

Elective Options

Note: These are electives that are being offered for the 2022-2023 school year. Enrollment is subject to availability. Please click on the course names for course descriptions.

English Electives:

Course Name	Offering	Open To	Pre-Requisite
Creative Writing	Half Year	Grades 9-12	-
Fairytale	Half Year	Grades 9-12	-
Journalism	Half Year	Grades 9-12	-
Shakespeare	Half Year	Grades 9-12	-
Speech and Debate	Half Year	Grades 9-12	-
Tales of Mystery & Suspense	Half Year	Grades 9-12	-

Science Electives:

Course Name	Offering	Open To	Pre-Requisite
Deadly Outbreaks	Alt Day Full Year	-	Living Environment
Geologic History of NYS	Alt Day Full Year	-	Earth Sci & Living Env't
Health	Half Year or Alt Day Full Year	Grades 10-12	-
Hudson River Ecology	Half Year	-	Marine Science
Intro to Sports Medicine	Half Year	Grades 9-12	-
Marine Science	Half Year	-	Earth Sci & Living Env't
PLTW Principles of BioMedical Science H	Full Year	-	Enrolled in or completed Living Environment
PLTW Human Body Systems H	Full Year	-	PLTW BioMedical Science
Science of Wellness of Mind, & Body	Half Year	Grades 10-12	-

Social Studies Electives:

Course Name	Offering	Open To	Pre-Requisite
Adolescent Psychology	Half Year	Grades 9-12	-
American Sociology	Half Year	Grades 11-12	-
Child Psychology	Half Year	Grades 9-12	-
Criminal Law	Half Year	Grades 9-12	-
Film as History	Half Year	Grades 11-12	-
Greatest Generation	Half Year	Grades 10-12	-
History of US Women - SUNY Albany	Half Year	Grades 11-12	-
Intro to Philosophy	Half Year	Grades 10-12	-
Philosophy of Ethics	Half Year	Grades 10-12	-

Math Elective:

Course Name	Offering	Open To	Pre-Requisite
RCC Statistics	Half Year	Grades 11-12	GPA of 75 or higher

Business Electives:

Course Name	Offering	Open To	Pre-Requisite
Career Exploration	Half Year or Alt Day Full Year	Grades 9-12	-
RCC Intro to Business	Half Year	Grades 11-12	GPA of 75 or higher

<u>Music Electives:</u>			
Course Name	Offering	Open To	Pre-Requisite
Jr Band / Band	Half, Full or Alt Day Full Year	Grades 9-12	-
Concert Choir	Half, Full or Alt Day Full Year	Grades 9-12	-
Jr Orchestra / Orchestra	Half, Full or Alt Day Full Year	Grades 9-12	-
History of Music I	Half or Full Year	Grades 9-12	-
Music Theory	Alt Day Full Year	Grades 10-12	-
Jazz Band	Alt Day Full Year	Grades 10-12	Audition Required
Jazz Choir	Alt Day Full Year	Grades 10-12	Audition Required
Contemporary Strings	Alt Day Full Year	Grades 10-12	Audition / Teacher Rec Required
<u>Art Electives:</u>			
Course Name	Offering	Open To	Pre-Requisite
Animation 1	Half Year	-	Studio Art or Coding or Computer Science
Animation 2	Half Year	-	Animation 1
Fashion Illustration	Half Year	-	Drawing & Painting 1
Ceramics 1	Half Year	-	Studio Art
Ceramics 2	Half Year	-	Ceramics 1
Ceramics 3	Half Year	-	Ceramics 1 & 2
Computer Graphics 1	Half Year	-	Studio Art
Computer Graphics 2	Half Year	-	Computer Graphics 1
Metal/Jewelry 1	Half Year	-	Studio Art
Metal/Jewelry 2	Half Year	-	Metal/Jewelry 1
Digital Photography 1	Half Year	-	Studio Art
Digital Photography 2	Half Year	-	Digital Photography 1
Drawing/Painting 1	Full Year	-	Studio Art
Drawing/Painting 2	Full Year	-	Drawing/Painting 1
Studio Art	Full Year	Grades 9-12	-
AP Studio Art	Full Year	-	Drawing & Painting 1 & 2
<u>Technology Electives:</u>			
Course Name	Offering	Open To	Pre-Requisite
Design & Drawing for Production	Full Year	Grades 9-12	-
CAD	Half Year	-	Design & Drawing for Production
Advanced CAD	Half Year	-	CAD
Architecture	Half Year	-	CAD & Materials Processing
Materials Processing	Half Year	-	Design & Drawing for Production
Manufacturing	Half Year	-	Materials Processing
Engineering I	Half Year	-	Adv CAD & Materials Processing
Robotics 1	Half Year	-	Design & Drawing for Production

<u>Computer Electives:</u>			
Course Name	Offering	Open To	Pre-Requisite
Intro to Coding	Half Year	Grades 9-12	-
Intro to Computer Science	Half Year	Grades 9-12	-
AP Computer Science Principles	Full Year	Grades 11-12	Algebra 1
Cybersecurity	Half Year	-	Coding & Intro Computer Science
Video Game Design	Half Year	-	Coding & Intro Computer Science

Course Descriptions

ENGLISH ELECTIVES

CREATIVE WRITING (C0036)

½ credit

For students already proficient in mechanics of grammar and composition, this course is designed to provide an outlet for those interested in writing creatively. Concentration will be on the production of a memoir, a short piece of fiction and poetry. Stylistic devices will be studied, discussed, and various examples by established authors will be examined as guides to creating pieces of the same genre. Throughout the duration of the course students will be encouraged to submit their work for publication in *The Tenth Muse*, the school's literary magazine.

Offered: half year course **Credited:** elective credit **Open to students in grades 9 – 12.**

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DRAMATIC ARTS (C0034)

½ credit

(Not offered 2022-2023)

This one-semester elective offers an opportunity for students who have had some experience with theater as well as for those who have never set foot on a stage. Students work together with classmates on theater projects, improvisational work and playwriting. In this safe atmosphere, students are able to develop self-confidence and receive necessary feedback and support as they perform for their peers, and ultimately, for an audience of family and friends as a culminating project at the end of the course.

