

# CATALOG

## ACADEMIC Course Catalog

2021  
2022



# Academic Courses 2021-2022

## COMPUTER APPLICATIONS

### **Assistive Technology**

Course Code: ~Com130

Description: In the Assistive Technology course, students learn about the assistive technology available on a personal computer and available online through open access for their appropriate uses, focusing especially on academic tasks. Basic steps for identification of accessibility, range of motion issues, assistive technology devices available on new computers, and various operating systems are demonstrated and utilized. Students also learn to identify the assistive technology software that best suits their own learning styles and needs, as well as procedures for finding free software on the Internet.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

### **Excel Only**

Course Code: ~Com140

Description: This is a one-term class in the Computer Applications Department that covers the use and integration of Excel in schoolwork and daily life. Students will work with this program making spreadsheets, charts, calculating financial information, etc. Students will use real data and then integrate skills learned into other classes like math and the sciences.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

### **Keyboarding**

Course Code: ~Com120

Description: In this one term course, students improve upon their initial keyboarding skills, based on a short diagnostic evaluation provided in the Mavis Beacon keyboarding program. Students will use the same program to practice keyboarding for approximately twenty minutes per class period, gradually developing their abilities. Students who progress to advanced levels of keyboarding will then engage in transcription and dictation lessons. Each student's progress will be evaluated twice per week and scored for accuracy and adjusted words per minute.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Office Applications**

Course Code: ~Com115

Description: The Office Applications curriculum focuses on building and maintaining typing skills with the Mavis Beacon keyboarding program; word processing with Microsoft Word; spreadsheet work with Excel; and slide presentations with PowerPoint. Students type several lessons per week and record their typing accuracy and words per minute information. Writing prompts are supplied to provide the students writing and typing practice in Word. Class lessons for inserting images and tables, cutting and pasting, and using the spell checker and Flesch- Kincaid Readability Statistics are all demonstrated and applied by the instructor. Simple spreadsheets are introduced in Excel and the students create several charts or graphs in this program. They will utilize a variety of life skills, including financing a car, credit card financing, and building a budget in this section of the curriculum. The students are introduced to PowerPoint presentations and are challenged to utilize the advanced tools included in the program. Emphasis on factual information, citation of images, and copyright and fair use practices are also explained.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Web Page Design**

Course Code: ~Com100

Description: In the Web Page Design course, students learn the basics of Web Page Design and HTML code, including: page color, font type and size, tables, navigation links, and image insertion. Students will design a website in HTML, meeting the basic Website Accessibility Guidelines. Students will also be introduced to web design ethics, or the idea that web designers are accountable to the larger social, environmental, political, and economic contexts in which the design will circulate. Students will have opportunities to think through their web design choices, first as design practitioners or makers and second as consumers or users of a design.

Prerequisites:

Permission Required: No

Grades: 10,11,12

Credits: 3

# **COMPUTER SCIENCE**

## **3 Design Software: Introduction**

Course Code: ~Csc130

Description: Students start using Tinkercad, 3D design software for beginners, and then progress to Fusion 360, a professional-level software, when they are ready to make more complicated shapes. In three terms, they will progress from the basics of 3D design to more advanced techniques. In this course, they will design and print objects of their own choosing, but they will be encouraged to make

one object that could help a staff member on campus (e.g., a visual aid for a classroom, a special container for an unusual tool, etc.).

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

### **3D Design Software: Short Introduction (1 term)**

Course Code: ~Csc120

Description: Students start using Tinkercad, 3D design software for beginners, and then progress to Fusion 360, a professional-level software, when they are ready to make more complicated shapes. In one term, they will learn the basics of 3D design and 3D print several objects of their choosing.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

### **3D Design Software: Short Introduction (2 terms)**

Course Code: ~Csc120

Description: Students start using Tinkercad, 3D design software for beginners, and then progress to Fusion 360, a professional-level software, when they are ready to make more complicated shapes. In one term, they will learn the basics of 3D design and 3D print several objects of their choosing.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 2

### **3d Design Studio: Individual Selection**

Course Code: ~Csc160

Description: Before the course starts, students must select their own 3D design project and receive approval from the teacher, who will gauge whether or not the project can be accomplished in one term by the proposing student. This will allow that each student can hit the ground running on the first day of class so they have the best chance to finish their project in one term.

Prerequisites: 3D Design Software: Introduction or 3D Design Software: Short Introduction

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

### **3D Design Studio: Mobiles**

Course Code: ~Csc145

Description: Students will 3D design and print the parts of a multi-tiered mobile. In their construction,

they will have to take into account such things as weight, leverage, distance, balance, and symmetry.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

### **3D Design Studio: Post-Processing Superhero Masks**

Course Code: ~Csc155

Description: To make your 3D printed objects look professional, you have to post-process the objects once they are removed from the 3D printer. Learn how to polish, wet sand, and paint the materials used in 3D printers so they lose the subtle printer lines, have the proper texture, and reveal realistic coloring. During the first term, students will select a figurine (about 8 inches tall), 3D print it, and then go through the post-processing steps to improve the look of their characters. During the final two terms, students will select a superhero's headgear (Batman's cowl, Kylo Ren's helmet, etc.) and go through the process again. We will download pre-designed superhero headgear and 3D print it. The challenge will be to post-process it so it looks like what the headgear looks like in the movies.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

### **Advanced 3D Design: Gears and Motion**

Course Code: ~Csc180

Description: After learning many skills in the introductory class for making a single objects, students will take on the challenge of creating parts that move relative to each other using gears or some other mechanism of motion. This task requires a great deal of precision in the size and shape of the parts and how they fit together.

Prerequisites: 3D Design: Short Introduction or 3D Design: Introduction

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

### **Advanced Coding with Python**

Course Code: ~Csc170

Description: In the introductory course, students learned the basics of Python and coded small segments. In this course, students will learn how to design a program from scratch. They will learn to separate interface from implementation and how to break a program into small interacting parts and code modules for each part. Along the way, they will learn how to calculate the efficiency of their code and look up algorithms of greater efficiency.

Prerequisites: Introduction to Coding with Python

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Animation: Introduction Using Blender**

Course Code: ~Csc135

Description: Students use Blender, a professional-level animation suite, to learn the basics of making 3D objects and then rendering them using different lighting and textures. Next, they learn to move the objects to make a true animation with some simple objects. Finally, when students reach a limit of what they can absorb in Blender—because it is a complex program—they will move to another animation program called Alice, which makes it much easier to achieve motion through an underlying system of computer coding. The combination of these two animation programs will provide students a solid introduction to animation.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **App Creation (2 terms)**

Course Code: ~Csc165

Description: Using MIT App Inventor (<https://appinventor.mit.edu>), in the first two weeks of the course, students will make a very simple app for an Android device. The purpose of this first project is to give students experience with every step of the app creation process. During the remaining weeks of the course, students will carefully plan out an app that can potentially impact people's lives in their community. We will look at a collection of apps that have been created and how these apps help the people in their targeted communities. Then, students will research the needs of their target community and find a need that could be helped by the existence of an app. For example, maybe an app can quickly calculate your carbon footprint. Maybe an app can help students who have trouble organizing themselves in a particular way. Some apps might require the use of Artificial Intelligence (AI) software, specifically machine learning, in order to classify images or understand spoken language. The MIT App Inventor has several of these AI modules already incorporated into their app creation process. Finally, students will deploy their app, observe the intended users operating it, listen to their feedback, and make alterations to satisfy the intended users.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 2

## **App Creation (3 terms)**

Course Code: ~Csc165

Description: Using MIT App Inventor (<https://appinventor.mit.edu>), in the first two weeks of the course, students will make a very simple app for an Android device. The purpose of this first project is to give students experience with every step of the app creation process. During the remaining weeks of the course, students will carefully plan out an app that can potentially impact people's lives in their community. We will look at a collection of apps that have been created and how these apps help the people in their targeted communities. Then, students will research the needs of their target community and find a need that could be helped by the existence of an app. For example, maybe an app can quickly calculate your carbon footprint. Maybe an app can help students who have trouble organizing themselves in a particular way. Some apps might require the use of Artificial Intelligence (AI) software, specifically machine learning, in order to classify

images or understand spoken language. The MIT App Inventor has several of these AI modules already incorporated into their app creation process. Finally, students will deploy their app, observe the intended users operating it, listen to their feedback, and make alterations to satisfy the intended users.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Entrepreneurial Product Development**

Course Code: ~Csc185

Description: Following their interests, students will select a product area, find a gap, and create an original product to fill that gap. At the end of the course, students will have created a prototype of their product. Along the way, students will learn aspects of intellectual property law, business law, market research, design, manufacturing, and marketing.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Extended 3D Design (1 term)**

Course Code: ~Csc190

Description: This course is for students who would like more class time to improve their 3D design skills and challenge themselves to design more complicated objects. Students will have already taken “3 Design Software: Introduction” or “3D Design Software: Short Introduction” before taking this current class.

Prerequisites: 3 Design Software: Introduction or 3D Design Software: Short Introduction

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Extended 3D Design (2 terms)**

Course Code: ~Csc190

Description: This course is for students who would like more class time to improve their 3D design skills and challenge themselves to design more complicated objects. Students will have already taken “3 Design Software: Introduction” or “3D Design Software: Short Introduction” before taking this current class.

Prerequisites: 3 Design Software: Introduction or 3D Design Software: Short Introduction

Permission Required: No

Grades: 8,9,10,11,12

Credits: 2

## **Introduction to Coding with Python**

Course Code: ~Csc110

Description: This class is for students with no coding experience who are interested in standard programming languages used by professional programmers. Python is the most popular coding language among computing professionals and the most user friendly of the standard languages. Students will learn to draw precise geometrical shapes, learning or applying their pre-existing knowledge of geometry.

They will use their coding skills to recreate famous company logos, fractals, and other interesting shapes. They will also learn the general coding skills of manipulating integers, real numbers (floating point), and strings of characters (text). Time permitting, students will learn some basics of several data structures such as lists and arrays.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

### **Stop-Action Animation (1 term)**

Course Code: ~Csc175

Description: Stop-Action Animation is an early form of animation in which a still picture of a physical scene is taken, small movements in the scene are made, and another still picture is taken. This process is repeated to create the illusion of motion when all the still pictures are played in sequence. It is a very satisfying art form for students who are into art and crafts. In this course, students will make several short animations of varying lengths. Some will involve common objects (e.g., coins, shoes, etc.). Others will involve making a physical scene with craft items (e.g., construction paper, pipe cleaners, clay, Legos, etc.) or 3D printing some of the needed items. The animation app is very easy to use requiring only a few minutes of instruction.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

### **Stop-Action Animation (2 terms)**

Course Code: ~Csc175

Description: Stop-Action Animation is an early form of animation in which a still picture of a physical scene is taken, small movements in the scene are made, and another still picture is taken. This process is repeated to create the illusion of motion when all the still pictures are played in sequence. It is a very satisfying art form for students who are into art and crafts. In this course, students will make several short animations of varying lengths. Some will involve common objects (e.g., coins, shoes, etc.). Others will involve making a physical scene with craft items (e.g., construction paper, pipe cleaners, clay, Legos, etc.) or 3D printing some of the needed items. The animation app is very easy to use requiring only a few minutes of instruction.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 2

## **DIVERSITY AND SOCIAL JUSTICE**

### **Current Events in Social Justice and Diversity/Inclusion Practices**

Course Code: ~Div130

Description: This course explores current events post Civil Rights movement that are influential in



the advancement of equality for all people, including national security, laws, police enforcement, and corporate & educational policies.

Prerequisites: Social Construction of Identity  
Permission Required: No  
Grades: 8,9,10,11,12  
Credits: 1

### **Driving the Green Book**

Course Code: ~Div150

Description: The Driving the Green Book course will look at the historic travel guide for African Americans during the height of segregation. Using first person testimonies and texts, this course will provide a new perspective on the legacy of those who lived through this era and fought for equality.

Prerequisites: Social Construction of Identity  
Permission Required: No  
Grades: 8,9,10,11,12  
Credits: 1

### **Music in Social Justice**

Course Code: ~Div145

Description: Music in Social Justice is open to students interested in how the arts shape their world. Students will study how music can engage and advocate for those on the margins of society and inspire social justice movements. Tailored to the individual interest in social justice topics of the group, the course will analyze historical and current events as the class designs a musical movement that can empower a people, group or organization in addressing moral and social problems. Such topics may include racial inequality, women's rights, immigration reform, and institutional ableism. A diverse cultural, philosophical, and theological perspective will be taken by the instructor to help guide the ethical implications pertaining to this subject.

