

The curriculum of Oxbridge Academy is comprised of a core group of subjects intended to promote lifelong learning along with a wide array of elective courses designed to allow students to explore and experience subjects and topics they may not have previously considered. Students are encouraged to select courses that will be academically stimulating and personally enriching.

Placement tests and teacher recommendations are used to place students in courses appropriately matching their current skill level in order to promote success and engagement. Honors courses offer a more demanding and accelerated pace to challenge the more well-prepared students. Honors Seminar classes are the most rigorous courses offered by Oxbridge: they are typically taught at the college level and characterized by challenging material, extended writing assignments, and demanding projects requiring more individual responsibility.

Graduation requirements ensure that Oxbridge Academy graduates successfully complete a course of study in a broad range of disciplines and skills, ensuring a strong foundation for future learning. Please keep in mind that graduation requirements reflect minimum requirements and do not necessarily equate to college admissions requirements. Since most successful college applicants exceed minimum graduation requirements, we recommend that candidates take the most rigorous academic program available that they can handle without undue stress.

Typically, a study hall is required for all 9th graders to assist with the transition to an increased workload at Oxbridge. However, 10th, 11th & 12th graders with proven academic success are not required to enroll in study hall and may take an additional core or elective course.

In a given year, student's ability to be enrolled in an elective is dependent upon seat availability in the requested course. Students will be able to choose up to three electives in order of priority. If you do not receive your primary choice, the scheduler will attempt to enroll you in your alternate choices if possible. **Please understand that there are no guarantees, and core courses take precedence over electives.** 



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# **Graduation Requirements**

All students must meet the following graduation requirements to earn a diploma:

#### English - 4 Credits

4 credits of English while in high school.

#### Mathematics - 4 Credits

4 Credits of Math while in high school Note: All students must show proof of completion of Algebra I, Geometry, and Algebra II

#### Science - 3 Credits

At least one credit each in Physics, Chemistry and Biology

#### World Language - 3 Credits

Students are required to complete 3 credits of a language. Students must take a minimum of 2 consecutive years of the same language. Typically, students will continue to a third consecutive year. However, students may complete a year of a different language to satisfy their remaining graduation requirement.

#### Social Science - 3 Credits

At least one credit each in World History, United States History, and Government  $\vartheta$  Economics

#### Health & Wellness- 1 Credit

A one credit course in Lifetime Health and Fitness is required for all freshmen.

## Visual & Performing Arts - 2 Credits

One-half credit in Introduction to Visual Arts and one-half in Introduction to Performing Arts courses are required for all freshmen.

**Note:** Freshman students who already have proficiency in either the visual arts and/or the performing arts (*Band, Orchestra, Theater, or Chorus*) as demonstrated by portfolio or audition/permission of the instructor are exempt from the two sequences of Visual and Performing Arts.

In addition, students  $\,$  who wish to pursue Debate or Honors Computer Science 1 instead of the Visual or Performing Arts are exempt from the requirement.

There are additional elective offerings for grades 10-12.

#### **Electives - 4 Credits**

A student may take an additional core subject course or any other course of special interest to meet the elective requirements.

## Things to Know:

- $\bullet$  Students earn 1 credit for a year-long course and  $^{1}\!/_{2}$  credit for a semester course. Credits are awarded only at the end of the course. Oxbridge does not offer quarter-long courses.
- Students are required to earn a minimum of 24 credits to graduate and a minimum of 6 credits per year. However, seven credit-earning courses per semester are expected, unless a student has prior permission for a reduced schedule from the Assistant Head of School.
- Students in 9th grade who elect Debate, Band, Orchestra, Chorus, Theater, or Honors Computer Science 1 will be exempt from the Freshman Visual Art/Performing Art credit. These students will still be required to fulfill the additional 1 credit in Art.
- Any requested exceptions to graduation requirements will be considered on an individual basis by the Assistant Head of School.
- Students should meet with their advisor and college counselor annually to develop a four-year plan that will help them achieve their academic goals.
- Oxbridge Academy reserves the right to evaluate each student's transcript at time of entrance to determine which transfer credits suit Oxbridge's graduation requirements.
- Online Learning courses may not be taken for Oxbridge credit in lieu of Oxbridge Academy unless there is an irresolvable scheduling conflict and with prior written approval from the Assistant Head of School.



#### Semester - Open to Freshmen only

This required course for all freshmen provides a foundational experience in several categories, including 2D Art (drawing and painting), 3D Art (sculpture and ceramics), Digital Graphic Design, and Photography. Over the course of a semester, students will participate in each category of the visual arts through work with specialized instructors in those areas. The goal of the course is to introduce freshmen to the diverse range of meaningful visual arts experiences in which many might choose to focus their studies at a later point in high school.

#### Studio Art: Drawing 1

#### **Semester - No Prerequisites**

This class introduces students to a range of drawing techniques that are used in the creation of illustrative works. The class teaches the proper use of a variety of artistic tools to develop an awareness of craftsmanship in finished works. Through this course, students will have the opportunity to draw from observation as well as from their own interests for themed drawings. This course is preparation for Painting and all advanced level 2D Art courses.

#### **Studio Art: Drawing 2**

#### Semester - Drawing 1

This course uses the skills and techniques learned in Drawing I as a foundation for students to create works that fit their own personal style. Projects are designed to teach advanced drawing skills and additional exploration of drawing media. Topics and themes are chosen to further the development of students' strengths, personal interests, and creative styles. This course is preparation for Painting and all advanced level 2D Art courses.

#### **Art History 1: American Art & Culture** 1900 - 1950

#### **Semester - No Prerequisites**

Over the 20th Century, America became recognized as one of the most powerful artistic and cultural forces in the world. This course will study why and how this came about ranging from 1900-1950, and how the fine arts achievements are seen as part of the larger culture that helped shape them.

#### **Studio Art: Painting 1**

#### **Semester - No Prerequisites**

As an introductory painting class, the class teaches proper safety, tools, and techniques of each medium in order to establish best practices and craftsmanship skills. Projects are based on personal photographs given specific themes that work best for each medium. Students will learn about how color and layers bring their paintings to life. This course is preparation for all advanced level 2D Art classes.

#### Studio Art: Painting 2

#### Semester - Painting 1

Painting 2 continues the study of painting mediums. Projects are designed to explore more complex painting concepts while allowing for creative freedom and personal interests. This course offers opportunities for students to develop their own painting style and to seek inspiration from historical and contemporary artists. Completion of this course is preparation for 2D Studio Art classes, as well as Portfolio Design.

## **Visual Arts**



#### 2D Mixed Media 1

#### **Semester - Drawing 1 or Painting 1**

This course focuses on combining several traditional art-making materials to create more dynamic compositions. This class uses basic drawing and painting skills to teach students how to identify which materials work well together. Projects are designed to encourage students to create and destroy; work with layers; and utilize a range of materials to express their individual vision. Students have the opportunity to create works ranging from abstracts to representational, as developed from personal interests or social topics.