Offered: half year course **Credited:** elective credit **Open to students in grades 9 – 12.**

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FAIRYTALES, FANTASY, AND CHILDREN'S LITERATURE (C0032)

½ credit

Prerequisite: a love of the classic fairytale.

This one semester course traces the development of the genre cross culturally with particular attention to its European and American roots, considering the impact of James Barrie's Peter Pan and the Utopian visions of the wonderful words of Baum's Oz, C.S. Lewis' Narnia, as well as the lens of Walt Disney's cinematic fantasies and Lewis Carroll's Alice in Wonderland.

Requirements: completion of assessments and writing assignments and final exam project

Offered: half year course **Credited:** for elective credit **Open to students in grades 9-12.**

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JOURNALISM IN THE 21st CENTURY (C0029)

1 credit

In the Journalism course, students explore the field of journalism through the creation of articles, broadcast videos, and podcasts. Student work will be used in the creation of Pirate TV (the school's video channel), the Pirates' Log (the school newspaper), and various other outlets. Students will create various written, video, and audio segments as they examine ethical questions of journalism, gain experience in conducting interviews, and master the various journalistic writing styles. The class will also address the role of journalism and media in our lives through the use of documentaries, feature films, and articles related to media issues.

Offered: full year course **Credited:** for elective credit **Open to students in grades 9-12.**

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SHAKESPEARE AND FILM (C0023)

½ credit

Classic and recent film adaptations of Shakespeare's plays, including *Othello*, *The Taming of the Shrew*, *Hamlet*, and *Twelfth Night* will provide students with the opportunity to analyze Shakespeare's texts in conjunction with modern interpretations. Our main objectives are to become more comfortable with Shakespearean language, easing the intimidation some feel when encountering Shakespeare, and to recognize the universality of Shakespeare's themes in order to appreciate and enjoy his timeless works.

Requirements: include individual and group assignments and activities, active class participation, and a final project

Offered: half year course **Credited:** elective credit **Open to students in grades 9 – 12.**

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SPEECH AND DEBATE (C0033)

½ credit

This course gives students both the strategies and the opportunity to deliver a variety of speeches: introducing oneself, demonstrating a skill, delivering a dramatic recitation, and engaging in an impromptu speech. Students develop a deeper understanding of logos, pathos, and ethos, the three modes of rhetoric, and various rhetorical techniques that improve both written and oral arguments. Students also learn how to spot and avoid fallacies and unethical appeals. Applying what they learn in the earlier speeches, students engage in Oxford style debates before a variety of audiences. To prepare for these events, students research controversial topics that interest them and learn strategies that help them argue either side of the controversy, refute opponents' arguments, and defend their positions. The most important objective of the class is to help students develop greater confidence in public speaking and to develop the communication, critical thinking, and collaboration skills necessary for success in college and the workplace.

Offered: half year course **Credited:** elective credit **Open to students in grades 9 – 12.**

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TALES OF MYSTERY AND SUSPENSE (C0028)**½ credit**

This course will investigate the various techniques and characteristics typical of mystery thriller-suspense writing and will explore the many forms of the mystery genre, from whodunit to thriller, from private eye to police procedural. The course will acquaint students with typical characteristics of mystery fiction as they play the role of “detective”, working to gather clues, question suspects, record notes, and solve crimes. Analyzing various short stories, old time radio programs, plays, and participating in interactive games and activities, student investigators will discover the “truths” of the mystery genre.

Offered: half year course **Credited:** elective credit **Open to students in grades 9 – 12.**

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TALES OF TERROR AND THE SUPERNATURAL (C0016)**½ credit**

(Not offered for 2022-2023)

With tales suitable for a dark and stormy night, students will read and share stories of ghosts and monsters, urban legends and myths of local hauntings. From vanishing hitchhikers to the haunting in Amityville, Long Island, students will explore the fine line between imagination and reality. Contemporary authors such as Stein, King, and Bloch will unveil the darker side of the literary mind.

Offered: half year course **Credited:** elective credit **Open to students in grades 9 – 12.**

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MATH ELECTIVE

RCC STATISTICS (C0318)

½ credit

Prerequisite: Students must enroll with SUNY Rockland to take this half year course at the high school. They must also qualify for the course by taking the Accuplacer exam. Please note that there is a fee associated with this course.

The SUNY Rockland Statistics course (MAT 125) is intended for students whose major area of study is psychology, sociology, economics, business, engineering, or education. Topics include probability, distributions, sampling, confidence intervals, hypothesis testing, inferences about means, proportions and standard deviations, correlation and regression, analysis of variance and non-parametric tests of hypotheses. The cost of the course is approximately \$65 per semester as well as additional fees depending on the course. There may be a tuition increase.

Offered: half year course **Credited:** for elective credit through PRHS; 4 credits through SUNY Rockland **Open to students in grades 11 & 12.**

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SCIENCE ELECTIVES

DEADLY OUTBREAKS (C0122)

½ credit

Prerequisites: Living Environment

Deadly Outbreaks examines the science of public health with a focus on human communicable diseases. The class will examine major epidemics/pandemics of the PAST, such as: influenza, bubonic plague, cholera, and smallpox, of the PRESENT: HIV/AIDS, Ebola, and E.coli, and of the FUTURE: Planetary health and Bioterrorism. It will address essential questions, such as: How do major outbreaks spread, and how can they be prevented, contained and controlled? How have these diseases shaped history? How have these diseases shaped our understanding of the origin of diseases?

Offered: full year/alternate day course **Credited:** for elective credit

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FRESHWATER/HUDSON RIVER ECOLOGY (C0121)

½ credit

Prerequisites: Earth Science, Living Environment and Marine Science.