Prerequisites: Social Construction of Identity  
Permission Required: No  
Grades: 8,9,10,11,12  
Credits: 1

### **Social Justice in Film**

Course Code: ~Div140

Description: The Social Justice in Film course provides students with the opportunity to examine their social identities, giving consideration to elements such as race, religion, class, and sexuality. Using documentaries and contemporary films, students will explore how they are perceived by individuals and society. The class will analyze the varying privilege and disadvantage related to social group memberships and the historical roots of these systems. This course will allow students to gain a stronger understanding of themselves as individuals and of their peers.

Prerequisites: Social Construction of Identity  
Permission Required: No  
Grades: 8,9,10,11,12  
Credits: 1

## **The Social Construction of Identity**

Course Code: ~Div105

Description: This first course in social justice will increase students' understanding and awareness of social identities and how these identities impact our lives and our perception of others. Students will look at some of the basic concepts of social justice including stereotypes, privilege, oppression and socialization. Each of the subsequent courses will allow students the opportunity to look more deeply at a specific form of oppression and establish strategies for change both individual and collectively.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **ENGLISH**

### **All About Love: A Writing Journey**

Course Code: ~Eng720

Description: This course invites students to consider and write about the many meanings of love, including self-love, romantic love, moral love, agapic love, and mutual love. Students will also examine how "love" is shaped through language and what language has to do with love, passion, and desire. Projects will include research and analytical writing, keeping a commonplace book and delight log, and assembling collage poems and love blueprints.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 6

### **Banned Books**

Course Code: ~Eng130

Description: The Banned Books course provides an opportunity for students to be exposed to works of literary merit that for various reasons are or have been kept off the shelves at other institutions of learning. In reading, discussing, and writing about the texts chosen for this class, students explore themes often encountered in post-secondary literature courses while still in high school, so an open mind and a measure of maturity are expected on the part of interested students.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 6

### **Classic Film as Text**

Course Code: ~Eng150

Description: We love movies, which have been called "sacred dramas for a secular society" (Howard Suber, UCLA), yet many people appreciate film just for its surface elements of plot or character. This course will teach students to read films more critically by making apparent the aspects of film that might otherwise

remain invisible: performance, direction, cinematography, editing, production design, composition, costume, and dialogue, among others. Students will read academic theory and film criticism while viewing, discussing, and writing about a wide range of films. Coursework will include in-class discussion, nightly reading and writing assignments, and analytic projects both written and visual in nature.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Greco-Roman Drama**

Course Code: ~Eng625

Description: Pride, anger, joy, wisdom, madness—the drama of classical Greece and Rome captures the best and worst of the human condition. From Aeschylus and Sophocles to Seneca and Terence, the class reads the great tragedians and charts the evolution of drama from hillside festival to civic spectacle. The course explores modern interpretations, and also studies the conditions of classical performance in Eagle Hill's amphitheater. Evaluation is based on reading, class discussion, and writing assignments both brief and long. This class fulfills part of the requirement for the Certificate in Classical Studies - Literature Track.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 6

## **Our Uncanny World: Writing Peculiar Histories**

Course Code: ~Eng725

Description: Our Uncanny World focuses on writing through the lens of offbeat events in American and world history. Covering a variety of types of writing tasks, from formal research to creative writing, students in Our Uncanny World will learn about fascinating historical events that may not be covered in traditional history classes. Topics can easily be customized to suit the interests of any given group of students, but may cover such historical oddities as the Boston molasses flood, which dumped 13,000 tons of industrial molasses on the North End of Boston in the early 1900s or the radium girls, whose employer in the 1920s actively encouraged them to lick radioactive paint “because it was beneficial to their health.” Students will both learn about the targeted event and also examine its impact and legacy on current society and modern history.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 6

## **Post-Modern Literature**

Course Code: ~Eng565

Description: In this course, students delve into the rich diversity of the post-modern literary world, from the middle of the 20th century to the present. While reading challenging works by authors such as Kurt Vonnegut, Thomas Pynchon, and Zadie Smith, common features of post-modern literature such as metafiction and irony will be analyzed. In reading, discussing and writing about the texts chosen for this class, students will explore themes often encountered in post-secondary literature courses while still in

high school so an open mind and a measure of maturity are expected on the part of interested students.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 6

### **Reading & Writing: Critical Analysis**

Course Code: ~Eng330

Description: This course provides the opportunity to develop writing skills required in post-secondary programs. Students complete essay responses to questions and readings, term and research papers, critiques, literary analysis, and persuasive essays with a focus on academic argument and proper citation. This course may be taken repeatedly; the coursework targets the development of sophisticated reading and writing skills on an individual basis. This course is open to juniors and seniors. Enrolling in this class as a sophomore requires department chair approval.

Prerequisites:

Permission Required: grade 10 with permission of English department chair

Grades: 11,12

Credits: 6

### **Renaissance Literatures**

Course Code: ~Eng735

Description: A renaissance is a revival of art and literature in the midst of national, social, political, economic, and religious changes. In this course we will be reading, discussing, and writing about three renaissance periods: the Italian and English renaissances emerging from the dark ages; the American renaissance of the mid to late 1800's to the Civil War; and the Harlem Renaissance of the 1920s. Students will have opportunities to read from a wide range of authors, including Dante, Giovanni Boccaccio, Christine De Pizan, William Shakespeare, Edmund Spenser, John Milton, EA Poe, Emily Dickinson, Fredrick Douglass, Langston Hughes, Claude McKay, Zora Neal Hurston, and many others.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 6

### **Sound**

Course Code: ~Eng740

Description: How do we interact with the sounds of the world we inhabit? Natural experiences, man-made noises, music and instruments, scientific anomalies, technological innovation, and even silence shape our perceptions and alter our emotions. We are surrounded by opportunities to recognize the powerful role that sound plays in our lives: past, present, and future. This course is a one-term, multi-modal exploration of the magnitude of SOUND'S power and role, and an exciting opportunity for students to investigate the sounds of our world through S.T.E.M., the arts, history, and the other humanities.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Sports Journalism**

Course Code: ~Eng165

Description: The Sports Journalism class introduces students to the basics of journalism through writing about sports. Students write articles covering sports events, using the traditional inverted pyramid method of newspaper writing, and focusing on the who, what, where, when, why and how of each story. Students will also research and read published sports articles in order to develop appropriate diction and style of writing for their own coverage of professional sports events, including published articles about Eagle Hill School athletics events.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 6

## **The LGBT Experience in Literature**

Course Code: ~Eng220

Description: In this course, students read, discuss, and write about both fictional and non-fictional accounts of the LGBT (Lesbian, Gay, Bi-sexual & Transgender) experience. From novels and short stories to memoir, poetry, plays, movies and documentaries, there is a rich pool of texts and media to choose from in exploring this topic. Students will discuss themes often encountered in post-secondary literature courses while still in high school so an open mind and a measure of maturity are expected on the part of interested students.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 6

## **Writing Cultures**

Course Code: ~Eng730

Description: This course is playfully titled after the famous anthropology text Writing Culture (Clifford Geertz). Students in this class will research the cultural communities of which they are a part, as well as how culture structures home, work, play, and society. Students will also research and write about popular culture, media culture, and multiculturalism.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 6

## **Writing for Publication**

Course Code: ~Eng260

Description: Have you started a big story and need time to write with the guidance of an experienced editor? Do you have a completed manuscript that you'd like to get published, but you know it's rough and you need help with editing and proofreading? Would you like to be able to share your writing with your peers and a supportive teacher--and hear their constructive criticism? Do you have a great idea for an essay, or a group of poems, or a film script, but haven't started turning that idea into reality? If any of

these apply to you, Writing for Publication may be your course. This course invites students to consider as part of their writing aesthetics, ethics, electracy, materiality, and curation across literary forms.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 6

### **Writing the Research Paper**

Course Code: ~Eng255

Description: In this course, students are introduced to research methods, including both library and online database searches. Students prepare one or more research papers, using standard in-text citation, bibliographic, and other conventions. Rhetorical techniques and the elements of argument are also reviewed. This course can be taken multiple times.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## HISTORY

### **A New Nation: Independence to Reconstruction**

Course Code: ~His460

Description: A survey of American history from Independence through the Civil War and Reconstruction.

Prerequisites:

Permission Required: No

Grades: 9,10,11,12

Credits: 3

### **Founding of a Nation: The Earliest Americans to the Revolution**

Course Code: ~His455

Description: A survey of American history from the first peopling of the Americas up to the American War of Independence.

Prerequisites:

Permission Required: No

Grades: 9,10,11,12

Credits: 3

### **Global Economy**

Course Code: ~His100

Description: In the Global Economy course, students learn, identify, and define economic terms currently in use. They are introduced to major economic practices and globalization and the influences of

these concepts are studied. Global banking, investing, and funding organizations such as the World Bank, stock markets, and private organizations are discussed. Foreign policy and its overall political effect is considered as a motivator for local and global economic decisions.

Prerequisites:

Permission Required: No

Grades: 10,11,12

Credits: 3

## **Global Perspectives**

Course Code: ~His105

Description: The Global Perspectives course is built around the following concepts: diversity, acceptance, globalization, and sustainability. The basic elements of each concept are introduced and then different countries' perspectives are woven into the learning experience. Specific information is taken from individual countries and taught as a part of the overall concept. Students are also introduced to major topics in geography and how they influence the lifestyles, decisions, and policy making of different peoples of the world. Students maintain an archive for all the class papers, assignments, and homework. Those archives are checked and graded periodically.

Prerequisites:

Permission Required: No

Grades: 8

Credits: 6

## **Government**

Course Code: ~His110

Description: The Government course is an introduction to the fundamentals of American government and politics. It is designed to guide students as they consider their relationship to the government of the country in which they live. This course aims to help develop critical and analytical reasoning skills as students evaluate issues and public policies in American politics.

Prerequisites:

Permission Required: No

Grades: 11,12

Credits: 8

## **Growth of a Nation: Age of Industry to the Cold War**

Course Code: ~His465

Description: A survey of American history from the period following Reconstruction to the era of the Cold War.

Prerequisites:

Permission Required: No

Grades: 9,10,11,12

Credits: 3

## **Important American Speeches**

Course Code: ~His525

Description: The purpose of this class is for students to develop familiarity with significant issues and events in American history through the analysis of a selection of notable speeches. Students will investigate the historic issue that prompted a particular speech and the manner in which the speaker addressed it. The course may include not only well-known speeches such as the Gettysburg Address or FDR's speech to Congress after the bombing of Pearl Harbor but also less-remembered ones such as Reagan's speech after the Space Shuttle disaster or Teddy Roosevelt's "The Liberty of the People." This innovative approach will not only familiarize students with an array of important historic events but will also afford an opportunity to consider the rhetoric of influential people who tried to shape the narrative around those events, all in a brief and accessible format.

Prerequisites:

Permission Required: No

Grades: 9,10,11,12

Credits: 1

## **Moving Toward the Future: The Cold War and Beyond**

Course Code: ~His495

Description: This course explores the history of the United States from the beginning of the Cold War through the Civil Rights Movement, the Vietnam Era, and the end of the Cold War.

Prerequisites:

Permission Required: No

Grades: 9,10,11,12

Credits: 3

## **Revolutions**

Course Code: ~His375

Description: What would it take for a population to rise up against its government, overthrow its leaders and establish a new order? This course is designed for students to analyze and evaluate uprisings that have turned into revolutions that changed the world. The American, French, Chinese, Russian and other Revolutions will be studied with the aim of finding commonalities amongst their causes and their leaders. (The analytical nature of this course makes it more suited for older students with well-developed reasoning skills).

Prerequisites:

Permission Required: No

Grades: 10,11,12

Credits: 6

## **Survey of Belize**

Course Code: ~His505

Description: In advance of EHS's April 2021 trip, this class will investigate the history, culture, and geography of Belize.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1



## **The Most Evil Men and Women in History**

Course Code: ~His305

Description: Explore the lives and minds of the villains who have tainted the pages of history with their crimes.

Prerequisites:

Permission Required: No

Grades: 9,10,11,12

Credits: 1

## **WMD: Minutes to Midnight**

Course Code: ~His520

Description: Students will learn about CBRN--Chemical, Biological, Radiological and Nuclear weapons. Origins and the spread of the weapons will be featured along with current levels of oversight and prevention of the weapons. The course addresses international concerns with countries escalating their threats and research along with production of nuclear weapons.

Prerequisites:

Permission Required: No

Grades: 9,10,11,12

Credits: 1

# **IB DIPLOMA PROGRAMME**

## **Biology HL (I)**

Course Code: ~IB200

Description: Biology is the study of life. The vast diversity of species makes biology both an endless source of fascination and a considerable challenge. Biologists attempt to understand the living world at all levels from the micro to the macro using many different approaches and techniques. Biology is still a young science and great progress is expected in the 21st century. This progress is important at a time of growing pressure on the human population and the environment. By studying biology in the DP students should become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach through experimental work that characterizes the sciences. Teachers provide students with opportunities to design investigations, collect data, develop manipulative skills, analyze results, collaborate with peers and evaluate and communicate their findings. Biology HL is a two-year course. This is part one.