#### 2D Mixed Media 2

#### Semester - 2D Mixed Media 1

This course is designed to build upon the skills and techniques used in 2D Mixed Media 1. Students will continue to explore a variety of media and reinvent their purpose in the art-making process. Project themes become more expansive and offer more personally meaningful solutions for students to pursue their individual creative style. This class prepares students for the study of Portfolio Design.

#### **Photography 1**

#### **Semester - No Prerequisites**

Photography 1 is a broad-based introductory course in the study of Photography designed to inspire and educate students on the possibilities of photographic media. Students will gain both historical insight and visual literacy while learning how to control the look of their photographs. Students will also gain familiarity with real-world industry techniques for digital asset management, post-production, and retouching through Adobe Lightroom and Adobe Photoshop.

#### **Photography 2**

#### Semester - Photography 1 or Instructor Approval

This course offers students the opportunity to embrace both modern and traditional techniques employed in various genres of photography. Students will experience the world of post-production where images are enhanced, altered, and manipulated for increased visual impact with the use of Adobe Lightroom and Photoshop. At the end of the semester, students are equipped with a working knowledge of each step of the photographic process: from inception, to planning, to capturing an image, and post-production.

#### **Honors Portfolio Design 1**

#### **Semester - Instructor Approval Required**

This course is for students who have completed beginning and advanced levels of Visual Arts courses in their chosen specialty and are seeking a more intensive focus on their individual artistic styles. At the beginning of the semester, students will propose a theme of their own interest that will guide the creation of several works over the course of the semester. Under instructor guidance, students will work to create a comprehensive collection of work suitable for college applications.

#### **Honors Portfolio Design 2**

#### Semester - Honors Portfolio Design 1

This course is an opportunity to add more complex works to the comprehensive collection of work already begun. Students should expect to show development of style and technique, as well as evolution of thought, through the creation of each new work. Portfolio reviews will provide students with additional opportunities to engage in conversation to share their knowledge of inspiration from historical and contemporary artists, as well as their understanding of art and design principles.



## Visual Arts



#### Mixed Media Sculpture 1

#### **Semester - No Prerequisites**

This beginning sculpture course introduces students to a range of creative building and design methods in 3D Art, with no experience necessary. Students will explore traditional and non-traditional materials as they make original works of art. Students will learn how to design and build sculptural projects using the methods of planer construction, clay modeling, found object assemblage, and more. This course approaches the making of sculptures by using the same methods as working artists.

#### **Mixed Media Sculpture 2**

#### Semester - Mixed Media Sculpture 1

This class is a continuation of the Mixed Media Sculpture 1 course. Students will build upon skills learned in the previous course such as planer construction, clay modeling, and found object assemblage. This course will introduce students to new building techniques such as the construction of large-scale installation art, carving, and figure sculpting. Throughout the semester students will study methods of sculpting embraced by contemporary sculptors while building their portfolio and design skillset.

#### **3D Construction and Design 1**

#### **Semester - No Prerequisites**

This course introduces students to design and building methods that help them to develop an understanding of the 3D form and space with an emphasis on the elements and principles of visual design. This course will introduce students to different industry techniques, such as wood working, metal and jewelry smithing, industrial design, and more. Through lecture, assigned projects, and critiques, students will develop the skills to create a design plan through technical drawing and models.

#### **3D Construction and Design 2**

#### Semester - 3D Construction and Design 1

This course is designed to build on concepts and techniques introduced in 3D Construction and Design 1. Students will continue to build upon their woodworking, metal and jewelry, and industrial design skills and be introduced to computer aided design software that will assist in advancing their design skills.

#### **Ceramics 1**

#### **Semester - No Prerequisites**

Students in Ceramics 1 are introduced to basic processes of making both traditional and contemporary sculptural works in clay through hand-building methods. Students will explore historical examples of ceramic vessels as well as modern influential ceramic artists that are leaders and innovators in their craft. This course gives students all the foundational techniques they will need to explore more advanced methods in Ceramics 2.

#### **Ceramics 2**

#### Semester - Ceramics 1

This course is designed to advance students' skills that were developed in Ceramics 1. Students will have the opportunity to engage in advanced hand building techniques as well as wheel-throwing. Students will also learn more about the artistic trends developing in the world of contemporary ceramics.



## **Visual Arts**



#### Digital Graphic Design 1

#### **Semester - No Prerequisites**

Students will be introduced to Adobe Photoshop, Illustrator, and InDesign and will learn the basic design principles, such as spacing, margins, and color. Students will apply this knowledge to a variety of real-world design projects. Some of the projects include a Book Cover, City Logo, and a Magazine Cover.

#### **Digital Graphic Design 2**

#### Semester - Digital Graphic Design 1

Students will dive deeper into Adobe Photoshop, Illustrator, and InDesign. Projects will include more real-world projects such as a Movie Poster, App Redesign, Personal Logo, and Real Estate Ad. Each of those projects will be pushing the knowledge of typography, color theory, and the use of spacing.

#### **Motion Graphics Animation 1**

#### Semester - Graphic Design 1

Students will be taking the knowledge and still ideas from Graphic Design I & II and learning how to bring them to life. Students will be taught Adobe After Effects with continued knowledge of Adobe Photoshop and Adobe Illustrator. Assembly, motion, scaling, and organization will be the fundamentals taught. Projects will include Live Wallpapers, Transitions, Pac-Man animation, and Lyric Videos.

#### Videography 1

#### **Semester - No Prerequisites**

Students will learn the basics of video such as camera operation, camera angles, sound, editing, and basic storyboarding. Students will be introduced to Adobe Premiere Rush and work their way to Adobe Premiere. Students will apply their knowledge to real-world video projects such as a PSA, Sound Mixing, and a Movie Trailer.

#### Videography 2

#### Semester - Videography 1

Students will expand their knowledge of scriptwriting, storyboarding, and camera techniques and options using additional equipment such as lighting, green screen, and mics. Students will gain proficiency in Adobe Premiere. Projects will include re-editing movie trailers, dynamic interviews, and movie shorts in different genres.

#### **Motion Graphics Animation 2**

#### **Semester - Motion Graphics Animation 1**

Building upon the previous course, students are pushed in various areas such as color, motion, and pacing. Students will be more proficient in Adobe Photoshop, Illustrator, and After Effects, learning new animation design techniques that include motion easing, scale easing, and advanced masking. Projects will be in various areas such as Logo Animation, Story Animation, Phone Commercial, and Motion Reel.





#### **Introduction to the Performing Arts**

#### Semester - Open to Freshmen only

This is a required course for all first-year students\*, providing experience in several dimensions of the performing arts: chorus, acting, movement, and stagecraft. Over the course of a semester, students will participate in each area of the performing arts through work with specialists. The goal of the course is to introduce first-year students to the range of performing arts experiences in which many might choose to specialize at a later point in high school.

#### Acting

#### Full Year - No Prerequisites

This course will teach the fundamentals of concentration, imagination, and improvisation through games and exercises in scene work & characterization. Evaluation is based on daily exercises, homework, individual growth, and projects. The curriculum will be appropriate for students interested in acting on stage, for film/TV, or who simply want to improve their public presentation skills. The course will culminate in a showcase performance.