This course is a continuation of the Marine Science course but with a shift in focus from saltwater environments to freshwater, with particular emphasis placed on the Hudson River. Topics: Rivers; Lakes; Streams; Earth's water resources; Water pollution and conservation; freshwater organisms; Freshwater food webs.

Requirements: local final exam in June.

Offered: spring semester **Credited:** for elective credit

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GEOLOGIC HISTORY OF NEW YORK STATE (C0124)

½ credit

Prerequisites: Earth Science and Living Environment.

This course is an introduction to the major periods in the formation of the Earth with emphasis on NYS's geology. The course will focus on the 4 major periods of the history of Earth (Pre-life, the age of trilobites, the age of dinosaurs and the age of mammals). Students will look at how the rocks and fossils of NYS show evidence of past geologic events from each of these periods of time.

Requirements: Students will be required to go on one field trip as part of the class curriculum.

Offered: full year/alternate day course **Credited:** for elective credit.

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HEALTH (C0152 or C0150)**½ credit**

Each student is required to complete one half credit in health education for graduation. This course continues and expands upon the topics covered in earlier grades. This course is designed to give students the opportunity to examine information and to develop attitudes that will have a positive effect on their health behavior. Health will also further develop decision-making skills that deal with total well-being. Topics will include mental health; suicide, eating disorders, disease prevention, substance abuse, human sexuality, safety, and other health related areas.

Offered: half year course or full year- every other day **Credited:** for core credit **Open to students in grades 10-12.**

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INTRODUCTION TO SPORTS MEDICINE (C0153)**½ credit**

This course is designed to help students understand the connection between athletics and health. Students will examine the physical and physiological changes that occur in the body as a result of exercise and proper nutrition. The course will focus on knowledge and skills in the area of injury prevention, recognition and treatment.

Offered: half year course **Credited:** for elective credit **Open to all students in grades 9-12.**

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MARINE SCIENCE (C0120)**½ credit**

Prerequisites: Earth Science and Living Environment.

This course is designed to foster students' exploration of the features and processes of our oceans. Students learn how living and non-living components of the ocean interact and the ocean's critical role for human civilization. Activities include field studies, projects, lab investigations, and data analysis. The course is a hands-on course with a great deal of time devoted to aquarium care.

Topics: Sea floor features; Tides; Waves; Currents; Marine populations and ecosystems; Food webs; the ocean-atmosphere system and climate; Ocean resources.

Requirements: local final exam in January.

Offered: fall semester **Credited:** for elective credit

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SCIENCE OF WELLNESS OF MIND AND BODY (C0125)**½ credit**

This course explores the seven dimensions of wellness and the scientific benefits of each health. Wellness is the integration of not only physical health (nutrition and fitness), but also mental and spiritual health. With the scientific understanding of these three entities, a healthy balance of wellness can be achieved. The benefits of each dimension will be researched, discussed, and, at times, demonstrated. The seven dimensions include physical, emotional, intellectual, social, spiritual, environmental, and occupational health.

Offered: half year course **Credited:** for elective credit **Open to students in grades 10-12.**

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PROJECT LEAD THE WAY (PLTW) PRINCIPLES OF BIOMEDICAL SCIENCE H (C0126) 1 credit

In this course, students explore concepts of biology and medicine as they take on roles of different medical professionals to solve real-world problems. Over the course of the year, students are challenged in various scenarios including investigating a crime scene to solving a mystery, diagnosing and proposing treatment to patients in a family medical practice, tracking down and containing a medical outbreak at a local hospital, stabilizing a patient during an emergency, and collaborating with others to design solutions to local and global medical problems. **Project Lead the Way (PLTW) courses are rigorous courses that engage students in hands-on, inquiry-based learning, grounded in real-world application. In addition to college credit, PLTW offers many potential opportunities for students as they consider future studies in the Biomedical field.**

Requirements: Must be enrolled in Living Environment (concurrently) or have completed Living Environment in previous years.

Offered: full year course **Credited:** for elective credit (Honor bearing)

***This course is the first in a sequence of four in Project Lead the Way (PLTW) Biomedical Science courses. Students will have the opportunity to earn up to 3 college credits from participating colleges if the minimum criteria are met for each of the courses in the pathway. It is anticipated that a new PLTW Biomedical elective will be added to the Program of Studies each year until the four courses are fully implemented.*

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PROJECT LEAD THE WAY (PLTW) HUMAN BODY SYSTEMS H (C0127) 1 credit

Prerequisite: PLTW Principles of Biomedical Science H

Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis in the body. Exploring science in action, students build organs and tissues on a skeletal manikin; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.

Requirements: Must have completed Principles of Biomedical Systems

Offered: full year course **Credited:** for elective credit (Honor bearing)

Course sequence:

- 1. PLTW Principles of Biomedical Science (9-12) Started Fall 2021*
- 2. PLTW Human Body Systems (10-12) Starting Fall 2022*
- 3. PLTW Medical Interventions (11-12) Starting (anticipated) Fall 2023*
- 4. PLTW Biomedical Innovations (12) Starting (anticipated) Fall 2024*

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SOCIAL STUDIES ELECTIVES

ADOLESCENT PSYCHOLOGY (C0225)

½ credit

This course examines psychological and developmental issues of adolescence; including the interaction between physiological, psychological, and social changes that occur during the transition from childhood through young adulthood. The course will provide a background in the principles of psychology and proceed to examine social and abnormal psychology. There is an emphasis on psychosocial factors influencing various peer relationships. The course is discussion and project based. Students will read, analyze, discuss, and present content. Additionally, various experiments will be conducted in class. Students will evaluate hypotheses, data, analysis, and conclusions to understand concepts and resolve conflicting ideas.

Requirements: students are required to complete a final project.

Offered: half year course **Credited:** for elective credit **Open to students in grades 9-12.**

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AMERICAN SOCIOLOGY (C0229)

½ credit

A semester long course that will focus on the influential role of music, movies, television and sports on American society. American Sociology is a theme-based course that follows trends in these topics from the 1920s until the present. Students will learn to analyze American history, politics and culture by using various forms of media outlets, including but not limited to popular music, television programs, film clips and sports broadcasts.