Prerequisites: Biology

Permission Required: Yes

Grades: 44512

Credits: 9

## **Biology HL (II)**

Course Code: ~IB240

Description: Biology is the study of life. The vast diversity of species makes biology both an endless source of fascination and a considerable challenge. Biologists attempt to understand the living world

at all levels from the micro to the macro using many different approaches and techniques. Biology is still a young science and great progress is expected in the 21st century. This progress is important at a time of growing pressure on the human population and the environment. By studying biology in the DP students should become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach through experimental work that characterizes the sciences. Teachers provide students with opportunities to design investigations, collect data, develop manipulative skills, analyze results, collaborate with peers and evaluate and communicate their findings. Biology HL is a two year course. This is part two.

Prerequisites: Biology HL (I)

Permission Required: Yes

Grades: 12

Credits: 9

### **History HL (I)**

Course Code: ~IB130

Description: The DP history course is a world history course based on a comparative and multi-perspective approach to history. It involves the study of a variety of types of history, including political, economic, social and cultural, and provides a balance of structure and flexibility. The course emphasizes the importance of encouraging students to think historically and to develop historical skills as well as gaining factual knowledge. It puts a premium on developing the skills of critical thinking, and on developing an understanding of multiple interpretations of history. In this way, the course involves a challenging and demanding critical exploration of the past. Teachers explicitly teach thinking and research skills such as comprehension, text analysis, transfer, and use of primary sources. There are six key concepts that have particular prominence throughout the DP history course: change, continuity, causation, consequence, significance and perspectives.

Prerequisites:

Permission Required: Yes

Grades: 11,12

Credits: 9

### **History HL (II)**

Course Code: ~IB260

Description: The DP history course is a world history course based on a comparative and multi-perspective approach to history. It involves the study of a variety of types of history, including political, economic, social and cultural, and provides a balance of structure and flexibility. The course emphasizes the importance of encouraging students to think historically and to develop historical skills as well as gaining factual knowledge. It puts a premium on developing the skills of critical thinking, and on developing an understanding of multiple interpretations of history. In this way, the course involves a challenging and demanding critical exploration of the past. Teachers explicitly teach thinking and research skills such as comprehension, text analysis, transfer, and use of primary sources. There are six key concepts that have particular prominence throughout the DP history course: change, continuity, causation, consequence, significance and perspectives.

Prerequisites:

Permission Required: Yes

Grades: 12

Credits: 9

## **Language and Literature HL (I)**

Course Code: ~IB100

Description: The language A: language and literature course aims to develop skills of textual analysis and the understanding that texts, both literary and non-literary, can relate to culturally determined reading practices. The course also encourages students to question the meaning generated by language and texts. An understanding of the ways in which formal elements are used to create meaning in a text is combined with an exploration of how that meaning is affected by reading practices that are culturally defined and by the circumstances of production and reception. The study of literature in translation from other cultures is especially important to IB DP students because it contributes to a global perspective. Texts are chosen from a variety of sources, genres and media. Language and Literature HL is a two year course. This is part one.

Prerequisites: Reading and Writing Critical Analysis

Permission Required: Yes

Grades: 11,12

Credits: 9

## **Language and Literature HL (II)**

Course Code: ~IB270

Description: The language A: language and literature course aims to develop skills of textual analysis and the understanding that texts, both literary and non-literary, can relate to culturally determined reading practices. The course also encourages students to question the meaning generated by language and texts. An understanding of the ways in which formal elements are used to create meaning in a text is combined with an exploration of how that meaning is affected by reading practices that are culturally defined and by the circumstances of production and reception. The study of literature in translation from other cultures is especially important to IB DP students because it contributes to a global perspective. Texts are chosen from a variety of sources, genres and media. Language and Literature HL is a two year course. This is part two.

Prerequisites: Language and Literature HL (I)

Permission Required: Yes

Grades: 12

Credits: 9

## **Mathematics: Analysis and Approaches SL (I)**

Course Code: ~IB360

Description: Mathematics: Analysis and approaches is designed for students who wish to study mathematics as a subject in its own right or to pursue their interests in areas related to mathematics. This course has a strong emphasis on calculus and on algebraic, graphical and numerical approaches. Students will develop strong skills in mathematical thinking and become fluent in the construction of mathematical arguments. It will appeal to students who are interested in exploring real and abstract applications of mathematical concepts. They will enjoy problem solving and generalization. This course is suitable for students who may go on to further study in subjects that have a significant level mathematics content, for example mathematics itself, engineering, physical sciences or economics.

Prerequisites: Algebra II

Permission Required: Yes

Grades: 11,12

Credits: 9

## **Mathematics: Analysis and Approaches SL (II)**

Course Code: ~IB370

Description: Mathematics: Analysis and approaches (II) is designed for students who wish to study mathematics as a subject in its own right or to pursue their interests in areas related to mathematics. This course has a strong emphasis on calculus and on algebraic, graphical and numerical approaches. Students will develop strong skills in mathematical thinking and become fluent in the construction of mathematical arguments. It will appeal to students who are interested in exploring real and abstract applications of mathematical concepts. They will enjoy problem solving and generalization. This course is suitable for students who may go on to further study in subjects that have a significant level mathematics content, for example mathematics itself, engineering, physical sciences or economics.

Prerequisites: Mathematics: Analysis and Approaches (I)

Permission Required: Yes

Grades: 12

Credits: 9

## **Music SL (I)**

Course Code: ~IB190

Description: The IB Diploma Programme music course seeks to develop students' knowledge and potential as musicians, both personally and collaboratively. IB Diploma Programme music students are required to study musical perception and actively listen to a wide range of music from different parts of the world, musical cultures and time periods. They also develop aural perception and understanding of music by learning about musical elements, including form and structure, notations, musical terminology, and context. Through the course of study, students become aware of how musicians work and communicate. Music SL is a two year course. This is part one.

Prerequisites: Introduction to the Performing Arts

Permission Required: No

Grades: 11,12

Credits: 9

## **Music SL (II)**

Course Code: ~IB300

Description: The IB Diploma Programme music course seeks to develop students' knowledge and potential as musicians, both personally and collaboratively. IB Diploma Programme music students are required to study musical perception and actively listen to a wide range of music from different parts of the world, musical cultures and time periods. They also develop aural perception and understanding of music by learning about musical elements, including form and structure, notations, musical terminology, and context. Through the course of study, students become aware of how musicians work and communicate. Music SL is a two year course. This is part two.

Prerequisites: Music SL (I)

Permission Required: Yes

Grades: 12

Credits: 9

## **Spanish ab initio (I)**

Course Code: ~IB110

Description: The IB DP language ab initio course is designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where the language studied is spoken. This process encourages the learner to go beyond the confines of the classroom, expanding an awareness of the world and fostering respect for cultural diversity. The language ab initio course develops students' linguistic abilities through the development of receptive, productive and interactive skills by providing them opportunities to respond and interact appropriately in a defined range of everyday situations. Language ab initio is available at standard level only. Spanish ab initio is a two year course. This is part one.

Prerequisites:

Permission Required: Yes

Grades: 11,12

Credits: 9

## **Spanish ab initio (II)**

Course Code: ~IB310

Description: The IB DP language ab initio course is designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where the language studied is spoken. This process encourages the learner to go beyond the confines of the classroom, expanding an awareness of the world and fostering respect for cultural diversity. The language ab initio course develops students' linguistic abilities through the development of receptive, productive and interactive skills by providing them opportunities to respond and interact appropriately in a defined range of everyday situations. Language ab initio is available at standard level only. Spanish ab initio is a two year course. This is part two.

Prerequisites: Spanish ab initio (I)

Permission Required: Yes

Grades: 12

Credits: 9

## **Theory of Knowledge (I)**

Course Code: ~IB170

Description: Theory of knowledge (TOK) is a course about critical thinking and inquiring into the process of knowing, rather than about learning a specific body of knowledge. It plays a special role in the DP by providing an opportunity for students to reflect on the nature of knowledge, to make connections between areas of knowledge and to become aware of their own perspectives and those of the various groups whose knowledge they share. It is a core element undertaken by all DP students, and schools are required to devote at least 100 hours of class time to the course. The overall aim of TOK is to encourage students to formulate answers to the question "how do you know?" in a variety of contexts, and to see the value of that question. This allows students to develop an enduring fascination with the richness of knowledge. Theory of knowledge is a two year course. This is part one.

Prerequisites:

Permission Required: Yes

Grades: 11

Credits: 3

## **Theory of Knowledge (II)**

Course Code: ~IB330

Description: Theory of knowledge (TOK) is a course about critical thinking and inquiring into the process of knowing, rather than about learning a specific body of knowledge. It plays a special role in the DP by providing an opportunity for students to reflect on the nature of knowledge, to make connections between areas of knowledge and to become aware of their own perspectives and those of the various groups whose knowledge they share. It is a core element undertaken by all DP students, and schools are required to devote at least 100 hours of class time to the course. The overall aim of TOK is to encourage students to formulate answers to the question “how do you know?” in a variety of contexts, and to see the value of that question. This allows students to develop an enduring fascination with the richness of knowledge. Theory of knowledge is a two year course. This is part two.

Prerequisites: TOK (I)

Permission Required: Yes

Grades: 12

Credits: 3

## **Visual Arts SL (I)**

Course Code: ~IB160

Description: The IB Diploma Programme visual arts course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media. The course is designed for students who want to go on to further study of visual arts in higher education as well as for those who are seeking lifelong enrichment through visual arts. Visual Arts SL is a two year course. This is part one.

Prerequisites:

Permission Required: Yes

Grades: 11

Credits: 9

## **Visual Arts SL (II)**

Course Code: ~IB350

Description: The IB Diploma Programme visual arts course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media. The course is designed for students who want to go on to further study of visual arts in higher education as well as for those who are seeking lifelong enrichment through visual arts. Visual Arts SL is a two year course. This is part two.

Prerequisites: Visual Arts SL (I)

Permission Required: Yes

Grades: 12

Credits: 9

## LIFE SKILLS

### **College Orientation**

Course Code: ~Lif100

Description: The College Orientation class is a required course designed to help students understand their learning styles and effective learning strategies in order to prepare them for college and potential support and accommodations they may need. Students are exposed to various postsecondary options. This is done through discussions, visits from college representatives, and various college search mechanisms. The class also helps students become more prepared for the college process through college visits, mock interviews, and application completion assistance.

Prerequisites:

Permission Required: No

Grades: 11,12

Credits: 3

### **The Personal Essay**

Course Code: ~Lif140

Description: In this one-term writing class for seniors, students will work with a writing teacher or college counselor to revise and further develop personal essays for college applications. Emphasis will be placed on developing essays that demonstrate the uniqueness of the applicant with college admission officers as the intended audience. It is expected that students will have completed a draft of their essays before taking the class.

Prerequisites:

Permission Required: No

Grades: 12

Credits: 1

## MATHEMATICS

### **Algebra I**

Course Code: ~Mat100

Description: The Algebra I course covers all aspects of understanding variables and how they are utilized to solve problems in many different life activities. Among the topics covered are operations with monomials and polynomials, solving equations, solving inequalities, factoring, graphing linear equations and solving systems of equations. Word problems are presented with each concept. Students engage in design thinking, or a human-centered process for creative problem solving. They are encouraged to ask questions, learn and practice a variety of strategies to solve equations, and apply those strategies to everyday human experiences that they identify. Students in Algebra I engage in active learning, offering and receiving feedback, tinkering, and academic risk-taking. Students in Algebra I will make basic connections among mathematics and other disciplines.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 8



## **Algebra II**

Course Code: ~Mat105

Description: Advanced concepts utilizing both algebra and geometry skills are taught in Algebra II. Systems of equations, functions and graphs, rational expressions, complex numbers, the quadratic formula, polynomial functions, and basic trigonometry are covered. The graphing calculator and its functions are introduced in this course. Students learn to solve complex word problems relating to science and business, with the assistance of the graphing calculator. Students engage in design thinking, or a human-centered process for creative problem solving. They are encouraged to ask questions, learn and practice a variety of strategies to solve equations, and apply those strategies to everyday human experiences that they identify. Students in Algebra I engage in active learning, offering and receiving feedback, tinkering, and academic risk-taking. Students in Algebra I will continue to make connections among mathematics and other disciplines.

Prerequisites: Algebra I

Permission Required: No

Grades: 8,9,10,11,12

Credits: 8

## **Algebra II (begins with review of Algebra I)**

Course Code: ~Mat105

Description: Advanced concepts utilizing both algebra and geometry skills are taught in Algebra II. Systems of equations, functions and graphs, rational expressions, complex numbers, the quadratic formula, polynomial functions, and basic trigonometry are covered. The graphing calculator and its functions are introduced in this course. Students learn to solve complex word problems relating to science and business, with the assistance of the graphing calculator. Students engage in design thinking, or a human-centered process for creative problem solving. They are encouraged to ask questions, learn and practice a variety of strategies to solve equations, and apply those strategies to everyday human experiences that they identify. Students in Algebra I engage in active learning, offering and receiving feedback, tinkering, and academic risk-taking. Students in Algebra I will continue to make connections among mathematics and other disciplines.