#### Stagecraft

#### **Semester - No Prerequisites**

This course will teach "behind the scenes" activities like set design and building, scenic painting, lighting, special effects, sound design, crafts, and costuming. This class is the technical crew behind all productions in a variety of ways. Physical work required.

#### **Performing Ensemble**

#### Full Year - Audition AND Instructor Approval

The fall semester will be focused on preparing for our competitions: Florida Theater Conference One-Act Festival. District Thespian One-Act Festival. District Thespian IEs, English-Speaking Union Shakespeare Monologue Competition. Students enrolled in this class will have priority sign up for the 5 competition slots available for each individual event category. In the spring semester, the class will present a play and/or musical to learn and rehearse in class and perform for the public. Advanced acting techniques, choreography/movement, and classical theater in performance are important parts of the curriculum.

Freshmen who elect **Debate**, **Honors Computer Science 1**, or a **performance ensemble course** will be exempt from Intro to the Performing Arts. **These students** will still be required to fulfill the additional 1 credit in Art.





#### Full Year - Department Approval Required

The Jazz Ensemble course is a performance group whose primary purpose is jazz music in small jazz ensembles. Instruction will be provided in jazz improvisation and ensemble performance techniques for various styles of jazz, from the Swing Era to contemporary styles.

#### **Rock & Contemporary Music Ensemble**

#### **Full Year - No Prerequisites**

This course is an opportunity to study contemporary, rock, and popular music genres through performance and rehearsal in an academic setting. Students will perform covers and originals spanning all styles and time periods. This ensemble will perform regularly at festivals, on and off campus, in-class, and other events. Students are expected to practice outside of class so that time in class may be devoted to rehearsal.

#### Winds & Percussion Chamber Ensemble

#### **Full Year - No Prerequisites**

This Chamber Ensemble/Concert Band course focuses on the performance of music literature for woodwind, brass, and percussion ensembles of various stylistic periods. Instruction cultivates performance techniques, artistic interpretation, and overall musicality. Student ensembles will include, but not be limited to, student coaching, literature selection, composer research, accompaniment, arrangements, and performance production.

#### **Studio Recording and Production**

#### Full Year - Digital Music Required

Students will develop skills in recording technique including acoustics, microphone setup and placement, digital multi-track recording and editing, mixing, and sampling. In addition, students will gain hands on training and experience with podcasting, as well as live audio mixing in performance settings. Special attention will be given to the history of recording and audio production. The focus of evaluation is project oriented.

#### **Digital Music**

#### **Semester - No Prerequisites**

In this course, students will use music authoring and editing software to compose original music, create mash-ups, and alter existing music to create something new. This is a hands-on way to learn musical theory and composition and the skills to create musical tracks for digital movies and other audio-visual projects.

Freshmen who elect a **performance ensemble course** will be exempt from needing to take Intro to the Performing Arts. **These students will still be required** to fulfill the additional 1 credit in Art.



#### **Beginning Piano**

#### **Semester - No Prerequisites**

This is a piano course for students with little or no previous piano instruction. Areas covered will include fundamentals of posture and hand position, reading notes and rhythms, reading chord charts, understanding of basic music theory, and introduction to composition and computer notation programs. The course will be adapted to challenge individual levels and rates of progress.

#### Guitar

#### **Semester - No Prerequisites**

This course is designed to teach the basic skills and knowledge required to play the guitar, as well as teach basic music reading ability and music theory. Students will learn the basics of playing guitar at a beginner level through studying music notation, chord symbols, and peer modeling. Through this class, students will gain a better understanding of many different musical genres, and public performance may be a course expectation.

#### Chorale

#### **Full Year - No Prerequisites**

Advanced vocal students study choral works with an emphasis on reading, diction, tone quality, interpretation and aesthetics. Students learn and perform an advanced level of repertoire that spans the Renaissance through Contemporary periods. Attention will be given to the languages and cultures associated with the particular choral literature.

#### **Strings and Chamber Ensemble**

#### **Full Year - No Prerequisites**

The Strings Chamber Ensemble/Orchestra performs music from the string repertoire of the Baroque, Classic, and Romantic Eras with an emphasis on the development of string technique and ensemble skill. Student solos and/or ensembles will include, but not be limited to, student coaching, literature selection, composer research, accompaniment, arrangements, and performance production.



#### **Dance Foundations**

#### **Full Year - No Prerequisites**

This course emphasizes ballet and modern/contemporary techniques with an emphasis on conditioning based in Pilates. The class is perfect for dancers and non-dancers who have a good movement background but may also come from other art forms (theater and music).

#### **Dance Repertory**

#### Full Year - Audition Required

This class combines contemporary, modern and classical dance techniques with guest artists in modern dance, jazz, hip-hop, and other dance genres. This class also supports students' choreography and improvisation. Performances are required for winter and spring concerts with the opportunity to perform in the South Florida area and beyond.



#### **Debate 1: Intro to Public Speaking**

#### **Full Year - No Prerequisites**

Students learn and try 8 different types of public speaking and debate as they improve their skills in reading, research, organization, and communication. Public speaking formats include different areas of focus: current events, political topics, creative writing, improvisational speaking, and more. Students become more comfortable and skilled in speaking with and in front of others for a variety of purposes, including real-world applications/public speaking formats, such as job interviewing and written and oral presentation skills.

## Honors Debate 1: Intro to Speech and Debate

#### Full Year - Instructor Approval Required

Students learn and try 12 different types of debate and public speaking as they improve their skills in reading, research, organization, and communication. Students learn and practice improvisational speaking, persuasive speaking, argumentative debate, creative writing, presentations, acting, and more. The course includes political, philosophical, and global problem topics, as well as conversational and creative styles of speaking. For Honors Debate 1, there is a 4 tournament requirement for the year: students choose from a wide variety of after-school tournaments, Saturday tournaments, and travel tournaments to find at least four they can attend, any time during the year.

#### **Debate 2 (Honors Available)**

#### Full Year - Debate 1 or Instructor Approval

Debate 2 builds on the fundamentals taught in Introduction to Speech and Debate. The course focuses on an in-depth analysis of issues related to economics, government policy, international relations, the Congress, the President of the United States, and contemporary issues facing the U.S. and the world. Through lectures, seminars, and readings, students will be engaged in the politics and policies of the world as they relate to the debate topics presented by the National Speech and Debate Association.

#### **Honors Debate 3**

#### Full Year - Honors Debate 2 or Instructor Approval

Debate 3 focuses on a critical analysis of arguments and honing rhetorical ability. Students will engage arguments written by non-governmental organizations, governments and, individual policy makers to critically review the premises, logic, and impacts of proposals. Students will also write arguments using briefs and other academic sources for use in national speech and debate competitions. Students will continue to review and analyze a host of written and oral communication to improve argument formulation in both written and oral expression.