Requirements: a daily journal, and a final portfolio, which is a culmination of a variety of multi-media assessments.

Offered: half year course **Credited:** for elective credit **Open to students in grades 11 & 12 .**

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CHILD PSYCHOLOGY (C0224)

½ credit

An introduction to child psychology class that affords students the opportunities to examine child psychology theories, abnormal child psychology, the impact of television on child development, and current issues. The course examines different theorists who focus on social learning development, patterns of behavior, the impact of love and affection, birth order, the impact and development of the brain, and many more. While child psychology examines cognitive, behaviorist, biological, humanist, and psychoanalytic perspectives, a major focus is on learning from infancy through childhood. This course is heavily based on discussion, which involves experiments, group projects, analysis of current event topics and reflection on one's childhood.

Requirements: a final exam and to conduct experiments evaluating Vygotsky, Kohlberg, Erikson, and Piaget's theories.

Offered: half year course **Credited:** for elective credit

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CRIMINAL LAW (CO222)**½ credit**

This one semester course is intended to provide the student with a functional knowledge of the American legal system, with primary emphasis on criminal law. Topics studied include: The historical basis for establishing laws, how to advocate as citizens within the context of a legal environment, the nature and prevalence of crime, and the court system of the United States as it pertains to criminal law in the phases of investigation, defense, proceedings, and trials. Trial procedure will be taught, as well as how to write coherent and accurate legal briefs. Students will be required to analyze specific court cases related to the topics of study, as well as present their case research with clear and precise legal arguments (both written and through class presentations). Instruction will be primarily discussion-based, with emphasis on relating to the topics of study to the expectations of responsible citizenship. A mock trial is conducted at the end of the course.

Requirements: a local assessment is given as the final exam.

Offered: half year course **Credited:** for elective credit **Open to students in grades 9–12**

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FILM AS HISTORY (CO220)**½ credit**

Through the use of predominantly movies and documentaries, the course examines several major historical events that have impacted American History from the late 1800's into the Twenty-first Century. Major events include Wounded Knee, World War I, Prohibition, The Great Depression, World War II, The Cold War and the War on Terrorism. Each event studied will include historical information that is essential for understanding the event as students will be required to analyze and evaluate major historical events that have shaped American History. The focal point of each unit will be the viewing of a movie depicting the event. While viewing each movie, students are required to answer guide questions and will be responsible for an assessment upon conclusion of the movie. In addition, class discussions and activities will be utilized to gain insight as to the historical accuracy of the movie as well as making connections to current American themes. A sampling of movies viewed include *Bury My Heart at Wounded Knee*, *Cinderella Man*, and *Forrest Gump*.

Requirements: students are required to take a final exam.

Offered: half year course **Credited:** for elective credit **Open to students in grades 11 & 12**

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GREATEST GENERATION: A HISTORY OF WORLD WAR II (C0228)**½ credit**

In this semester-long Fall course, students will study the causes and effects of the Second World War as well as the significant events and leaders of the war itself. The course will expose students to the causes of World War II, the leaders who led their nations, the men and women who fought valiantly on the front and at home, as well as the fascinating stories of bravery, the devastating acts of cruelty, and the lasting effects World War II had on the world. Students will pay particular attention to a number of historical examples, including the Nazi rise to power, the bombing of Pearl Harbor, the D-Day Invasion of Normandy, the Nazi Holocaust, the controversial use of the atomic bomb, and the “Greatest Generation” of Americans. Using scholarly texts, primary sources, images, fiction, film, and other media, students will discuss the battles, leaders, technology, unspeakable acts, and foreign and domestic diplomacy associated with World War II. There are plans to supplement the course with field-work and guest speakers.

Requirements: students are required to complete a final project.

Offered: Fall Semester **Credited:** for elective credit **Open to students in grades 10-12**

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HISTORY OF U.S. WOMEN & SOCIAL CHANGE (C0231)**½ credit**

This course (SUNY Albany AWSS 260X) puts an emphasis on the diversity of U.S. women and examines the social, historical, and economic forces that have shaped U.S. women’s lives from about 1800-1970 and the contexts within which women have participated in and sometimes led social and political movements. Class discussion will play an integral role in the classroom.

This class is a college credit bearing course and there will be required reading and writing throughout the semester as well as a final at the end of the semester. This course has an approximate fee of \$160. Students are required to register with SUNY Albany and pay this fee. Students are not allowed to audit this class. Students that successfully complete this course may be eligible to receive 3 college credits.

Requirements: Students are required to take a final exam at the end of the semester.

Offered: half year course **Credited:** for elective credit through PRHS; 3 credits through SUNY Albany **Open to students in grades 11&12**

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INTRODUCTION TO PHILOSOPHY (C0227)**½ credit**

This introductory course in the field of philosophy addresses many contemporary moral issues. These issues include but are not limited to understanding what philosophy is, just war theory, abortion, same sex marriage, animal rights, environmentalism, affirmative action, the death penalty, racial profiling & rights of the accused.

Requirements: completion of reflection papers, projects and a final presentation.

Offered: Fall Semester **Credited:** for elective credit only **Open to students in grades 10-12**

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PHILOSOPHY OF ETHICS (C0232)**½ credit**

This course is designed as a fundamental inquiry into the assumptions or presuppositions of any subject. Ethics, or moral philosophy, is a branch of philosophy that involves systematizing, defending, and recommending concepts of right and wrong conduct. This branch of philosophy comprises the sub-branches of ethics and aesthetics, each concerned with values. As a field of intellectual enquiry, we will look at moral ethical philosophy as it relates to the fields of moral psychology, descriptive ethics, and value theory. During the semester a sample of the topics to be studied include Ethical Theories, Euthanasia, Capital Punishment, Free Expression, Animal Rights, Environmental Rights, and Business Ethics amongst others. The course will make wide use of multiple strategies including Socratic seminar.