Prerequisites: Algebra I

Permission Required: Yes

Grades: 8,9,10,11,12

Credits: 18

## **Basic Math**

Course Code: ~Mat110

Description: The Basic Math course develops skills in fractions, decimals, measurement, and factoring (greatest common factor, least common multiple, prime numbers), as well as the terminology of factoring. Skills in conversion of measurements, both standard and metric, are also developed. Students in Basic Math engage in design thinking, or a human-centered process for creative problem solving. They are encouraged to ask questions, learn and practice a variety of strategies to solve equations, and apply those strategies to everyday human experiences that they identify. Students in Basic Math engage in active learning, offering and receiving feedback, tinkering, and academic risk-taking. Students will engage in conversations and



collaborative activities that cultivate an interest in and appreciation for mathematics.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 8

### **Basics of the Stock Market**

Course Code: ~Mat225

Description: Students learn about buying and selling stocks and using different stock market strategies in this course. At the beginning of the course, students will develop a portfolio of investments that they will follow for the remaining weeks of the course and will attend regular follow-up visits with the instructor until the school year is completed.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

### **Calculus**

Course Code: ~Mat115

Description: The Calculus course focuses primarily on differential calculus. Topics covered are limits, continuity, derivatives, rules of derivatives, and their applications. Some integral calculus will be covered if time permits. Word problems are presented relating to such fields as physics, geology, architecture, chemistry, and business. Students utilize a graphing calculator in this class.

Prerequisites: Pre-Calculus

Permission Required: No

Grades: 11,12

Credits: 8

### **Calculus II**

Course Code: ~Mat190

Description: This course is offered after one year of successful completion of the Calculus course. Topics covered include optimization, anti-derivatives, the definite integral, applications of the definite integral, logarithmic, exponential and trigonometric functions, techniques of integration, indeterminate forms and L'Hopital's Rule, improper integrals, Taylor series expansion of function, infinite series and sequences and application of integral.

Prerequisites: Calculus I

Permission Required: No

Grades: 11,12

Credits: 8

### **Consumer Math**

Course Code: ~Mat120

Description: In the Consumer Math course, students learn how to apply the basic mathematics skills needed to contribute personally and professionally in today's world. Topics such as money, balancing a

checkbook, finding discounts, estimation, percents, shopping, and budgeting are covered. Students also discover how to measure distance, liquid, mass, and calculate metric conversions. Students in Consumer Math engage in design thinking, or a human-centered process for creative problem solving. They are encouraged to ask questions, learn and practice a variety of strategies to solve equations, and apply those strategies to everyday human experiences that they identify. Students in Consumer Math engage in active learning, offering and receiving feedback, tinkering, and even academic risk-taking. Students will engage in conversations and collaborative activities that cultivate an interest in and appreciation for mathematics. Calculators and many different measuring tools are employed in this course.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 8

## **Contemporary Mathematics**

Course Code: ~Mat210

Description: The Contemporary Mathematics course is designed to survey theoretical and practical applications in mathematics. Topics such as problem solving, finance, measurement, number concepts, art and math, and mathematical modeling are covered. Students in Contemporary Mathematics engage in design thinking, or a human-centered process for creative problem solving. They are encouraged to ask questions, learn and practice a variety of strategies to solve equations, and apply those strategies to everyday human experiences that they identify. Students in Contemporary Math engage in active learning, offering and receiving feedback, tinkering, and academic risk-taking. Students will engage in conversations and collaborative activities that cultivate an interest in and appreciation for mathematics. Students will develop critical thinking and problem solving strategies, and learn about the use of various technologies, including operating systems, software, and maker technology.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 8

## **Fraction Fluency**

Course Code: ~Mat235

Description: Fraction Fluency is a course tailored to meet the needs of an individual student based upon his or her experience and skill in the area of fractions. The mathematical skills targeted range from simplifying fractions, to practicing the four operations of addition, subtraction, multiplication, and division, to solving algebraic expressions and equations involving fractions.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Fundamentals of Advanced Mathematics**

Course Code: ~Mat125

Description: The primary objective of the Fundamentals of Advanced Mathematics course is to assist students with mastering algebra and geometry topics and then apply these concepts to real-life situations.

Some of the specific topics include: solving polynomial equations using the quadratic formula, the Pythagorean Theorem, basic trigonometric functions, and solving right triangles. Fundamentals of Advanced Mathematics is recommended for students who have completed Algebra I, Algebra II, and Geometry and need reinforcement of basic algebra and geometry skills before taking Pre-calculus.

Prerequisites: Algebra II  
Permission Required: No  
Grades: 11,12  
Credits: 8

## **Fundamentals of Geometry**

Course Code: ~Mat130

Description: Fundamentals of Geometry emphasizes the practical application of deductive reasoning in conjunction with basic geometry theorems to solve problems including: parallel and perpendicular lines, angles, circles, polygons, and triangles.

Prerequisites: Algebra I  
Permission Required: No  
Grades: 8,9,10,11,12  
Credits: 8

## **Geometry**

Course Code: ~Mat135

Description: The Geometry class emphasizes the understanding and interrelationships of geometry concepts, vocabulary, postulates, and theorems. These are presented in a multimodal manner, allowing the students to learn through visual, auditory, kinesthetic and hands-on activities. Topics covered include but are not limited to: lines, line segments, rays, angles, line segment and angle properties, polygons, perimeter, circumference, area, and planes. In addition, students develop their diagram-drawing skills, logical thinking abilities and organizational skills.

Prerequisites: Algebra I  
Permission Required: No  
Grades: 8,9,10,11,12  
Credits: 8

## **GO**

Course Code: ~Mat138

Description: Go is a fascinating board game that originated in China more than 4,000 years ago. It is played today by hundred millions of people, including thousands in the United States. In Japan, Korea, China, and Taiwan, it is far more popular than chess is in the West. Like the Eastern martial arts, Go can teach concentration, balance, and discipline. Each person's style of play reflects his or her personality and can serve as a medium for self-reflection. The most prominent feature of Go is the dynamic and holistic thinking strategy in addition to the analytic thinking strategy.

Prerequisites:  
Permission Required: No  
Grades: 8,9,10,11,12  
Credits: 1

## **Integrated Mathematics**

Course Code: ~Mat140

Description: Integrated Mathematics features opportunities for students to make connections among informal geometry, basic algebraic concepts, probability and statistics, measurement, and fractions. Students study mathematical terminology, concepts such as similarity and congruence, area, perimeter, and volume. Problems in statistics include applying the mean, median, mode, and range while utilizing graphs, tables, and charts to make predictions and inferences. Students engage in design thinking, or a human-centered process for creative problem solving; they are encouraged to ask questions, learn and practice a variety of strategies to solve equations, and apply those strategies to everyday human experiences that they identify. Students Integrated Mathematics engage in active learning, offering and receiving feedback, tinkering, and academic risk-taking.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 8

## **Introduction to Algebra**

Course Code: ~Mat145

Description: The concepts of ratio, proportion, and percent are covered in the Introduction to Algebra course. Word problems that help explain the use of proportions and percents are discussed. Integers are also introduced in this class as the students learn to add, subtract, multiply, and divide positive and negative numbers. The order of operations is an integral part of the course, as are understanding exponents and working with variables.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 8

## **Introduction to Algebra II**

Course Code: ~Mat290

Description: This course is designed for students who have already taken Algebra I and Geometry and provides the opportunity to review the most important skills in these areas. Topics covered include: solving equations and inequalities, graphing linear equations, using algebraic reasoning to solve for various angle measures, parallel and perpendicular lines, triangles and polynomials. Once students have fully developed these skills, they will work on solving word problems related to these particular topics. Standardized test sample problems, such as those found on the ACT, will be utilized for this purpose.

Prerequisites: Algebra I

Permission Required: No

Grades: 8,9,10,11,12

Credits: 8

## **Introduction to Probability & Statistics**

Course Code: ~Mat250

Description: This course covers topics in both descriptive and inferential statistics. Topics include permutations, combinations, axiomatic probability and statistical inference. The course consists of displaying, analyzing, and interpreting various graphs with given data. Students will calculate measures of central tendency with group frequency distributions and learn about outliers. Calculating measures of dispersion (range, quartiles, interquartile range, standard deviation, and variance) for both samples and population will be taught. Students will also learn how to utilize the TI-83 calculator to display and understand data.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Lies My Geometry Teacher Taught Me**

Course Code: ~Mat310

Description: What would happen if lines don't extend forever? What if parallel lines actually can intersect? What if triangles don't actually add up to 180 degrees? What if everything you've ever been taught about geometry is wrong? Explore and investigate planar geometry concepts in a non-planar space. Learn about points, lines, triangles, circles, and other geometric concepts the way mathematicians do: by questioning assumptions, looking for patterns, and discovering new mathematical truths.

Prerequisites: Algebra I

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Personal Finance**

Course Code: ~Mat220

Description: The Personal Finance course develops a student's ability to comprehend day-to-day finances in a technological society. Students are taught what types of banks and bank accounts are appropriate for their individual life styles. Specific units of study include checking accounts, the advantages and disadvantages of using credit cards, and paychecks, specifically targeting tax deductions, gross, and net pay.

Prerequisites:

Permission Required: No

Grades: 11,12

Credits: 3

## **Pre-Calculus**

Course Code: ~Mat150

Description: The Pre-Calculus course includes the study of functions, circular functions, exponential and logarithmic functions, sequences, and series. The limit concept is introduced through infinite series.

Prerequisites: Algebra II

Permission Required: No

Grades: 10,11,12

Credits: 8

## **Statistics I**

Course Code: ~Mat255

Description: The main objective of Statistics I is to provide students with skills to deal with acquisition, analysis and representation of data in useful formats. Topics include characteristics of data, statistical concepts, and statistical charts. Microsoft Excel is used extensively to process data and represent data graphically.

Prerequisites: Algebra I

Permission Required: No

Grades: 11,12

Credits: 8

## **Trigonometry**

Course Code: ~Mat155

Description: In Trigonometry, the topics covered include trigonometric functions, graphing trigonometric functions, right triangle trigonometry, the law of sines, the law of cosines, trigonometric identities, and inverse trigonometric functions. The students solve many intriguing word problems, with the use of a graphing calculator, from the construction of the pyramids of ancient Egypt to the building of bridges and skyscrapers.

Prerequisites: Algebra II

Permission Required: No

Grades: 11,12

Credits: 8

## **Using the Graphing Calculator**

Course Code: ~Mat165

Description: Students develop self-confidence while learning a variety of functions available on a graphing calculator. Experience shows that the level of skillful use of the graphing calculator is directly proportional to the accurate performance of most students completing high school mathematics assignments. The class also studies the historical development of the method for finding Pi, as students have fun and develop their enthusiasm for learning significant mathematics. This course is designed for students who have a sound understanding of algebraic concepts.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

# **PHYSICAL EDUCATION**

## **Advanced Outdoor Adventure**

Course Code: ~Pe105

Description: The Advanced Outdoor Adventure class is an advanced physical education class. Participants are required to have already successfully taken Outdoor Adventure and have a background in group games and team-work skills. This class focuses on developing leadership skills through a higher level of training for the participants. Each student is required to go through the belay certification program

and will be trained in safety techniques (bear claws and pulley repair) and basic wilderness first aid (will not be a certification program). Students are taught how to develop and facilitate team building and problem solving games, as well as leading high ropes activities. Because of the advanced nature of the class, students will be working on the high and low ropes courses in cooler weather, as long as it is safe to do so.

Prerequisites: Outdoor Adventure

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Athletic Director Internship**

Course Code: ~Pe155

Description: This internship course is open to any junior or senior who is involved in the athletic program. Interning students assist the Athletic Director in the management of the athletic website, the scheduling of contests for athletic teams, the setup of athletic events, and perform other related office tasks and game preparation responsibilities. Students should have good communication skills, general computer knowledge and a willingness to work at events outside of the classroom. The Athletic Director will assist academic advisors in the process of selecting individuals for this class/internship. This four-credit internship class meets for three terms and requires an additional commitment of approximately two hours per week before and after school.

