their wealthy future. Students will learn the foundations of financial planning and discuss how to manage their finances, income taxes, investment methods, and retirement/estate planning. Students will also “play” the Stock Market Game.

### **Sports & Entertainment Market 6225**

Are you a sports fan? In this course students will learn about the business and promotion sides of the sports and entertainment industries. Students will be introduced to basic marketing and business terms through techniques used to promote and market sports. Topics include: sports current events, tourism, event planning, managing a sports franchise, ethical issues in sports, advertising and promotion.

### **Criminal Justice 6230**

This course focuses on the many subsystems in the criminal justice system and their effects on students' lives. Students will examine criminal justice procedures and their role in police work as well as investigate the steps of the judicial process. Students also will have the opportunity to learn from guest speakers and take trips to local and state agencies. Ethics, problem solving skills, analysis, teambuilding and communication skills are incorporated in every lesson. In addition, police work, court procedure, corrections and the history of the criminal justice field are also covered.

### **Business Math 6246 (1 credit business or math)**

This course is designed to help students develop mathematical skills through practical applications and activities that emphasize the application of mathematics in many types of real-world endeavors. It is applicable for today, every day, and for the rest of your life. Topics may include: earnings and taxes, checking and savings accounts, loans, insurance, installment versus credit purchases, automobile expenses and housing expenses. It is a must-take class for those going to college or entering the workforce upon graduation.

### **Social Media Marketing 6218**

Social media plays an important role in marketing to today's consumers. It has helped give consumers a voice, connect them with friends and other like-minded consumers, and given them considerable power over marketers and brands. Companies and individuals who run their own business must have successful

social media marketing strategies to compete in today's market. This class will take an in-depth look at social networks and social media platforms, (ex: Twitter, Instagram, LinkedIn, YouTube, Google, etc.), internet business, internet marketing and advertising, and the role of social media in today's marketplace. Students will examine best practices for reaching customers through various social media platforms as well as learn to evaluate emerging tools in the digital marketplace.

## Health

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### **Adv. First Aid & CPR 6407 (0.5 credit)**

This course will give students a comprehensive understanding of advanced first aid and CPR/AED concepts. Completion of the course will result in certifications from the American Safety Health Institute (ASHI) in Advanced First Aid and CPR Pro. This course is ideal for students who wish to babysit, join their local volunteer fire department, lifeguard, or are interested in a health or service profession.

### **Anatomy 3505 (0.5 credit)**

PREREQUISITE: Living Environment and Earth Science. Chemistry is suggested.

Two complimentary branches of science - anatomy and physiology - will provide the concepts to better understand the human body. Laboratory dissections will facilitate the study of anatomy, and laboratory experiments will be performed to better understand physiology. Completion of this course will prepare the student for future courses in medical and allied health fields.

## Math

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### **Intro to College Math 4350**

PREREQUISITE: Algebra I course with Regents exam

Intro to College Math is a course designed to provide students with the opportunity to learn advanced topics in math without the pressure of the Common Core Regents curricula and exams. Students will explore in depth Geometry and Algebra II topics giving them the proper preparation for SUNY Ulster's Math 115 (College Algebra II and Trigonometry). Units discussed include Radicals, Polynomials and Algebraic Fractions, Equations and Methods of Solving, Right Triangle Trigonometry, Matrices, Coordinate Geometry, and Statistics and the Normal Curve. After completing this course, we recommend students take Math 115, although students will have the option of taking Math 115, Geometry or math electives.

### **Math 115 4450**

PREREQUISITE: Algebra I course with Regents exam, and Introduction to College Math or Geometry course and Regents exam.

Math 115 is a one-year course offered at Onteora through the Bridge Program with SUNY Ulster. Successful completion of this course may earn students 4 college math credits from SUNY Ulster. The goal of this course is to provide a foundation in algebra for students pursuing liberal arts programs in college. This course meets the SUNY general education requirements for mathematics. Topics in this course include linear and quadratic equations; absolute value and polynomial inequalities; coordinate geometry of the line and circle; linear and polynomial functions; techniques of graphing; exponential functions; logarithms; right triangle trigonometry; trigonometric functions of any angle; and fundamental trigonometric identities.