Offered: Spring Semester **Credited:** for elective credit **Open to students in grades 10-12**

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BUSINESS ELECTIVES

CAREER EXPLORATION 9-12 (C0520)

½ credit

This course will provide students with the opportunity to plan for future educational and career goals as well as personal financial responsibility. Students will discover their own aptitudes and interests, to determine relevant college majors and career paths. Assessments will incorporate information from personalized surveys, and a database with over 7,000 colleges and universities; and over 2,000 occupations. Students will synthesize information from a range of sources that will allow them to make informed and effective decisions about their future educational and career plans. The assessments are intended to foster creativity and critical thinking, as each student completes unique, individualized projects.

Requirements: students are required to submit a final portfolio.

Offered: half year course or full year- every other day **Credited:** for core credit **Open to students in grades 9 – 12.**

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RCC INTRODUCTION TO BUSINESS (C0230)

½ credit

Note: Students must enroll with SUNY Rockland to take this half year course at the high school. They must also qualify for the course by taking the Accuplacer exam. Please note that there is a fee associated with this course.

The SUNY Rockland Introduction to Business course (BUS 101) is an overview of business in the American economy. It discusses basic economics, ethics in business, globalization, other forms of business, management functions, motivation, human resource management, and marketing and financial management. Enhancements to this course will also introduce concepts related to accounting, production and data processing. The cost of the course is approximately \$65 per semester as well as additional fees depending on the course. There may be a tuition increase.

Offered: half year course **Credited:** for elective credit through PRHS; 3 credits through SUNY Rockland.

This program is open to students in grades 11 & 12.

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ART ELECTIVES

ANIMATION I (C0624)

½ credit

Prerequisite: Studio Art or Coding or Intro to Computer Science

This course is an introduction to animation and the moving image. The history and basic principles of design and animation will be explored ranging from techniques that were used to animate Bugs Bunny up to the modern age of Pixar and DreamWorks. Students will use traditional hands on methods as well as learning to use software in the Adobe Creative Suite. All students should have basic computer skills and be able to manage files and folders. It is helpful to have skills in drawing and geometry prior to signing up for this course.

Offered: half year course **Credited:** for elective credit

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ANIMATION II (C0625)

½ credit

Prerequisite: Animation I

This course builds on the foundation of Animation I. Here students are not only making something move across the screen – they are making something come to life. Students will learn to do this through The Principles of Animation. We will introduce the concepts of physics and how they apply to animation motion. Students will continue developing their skills with hands on methods and also with the Adobe Creative Suite.

Offered: half year course **Credited:** for elective credit

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CERAMICS I (C0617)

½ credit

Prerequisite: Studio Art

This course offers an introduction to clay through an emphasis on hand-building techniques (coil, slab, drape) while also giving students some opportunity to explore the material in order to produce original pieces of artwork. Students are also expected to begin practicing wheel-throwing techniques.

Offered: half year course **Credited:** for elective credit.

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CERAMICS II (C0618)

½ credit

Prerequisite: Ceramics I

This course builds on the curriculum and skills established in Ceramics I. It offers advanced techniques and challenges in clay design and construction. More concentrated work on the wheel is expected.

Offered: half year course **Credited:** for elective credit.

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CERAMICS III (C0620) *(Previously known as Advanced 3D Design)***½ credit****Prerequisite: Ceramics II**

This advanced ceramics course is offered to students who have successfully completed ceramics I & II. It is recommended for Juniors & Seniors. The course is for the self-motivated student who would like to continue further exploration in clay. Students will learn more advanced hand-building and decorating techniques. There is a strong focus on creating sculptures. Students will be challenged to develop a connected body of work.

Offered: half year course **Credited:** for elective credit.

This course is open to students in grades 11 and 12.

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COMPUTER GRAPHICS I (C0615)**½ credit****Prerequisite: Studio Art**

This course will stress the role of design concepts in the production of computer images. Students will learn a variety of programs and how to apply them to manipulate the original images creatively. There will be limited use of digital scanners and digital cameras to capture these images. Drawing skills are necessary to be successful in this class.

Offered: half year course **Credited:** for elective credit

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COMPUTER GRAPHICS II (C0616)**½ credit****Prerequisite: Computer Graphics I**

This class builds on skills learned in Computer Graphics I. Creative problem solving and the design of original computer graphic images will be explored. Moving images on the screen and computer generated animation will be experienced on a limited basis. The digital capturing process will be more extensively explored. Good drawing and graphic skills are necessary to be successful in this class.

Offered: half year course **Credited:** for elective credit

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DIGITAL PHOTOGRAPHY I (C0611)**½ credit****Prerequisite: Studio Art**

This elective is an introduction to digital photography. Students will learn about the history and evolution of cameras and how picture-taking has advanced into the digital age. Students will learn how to operate the manual controls on a digital single lens reflex camera (DSLR). The design aspects of photography as an art form will be addressed through lessons on composition, line, tone, motion, depth of field, panning, portraiture and landscape.

Offered: half year course **Credited:** for elective credit

Note: Students must have access to a digital single lens reflex camera with manual adjustments for shutter speed and aperture. A Memory Card for their specific camera and thumb drive are also required.

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DIGITAL PHOTOGRAPHY II (C0612)**½ credit****Prerequisite: Digital Photography I**

This course continues to build upon the skills and concepts taught in Digital Photography I. Advanced compositional content, special effects and technical experimentation will be explored. Lessons will include basic Photoshop manipulation, photo storytelling, framing a scene, double exposure, and commercial photography.

Offered: half year course **Credited:** for elective credit

Note: Students must have access to a digital single lens reflex camera with manual adjustments for shutter speed and aperture. A Memory Card for their specific camera and thumb drive are also required.

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DRAWING AND PAINTING I (C0601)**1 credit****Prerequisite: Studio Art**

This is a full year study of drawing and painting techniques. Pencil, pen and ink, colored pencil, charcoal, and pastel drawing are explored as well as transparent watercolor, acrylic and tempera paint. Color theory and compositional skills are stressed. Research and art history are part of this art course. Outside assignments help students develop the ability to think independently.