Prerequisites:

Permission Required: yes

Grades: 11 and 12th

Credits: 3

## **Exercise Physiology**

Course Code: ~Pe190

Description: The objective of this cross-curricular course is to provide students with an anatomical outline of the human body as it relates to body movement conducted during physical activity such as exercise and sports. Students will participate in various sports, games, and exercise focused on different portions of musculature. This course consists of both classroom learning and physical exercise.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Golf Statistics**

Course Code: ~Pe205

Description: The objective of this cross-curricular course is to provide students with real world application of mathematic principles. The primary way of learning those principles in this course is the use of golf statistics. Real world data will be gathered while students use a golf simulator. This course consists of both classroom learning and physical exercise.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Introductory Nutrition and Fitness**

Course Code: ~Pe185

Description: The objective of this cross-curricular course is to educate students on the basic elements of good nutrition principles and eating habits while also promoting the benefits of physical activity through exercise to help individuals establish a healthy lifestyle. Over time students will work with the instructor on creating an appropriate workout regimen for their goals. This course consists of both classroom learning and physical exercise.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Outdoor Activities and Forestry**

Course Code: ~Pe210

Description: What better way to learn about the science and practice of planting, managing, and caring for forests than by spending time in the outdoors and putting theory into practice? By hiking to different forested areas on school property, students will be able to put into practice concepts and methods in the study of forestry. This class will consist of classroom learning as well as outdoor activities and exercise.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Outdoor Adventure**

Course Code: ~Pe100

Description: The Outdoor Adventure course has two main thematic components. The physical component involves use of the ropes course, initiative activities, and noncompetitive group games. The emotional component builds self-esteem, self-confidence, and ego strength. The ropes course and the group games are designed to increase agility, flexibility, balance, general strength and coordination. In addition to individual benefits, the course is meant to develop mutual trust among class members. The level of involvement in activities, as well as participation on the ropes course is individualized so that each student may achieve his or her full potential. Students in Outdoor Adventure have opportunities to solve “wicked” problems through radical collaboration.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Physical Education**

Course Code: ~Pe130

Description: The Physical Education curriculum is designed to improve the individual’s spirit, body, and mind. Classes are structured so that each student’s need to improve or to learn new skills for team and individual sports is best met. Strategies and rules are taught to increase the enjoyment of participating in



a physically active environment. A great deal of emphasis is placed on teamwork, sportsmanship, and fair game play--the elements necessary for a positive and rewarding athletic experience.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

### **Physical Education Internship**

Course Code: ~Pe160

Description: This internship is open to seniors who have an interest in the physical education field. The course will expose students to the daily routine of leadership, responsibility and flexibility. The student will assist in leading activities, prepare and gather game/fitness equipment, and will be an active role model for students in a physical education class. Individuals accepted for this internship will possess significant levels of knowledge regarding the traits of sociability, sportsmanship, self-discipline, and cooperation. The physical education department head will assist advisors in the selection of interns. Interested students should have fulfilled all of their PE requirements for graduation prior to taking this class.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

### **Sports History**

Course Code: ~Pe200

Description: The objective of this cross-curricular course is to provide students with an overview of individual sports and their origin while also looking at specific time periods and historic events during which those sports developed. Students will participate in various sports originating from different time periods. This course consists of both classroom learning and physical exercise.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

### **Sports Science**

Course Code: ~Pe195

Description: The objective of this cross-curricular course is to demonstrate scientific principles through the use of games and sports. Classroom lecture and discussion will provide the student with the background information needed to show how these scientific principles apply to different sports and games. This course consists of both classroom learning and physical exercise.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Swimming**

Course Code: ~Pe180

Description: Students in swimming class will utilize the pool in the RMB Center. They will be expected to swim a designated amount of laps, learn proper strokes in swimming, and participate in group water games. There will be time to use the diving board and other equipment to enhance swimming experience. Students are expected to swim on a daily basis.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

# PRAGMATICS

## **Abnormal Psychology**

Course Code: ~Pra175

Description: The Abnormal Psychology course reviews the etiology, diagnosis, prevention, and treatment of abnormal behavior, including the anxiety and psychosomatic disorders, depressive disorders, social and interpersonal disorders, substance abuse disorders, psychoses, and other abnormal personality patterns. Psychopharmacology, theories of counseling, and individual and group therapy are discussed. Students learn through lecture, activities, readings, discussions and documentaries.

Prerequisites: Psychology

Permission Required: No

Grades: 11,12

Credits: 3

## **Child Development**

Course Code: ~Pra155

Description: The Child Development course supplies those students interested in pursuing psychology in college an opportunity to work with a college text. Students cover various topics such as the three developmental processes, history of child development, different theories of development, and the periods of development. The material is presented lecture style and projects are used to help the students develop their own understanding of how a child develops. Students are presented with a syllabus and are expected to manage their own deadlines, as well as summaries of the text readings.

Prerequisites: Biology

Permission Required: No

Grades: 11,12

Credits: 3

## **Coping with Stress (1 term)**

Course Code: ~Pra225

Description: Coping With Stress was designed to assist students in understanding stress and the effects it has on their lives. Students identify stressors in their lives and are taught strategies to manage their stress more effectively. Topics include listening and expression skills, identification of one's emotions, problem-solving, assertiveness, and a variety of relaxation and stress-reducing techniques. Skills are practiced in

class and through structured homework assignments, which result in generalization.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

### **Coping with Stress (3 terms)**

Course Code: ~Pra225

Description: Coping With Stress was designed to assist students in understanding stress and the effects it has on their lives. Students identify stressors in their lives and are taught strategies to manage their stress more effectively. Topics include listening and expression skills, identification of one's emotions, problem-solving, assertiveness, and a variety of relaxation and stress-reducing techniques. Skills are practiced in class and through structured homework assignments, which result in generalization.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

### **Gender Studies**

Course Code: ~Pra130

Description: The Gender Studies class addresses relevant issues pertinent to adolescents. The class addresses social and personal issues within a gender-specific context. The primary focus of the class is to instruct students on various social issues while also creating an environment in which students can feel comfortable to discuss and question various gender specific concerns. The development of each student's own values is an important part of the class, as well as expressing those values clearly and assertively. This is accomplished through class discussions, small group activities, critical thinking exercises, role-playing, and analysis of each student's values and beliefs. Some of the topics discussed are healthy relationships and the portrayal of genders in the media, including body image and personal rights and responsibilities.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

### **General Psychology I**

Course Code: ~Pra250

Description: The General Psychology I course is designed to provide students with an understanding of the basic concepts and techniques of psychology as a behavioral science. Topics include a basic understanding of the scientific method and an overview of research methods, familiarity with writing techniques used in psychology, the endocrine system, the brain, consciousness, and operant and classical conditioning with a focus on terminology and the application of concepts. The course uses small group activities, lectures, discussions, films and other media.

Prerequisites:

Permission Required: No

Grades: 11,12

Credits: 3

## **General Psychology II**

Course Code: ~Pra255

Description: The General Psychology II course is designed to as a continuation of the topics presented in General Psychology I for students who wish to pursue seriously their psychology studies after high school. Topics include sensation and perception, memory, language and intelligence, motivation, social psychology, and personality. Through the study of human behavior and personality development along with activities and critical thinking skills, students will develop an increased knowledge and understanding of themselves and others. The course uses small group activities, lectures, discussions, films and other media.

Prerequisites:

Permission Required: No

Grades: 11,12

Credits: 3

## **Inspiring Leadership**

Course Code: ~Pra235

Description: Everyone will be called on to be a leader at some point in life. This course investigates the key traits of leadership, including but not limited to the characteristics of good leaders, how to improve leadership qualities, understanding and executing effective communication and leading groups. Students will put their skills in practice as they work in underclassmen dorms and around campus in the Prefect role. In addition, students will complete a campus improvement project of their choosing. The course meets during evening hours as part of the residential curriculum.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Intrapersonal Pragmatics (1 term)**

Course Code: ~Pra120

Description: The Intrapersonal Pragmatics course assists students as they become more responsible for their thoughts, emotions and behavior. As in all pragmatics courses, the course strategy is to instruct students about the various topics targeted in the classroom through role-plays and discussion, and to encourage the generalization of targeted skills outside of the classroom. Some course topics include harassment and teasing, the effects of self-talk, and three styles of behavior: passive, aggressive and assertive. Students work towards cultivating empathy, resilience, and a growth mindset.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Intrapersonal Pragmatics (3 terms)**

Course Code: ~Pra120

Description: The Intrapersonal Pragmatics course assists students as they become more responsible for their thoughts, emotions and behavior. As in all pragmatics courses, the course strategy is to instruct

students about the various topics targeted in the classroom through role-plays and discussion, and to encourage the generalization of targeted skills outside of the classroom. Some course topics include harassment and teasing, the effects of self-talk, and three styles of behavior: passive, aggressive and assertive. Students work towards cultivating empathy, resilience, and a growth mindset.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Mindfulness in Everyday Life**

Course Code: ~Pra195

Description: Mindfulness can transform how you are in your body—in your mind—with your friends—at your work—in the world. Learn how to breathe, how to walk, how to sit, how to eat a potato chip, how to listen to a bell, how to turn a door-handle, how to talk, and how to listen, in an entirely new way. Learn how to be fully in the present moment—the only moment we ever have. The course will include exercises both inside and outside the classroom, readings, and discussion, films on meditation, and if time permits, a tour of the Insight Meditation Society in Barre, Massachusetts.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Movements: Basic Self Defense**

Course Code: ~Pra230

Description: This class involves a combination of basic self-defense and the study of women's issues. Participants will spend three days a week learning and practicing the basic techniques of self-defense and the importance of self-awareness. Through safety discussions, students will discuss topics such as, how to use your voice, and the power of body language: verbal and non-verbal cues. Two days of the week will be dedicated to women's studies wherein students will explore how women's roles in U.S. history have changed and expanded. Students will focus on political, social, economic, educational, and gender issues. Through media and technology, writing, presentations, and discussions, students will broaden their knowledge and critical thinking skills while respectfully considering other perspectives. The class is open to female juniors and seniors.

Prerequisites:

Permission Required: No

Grades: 11,12

Credits: 1

## **Positive Psychology**

Course Code: ~Pra140

Description: Positive Psychology assists students in understanding stress and the effects it has on their lives and interpersonal relationships. Students identify stressors in their lives and learn skills to assist them in managing their stress more effectively. Topics are presented through lecture and discussion with a goal of student self-exploration. Appropriate use of the skills is demonstrated and followed by student rehearsal in class activities. The goal of the practice sessions is to establish the skills while also offering the opportunity to examine alternative methods of handling situations. Additional practice occurs in

structured homework assignments with feedback given the following class period. Generalization is encouraged through practice of skills during daily concerns volunteered by students accompanied by their understanding of alternative strategies. Topics include identifying positive and negative stressors, coping techniques, and effects on overall health.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Psychology**

Course Code: ~Pra200

Description: The Psychology course is designed to provide students with an understanding of the basic concepts and techniques of psychology as a behavioral science. Topics include a basic understanding of the scientific method, familiarity with writing techniques used in psychology, terminology and theories, and an overview of research methods. Through the study of human behavior and personality development along with activities and critical thinking skills, students gain an increased knowledge and understanding of themselves and others. The course uses small group activities, lectures, discussions, films and other media.

Prerequisites: Biology

Permission Required: No

Grades: 11,12

Credits: 3

## **Seminar on Learning**

Course Code: ~Pra100

Description: The Seminar on Learning course provides students with a general overview of the history and development of the field of special education (social and cultural factors are addressed). More importantly, students develop a self-awareness pertaining to their own individual learning approaches, identify areas of academic strengths, and help those in need of further development. Learning strategies are introduced and explained, providing students with the opportunity to utilize these strategies in their current coursework in other subject areas. Students are exposed to a series of multi-modal instructional tools that introduce and explain the importance of self-advocacy and teach them to understand the process of appropriately addressing one's own academic needs.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Social Emotional Communication (1 term)**

Course Code: ~Pra240

Description: Social Emotional Communication supports students to develop foundational skills that are important in maintaining healthy relationships and interpersonal communication. Skills are presented in an organic, conversation style with each individual student in mind. Skills are demonstrated, modeled, and followed by student rehearsal in class activities. The goal of the practice sessions is to establish the skills while also developing the students' level of self-esteem, confidence, and social emotional learning. Generalization is encouraged through increased confidence stemming from positive reinforcement of

the successful demonstration of skills. Topics include building and maintaining healthy relationships, respectful etiquette within relationships, and mindfully managing peer pressure.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

### **Social Emotional Communication (3 terms)**

Course Code: ~Pra240

Description: Social Emotional Communication supports students to develop foundational skills that are important in maintaining healthy relationships and interpersonal communication. Skills are presented in an organic, conversation style with each individual student in mind. Skills are demonstrated, modeled, and followed by student rehearsal in class activities. The goal of the practice sessions is to establish the skills while also developing the students' level of self-esteem, confidence, and social emotional learning. Generalization is encouraged through increased confidence stemming from positive reinforcement of the successful demonstration of skills. Topics include building and maintaining healthy relationships, respectful etiquette within relationships, and mindfully managing peer pressure.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