#### **Honors Seminar Debate 4**

#### Full Year - Honors Debate 3

Debate 4 has three fundamental components: Critical analysis of issues and arguments, understanding past, present, and future implications of issues and arguments, and college level written and oral communication ability. Building upon the skill of critical analysis of arguments studied in Debate 3, debate 4 will expose students to the implication of policies in nuanced and detailed ways. The course explores case studies of policies written, enacted, and their long-term impacts. Students will analyze policies through the lens of short and long-term impact and apply this skill to National Speech and Debate Association topics. Last, Debate 4 will focus on critical analysis of rhetorical analysis in both written and video texts to continue bolstering students' written and oral communication.



#### **English 1**

#### **Full Year - No Prerequisites**

English 1 is a survey course of classic and modern literature. Students will read works of fiction, nonfiction, poetry, personal narrative, and drama. Through rigorous writing and discussion, students learn to think critically about the important themes in these works. Teachers emphasize a variety of writing techniques, strategies, and genres. In addition, students learn intermediate grammar and vocabulary.

#### **Honors English 1**

#### Full Year - Department Approval

Students read works of fiction, nonfiction, poetry, personal narrative, and drama that focus on the journey of self-discovery and the odyssey of the human experience. This course introduces students to the art of Socratic discussion, developing their skills as collaborative thinkers and confident speakers. Students will study and practice the mechanics of good writing: grammar, punctuation, and vocabulary building as they are encouraged to develop their own voice and style. They will compose analytical, persuasive, reflective, and descriptive writing.

#### **English 2**

#### Full Year - English 1

English 2 students explore literary genres in American Literature to promote critical thinking and develop discussion and collaboration skills. Students will demonstrate command of the elements of effective composition and writing and will also read works of fiction, nonfiction, poetry, personal narrative, and drama that focus on the role of the individual in the community and the tensions that frequently emerge in that dynamic.

#### **Honors English 2**

#### Full Year - English 1 and Dept. Approval Required

Honors English 2 is intended for students who have shown exceptional promise in writing and literary analysis. Course readings will be drawn from a diverse body of American literature and will ask students to consider the role of the individual in the community and the tensions that frequently emerge in that dynamic. Writing instruction will guide students as they craft strong analytical arguments in response to texts and teach students how to effectively incorporate textual evidence and critical source materials into their essays.

## Honors Seminar English 2: American Literature

#### Full Year - Honors English 1 and Dept. Approval Required

Honors Seminar English 2 is an advanced seminar-style course in American Literature that will be taught in conjunction with Honors Seminar U.S. History. There is a prerequisite for this course: Honors Seminar World History. The course is a chronological study of American Literature, from colonial writing to the post Civil Rights era. Major movements in American Literature will be covered: Romanticism, Transcendentalism, Realism, Harlem Renaissance, and Modernism.



#### **English 3**

#### Full Year - English 2

Students will read works of fiction, nonfiction, poetry, personal narrative, and drama that focus on the efforts of individuals to develop empathy make a difference in their social and cultural contexts. As students explore the actions of protagonists who experience the impact of the world around them, they will examine questions about success and disappointment in working for change. In some cases, individuals triumph in overcoming the obstacles to personal and social progress; in other situations, human beings must confront apparently insurmountable barriers to happiness and fulfillment. The majority of the texts studied in this class are from the 20th and 21st century.

#### **Honors English 3**

#### Full Year - English 2 and Dept. Approval

Students will read works of fiction, nonfiction, poetry, personal narrative, and drama that focus on the human condition, specifically efforts of individuals to make a difference in their social and cultural contexts. As students explore the actions of protagonists who experience the impact of the world, they will examine questions success disappointment in working about and for change. In some cases, individuals triumph in overcoming the obstacles to personal and social progress; in other situations, human beings must confront apparently insurmountable barriers to happiness and fulfillment. Students are expected to read a significant number pre-20th century texts.

## Honors Seminar English 3: British Literature Full Year - Open to Juniors with Dept. Approval

This course is a chronological study of British Literature beginning in the Medieval period and ending just after WWI. Students will examine canonical texts, paying close attention to the historical context as well as the immediate and long-term cultural impacts of each text. Students will be expected to participate in seminar style discussions and write college level literary analysis and research papers that incorporate both primary and critical courses.

#### **College Writing (Honors Available)**

#### Semester

#### **Required for Seniors not in Honors Seminar 4**

College Writing is a semester-long course designed to prepare students for the modes of analytical academic writing and rigor that will be expected of them as college-level students. They will read and write essays that respond to prompts that require them to analyze, persuade, reflect, and inform. The course will teach all steps of the writing process, with an emphasis on revision and editing. This course is required of all seniors except for those in Honors Seminar 4.

#### **Honors Seminar English 4: Great Books**

#### Full Year - Open to Seniors with Dept. Approval

Students in this course will read works of literature that have withstood the test of time and offer distinct insights into the nature of human experience. Through close reading, discussions, research, presentations, and extensive writing, students will become familiar with the themes and issues embedded in these texts. Teachers select from a wide range of texts, including Morrison's Beloved. the Greek theater, Dostoyevsky's Punishment, Shake-Crime and speare's King Lear, and Melville's Moby Dick.

#### English 4: Film As Literature (Honors Available)

#### Semester - Open to Seniors as a Semester 2 Elective

In Film as Literature, the teacher will choose a relevant common theme for films viewed in the course. Students will view films from a variety of genres selected for their contributions to the thematic focus. We view, discuss, and critique films from a variety of genres, much the same as we study literature. Students will understand the mechanics of film as a storytelling vehicle and use technical filmmaking terms in their analysis. Numerous critical essays and a major research paper is required.

#### **English 4: Contemporary Women's Literature**

(Honors Available)

#### Semester - English 3

This course will examine contemporary fiction and nonfiction written by women, focusing on texts that directly engage with questions of identity, and explores contemporary issues from the perspective of contemporary female writers.

## **English 4: African American Literature** (Honors Available)

#### Semester - English 3

This course uses texts, film, and music by African Americans as primary entry points into historical and contemporary conversations about race and racism, community, impact of slavery and the the diaspora, cultural traditions and cultural approunderground priation, mainstream and hip-hop, materialism, and consciousness.

## English 4: Practical Wisdom (Honors Available) Semester - English 3

This course focuses on entrepreneurial and thought-provoking literature and personal and professional growth. Students will be required to keep a copious journal, contributing to it daily, chronicling the growth of their thoughts and their plans. They will also compose a comprehensive "business plan" for their lives, including creating a credible, realistic business venture, fictitious or real, as the culminating product. Guest lectures, live and via video, will be an integral aspect of the course, as will self-reflective writing. Students will read excerpts from important literature in the field.