Offered: full year course **Credited:** for elective credit

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DRAWING AND PAINTING II (C0602)**1 credit****Prerequisite: Drawing and Painting I**

This is a full year study of a variety of drawing and painting techniques. Emphasis will be on creativity and compositional decision-making through a concentrated study chosen by the student. This focus on a particular subject matter or point of interest will allow students to take a closer, more personal look at who they are as artists and what they need to express themselves and how to do that successfully.

Offered: full year course **Credited:** for elective credit

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FASHION ILLUSTRATION (C0626)**½ credit****Prerequisite: Drawing and Painting I**

This course introduces students to the exciting world of fashion illustration and design. Curriculum includes the history of fashion illustration, historical costume, anatomy and proportion, and rendering a draped and clothed figure using media such as charcoal, watercolor, marker and gouache. Students will discover how the Elements of Art and Principles of Design apply to clothing and accessories. Students will learn about “Croquis” and create presentation boards. The course may culminate with a trip to a costume exhibit.

Offered: half year course **Credited:** for elective credit

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METAL/JEWELRY I (C0607)**½ credit****Prerequisite: Studio Art**

This course is an introduction to working with sheet and wire metals such as copper, brass and nickel silver. Students will learn to form, pierce, cut, file and buff metal. Objects created include wearable art, mini sculptures and jewelry. Tools and equipment used are a roller mill, buffing wheel, acetylene torch, drill press and more! Techniques include cold connections, metal forming and riveting.

Offered: half year course **Credited:** for elective credit

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METAL /JEWELRY II (C0608)**½ credit****Prerequisite: Metal/Jewelry I**

This course is a continuation of Metal/Jewelry I and builds upon the skills and techniques learned previously. Students will learn more advanced techniques in metal work as well as being challenged with more complex design work. Techniques include hot connections (soldering) and bezel work for setting stones.

Offered: half year course **Credited:** for elective credit

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SCULPTURE I (C0605)**½ credit***(Not offered for 2022-2023)***Prerequisite: Studio Art**

This course is an intensive study of three-dimensional design working with clay, wood, metal, wire, wax and plaster. The student will develop skills in construction, modeling and carving balance and negative and positive space. Both additive and subtractive sculpture techniques and methods will be used.

Offered: half year course **Credited:** for elective credit

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SCULPTURE II (C0606)**½ credit***(Not offered for 2022-2023)***Prerequisite: Sculpture I**

This course will expand upon the skills and techniques learned in 3D Art I. Basic techniques of mold making and casting will be introduced.

Offered: half year course **Credited:** for elective credit

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STUDIO ART (C0600)**1 credit**

Students will develop basic art skills through the exploration of a variety of art materials and processes. The course projects will help students develop the ability to work with the elements of art and the fundamentals of design. Students learn to evaluate artwork, become aware of historical factors that shape visual communication and strengthen their powers of observation.

Offered: full year course **Credited:** for elective credit and meets the NY State Fine Arts requirement

NOTE : Studio Art is a prerequisite for all other art courses.

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AP STUDIO ART 2D Design Portfolio (C0623)**1 credit****Prerequisites Suggested : Studio Art and Drawing and Painting I and II**

This course allows talented art students to complete the preparation of the AP Studio portfolio. This portfolio involves at least 24 high quality pieces that are submitted for review in slide form as part of the AP Exam. It is expected that students will be highly motivated artists, able to work independently at school and at home and will be responsible at meeting deadlines. Students will be required to provide their own slide film and have it developed at a film lab. AP Exam is a course requirement.

Requirement : The AP Exam is a course requirement that has a fee of approximately \$95.

Offered: full year course **Credited:** for elective credit

Note: Students need to have completed at least 3 credits of art prior to this class. Permission of instructor and portfolio review is required prior to admission to this course.

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MUSIC ELECTIVES

BAND (C0640)

1 credit

Prerequisite: Junior Band

Students within the Pearl River High School Band will perform two concerts a year as well as provide music for other various school and community activities. On a daily basis, students will work on individual instrumental technique, ensemble technique, basic theory concepts as well as basic composition. Students will also participate in regularly scheduled pullout lessons, which will focus on individual technique as well as small ensemble technique.

Requirements: students are required to participate in quarterly assessments as well as the mid-term and final exams (the winter and spring concerts).

Offered: full year course **Credited:** Fine Arts requirement and/or elective credit

This course is open to students in grades 9 – 12.

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JUNIOR BAND (C0644)

½ credit / 1 credit

Prerequisite: Participation in MS Band or director approval

The concepts and skills learned in Junior Band will allow students to be successful in the upper-level band the following school year. On a daily basis, students will work on basic theory concepts, individual instrument technique, ensemble technique and basic composition. Students will participate in regularly scheduled pullout lessons, which will focus on individual technique, instrument care and maintenance as well as small ensemble technique.

Requirements: Students are required to participate in quarterly assessments as well as the mid-term and final exams (the winter and spring concerts).

Offered: full year course **Credited:** Fine Arts requirement and/or elective credit

Course open to 8th & 9th and selected 10-12th graders who may be new to the music program.

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JAZZ BAND (C0637)

½ credit

Prerequisite: Audition only

A completely performance based course where band players of all kinds (guitar, bass, and drum set as well) learn to play various subgenres of jazz, rock, pop and fusion. We will focus on song form and improvisation, as well as jazz theory/ arranging.

Requirements: mandatory participation in the Winter Pops Concert and Spring Pops Concert.

Offered: full year/alternate day course **Credited:** Fine Arts requirement and/or elective credit

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CONCERT CHOIR (C0680)**1 credit**

A largely performance based course which touches on the basics of singing, sight reading, vocal anatomy, and performance etiquette.

Requirements: mandatory participation in the Winter Concert I and Spring Concert, group voice lessons (2 per quarter), written tests and quizzes, parts quizzes, and daily participation in singing, breathing, and music reading exercises.