## Music

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### **Foundations of Music 6560**

Foundations of Music is a course that is split between two semesters. The first semester covers music theory and the second semester focuses on the study of music history in western civilization. In the first semester students learn about different types of clefs, notes and rest values, rhythm patterns, key

signatures, various types of scales, and choral harmonies. Students learn to dictate rhythms, melodies, and compose an original composition. In the second semester, students study all of the major historical time periods in music history (Medieval, Renaissance, Baroque, Classical, Romantic, and 20th Century) along with important composers of the past.

### **Chorus 6525**

Chorus is an experience in music performance using music from a variety of time periods and styles. Students will learn to read and write music as they improve their vocal skills. In addition to regular classes, students receive individual attention by meeting four to five times each quarter in small groups. Evening school concerts are scheduled each winter and spring.

### **Philharmonic Orchestra 6540**

Orchestra is a course in music theory and performance. Students in this course need to have previous experience in reading music and performing with an ensemble. This course will continue to build on the previous skills learned which include reading and listening to music, music theory, sight-reading, and pedagogy. Students will also focus on time management, cooperation, and organizational practices. There is also an emphasis on integrating the math, language, and science fields through the reading of rhythms and the understanding of music terminology and sound production. The Orchestra Curriculum also requires meeting four of five times each quarter in smaller group lessons for more individualized attention.

### **Wind Ensemble 6500**

The Wind Ensemble is a musical organization that rehearses many types of marches, Broadway show selections, movie and TV selections, and pop music of today.

### **Piano I 6570 (0.5 credit)**

Piano I is a half year course designed for the beginning piano student. The class uses a workbook created for adults, employing songs in a variety of musical styles to teach basic note reading and playing technique. Students work at their own pace and are encouraged to bring in songs they wish to learn.

### **Piano II 6571 (0.5 credit)**

PREREQUISITE: Piano I or permission of instructor

This course is intended for students who have completed Piano I. Exceptions will be made for students with previous piano training on a case by case basis. The textbook will consist of the second level book in the Alfred Adult Piano Course. Students will continue the study of music theory and learn more advanced playing techniques. Students will learn and perform at least 20 piano pieces of varying styles.

### **Intro to Guitar 6575 (0.5 credit)**

Introduction to Guitar is both a theory and performance-based class. In the first half of the course, students will start out learning proper guitar hold, posture, and tuning. Students will then progress to basic notes on the guitar and basic guitar chords both individually and as an ensemble. In the second half of the course, repertoire will include basic folk songs and progress to contemporary music as reading and playing ability increases. As a final project, students will have the opportunity to write and perform their own song based on the music theory learned throughout the course.

## **Science**

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### **Science of Survival 3509 (0.5 credit)**

How prepared are you to deal with the issues of today? Read and watch the news - environmental, biological, chemical and geological disasters happen every day. Most often these issues are met with ignorance, panic, denial and complacency. When you live within your strengths, push your limits and practice your weaknesses with an eye on the current global situation, you will be prepared for anything. Topics will include shelter building, water filtration and purification, fire-by-friction, wild edibles, wild medicinal, tracking, movement, awareness and orienteering.

**Robotics 3507**

PREREQUISITE: 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> graders only

The objective of this course is to use a hands-on approach to introduce the basic concepts in robotics. A robot is an electro-mechanical machine. Programming and building robots applied science, technology, engineering and math (STEM) concepts. Students will be taught physical concepts of motion, force, simple machines and circuitry. Students will be using teamwork, problem-solving and project management skills to complete various challenges. No prior experience with programming or electronics is required.

**Forensics 3500 (0.5 credit)**

PREREQUISITE: Living Environment and Earth Science. Chemistry is suggested.

Focus on the application of scientific methods and techniques to crime and law. Recent advances in scientific methods and principles have had an enormous impact upon law enforcement and the entire criminal justice system. In this course, scientific methods specifically relevant to crime detection and analysis will be presented.

**Physics 3400**

Physics is the study of matter and energy in the universe. Students will learn to use mathematics to describe and predict natural phenomena. This course encompasses the topics of Mechanics, Energy, Electricity, and Magnetism, Waves, and Modern Physics. Due to the mathematical nature of the Physics curriculum, students should have completed or be currently enrolled in Algebra II.