#### Honors Digital Multimedia Yearbook - Journalism

#### Full Year - Honors English and Instructor Approval

This course is designed to provide students with a medium of self-expression through the hands-on production of both the creative and technical elements of yearbook assembly. Units of study include teamwork, responsibility, brainstorming, confidentiality, coverage, concept development, reporting, writing, headlines, captions, editing, photography, typography, design, marketing, and distribution. Those enrolled in the course will make content, coverage, marketing campaigns, and design decisions in adherence to journalistic standards. Students work within teams in accordance with their areas of focus such as photography, design, writing, and marketing, under the leadership of student editors.



## Creative Writing 1 (Honors Available) Semester - Open to Grades 10-12

Students in this course will experiment with two creative genres—poetry and fiction—as a way to develop a familiarity with both genres and also explore their own creative voices. Over the course of the semester, students can expect to generate original material, practice strategies for reading and talking about writing, and work toward creating a polished body of work. Students will read and consider published fiction and poetry, as well as their peers' work. This course will also serve as an introduction and prerequisite to any of the upper level creative writing courses offered at Oxbridge.

#### **Creative Writing 2** (Honors Available)

#### **Semester - Creative Writing 1**

This course offers students the opportunity to deepen their writing experience. Various genres will be considered including poetry, fiction, creative non-fiction, screen writing, and drama. By the end of the semester, students will have created a self-directed work in a genre of interest. Students will revise their work to hone the skills acquired in Creative Writing and Creative Writing Honors.

English 1, English 2, English 3, and English 4 are also offered at the survey level.

Survey level classes are **specifically designed for students with diagnosed learning disorders.** In a survey-level course, access to the curriculum is more readily available through smaller class sizes, more direct instruction, guided practice, and scaffolding of lessons.



#### Spanish 1

#### **Full Year - No Prerequisites**

This course will introduce students to the Spanish language and the culture of the Spanish speaking world. This class will emphasize the spoken language and verbal communication, by teaching words, phrases and idioms that one will need to communicate in a Spanish-speaking country. Students are expected to reach novice-low to novice-mid levels of proficiency.

#### Spanish 2

#### Full Year - Spanish 1

Students will continue to develop their listening, speaking, reading, and writing skills from a novice low to a novice mid proficiency level. Students will exchange information on a variety of topics, including Latinos in the world, pastimes, technology, holidays, the arts, sports, transportation, and health. Cultural aspects of the contemporary Spanish-speaking world will be studied through communicative activities and projects.

#### Spanish 3

#### Full Year - Spanish 2

Students will expand their Spanish proficiency through communicative activities with an emphasis on speaking and auditory comprehension. Students will be able to express events in present and future tense, with the use of new and previously acquired grammatical structures. Students will apply their knowledge and understanding of grammatical structures and vocabulary to the production of projects, presentations, and short writing assignments. Students are expected to reach novice-high to intermediate-mid levels of communication.

#### Spanish 4

#### Full Year - Spanish 3

Students will be able to exchange biographical information and life experiences, write their résumé, and prepare for a job interview in Spanish. Grammar will be learned contextually through hands-on activities such as: design an ideal city, plan a dream vacation to a Spanish country, create an advertising campaign for an original invention, etc. Students will also deepen their cultural appreciation through an exploration of art, history, and cultural traditions across the Spanish-speaking world. Students are expected to master the intermediate-midlevels of proficiency.

#### Spanish 5

#### Full Year - Spanish 4

Spanish 5 is an advanced-level course designed to expand students' communication skills in Spanish through a modern and diversified approach to topics and cultural practices. Students will improve their competence skills and build their ability to interact in Spanish-speaking environments. Students will be exposed to all areas of linguistic competence, including listening, writing, reading, and socio-cultural awareness.

#### Spanish for Heritage Speakers

#### Full Year - Department Approval

This elective course provides students with real-life communicative situations and settings, with opportunities to reflect and gain a deeper understanding of their own culture. Students synthesize and negotiate linguistic and cultural meaning in order to explore problems and issues from their own and different perspectives. Students also gain practice in three modes of communication in pair and group activities by reading authentic texts, listening to authentic audios recorded by native speakers, and engaging in conversation in the heritage language. This course allows students to take what they have learned in each unit and apply it to situations beyond the classroom. This course is conducted in Spanish.

#### **Honors Spanish 2**

#### Full Year - Spanish 1 and Department Approval

Students will master grammatical topics such as the indicative, imperative, subjunctive moods. and Emphasis is placed on increasing the student's active vocabulary through authentic materials. Cultural aspects are taught through the history, geography, gastronomy, and pop culture of Spanish-speaking countries. Oral, written, listening, and reading assessments are major components of the class. By the course's end, students will have accomplished a variety of novice-high functional skills.

#### **Honors Spanish 3**

#### Full Year - Spanish 2 and Department Approval

Spanish 3 Honors is an advanced level course designed to accelerate the linguistic proficiency of motivated students. Grammar lessons will be focused on using language in context, and students will be expected to immediately apply new structures to their spoken and written work. The course provides students with interactive, productive, and receptive skills developed through the contextualized study of language, text, and themes. Students are exposed to a variety of authentic texts, and work is produced in a variety of communicative contexts. This course is taught primarily in the target language. Students are expected to complete practice outside of the classroom and be proactive in their acquisition of the target language. Students are expected to master the intermediate mid to intermediate-high levels of all four skill areas: reading, writing, listening, and speaking.

#### **Honors Spanish 4**

#### Full Year - Spanish 3 and Department Approval

In addition to communicative activities where students will be expected to exchange biographical information and life experiences, students will also dive into the Hispanic literary canon. In-depth readings of short stories and poetry from a variety of authors such as Ana Maria Matute, Jorge Luis Borges, and Sor Juana Ines de la Cruz will expose students to college-level coursework and assessments, as well as expand their cultural understanding. Through discussions of readings and exposure to contemporary media, students will develop a more profound understanding of grammar and vocabulary, as well as greater linguistic proficiency. Students are expected to reach intermediate-high to advanced-low levels of proficiency in all communicative areas of speaking, reading, listening, and writing.

#### **Honors Spanish 5**

#### Full Year - Spanish 4 and Department Approval

Spanish 5 Honors is a course designed to advance students' proficiency through the study and discussion of short stories, poems, plays, art, and films. The structure of the course will be similar to a college survey course, where students are expected to engage in close readings and analyses of the thematic material and make inferences about a work's meaning. Students will also study films and artwork such as Buñuel's *Edad de oro* and Goya's *Pinturas* negras and discuss how they relate to or reflect cultural and historical events in the Hispanic world. By the conclusion of the course, students will be expected to reach advanced-low or advanced-mid levels of proficiency.

**Honors Courses** are offered to students who show substantial motivation and previous experience in Spanish and who wish to advance at a faster yet also more in-depth pace. **Department Approval is required.** 



#### **Full Year - No Prerequisites**

Students learn to introduce themselves and speak about their hobbies and interests. They focus on home, school, family, and daily lives using the present and the near future tense. Students learn phrases and idioms necessary for friendly social exchanges and learn to ask for information used in shops and cafés. Dialogue, role play, and pronunciation are important components of our communicative approach to French. Students are expected to reach novice-low to novice-mid levels of proficiency.