### **Sociology**

Course Code: ~Pra245

Description: The sociology course is designed to provide students with a foundational background of how groups and/or social structures have a profound influence on the way we think, feel, and act. Students will explore the history of sociology, research approaches, culture, and society as a whole. Students will gain knowledge and understanding of the three main sociological perspectives and theories and apply these theories to present-day social problems. The course includes small group work, lectures, discussion, and scientific research.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

### **Verbal Communication**

Course Code: ~Pra125

Description: The Verbal Communication course develops enhanced verbal skills and strategies for students that have basic pragmatic skills and the ability to understand the fundamentals of conversation. The goal of the course is to develop the students' ability to understand the messages that they give and receive, as well as to consider the perspective of their audience. Topics include interview skills, basic conversation skills, and public speaking.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits:

# READING

## **Close Reading Strategies for Fiction**

Course Code: ~Rea280

Description: The Close Reading Strategies for Fiction course covers the multi-sensory, explicit, sequential learning of the art of understanding various fiction genres - how to analyze, synthesize and use critical thinking skills to understand fictional text, through learning the structure of narrative writing with the assistance of graphic organizers, vocabulary development, and class discussions. This course is a great starting place for those with weak reading comprehension skills, which can open up the world of literature for them. For students with comprehension skills in fictional text, who, with explicit instruction in story structures, could improve their understanding of this type of text. The course may be combined with Expository Reading Comprehension or taken singly.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 6

## **Comprehension Imagery (3 terms)**

Course Code: ~Rea125

Description: The Comprehension Imagery course covers the multi-sensory, explicit, sequential learning of the art of concept imaging in order to increase the ability to form pictures or movies in one's mind while reading. This skill expands language/reading comprehension, reasoning, critical thinking and expressive language skills. Students who have an underdeveloped ability to picture and remember scenes while they read, dramatically affecting comprehension, memory and critical thinking.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Comprehension Imagery (6 terms)**

Course Code: ~Rea125

Description: The Comprehension Imagery course covers the multi-sensory, explicit, sequential learning of the art of concept imaging in order to increase the ability to form pictures or movies in one's mind while reading. This skill expands language/reading comprehension, reasoning, critical thinking and expressive language skills. Students who have an underdeveloped ability to picture and remember scenes while they read, dramatically affecting comprehension, memory and critical thinking.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 6



## **Reading and Writing Children's Literature**

Course Code: ~Rea265

Description: This back to the basics course exposes students to a variety of children's literature. Students read, discuss and critique various genres of literature with a focus on setting, plot, characters, theme, and overall appeal to children. After being exposed to numerous pieces of children's literature, students write their own children's stories. These stories involve character, setting, and plot development, as well as the incorporation of various themes. Students do not have to be artisans for this class they just need a desire to study this genre and have a positive attitude.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Reading and Writing Technology Tools**

Course Code: ~Rea290

Description: In this course, students will be introduced to extensions, apps and technology websites that assist in reading and writing. The course will introduce Snap & Read, Co:Writer, and Learning Ally, as well as other helpful tools depending upon students' academic needs. Any student who would benefit from assistive technology for academic success in reading and writing should consider this course.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Reading Between the Lines**

Course Code: ~Rea300

Description: Reading Between the Lines allows students to hone their skills at making inferences. In order to infer meaning from text, readers must combine information from the text with their own background knowledge to make a theory about what is possibly true. Students will practice the skill using a variety of media such as short film clips, photos, cartoons, song lyrics, and short passages. When they have gained proficiency, they will apply the skill to short stories.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Reading Development**

Course Code: ~Rea275

Description: The Reading Development course teaches the multi-sensory development of advanced decoding skills through understanding of linguistic structures (phonetic and meaning-based patterns in words of Anglo-Saxon, Latin, Greek, French origins, grammar), multi-syllabic word attack, vocabulary development, specific

comprehension and encoding (spelling). Reading Development is for students who need further explicit instruction to improve decoding and related reading skills after Word Attack Skills or Reading Tutorial.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 6

## **Reading Fluency**

Course Code: ~Rea120

Description: The Reading Fluency course covers the development of reading fluency through intensive oral and silent reading practice linked with comprehension, multi-syllabic word recognition mastery and vocabulary development. This course is for students whose reading speed/accuracy is below the norm and impairs memory and comprehension of what is read. This course may be taken more than once and for different term lengths.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 6

## **Reading for Academic Purposes (1 term)**

Course Code: ~Rea135

Description: Reading for Academic Purposes covers the multi-sensory, explicit, sequential learning of the art of understanding nonfiction text through focusing on collecting, gathering, organizing and synthesizing information in a text through the use of graphic organizers, teacher modeling, class discussion, notetaking and summarizing. A particular emphasis is put on identifying main ideas and supporting details. This course is for students who have emerging comprehension skills with academic text. Students will practice reading with curiosity, resilience, and empathy. This course may be combined with the Reading Comprehension for Fiction course or taken singly.

Prerequisites:

Permission Required: No

Grades: 10,11,12

Credits: 1

## **Reading for Academic Purposes (3 terms)**

Course Code: ~Rea135

Description: Reading for Academic Purposes covers the multi-sensory, explicit, sequential learning of the art of understanding nonfiction text through focusing on collecting, gathering, organizing and synthesizing information in a text through the use of graphic organizers, teacher modeling, class discussion, notetaking and summarizing. A particular emphasis is put on identifying main ideas and supporting details. This course is for students who have emerging comprehension skills with academic text. Students will practice reading with curiosity, resilience, and empathy. This course may be combined with the Reading Comprehension for Fiction course or taken singly.

Prerequisites:

Permission Required: No

Grades: 10,11,12

Credits: 3

## **Reading Tutorial**

Course Code: ~Rea100

Description: The Reading Tutorial course provides a multi-sensory, alphabetic-phonetic and sequential approach to basic word attack, reading, spelling, and writing skills, explicitly teaching the association between written symbols and their spoken sounds and the correspondence between the sequences of sounds and the sequences of letters. Students read words in isolation, participate in sound dictation, spell targeted words and sentences, read orally from appropriate skill level trade books, and write short pieces toward mastery of these skills. This course is designed for students with significant weaknesses in basic decoding skills, who may also have coexisting challenges that present difficulty for the student in making effective progress in a group of more than three students. Students appropriate for Reading Tutorial are in need of individualized, explicit, intense instruction in order to make effective progress. Students will practice reading with curiosity, resilience, and empathy. This course may be taken only with the recommendation of the reading department and may be taken more than once.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 8

## **The Novella**

Course Code: ~Rea260

Description: The Novella course provides an opportunity for students served by the reading department to enjoy the classics while sharpening their vocabulary, fluency, and comprehension skills. Through the use of carefully selected literature, students will continue to foster a love of reading while exploring classic novellas. Students will practice reading with curiosity, resilience, and empathy. This course can be used as a precursor for literature courses in the English department.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Word Attack Skills**

Course Code: ~Rea270

Description: The Word Attack Skills course teaches the multi-sensory development of decoding skills through recognition and understanding of linguistic structures (phonetic and meaning-based patterns in words of Anglo-Saxon and Latin origins, along with basic grammar), multi-syllabic word attack, vocabulary development, specific comprehension and encoding (spelling). This course is for students with relatively weak multi-syllable decoding and spelling abilities, perhaps causing dysfluent reading and weak comprehension.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 8

# SCIENCE

## **Advanced Robotics**

Course Code: ~Sci340

Description: Advanced Robotics explores robotic technology, including iterative design, design ethics, user experience, structure, motion, sensors, programming, and logic controls. Students engage with one another in Do-It-Yourself and Do-It-With-Others projects. Students in this course are participants in our school's growing maker culture, which promotes shared leadership and collaboration. This course uses the VEX Robotics platform.

Prerequisites: Intro to Robotics

Permission Required: No

Grades: 9,10,11,12

Credits: 1

## **All About Birds!**

Course Code: ~Sci440

Description: All About Birds! introduces several unique aspects of bird physiology and behavior within the animal kingdom. Students will explore the life history, speciation, and migratory patterns of birds. This course will also discuss factors of avian life history that have been influenced by humans as well as the environmental significance of our interest in bird life and behavior.

Prerequisites:

Permission Required: No

Grades: 9,10,11,12

Credits: 3

## **Anatomy and Physiology**

Course Code: ~Sci100

Description: Anatomy and Physiology introduces students to the structure and function of the human body. Topics include anatomical terminology, detailed exploration of all major body systems, and common diseases affecting humans. Students will learn how the systems of the body work together by completing a series of laboratory exercises and through class demonstrations.

Prerequisites: Biology

Permission Required: No

Grades: 11,12

Credits: 8

## **Anthropology**

Course Code: ~Sci500

Description: The Anthropology course introduces the study of biological and cultural anthropology. First, the course will cover the discipline of biological anthropology, tracing the origins and evolution of humans. This involves a comparative perspective on what makes humans unique in their physical, behavioral, and ecological adaptations. Next, the course introduces forensic anthropology as a

continuation of the study of human biology but with an emphasis on cultural and social information that has been gathered from examining archeological sites. This study includes both artifacts that have been discovered, as well as the ecological features of these sites. The end of the course focuses on past and present-day ethnography, examining social and cultural customs across different eras and geographies.

Prerequisites:

Permission Required: No

Grades: 9,10,11,12

Credits: 3

## **Beekeeping**

Course Code: ~Sci450

Description: Beekeeping takes a beginner beekeepers, with no experience, and teaches them the history, the uses, and the “how-to” of being a beekeeper. Students will learn about popular hive designs, construct their own beehives and frames, install live honey bee colonies, split hives, and learn to care for hives during the warmer months. Students will learn how to spot hive diseases, how to medically treat hives, as well as how to collect and extract honey and wax from hives. Students will learn how to prepare hives for winter months, as well as bottle and sell honey to the local community.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Biology**

Course Code: ~Sci110

Description: Biology introduces students to the fundamental characteristics of living organisms and the biotic and abiotic systems in which they exist. Major topics of study include, but are not necessarily limited to, the following “big ideas” of biology: the importance of homeostasis, both in individual organisms and the ecosystems in which they exist; the cellular basis of life, which includes cell classification, structure, function, metabolism, and role in creating larger structures in multicellular organisms; the role of genetics in determining traits of living things, which includes both Mendelian and non-Mendelian patterns of inheritance, sex linked traits, and the structure and function of DNA; the evolutionary history of life on Earth; evidence of evolution, both as it existed in the past and is seen in the present day is examined, as are the mechanisms by which speciation occurs; systems of classification, which includes classification of cells (prokaryotic and eukaryotic), as well as classification of organisms into domains, kingdoms, and so on.; and the interconnected nature of all living things, introduced through the study of the interactions between living things in the environment. Lab work is an integral part of student exploration of all topics in this course.

Prerequisites:

Permission Required: No

Grades: 9,10,11,12

Credits: 8

## **Chemistry**

Course Code: ~Sci120

Description: Chemistry continues building the core critical, analytical skills required to succeed in the science, including different experimental procedures used to obtain data, as well analytical tools designed to facilitate an understanding of the mechanisms by which chemical reactions progress. Students are also introduced to the core ideas of chemistry, including: the basis of atomic theory, including the history of the evolution of the idea, an appreciation for electron structure and the properties of different structures, culminating with a discussion of the modern day theory along with critical technological advancements such as the atomic force microscope; balancing chemical equations, the Law of Conservation of Mass, Stoichiometry and the concept of the Mole; and the different types of chemical bonding and the properties of the resulting compounds, and how these properties relate to the number and organization of electrons. Students are also introduced to different modes of data presentation and information organization, including diagramming to represent important information in context, effective note-taking, and table-graphic organizers; mathematical modeling of observed phenomena and data, including the generation and derivation of complex equations in order to make predictions about future behaviors and experimental outcomes; the chemical nature of acids and bases, including an appreciation for reversible reactions, mass action and equilibria, along with usage of the log function. The chemical nature of salts is also explored in the context of this acid-base chemistry. Electrochemistry, including a discussion of the concept of electronegativity and its associated pattern in the periodic table is covered, as well as the concept of anode and cathode. A discussion of reduction-oxidation chemistry and its applications to constructing batteries is included. An introduction to organic chemistry, including the conventions for naming organic molecules, the chemistry of related functional groups, isolation procedures for purifying organic compounds, and an introduction to the chemical mechanisms involved in organic reactions, including substitution and elimination reactions, completes the course of study.

Prerequisites: Algebra I

Permission Required: No

Grades: 9,10,11,12

Credits: 8

## **Conceptual Physics**

Course Code: ~Sci125

Description: Conceptual Physics emphasizes the understanding and appreciation of the physical phenomena discovered in mechanics, forces, waves, sound, light, and electromagnetism without the mathematical emphasis which students acquire in our standard physics course.

Prerequisites:

Permission Required: No

Grades: 9,10,11,12

Credits: 8

## **Epidemiology**

Course Code: ~Sci320

Description: Epidemiology introduces students to the fundamental methods used to determine the causes of disease in a community, how the disease spreads, and how the spread can be controlled. The

course addresses health issues in communities and the ethical issues surrounding many health problems.