**AP Biology 3700**

REQUIRES AP CONTRACT AND COMPLETION OF SUMMER WORK

Advanced Placement Biology is a curriculum designed to replace college level biology courses 101 and 102. It is a rigorous course requiring a minimum of one hour a night reading and reviewing the day's lesson. The course covers fifty-six chapters in less than thirty weeks and is designed for those students who work well independently and can learn and retain in-depth concepts. The course covers several units of molecular biology including the molecular basis of heredity, as well as, macro-biology and ecology. The course consists of lecture, chapter reading, study guide completion, note taking, and minimum of 12 biology labs. Students who enroll in this course should have a score of 88 or higher on the Chemistry Regents. It is recommended that students take AP Biology concurrently with Anatomy, if offered. Due to the volume of content, a summer assignment on the structure and function of human organ systems will be necessary in order to complete the curriculum. The purpose of the AP course is to prepare students for the AP exam in May. The cost for the AP exam is approximately \$94.

**AP Environmental Science 3720**

REQUIRES AP CONTRACT AND COMPLETION OF SUMMER WORK

AP environmental science is an interdisciplinary course that combines elements of biology (especially ecology), chemistry, the earth sciences, political science, sociology, demography (human population), agriculture, forestry, energy production and use, and a number of topics that are often missed in other high school classes. Special emphasis is placed on local watershed issues; field trips include water testing and participating in research symposia with students from around the state. The purpose of the AP course is to prepare students for the AP exam in May. The cost for the AP exam is approximately \$94.

**AP Chemistry 3710**

REQUIRES AP CONTRACT AND COMPLETION OF SUMMER WORK

Advanced Placement Chemistry is a curriculum designed to replace a college level general chemistry course. The content and exam are established by the College Board and include such topics as the Structure of Matter, Reactions, and Descriptive Chemistry. The laboratory experience will also be college level. Students in AP Chemistry should plan on spending at least one hour per evening. This time should be spent reading the textbook, doing homework, studying for tests, reading experiment procedures to be performed, writing laboratory reports, and revisiting the day's lesson, as students would in college. The

purpose of the AP course is to prepare students for the AP exam in May. The cost for the AP exam is approximately \$94. Due to the difficult nature of this course, a minimum grade of 85 on the Chemistry Regents exam, or permission of the instructor is required.

### **AP Physics C 3730**

#### **REQUIRES AP CONTRACT AND COMPLETION OF SUMMER WORK**

The AP Physics C (Mechanics only) Course: This Advanced Placement course has a syllabus designed by the College Board. It is equivalent to a calculus-based university level physics course usually covered in 1 semester. We will develop a basic understanding of physical laws and learn how to apply mathematical equations to natural phenomena. Introductory differential and integral calculus is used throughout the course. AP Calculus is a co-requisite. Regents Physics OR teacher approval are prerequisites for this course. The purpose of the AP course is to prepare students for the AP exam in May. The cost for the AP exam is approximately \$94.

## **Social Studies**

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### **Film History 2510**

The Film History elective spends the first half of the year examining film from the late 1800s until 1945. We will look at early American and French cinema, German expressionist film, Soviet montage cinema and other genres, national cinemas and important topics. The second semester will focus more on post-war Nationalist cinema and genre studies. This course is offered alternating years with Cinema Studies.

### **Mythology 1511 (0.5 credit)**

From tragic heroes to tricksters, love to fear, and of course the omniscient gods and goddesses, there is something for everyone in Mythology. Are you ready for this epic expedition? This course is designed to enhance your understanding of mythology and its continuing influence on our modern world. Students will study mythology from various cultures, including Greco-Roman, Norse, Egyptian, and Hindu Pantheons.

### **Philosophy I 2516 (0.5 credit)**

The Philosophy course is designed as an introduction to the philosophical reflection and examination of some of the central questions of human existence from the Western perspective. Throughout the course students will consider: 1 - Epistemological questions concerning the possibility and nature of knowledge and truth; 2 - Metaphysical questions concerning the nature of ultimate reality, the mind-body problem, consciousness, free will and determinism, personal identity, the existence of God, and death; 3 - Ethical questions concerning morality and the good life. Philosophy is largely discussion-based and will place emphasis on the careful reading of primary sources, critical and systematic thinking, and the verbal and written expression of ideas.