#### French 2 (Honors Available)

#### Full Year - French 1 Required

Students build on their vocabulary and understanding of how the French language is similar to English and other languages. Students will learn to discuss activities that have occurred in the past. As students discover the different countries of the French-speaking world, they will learn phrases and idioms vital for travel. Projects allow students an in-depth investigation of the countries of their choice and allow them to plan a virtual vacation. Students begin to focus on reading and writing French and become familiar with famous poems by Vigneault, Gautier, LaFontaine, and stories of France and Québec. Students are expected to master novice-mid levels of proficiency.

#### French 3 (Honors Available)

#### Full Year - French 2 Required

Students review different ways of discussing the past and learn to recognize still other past tense forms used in poetry and literature, particularly the tales of Charles Perrault. New emphasis is placed on written expression as students rewrite endings to classic French stories. Students learn to talk about what is going to happen in the future and learn to speak about hypothetical events. They delve deep into French gastronomy and learn to make suggestions and give orders with varying degrees of politeness. Emphasis is placed on both understanding and using different ways of asking questions. Students are expected to reach novice-high to intermediate-low levels of proficiency.

#### French 4 (Honors Available)

#### Full Year - French 3

Students synthesize their knowledge of ways of discussing the past and the future as they learn idiomatic expressions of time. They discuss topical issues using expressions for hypothetical situations in the past, present, and future. Students study the building blocks of French, Québec, and North African society, with particular attention to festivals, traditions, and legends. Students read the poetry and prose of Saint-Exupéry, Laye, Camus, and Molière. Students are expected to develop their intermediate-low to intermediate-mid levels of proficiency.

#### **Honors Seminar in French Culture and Literature**

#### **Full Year**

#### Honors French 4 and Instructor Approval Required

Honors Seminar in French A is designed to advance students' proficiency through the study and discussion of short stories, poems, plays, art, movies, and contemporary news sources. The structure of the course will be similar to a college survey course in which students engage in close readings and analyses of thematic material and make inferences about a work's meaning. Students will study art and music and discuss how it relates to direct historical events in the French-speaking world. Students will continue to develop the four language skills of reading, writing, listening, and speaking through extensive interpretive, interpersonal, and presentational tasks. Works covered will span France, Québec, Haïti, Martinique, Guadeloupe, Sénégal, and beyond. Students are expected to reach novice-high to intermediate-low levels of proficiency.

Honors Courses are offered to students who show substantial motivation and previous experience in French and who wish to advance at a faster yet also more in-depth pace. **Department Approval is required.** 



#### **Honors Chinese 1**

#### **Full Year - No Prerequisites**

This course is designed for students who have had no prior experience in Chinese language and are interested in learning basic Chinese language as well as culture. Oral communication will be stressed through listening and speaking activities. Students will be able to ask and answer questions on topics such as greetings, numbers, date and time, self-introduction, and hobbies. Students will also learn reading and writing skills in basic simplified Chinese characters.

#### **Honors Chinese 2**

#### **Full Year**

#### Chinese 1 & Department Approval Required

Students continue their study of Chinese by further expanding their knowledge of key vocabulary topics and grammar concepts. Students will be able to handle basic conversation, such as making appointments and bargaining. Students will also be able to write about their daily routine, study habits, favorite sports.

#### **Honors Chinese 3**

#### Full Year - Chinese 2 & Department Approval Required

At this level, students will be expected to: actively engage in their own learning, understand common vocabulary terms and phrases, use a wide range of grammar patterns in their speaking and writing, participate in conversations, respond appropriately to conversational prompts, and analyze and compare cultural practices and products. Main topic areas covered are weather, food and restaurant culture, travel, asking directions, and seeing a doctor. The reflection of students' progress will be seen in making mini movies, presentations, and journals.

#### **Honors Chinese 4**

#### **Full Year**

#### Chinese 3 & Department Approval Required

Students will further develop their language skills across the three communicative modes: interpersonal, interpretive, and presentational. Students will learn about various aspects of contemporary Chinese society, including Chinese geography and population, ethnic and regional diversity, travel and transportation, holidays, and current affairs.

#### **Honors Chinese 5**

#### **Full Year**

#### Chinese 4 & Department Approval Required

Students will develop advanced proficiency in Chinese and the capacity to respond in culturally appropriate ways to questions on familiar topics, to understand conversations among native Chinese speakers, and to comprehend and compose email as part of back-and-forth communication with other Chinese speakers. They will express their personal views or exchange opinions on topics of Chinese education, jobs and interviews, gender imbalances, and environmental protection.



## American Sign Language 1

Full Year - No Prerequisites

This introductory course will focus on developing the basic expressive and receptive skills necessary to communicate with deaf communities. Course content includes signs, fingerspelling, numbers, songs, activities, and grammatical and cultural information. Emphasis will be placed on skill development, correct usage of signs, and a general understanding of signed languages used by deaf communities.

## American Sign Language 2 (Honors Available) Full Year - ASL 1

In ASL 2, students will continue to expand vocabulary and concepts acquired in level one. Expansion of conversational range will include talking about other people and activities, giving directions, and making requests. Students will also develop discourse skills appropriate for establishing connections with deaf acquaintances and handling a variety of interruptions. This course will expand on fingerspelling, numbers, vocabulary, sentences, and conversation, with a focus on interaction in ASL to allow them to apply what they have learned.

## American Sign Language 3 (Honors Available) Full Year - ASL 2

Students at this level should possess the content knowledge contained in ASL 1 and 2. Instruction and student response at this level allows no vocalization by instructor or students. The course will cover rules of social interaction, including role shifting, deaf history in the United States, fingerspelling at the intermediate sign language level, money systems, time sequence, color modifiers, English translation of dialogue and storytelling, and expanded vocabulary. The course will also cover deaf education, deaf community, interpreters, audiologists, doctors, and ASL literature stories.

Honors Courses are offered to students who show substantial motivation and previous experience in American Sign Language and who wish to advance at a faster yet also more in depth pace. **Department Approval is required.** 



#### Algebra 1

#### **Full Year - No Prerequisites**

This course is the foundation for all other high school math courses. Algebra 1 covers topics including but not limited to linear relationships, exponential and quadratic relationships, advanced functions and equations, and data analysis.

#### Algebra 1 Plus

#### **Full Year - No Prerequisites**

This course is the foundation for all other high school math courses. It covers the same curriculum as the Algebra 1 course with greater emphasis on quadratic functions and equations, radical functions, rational functions, and real-life applications.

#### Geometry

#### Full Year - Algebra 1

This course will build upon Algebra 1 curriculum and is essential to further instruction in Algebra 2, Pre-Calculus, and beyond. The purpose of this course is to develop geometric relationships and deductive strategies that can be used to solve a variety of real-world and mathematical problems. Geometry covers topics including but not limited to geometric structure, congruence, similarity, and measurement.