Prerequisites: Biology  
Permission Required: No  
Grades: 10,11,12  
Credits: 3

## **General Science**

Course Code: ~Sci185

Description: This course explores the fundamentals of physical interactions, Earth sciences, material sciences and life sciences. Students in this course engage in active learning through playfulness, curiosity, collaboration, and academic risk-taking.

Prerequisites:  
Permission Required: No  
Grades: 8  
Credits: 6

## **Health**

Course Code: ~Sci385

Description: Health emphasizes the importance of students making informed and positive healthy choices, both for themselves and for others around them. The course examines the short- and long-term benefits of physical fitness and includes a study of nutrition. Substance use, including alcohol, illicit drugs, tobacco and vaping products are discussed, with an emphasis on the negative effects abuse of these products can have both in the short and long term. Students are introduced to the human reproductive system and the processes of conception, pregnancy, and birth. The importance of healthy sexual practices is addressed in a comprehensive manner, encompassing both the use of various methods of contraception as well as the benefits of abstinence. Sexually transmitted infections (STIs) are also addressed in this course. Additionally, healthy relationships and the concept of consent in a relationship are addressed. This course develops skills and poses challenges for college preparation through varied information acquisition, presentation of knowledge, and discussion of intrapersonal experiences.

Prerequisites:  
Permission Required: No  
Grades: 8,9,10,11,12  
Credits: 3

## **Health: CPR & First Aid Certification**

Course Code: ~Sci390

Description: CPR/First Aid Certification combines lectures, demonstrations, and video with hands-on training and practice. Students in this course learn to recognize and respond to emergencies including shock, cardiac and breathing emergencies (for adults, children, and infants), heat and cold emergencies, sudden illnesses, and poisonings. Additionally, participants learn first aid for everything from cuts and scrapes to muscle, bone, and joint injuries.

Prerequisites:  
Permission Required: No  
Grades: 8,9,10,11,12  
Credits: 1

## **History and Philosophy of Science**

Course Code: ~Sci505

Description: In the History and Philosophy of Science course, students will explore the evolution of scientific thought from the early Greek natural philosophers, through the Renaissance and the emergence of modern scientific practices, to the present day and how scientific methodologies and modern technologies allow us to study what we can't see. A major theme of class will be the interaction of science and technology across time and how advancements in one area led to advancements in the other.

Prerequisites:

Permission Required: No

Grades: 9,10,11,12

Credits: 3

## **Introduction to Marine Biology**

Course Code: ~Sci210

Description: Introduction to Marine Biology emphasizes the principles, concepts, and terminology involving the study of marine organisms found in shallow water, tropical ocean environments. The anatomy and relationships of organisms from algae to fish are examined in detail. The course also examines the human impact on this part of the ocean. Students will gain the information and skills needed for a foundation in marine biology, and for further study in the life sciences. This course includes laboratory exercises and demonstrations to assist students in understanding and investigating the processes of specific marine environments, and provides practical, manipulative, and problem solving experiences.

Prerequisites: Biology

Permission Required: No

Grades: 10,11,12

Credits: 3

## **Introduction to Robotics**

Course Code: ~Sci335

Description: The Introduction to Robotics course presents elements of study (including structure, motion, sensors, and programming controls) necessary for this technology. Students engage with one another in Do-It-Yourself and Do-It-With-Others projects. Students in this course are participants in our school's growing maker culture, which promotes shared leadership and collaboration. This course uses the VEX Robotics platform.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Invertebrate Zoology**

Course Code: ~Sci240

Description: Invertebrate Zoology offers an introduction to the kingdom Animalia and presents characteristics that are shared by all animals, as well as characteristics that make animals unique among all other living things. Evolutionary trends among organisms within the animal kingdom from the simplest forms of sponge to the most complex arthropods are introduced. The taxonomic categories of the animal kingdom are explained and used to compare traits of invertebrates from several major phyla.



The developmental processes of animals from zygote to adult form are discussed in detail along with concepts relating to alternating forms of metamorphosis in various invertebrate species.

Prerequisites: Biology  
Permission Required: No  
Grades: 10,11,12  
Credits: 3

### **Maker Science (1 term)**

Course Code: ~Sci445

Description: Maker science focuses on how materials respond to the manufacturing process, explored through a number of projects of the student's choice. Materials used vary from non-ferrous metals (jewelry metals), glass, wood, and stone. A large variety of processes can be applied to projects for making jewelry or other small decorative items. Journaling and research are used to enrich the experience.

Prerequisites:  
Permission Required: No  
Grades: 8,9,10,11,12  
Credits: 1

### **Maker Science (3 terms)**

Course Code: ~Sci445

Description: Maker science focuses on how materials respond to the manufacturing process, explored through a number of projects of the student's choice. Materials used vary from non-ferrous metals (jewelry metals), glass, wood, and stone. A large variety of processes can be applied to projects for making jewelry or other small decorative items. Journaling and research are used to enrich the experience.

Prerequisites:  
Permission Required: No  
Grades: 8,9,10,11,12  
Credits: 3

### **Physical Science**

Course Code: ~Sci255

Description: Physical Science is designed to introduce students to multiple fields of scientific study in order to help them better gauge their interests and goals as they proceed through their individualized science curriculum. Major fields of study include physics, chemistry, and geology.

Prerequisites:  
Permission Required: No  
Grades: 8,9,10,11,12  
Credits: 8

### **Physics**

Course Code: ~Sci230

Description: The Physics course emphasizes the mathematical techniques and concepts needed to solve problems involving physical phenomena of mechanics, forces, waves, sound, light, and electromagnetism.

Students in this course engage in active learning through playfulness, curiosity, collaboration, and academic risk-taking.

Prerequisites: Algebra II  
Permission Required: No  
Grades: 10,11,12  
Credits: 8

### **Science of Flight**

Course Code: ~Sci405

Description: Science of Flight covers the topics which students must master in order to pass the private pilot examination or sport certificate required by the Federal Aviation Regulations (FARs).

Prerequisites:  
Permission Required: No  
Grades: 9,10,11,12  
Credits: 3

### **Technology Design Challenge**

Course Code: ~Sci235

Description: Technology Design Challenge incorporates scientific technology into the design and construction of one or more projects. Students will learn and apply design thinking into their creative processes. They will learn to recognize the many uses of technology, and think through the constraints they may face as designers, helping them to develop creative confidence.

Prerequisites:  
Permission Required: No  
Grades: 8,9,10,11,12  
Credits: 1

### **Vertebrate Zoology**

Course Code: ~Sci245

Description: Vertebrate Zoology investigates the animal phylum, Chordata. The five major groups of vertebrates (fish, amphibians, reptiles, birds, and mammals) are covered in detail. This course involves direct interaction with the individual species being studied. Students will partake in experimentation and data collection on animal growth and behavior. This course includes laboratory exercises and demonstrations to assist the student in understanding and investigating the processes of living animals, as well as to provide practical, manipulative, and problem solving experiences.

Prerequisites: Biology  
Permission Required: No  
Grades: 10,11,12  
Credits: 3

# VISUAL AND PERFORMING ARTS

## **Acting Shakespeare**

Course Code: ~Vis110

Description: Students will learn techniques for understanding and acting Shakespeare's works. Most important is that students find acting Shakespeare fun and enlightening. Emphasis will be put on learning to turn Shakespearean acting into a physical experience including stage combat, appropriate expressiveness, and clowning. The student will come away from the class wanting more Shakespeare in his/her life.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Arts Management Internship**

Course Code: ~Vis200

Description: Supporting the brilliant performances at the Cultural Center is the business of Arts Management. The performing arts cannot happen without the important background work of budgeting, scheduling, coordinating, marketing, and publicizing. Arts Management student interns help to make the Cultural Center and its programs a success by playing a vital role in the Center's operation.

Prerequisites:

Permission Required: yes

Grades: 8,9,10,11,12

Credits: 9

## **Basic Acting Techniques**

Course Code: ~Vis115

Description: Basic Acting Techniques is a course for beginners or a refresher class for seasoned actors. This course builds actors' creative confidence through active learning, creativity, and play. This course covers a broad range of acting techniques.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Block Printing**

Course Code: ~Vis170

Description: This course utilizes the graphics process of block printing, which involves carving away part of a wood or rubber block and printing the remaining raised portion. The history of block printing and a study of block printing artist, M. C. Escher are on-going themes throughout the course.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Book Arts**

Course Code: ~Vis415

Description: Book Arts refers to all types of handcrafted books. This course will introduce students to the concept of the book as an art form. It will increase awareness and appreciation of the beauty and variations in artists' books and develop students' skills in the handling of the materials and tools necessary in creating a book. A special focus of Book Arts will be one-of-a-kind artists' books: a vibrant medium where creativity can be expressed through the considerations of typography, illustration, page design, text, binding structures, and presentation. Creating an artist's book is a process of continued growth and creativity.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Chorale**

Course Code: ~Vis220

Description: The Eagle Hill Chorale class serves to increase the musicianship of individual students while building a musical ensemble. Musicianship is measured by students' understanding of 1) musical terminology and its applications, 2) what constitutes effective and healthy vocal technique, 3) how to achieve appropriate expression in singing and in choral performance, and 4) what is necessary from the individual at any one moment in a performance to improve the sound of the whole ensemble. Building any musical ensemble requires that its members, including the director, treat each other with respect and good humor; that they be mutually supportive, working for the good of the whole rather than of any one individual; and that they be willing to make substantive contributions towards publicizing and presenting the ensemble's concerts. Chorale students need to be able to sing in tune and to hold their part in a four-voice choral arrangement.

Prerequisites: Introduction to the Performing Arts

Permission Required: No

Grades: 8,9,10,11,12

Credits: 6

## **CNC Woodworking**

Course Code: ~Vis475

Description: The CNC Woodworking class takes the student through the process of planning, designing, programming and running projects on a Shopbot CNC machine. The students will learn the process and create original pieces. They will have the opportunity to choose and design their own projects and see them through to a final product. Students are limited only by their imaginations in this class. As they master the Vcarve software, they will see their ideas come to fruition. Time will be divided between the desktop publishing computer room and the woodshop. While in the computer room, students will learn the software and design their projects. The second portion of the class will take place in the woodshop where their projects will be created using the CNC Shopbot machine.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Collage Basics**

Course Code: ~Vis300

Description: This course explores collage as a fine art. Looking at master artists' works of the past, as well as contemporary works for inspiration, each class session builds upon the previous session to add additional techniques to the repertoire of a collage artist.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Dance Concepts**

Course Code: ~Vis595

Description: Dance Concepts is a studio course that explores the dance activities of improvisation, technique, choreography/composition, and performance. Students will create and perform short and informal dance studies in a variety of styles and will use movement analysis, choreographic concepts, and personal reactions to write about and critique dance performances, both informal and professional. Students will engage in creative/critical conversations that challenge their awareness of arts making, individual creative voice, and the overall process of discovery. Close attention will be paid to an ethical creation of work and the authentic use of voice.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Desktop Publishing & Yearbook**

Course Code: ~Vis190

Description: This course utilizes the computer software Adobe Creative Suite to produce the school's yearbook. Targeted skills include using digital cameras, scanners, preparing photographs for publication, page layout and design, and meeting publisher's deadlines.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Drawing**

Course Code: ~Vis235

Description: Drawing helps students learn to translate the world around them into 2-D space. This course explores fundamental drawing techniques through observational study and the use of a variety of drawing materials and methods. Individual instruction is given, with periodic group critiques providing the source of shared challenges and inspirations. This class follows a plan of sequential projects building on fundamental drawing principles.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Film as Art**

Course Code: ~Vis135

Description: Film as Art explores American and foreign films as an art form. The objective is to develop a keen, critical appreciation of films, from all over the world, as art. The method is to work with established criteria for judging and appreciating the film medium. Students view films and read the reviews of each film. Then each student writes his or her own review based on the established criteria.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Hand Built Pottery**

Course Code: ~Vis255

Description: This course emphasizes the expressive potential of pinch, coil, and slab construction pottery. Students are assigned weekly projects based on the instructor's demonstrations. Projects range from creating functional to sculptural forms, introducing students to methods of pottery making, decorating, and techniques and tools for developing the aesthetics of form and function in pottery making.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Introduction to Performing Arts**

Course Code: ~Vis625

Description: Introduction to the Performing Arts is an exploratory course focused on performance art. Integrating the study of world music, instruments, artistic theory and history with the practice of singing, playing, acting, and dance, the course introduces students to a variety of performance opportunities and arts knowledge. Students will be challenged to create, practice, and perform each day as they discover different ways they are interested in interacting with the arts. Topics to be introduced include but are not limited to: percussion and rhythm, instrumental practice, choral singing, spoken word, songwriting, improvisation, music in social justice, production, and dance, as well as brief introductions to some of the visual art offerings at Eagle Hill. This class is a prerequisite for EHS Chorale, Jam Band, and IB Music.