### **Philosophy II 2526 (0.5 credit)**

**PREREQUISITE:** Philosophy I

Advanced Philosophy is a continuation of the philosophical reflection and examination of some of the central questions of human existence introduced in Philosophy. The overarching goal is to continue to introduce philosophers, arguments, concepts, schools of thought, etc. that students can analyze with the assistance and guidance of an instructor. Contrary to the introductory course, Advanced Philosophy will involve the study of philosophers, representative texts and arguments, and concepts from AROUND THE WORLD. Advanced Philosophy is largely discussion-based and will place an emphasis on the careful reading of texts, critical and systematic thinking, and the verbal and written expression of ideas.

### **Sociology 2512 (0.5 credit)**

Sociology is the study of human society and group behavior. This course is designed to familiarize students with various cultural frameworks and the problems resulting from the fact that humans are social primates. Topics covered include cultures, subcultures, socialization, social institutions, collective

behavior, social change, social deviation, gender, and population. Hopefully, students will gain a much better understanding of themselves and their place in the social world.

### **Cultural Anthropology 2517 (0.5 credit)**

Cultural anthropologists have estimated that there are more than 5,000 different cultures in the world today that speak mutually unintelligible languages. With such enormous linguistic and cultural variability in the world, it is impossible to become conversant with the details of all of these different cultures. Thus, by necessity, the study of cultural anthropology at the introductory level needs to take a more conceptual approach. During this course students will use their prior knowledge, personal experiences, firsthand observations, exposure to unique cultures via teacher guidance, and writings made by anthropologists to wrestle with the following question: What do human societies and cultures have in common, how do they differ, and why? Units of study include anthropology and the concept of culture, language, and communication, gender roles, kinship, marriage, religion, magic and rites of passage, and social stratification. Cultures presented in detail include the Kaluli of Papua New Guinea, the Changpa of northern India and Tibet, and the Azande of South Sudan.

### **Global Issues in the 21st Century 2518**

Students will study issues that have affected civilization since circa the end of World War II, such as nuclear proliferation, various movements for civil rights, police actions, conflicts, wars, genocide, environmental issues, international terrorism, urbanization, poverty, pandemics, drugs, and religious tolerance. The course will focus on the exploration of the historical origins of political, social, economic, and environmental problems that our world is facing today. The course encourages critical thinking in students by involving them in active problem solving by researching all sides of an issue, analyzing that issue's various components and developing solutions through writing, creative projects, discussion, and debate.

### **Newsroom 2530**

The Newsroom is a survey course elective of media studies and journalism. Students in this course will critically examine the first amendment and the role of a free press in a well-functioning democracy and the class will examine landmark supreme court cases involving freedom of the press. The Newsroom will instruct students in identifying and critically evaluating bias across media sources. Students will generate articles for possible publication in the school newspaper and help generate reports for the morning announcements.

### **AP Human Geography 2750**

REQUIRES AP CONTRACT AND COMPLETION OF SUMMER WORK The purpose of the Advanced Placement course in Human Geography is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice. The purpose of the AP course is to prepare students for the AP exam in May. The cost for the AP exam is approximately \$94.

## **Technology**

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### **Creativity & Innovation 6727 (0.5 credit)**

Creativity and Innovations is a one semester high school technology education course. The course uses a hands-on approach to solving real-world problems. Everything from sanding wood to 3-d printing will be covered. Anyone interested in working with their hands and building objects will benefit from this course. If you are interested in engineering this course is a must. You will learn the basics of 3-d modeling using Solid Works, a high-end software.

### **CADD 6720 (0.5 credit math, science, or technology)**



Computer aided design and drafting is a high school course designed to introduce CAD through the use of CADKEY & Solid Works. The course will focus on engineering drawings as well as new computer modeling techniques. Students will learn how to use computers to do drafting, instead of traditional methods. Topics to be covered include basic solid pictorial drawings, modeling, 2D and 3D modeling, dimensioning, assembly drawings and Pattern files. This course is an absolute must for any student thinking about a degree in the engineering field.