#### **Geometry Plus**

#### Full Year - Algebra 1

This course will build upon Algebra 1 curriculum and is essential to further instruction in Algebra 2, Pre-Calculus and beyond. The purpose of this course is to develop geometric relationships and deductive strategies that can be used to solve a variety of real-world and mathematical problems. Geometry Plus covers the same curriculum as Geometry, with a greater emphasis on logic, proof, and constructions. The focus is on the student's continuous development of analytical and critical thinking through logical and spatial reasoning.

#### **Honors Geometry**

#### Full Year - Algebra 1 and Dept. Approval

This course will build upon Algebra 1 curriculum and is essential to further instruction in Algebra 2, Pre-Calculus and beyond. The purpose of this course is to develop geometric relationships and deductive strategies that can be used to solve a variety of real-world and mathematical problems. The topics covered in this course include all of those listed in Geometry and Geometry Plus. Students are expected to synthesize and apply the material beyond examples discussed in class.

#### Algebra 2

#### Full Year - Geometry

This course will build upon the Algebra 1 curriculum and is essential for further instruction in post Algebra 2 courses. Algebra 2 covers topics including but not limited to: extension of the properties of the real number system, linear and quadratic relations and inequalities, polynomials, radical and inverse functions, complex numbers, logarithmic and exponential functions, and rational functions.

#### Algebra 2 Plus

#### Full Year - Geometry

This course will build upon the Algebra 1 curriculum and is essential for further instruction in other mathematical and scientific fields. This course covers the same curriculum as Algebra 2, with a greater emphasis on the depth of the questions asked.

#### **Honors Algebra 2**

#### Full Year - Minimum of a "B" in Hon. Geometry & Dept. Approval

The purpose of this course is to continue the study of Algebra and to provide the foundation for applying algebraic skills to other mathematical and scientific fields. This course covers the same curriculum as Algebra 2 Plus as well as trigonometric functions, formulas, graphs, and identities. Topics are taught at a greater depth than Algebra 2 Plus. Students are expected to synthesize and apply the material beyond examples discussed in class.

#### **Trigonometry**

#### Semester - Algebra 2

This course will be devoted to an introduction to Trigonometry where students will study right triangle trigonometry, non-right triangle trigonometry, the unit circle, trigonometric graphs, and vectors.

#### **Selected Topics in Mathematics**

#### Semester - Algebra 2

The purpose of this course is to strengthen and build on students' understanding of topics covered in previous math classes. Topics covered include quadratic functions, polynomial functions, radical functions, rational functions, sequences, series, probability, and statistics.

#### **Statistics With Applications**

#### Semester - Selected Topics in Mathematics

This course will focus on developing fundamental understandings of the statistics and probability that students will encounter in everyday life. Topics covered will include probability models, descriptive statistics, hypothesis testing, and confidence intervals. An emphasis will be placed on applications of these topics to real world situations.

#### **Personal Finance**

#### **Semester - Open to Seniors Only**

Personal Finance will be reserved for seniors. The course will be comprised of financial planning, investing, creating a budget, and understanding financial vocabulary and the world of banking, credit, and taxes. Additionally, students in this course will read the book *Richest Man in Babylon*.



## Functions, Statistics and Trigonometry Full Year - Algebra 2

This course is a study of the theory and applications of polynomials, trigonometric identities, vectors, statistics, and rational, exponential, logarithmic, trigonometric, and inverse trigonometric functions. Graphing calculators will be used extensively in this course. The successful student in this course will be well prepared for more advanced topics. FST is equivalent to a Plus-level Precalculus course.

#### **Honors Pre-Calculus**

## Full Year - Minimum of a B in Algebra 2 and Dept. Approval Required

The purpose of this course is to prepare students for a Calculus course. The course includes all of the topics listed in Functions, Statistics and Trigonometry, as well as matrices, polar coordinates, analytical Geometry and discrete math. Students will demonstrate their mastery via projects that synthesize and apply the material beyond examples discussed in class.

#### **Descriptive Statistics and Probability**

#### Semester - Functions, Statistics and Trigonometry

This course explores all areas of descriptive statistics, such as different ways to display data, measures of center and variability, the normal distribution, and linear regression. Students will study several types of sampling methods and learn the differences between studies and experiments. Students will also learn how to find compound and conditional probabilities.

#### **Intro to Calculus**

#### **Semester - Descriptive Statistics and Probability**

This course is designed to introduce students to fundamental calculus procedures and to prepare them for a rigorous college level course in calculus.





#### **Inferential Statistics**

#### **Semester - Descriptive Statistics and Probability**

This course builds upon all the ideas learned in Descriptive Statistics and Probability. Students will be expected to go beyond describing data, using and applying the information and skills from semester one to draw conclusions about what they observe. Topics will include random variables, sampling distributions, confidence intervals, and hypothesis tests. Students will learn and apply different distributions of data, including the Normal distribution, t-distribution, and chi-squared distribution.

#### **Honors Probability and Statistics**

#### Semester - Descriptive Statistics and Probability

In this course students explore binomial distribution, the normal distribution, confidence intervals, hypothesis testing, t-distribution, chi-square distribution, correlation, regression, and multiple regression. Students will learn how to calculate confidence intervals and employ hypothesis testing. This course will make extensive use of graphing calculators and Excel spreadsheets. Students are expected to synthesize and apply the material beyond examples discussed in class.

## **Applications of Calculus: Business Semester - Intro to Calculus Required**

This course is intended for those studying business, economics, or other related business fields. The following topics are presented with applications in the business world: functions, graphs, limits, exponential and logarithmic functions, differentiation, integration, partial derivatives, and optimization. Topics also include total cost, variable cost, average cost, marginal cost, total revenue, marginal revenue, and average revenue.

#### **Honors Calculus A**

## Semester - Minimum of a "B" in Honors Pre-Calculus and Department Approval

This course will introduce students to calculus from an algebraic, numerical, and graphical perspective. Topics covered include continuity and limits, differentiation techniques and applications including implicit and logarithmic differentiation, exponential and logarithmic functions, simple differential equations, and definite and indefinite integrals. Students are expected to synthesize and apply the material beyond examples discussed in class.

#### **Honors Seminar Calculus B**

## Semester - Minimum of a "B" in Honors Calculus A and Department Approval

This course is a continuation of Honors Calculus A. Students will further their study of definite and indefinite integrals; additional topics include integration techniques and applications, the calculus of parametric, vector, and polar functions, sequences, and series, including Taylor and MacLaurin series. Students are expected to synthesize and apply the material beyond examples discussed in class.

## Honors Seminar Multivariable Calculus Semester - Honors Seminar Calculus B

This course studies the calculus of the 3D world. Topics covered include differential and integral calculus of functions of two or three variables, partial derivatives, multiple integrals, Green's, Stokes's, and Divergence Theorems, calculus of vectors and paths in two and three dimensions. The course will conclude with an introduction to first and second order differential equations. Students are expected to synthesize and apply the material beyond examples discussed in class.