Offered: full year course **Credited:** Fine Arts requirement and/or elective credit

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JAZZ CHOIR (C0638)**½ credit**

Prerequisite: Audition only.

A completely performance based course where singers learn Jazz, Contemporary, and Broadway Songs as well as minimal choreography.

Requirements: mandatory participation in the Winter Pops Concert and Spring Pops Concert as well as various community performances throughout the year.

Offered: full year/alternate day course **Credited:** Fine Arts requirement and/or elective credit

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HISTORY OF MUSIC I (C0633)**½ credit**

Students will explore the cultural, historical, and musical background of American Popular Music. Course activities will explore cultural connections, how music reflects social & cultural awareness and technological developments that affect the evolution of popular music. Each unit will focus on a different genre musical, or decade, and contain lessons based on the National Core Arts Standards of Creating/Presenting/Performing/Producing, Responding and Connecting with variable tasks.

Offered: fall semester only **Credited:** Fine Arts requirement and/or elective credit

This course is open to students in grades 9 – 12.

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HISTORY OF MUSIC II (C0631)**½ credit**

(Not offered 2022-2023)

Prerequisite : A History of Music in America I

Students will continue to explore the culture, historical, and musical background of American Popular Music. Course activities will explore cultural connections, how music reflects social & cultural awareness, and technological developments that affect the evolution of popular music. This semester will explore the various types of media, music videos, vlogs, blogs and other tech available. Each unit will focus on a different genre musical, or decade, and contain lessons based on the National Core Arts Standards of Creating, Presenting/Performing/Producing, Responding and Connecting with variable tasks.

Offered: spring semester only **Credited:** Fine Arts requirement and/or elective credit

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ORCHESTRA (C0690)**1 credit****Prerequisite:** Junior Orchestra

Orchestra is a performing group open to string players in grades 10-12 interested in playing music from the standard classical orchestral repertoire as well as music from the modern and pop/rock genres. The members of the orchestra perform at annual concerts and also participate in local and state music festivals and competitions.

Requirements: mandatory participation in the National Honors Society induction ceremony, Winter Concert I and Spring Concert, group lessons (5 per quarter), written tests and quizzes, and quarterly playing exams.

Offered: full year course **Credited:** Fine Arts requirement and/or elective credit

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JUNIOR ORCHESTRA (C0694)**½ credit / 1 credit****Prerequisite:** Participation in MS orchestra or director approval

Junior orchestra is a performing group open to string players in grades 8 & 9 and older students who are learning a string instrument for the first time. The concepts and skills learned in Junior Orchestra will prepare students for the more challenging music performed by the 10-12 orchestra. On a daily basis, students will work on basic theory concepts, individual instrument techniques, as well as ensemble technique. Students will participate in regular scheduled pullout lessons, with a focus on skills and techniques specific to their instrument. The members of the Junior Orchestra perform at annual concerts and also participate in local and state music festivals and competitions.

Requirements: Mandatory participation in Winter and Spring Concerts, group lessons (4-5 per quarter), playing quizzes and exams, and graduation ensemble.

Offered: full year/half year/alternate day course **Credited:** Fine Arts requirement and/or elective credit

Course open to 8th & 9th and selected 10-12th graders who may be new to the music program.

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CONTEMPORARY STRING ENSEMBLE (C0639)**½ credit****Prerequisite:** audition and/or teacher recommendation.

A completely performance based course open to string players (including electric bass) and percussionists. Players will learn music from the modern, pop, and rock genres as well as improvisation skills and performance techniques.

Requirements: mandatory participation in Winter Pops Concert and Spring Pops Concert.

Offered: full year/alternate day course **Credited:** Fine Arts requirement and/or elective credit

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MUSIC THEORY (C0635)**½ credit**

This course focuses on music fundamentals (rhythm, note values, notation, scales, and harmony). Its primary goal is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a musical composition.

Offered: full year/alternate day course **Credited:** for elective credit

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TECHNOLOGY ELECTIVES

ARCHITECTURE (C0544)

½ credit

Prerequisites: Design & Drawing for Production, CAD, Materials Processing

Students study house/commercial design and styles, and work with floor plans and drawings on a computer. Students will learn about house/construction design, commercial design/construct and complete a model of a sample home.

Requirements: series of floor plan drawings and elevation drawings, model building of house construction, final self-design project

Offered: half year course **Credited:** for elective credit

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COMPUTER AIDED DRAWING (C0542)

½ credit

Prerequisite: Design & Drawing for Production

CAD builds off the skills students learn in Design & Drawing for Production and applies them to the computer. Students will do much of the same work within the Auto CAD program.

Requirements: series of single view drawings, series of multi view drawings, two student design projects, and a final exam drawing.

Offered: half year course **Credited:** for elective credit

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ADVANCED CAD (C0543)

½ credit

Prerequisite: CAD

Students use 3D solid modeling software to create drawings and designs. Students learn to model objects in a 3D space and have the opportunity to create their own designs.

Requirements: multiple 3D drawings, multiple assembly drawings, student design drawing, and final exam drawing.

Offered: half year course **Credited:** for elective credit

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DESIGN & DRAWING FOR PRODUCTION (C0540)**1 credit**

Design and Drawing for Production is a full year introductory course for the technology program where students will study the design elements, technical drafting and the problem solving process in order to produce various models, prototypes and projects. Scientific inquiry will be practiced by designing, constructing, using, and evaluating products and services to satisfy human and environmental needs. Hands-on problem-based activities will include (but are not limited to) building a paper structure, designing and building a balloon powered vehicle, Rube Goldberg machine design, a CO₂ powered vehicle, and engineering product design and construction. These activities use a system approach requiring design and problem solving, data analysis, mathematical modeling, experimentation, and applying scientific principles and laws of nature. In addition, students will be introduced to the world of graphical communication using mechanical drawing skills to complete single view, multi view, isometric and architectural designs. Students will also learn basic hand tools and machine use when building their models, prototypes and various projects, as well as computers and online CAD programs such as Sketchup, as tools for increased productivity.