Prerequisites:

Permission Required: No

Grades: 8,9

Credits: 1

## **Introduction to Technical Theater**

Course Code: ~Vis570

Description: The Introduction to Technical Theater class will work with students who have an interest in exploring the world of backstage work. They must demonstrate attention to detail, teamwork, organizational skills, responsibility, initiative, and a can-do attitude. They will work with faculty members designing and implementing lighting, sound, rigging, and set construction, and running the technical functions for each concert and production—in addition to less glamorous but equally important labor

such as setting up risers and other furniture, and helping to keep equipment organized and well-maintained. This introductory class will be an opportunity to see if the Technical Theater Intern program is a good fit for the student.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Jam Band**

Course Code: ~Vis240

Description: The Jam Band course provides students with an understanding and appreciation of collective creative expression in music through playing and singing, both in class and in live performances. Students develop creative skills, performance techniques, and social skills through working with their instruments, different musical forms, specific songs, and the benefits and challenges of musical group dynamics. The culmination of the course is an all-day recording session at a professional studio, where the class essentially creates its own CD.

Prerequisites: Introduction to the Performing Arts

Permission Required: Yes

Grades: 8,9,10,11,12

Credits: 6

## **Making Oversized Models**

Course Code: ~Vis630

Description: In this course, students will explore model making in a new and bigger way. First, students will decide on a model they want to make, then cut a prototype from balsa wood using the laser cutter. No prior use of the laser is necessary. Once the prototype model is complete, students will create a plan for “blowing it up” to a larger scale. Students may use any of the processes available in the makerspace to complete their models (wood, metal, 3D printing).

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Making the Mobius: Community CNC Sculpture**

Course Code: ~Vis575

Description: In Making the Mobius, students will work on a portion of a STEM building sculpture which will be located in the math wing breakout space. Students will help prepare and run the CNC machine to make hundreds of pieces which will be finished in the shop and then assembled in place over the course of a school year.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Making with Lasers**

Course Code: ~Vis610

Description: Students in this course will become familiar with laser cutters and their different applications. The course begins with work in Corel Draw to create designs, models and prototypes. Students will then learn how to operate the makerspace laser. Challenge projects in design, cutting and assembly will be assigned. A final project will be determined and completed.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Making with Metal**

Course Code: ~Vis605

Description: In this course, students will be introduced to different areas of working with metal. Whether it is to solve a problem or to create a piece of art, metal can be used in many different ways. We will explore melting steel and casting it into new parts, welding and the different types and applications, sheet metal and assorted types of steel stock. Students will start with instruction, be assigned a number of challenges, then decide on a final project.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Making with Metal Exploratory**

Course Code: ~Vis640

Description: In this course, students will learn the basics of cutting metal, shaping metal, MIG welding, and turning steel/aluminum on a metal lathe. Students will have the opportunity to practice their new skill in the making of an individual project.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Making with Resin**

Course Code: ~Vis635

Description: Students in Making with Resin will explore the different applications of epoxy resin. Using resin, students can create anything from custom dominoes to a resin-based guitar. Faux stained glass, coasters, ocean art, and river pours are just a few other projects that students can create in this exploratory course.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1



## **Mixed Art Media**

Course Code: ~Vis260

Description: The Mixed Media course encourages creative expression that incorporates multiple materials within two-dimensional artwork. Openness to experimentation is essential. Through freely manipulating traditional materials such as pencil, ink, paint, chalk, and crayons with non-traditional materials such as adhesives, foils, and transfers, students develop a flexible approach to the problem of visually expressing and presenting their creative thoughts.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Modern/Contemporary Dance**

Course Code: ~Vis620

Description: Modern/Contemporary Dance is a studio technique course that allows students to develop expression through movement. This style of dance focuses on body and core strength, spatial awareness, and the use of breath, body weight, and release/recovery. Students will build from the techniques of modern dance pioneers José Limón and Martha Graham. By the end of the term, students will have learned a full-length dance utilizing these techniques.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Music Appreciation**

Course Code: ~Vis460

Description: Music Appreciation is open to all levels of students who enjoy listening to and discussing music. Students will bring their own musical interests to class discussions through presentations on songs and artists while learning about the diverse musical interests of their peers. Through readings and class discussion students will be introduced to a variety of musical styles and cultures. Tailored to the individual group, possible topics explored in Music Appreciation include song writing, drums of the world, and Western music history and important composers.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Music Theory**

Course Code: ~Vis215

Description: Music Theory is open to any student who is interested in music to develop a basic understanding and knowledge of the theory behind why music works, while gaining basic keyboard and sight-reading skills. This course helps students build a foundation in basic musical elements as they discover how pitch, rhythm, harmony, and structure work together to create original music. Students will study existing music to understand compositional rules and techniques, while using their knowledge to analyze the form, key, and rhythmic features as well. This course provides essential groundwork for

students interested in music performance and composition, as well as a good introduction to those new to music study. Possible topics include learning the Circle of Fifths, finding the right chords for a melody, figuring out rhythmic patterns, and sight-reading at the keyboard. A Prerequisite for Advanced Music Theory and recommended for those interested in IB Music.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Musical Theater Dance**

Course Code: ~Vis615

Description: Musical Theater Dance is a studio technique course that develops jazz technique and performance quality for the stage. Students will examine the styles of well-known Broadway choreographers, such as Bob Fosse (Chicago, Pippin), Jerome Robbins (West Side Story, Fiddler on the Roof), and Michael Bennett (A Chorus Line). In addition to creating new choreography as a class, students will also have a chance to learn pieces of original Broadway choreography.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **One Act Competition**

Course Code: ~Vis125

Description: An advanced acting course for students who want to be involved in dramatic competitions with other schools. Students would have to audition or be screened by me to take part in the class. The commitment would mean that students would agree to all that is required by the Massachusetts High School Drama Guild including attending technical rehearsals and Performances as scheduled by the Guild. In addition, they would make a commitment to attend all rehearsals called by the director. Students would receive state recognition for their efforts as well as having the experience of performing in a competitive venue.

Prerequisites:

Permission Required: yes

Grades: 8,9,10,11,12

Credits: 3

## **Outdoor Theater**

Course Code: ~Vis505

Description: In Outdoor Theater, students will learn the history of theater in an outdoor setting. They will explore the humble beginnings of theater starting with Neanderthal storytelling traditions. Other units of study include Greek, Roman, Medieval, and Shakespearean theater. The Class will conclude with an outdoor performance from the class utilizing the Alsop Amphitheater.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Public Speaking**

Course Code: ~Vis365

Description: A fun, practical course to improve your ability to communicate with others and become an effective student and leader.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Screen Printing for Commercial Graphics**

Course Code: ~Vis165

Description: This course utilizes the graphics process of screen printing, focusing on projects such as t-shirts, stickers and posters found in the commercial graphics field. In screen-printing, the principle involved is forcing ink through a stenciled screen. Procedures for making screens will include both hand-cut and photographic methods.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Screen Printing: Warhols**

Course Code: ~Vis160

Description: This course utilizes the graphics process of screen printing. In screen-printing, the principle involved is forcing ink through a stenciled screen which has been created utilizing a photographic process. Basic art skills such as drawing, painting and color theory are targeted. Students create a 'self-portrait' in the style and manner of 60's pop artist, Andy Warhol who is considered to be the first artist to combine the areas of fine-arts and graphics.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Set Building and Design**

Course Code: ~Vis140

Description: This course exposes students to the technical and creative aspects of set designing and building. Students design and build sets to be used in productions at Eagle Hill School. Using hand drawings and theater software, students create interactive 3-D computer models of theater or performance spaces where the systems usually associated with performance (lights, sound, fly bars, revolves, and trucks) are used. Basic carpentry and electrical skills are learned while building sets, as well as painting and color coordination for dramatic effect. In addition, students learn about 'dressing the set' for performances.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Stage Combat**

Course Code: ~Vis385

Description: In Stage Combat, students learn about stage combat and how to fight safely on stage. The two areas they will be working on are hand-to-hand combat and single-sword combat. Hand-to-hand combat entails falling, slaps, grabs, chokes, pushes, tackles, punches, and kicks. Single-sword combat is sword fighting with one sword. Students will learn the parts of a sword and terms of the trade. The class will train in the fighting techniques and will perform in front of an audience.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Studio Art & Portfolio Preparation**

Course Code: ~Vis285

Description: This class is designed for students who want to continue their artistic efforts at a more advanced level and/or intend to participate in post-high school graduation education at an art school, college, or university. Students work in all areas of art with particular emphasis on drawing, painting, and two-dimensional design. Through a variety of projects students are encouraged to look at and respond to themselves in terms of the aesthetic world around them. Students experience many opportunities to explore varied media, art styles, and subjects. To be successful in this class, students are required to complete homework on a weekly basis and keep a thorough personal sketchbook of observation sketches.

Prerequisites:

Permission Required: yes

Grades: 8,9,10,11,12

Credits: 9

## **Technical Theater Internship**

Course Code: ~Vis205

Description: Students manage and run the state-of-the-art theatrical lighting, sound, and rigging systems at the Cultural Center for our own plays, concerts and other functions and for visiting productions. Interns must be interested in technical theater and ready to be a responsible, reliable, devoted member of a team. Student interns participate in intensive training. Then, they take on responsibilities such as consulting with performing artists about their technical needs, designing and implementing lighting, sound, rigging, and set, and running the technical functions for each concert and production. Ongoing professional development helps interns hone their practice of technical arts. Interns work at scheduled times but must also be available as-needed. They earn academic credit, but more importantly, they benefit from the exciting experience, becoming expert in theatrical systems, collaborating with performing artists, and building unusually substantive resumes.

Prerequisites:

Permission Required: yes

Grades: 8,9,10,11,12

Credits: 9

## **Woodworking**

Course Code: ~Vis155

Description: This course acquaints the students with the essential principles of woodworking. Topics include wood characteristics, use of hand tools, portable power tools, and basic machinery. Emphasis is placed on proper technique, safety, and policies for the woodshop. Students complete a project designed to develop primary woodworking skills.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 3

## **Woodworking: Box Making**

Course Code: ~Vis555

Description: In this course students learn basic woodworking techniques, power/hand tool use and safety while making a small box project. The project will start with a student generated design idea, developed cooperatively with the teacher. As the design evolves, the student will learn about design aspects as well as how various woodworking techniques play an important role in the project's development. Each student will complete a small box of their own design before the term's completion.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

## **Woodworking: CNC Cribbage Board**

Course Code: ~Vis560

Description: In this course students will learn the basics of the CNC software "Aspire." Once they gain a solid understanding of the software and how the CNC machine works, students will design and build a cribbage board to take with them. If time allows, students will also learn how to play the game of cribbage.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 1

# **WORLD LANGUAGES**

## **Latin I**

Course Code: ~Wor110

Description: Latin I provides a general introduction to the nature of language study for students across the spectrum of backgrounds and abilities. Goals for the series of Latin courses include students reading the Latin of classical authors with confidence, developing an awareness of the culture of the Romans (including its historic significance and contemporary relevance), enhancing their general language learning techniques and aptitudes (including facility with English), and developing their thinking skills

by strengthening the skills used for deductive and analogous reasoning, interactive learning, comparative analysis, and critical assessment.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 8

## **Spanish I**

Course Code: ~Wor140

Description: Spanish I introduces students to Spanish culture and language. Students read, write, listen and speak about cultural topics such as home and family, community, health, environment, education, food, clothing, and leisure activities. Students learn to express information about themselves and to compare and contrast their cultural backgrounds with those of Spanish-speakers around the world. In addition, students reinforce and expand their knowledge of other academic areas through interdisciplinary connections. Class activities include dialogues, discussions, readings, film viewing, computer activities, performance tasks and essays. They will engage in independent, paired, and group practice, as well as oral and written quizzes and tests. For listening comprehension and improvement of their pronunciation, students use computer-based applications.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 8

## **Spanish II**

Course Code: ~Wor145

Description: Spanish II is a continuation of Spanish I. The course builds on the cultural knowledge and language acquired during the students' first year of study and furthers their understanding of Spanish. Class activities include dialogues, discussions, readings, film viewing, computer activities, performance tasks and essays. They will engage in independent, paired, and group practice, as well as oral and written quizzes and tests.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 8

## **Spanish III**

Course Code: ~Wor150

Description: Spanish III is a continuation of Spanish I and II. The course builds on the cultural knowledge and language acquired during the students' prior years of study and furthers their understanding of Spanish. Class activities include dialogues, discussions, readings, film viewing, computer activities, performance tasks and essays. They will engage in independent, paired, and group practice, as well as oral and written quizzes and tests.

Prerequisites:

Permission Required: No

Grades: 8,9,10,11,12

Credits: 8