Offered: full year course **Credited:** for elective credit and meets the NY State Fine Arts requirement

NOTE: This is a prerequisite for all other Technology courses.

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ENERGY (C0569)**½ credit**

(Not offered 2022-2023)

Prerequisite: Technical Design

A laboratory study of energy technology as a resource of society. Emphasis is placed upon the most recent technological developments related to each energy source from the very primitive to the most sophisticated. Laboratory endeavors will center upon research, activities, experimentation and the design and fabrication of projects, scale models and mock-ups which utilize or demonstrate generation and application of energy. Forms of energy to be discussed include but are not limited to Heat, Power, Kinetic/Potential, Fossil Fuel, Nuclear, Bio Mass, Solar, Wind, Hydro, Storage, Distribution and use of energy.

Requirements: Solar Cooker, Hydroponics, Wind/Water Turbine, Crash Test Vehicle, Insulation Shelter, Simple Machines **Offered:** half year course **Credited:** for elective credit

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ENGINEERING I (C0548)**½ credit****Prerequisites: Advanced CAD, Materials**

Students will study the basic principles of engineering through the design process and problem solving. Students will work on design problems and create models and prototypes to test out ideas. Class studies reverse engineering to help us understand how technological devices work.

Requirements: multiple group and individual design problems, individual model/prototype building, boomilever design and construction, reverse engineering project, and a final problem solving project

Offered: half year course **Credited:** for elective credit

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ENGINEERING II (C0549)**½ credit***(Not offered 2022-2023)***Prerequisite: Engineering I**

Engineering II is the capstone class for technology education. Students culminate all of their experience from previous classes through a self-designed final project. Students are challenged to design a project that showcases their skills and abilities in the field of engineering, focusing on problem solving and the design process. Students will complete all the research, design, construction, and testing necessary for their project. All project ideas need to be approved by the teacher.

Requirements: Final project completed and evaluated/tested

Offered: half year course **Credited:** for elective credit

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MATERIALS PROCESSING (C0546)**½ credit****Prerequisite: Design & Drawing for Production**

Students will learn how to process various materials, focusing primarily on wood and metal. They will work on numerous projects with both hand tools and powered machines.

Requirements: one metals hand tool project, one wood hand tools project, one metal machine project, one wood machine project and one final self-design project

Offered: half year course **Credited:** for elective credit

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MANUFACTURING (C0547)**½ credit****Prerequisite: Materials Processing**

Manufacturing focuses on advanced materials processing skills. Students will continue to work with wood and metal materials. They will also learn about manufacturing processes and apply it to a culminating manufacturing project.

Requirements: one advanced hand tool project, one wood machine project, one metal machine project, one student designed project

Offered: half year course **Credited:** for elective credit

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ROBOTICS 1 (C0567)**½ credit****Prerequisite: Design & Drawing for Production**

A laboratory study of robotics and their impact on our world. Students will study how and why they are used, the advantages and disadvantages of their use, and their basic programming and functions. Students will study and experiment with different control systems such as remote control, preprogrammed operations, and autonomous functions. Students will design and test robots primarily based on tasks and challenges provided by the teacher.

Requirements: Robot design and construction, robot basic programming, completion of multiple control simulations, completion of multiple robotic tasks and functions

Offered: half year course **Credited:** for elective credit

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COMPUTER ELECTIVES

AP COMPUTER SCIENCE PRINCIPLES (C0317)

1 credit

Prerequisites : Algebra I

Students will follow an Advanced Placement curriculum which will focus on understanding how computing systems and the Internet function. In addition, students will craft an application featuring the JavaScript programming language. Highlights of the class include discussion of the Internet, digital representations of data, the role of big data in modern society, and programming fundamentals. A research project into a current or proposed computing innovation is also necessary for completion of this course.

Offered: full year course **Credited:** elective credit only

Recommendation for students in grades 11 & 12

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CYBERSECURITY (C0155)

½ credit

Prerequisite: Coding and Introduction to Computer Science

This course will begin with a thorough examination of various cryptographic techniques which is the basis of modern cybersecurity. In addition, the creation of unique keys will be discussed as well as symmetric and asymmetric encryption used for Internet communication. Students will then be introduced to proper and safe methods of securing computers and small networks using Raspberry Pis. Security measures for larger networks will be discussed. Lastly, students will be armed with a toolbox of techniques to make their online computing experience more secure.

Offered: half year course **Credited:** elective credit only

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INTRODUCTION TO CODING (C0154)

½ credit

This course is a basic introduction to coding on the computer. Students will learn how to program macros in Microsoft Excel. HTML and CSS will be introduced, so that students can learn how to build their own web pages. The JavaScript language will also be explained. Students will write formal programs in this language, and later, learn how to incorporate code into their very own HTML web pages. Coding will be examined in relation to Art, Music, and Sports.

Offered: half year course **Credited:** elective credit only **Open to students in grades 9 – 12**

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INTRODUCTION TO COMPUTER SCIENCE (C0319)**½ credit**

This entry-level course uses the popular Python language to introduce students to the basic concepts of computer science. This course emphasizes techniques of programming design, and it applies these concepts to problems that will demonstrate the power and functionality of the computer. Topics will also include the Internet, computer hardware functionality, and basic data processing. The ability to work independently and problem solve effectively are key components to be successful in this course.

Offered: half year course **Credited:** elective credit only

Open to students in grades 9 – 12

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VIDEO GAME DESIGN IN UNITY (C0156)**½ credit**

Prerequisite: Coding and Introduction to Computer Science

The Game Design in Unity course teaches the fundamentals of designing a game using the most widely accessed and preferred editing engine in the world. The intent of this course is to prepare high school students with the industry related skills needed for the workplace and higher learning environments. By the end of this course, they will understand the design planning process, be knowledgeable of industry related careers, and be able to navigate the Unity environment in order to create 3D games.

Offered: half year course **Credited:** elective credit only

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