## Honors Seminar Differential Equations Full Year - Honors Seminar Calculus B

Differential Equations is the study of equations involving rates (derivatives); Linear Algebra is the study of linear systems and vector spaces. Combining these courses will allow us to study systems of differential equations. This course will cover first-order differential equations, linear systems and matrices, vector spaces, higher order differential equations, eigenvectors, linear systems of differential equations, and Laplace Transforms. The emphasis is on application; as such, graphical interpretation and engineering application will be the focus and not the theory. Students are expected to synthesize and apply the material beyond examples discussed in class.

#### **Honors Web Application Programing**

#### Full Year - Honors Computer Science 2 required

Students will learn how to create fully functioning web applications using a variety of programming languages. Languages taught in this course include server-side languages such as PHP, client-side languages such a JavaScript, languages for database information retrieval such as SQL/MySQL, and markup languages such as HTML and CSS.

#### **Honors Computer Science 1**

#### Full Year - Must be enrolled in Honors Geometry or Higher

Honors Computer Science 1 focuses on developing reasoning skills and algorithmic thinking. Python, a programming language renowned for its simplicity and ease of use, is taught to develop student competency in software development. Topics such as simple data types and structures (booleans, integers, floats, strings, lists, and tuples), loops, function development, control statements, and recursion will be taught. This course is a strong introduction to the computing science field with a particular emphasis on software development.

#### **Honors Computer Science 2**

#### Full Year - Honors Computer Science 1 Required

Honors Computer Science 2 is a course similar in structure to Computer Science 1 Honors in so far as a subset of similar topics are taught (loops, functions/methods, control statements, recursion). The major difference, though, is that the class is taught in the Java programming language. Java, a purely object-oriented language, requires the teaching of object-oriented topics such as Java class design, object references, polymorphism, the substitution principle, inheritance, and interfaces. Java is an industry standard, and thus this class provides a solid exposure to college-level concepts.

#### **Digital Logic 1**

## Semester 1 - Co-requisite Honors Algebra 2 OR Algebra 2 Plus with Instructor Approval

This course will introduce students to the elements of circuit design and implementation. Topics will include number systems, logic, gate minimization techniques including Boolean Algebra, DeMorgan's Theorem, and Karnaugh mapping, binary arithmetic, multiplexers, flipflops, memory, and finite state machines.

#### **Digital Logic 2**

#### Semester 2 - Digital Logic 1 and Instructor Approval

Digital Logic 2 builds on the concepts and skills developed in Digital Logic 1. Students will work with sensors and motors, write code for microcontrollers such as the Arduino, and learn the fundamentals of soldering to create permanent designs. This course will place a greater emphasis on independent projects that synthesize the concepts learned over the semester.



## Honors Seminar Artificial Intelligence and Computational Modeling 1

#### Semester 1 - One semester of Calculus required

The first semester of this two-semester sequence will focus on computational modeling using Python. This course integrates concepts from calculus, statistics, linear algebra, and computer science through the lens of real-world scenarios. There will be an emphasis on numerical methods for solving differential equations. In addition, students will be introduced to statistical methods to analyze large data sets along with specific techniques from linear algebra.



## Honors Seminar Artificial Intelligence and Computational Modeling 2

#### Semester 2 - Hon Sem Al & Computational Modeling 1

Extending the first semester experience, this course will introduce students to the fundamentals of artificial intelligence, focusing on machine learning techniques and training, neural networks and deep learning, and applications of machine learning to real-world problems.

Algebra 1, Algebra 2 and Geometry are offered at the survey level.

**Survey-level classes** are specifically designed for students with diagnosed learning disorders. In a survey-level course, access to the curriculum is more readily available through smaller class sizes, more direct instruction, guided practice, and scaffolding of lessons.





#### **Physics**

#### **Full Year - No Prerequisites**

The course is focused on physics concepts and methods. Students will be solving problems utilizing the processes of technicians, engineers, and scientists. The students test hypotheses, apply conceptual understanding, conduct experiments, design and modify models, test and assess improvements, and analyze results. The students utilize data acquisition and analysis skills to formulate decisions and draw conclusions. The physics program employs a project based inquiry approach to learning the concepts and applications of physics.

#### **Honors Physics**

#### **Full Year**

## Must be concurrently taking higher level math course (Honors Geometry, Honors Algebra 2, etc.)

Honors Physics is a course designed to prepare students for advanced studies in the sciences in a career-related field. A general outline of the topics includes mechanics (kinematics & dynamics), harmonic motion, waves, optics, sound, electricity, and magnetism. Experimental processes will be examined in a more detailed manner. Honors Physics utilizes mathematics, including Algebra II and Trigonometry, on a regular basis and students selecting this course of study must be proficient in advanced mathematics.

#### **Material Science Engineering**

#### **Full Year - No Prerequisites**

This course will focus on engineering basics, metals, polymers, ceramics, composites, and smart materials. Students will learn how to modify materials to change their characteristics, learn how to characterize materials and perform tests to access the use of materials to suit specific purposes, such as applying your knowledge to making a skateboard or new material for a heart valve.

#### **Honors Seminar in Physics - Mechanics**

Semester

#### Honors Physics, Calculus, Instructor Approval Required

This class has been developed to cover the material of an introductory college physics course. The study of mechanics includes the description of motion, the analysis of motion using Newton's laws, and the application of the three major conservation laws to a wide range of systems. Familiarity with differential calculus is assumed, and all the topics studied will make use of this level of math.

#### Honors Seminar in Physics - Electricity & Magnetism

Semester - Honors Seminar in Physics - Mechanics, Calculus,

#### **Instructor Approval Required**

We continue our study in physics, this time with a focus on Electromagnetism. Topics to be covered include Coulomb's Law, electrostatics, Gauss's Law, electric potential and capacitance, DC circuit analysis, magnetic fields and induction, and AC circuits analysis. Electromagnetism plays a key role in our society and technology historically, currently, and in our future. Successful completion of this course provides a solid foundation for anyone considering physics, engineering, or any other physical science-based STEM discipline for their future endeavors.

#### **Honors Seminar in Physics - Modern Physics**

## Semester - Honors Seminar in Physics - Mechanics, Calculus, Instructor Approval Required

We continue our study of physics, introducthe subjects of Special Relativity, Quantum ing Mechanics, and Cosmology. Acquaintance differential and integral calculus is assumed, as well as introductory classical mechanics & electromagnetism. Quantum Mechanics and Relativity play a key role in our society and technology historically, currently, and in our future and are essential ingredients in contemporary theories of fundamental physics. Successful completion of this course provides a solid foundation for anyone considering physics, engineering, or any other physical science based STEM discipline for their future endeavors.

## **Physics & Aviation**



#### **Astronomy - Solar System**

#### Semester 1 - Co-requisite Algebra 2

Astronomy, the study of the universe, was the first science, and it remains a cutting edge and viable research discipline even today. In the first semester, we study the solar system from the Sun to the Kuiper belt and everything in between.

#### **Astronomy - Evolution of the Universe**

#### Semester 2 - Co-requisite Algebra 2

In the second semester, we look at cosmology, the study of the cosmos. We take a look at different types of galaxies and also black holes, pulsars, quasars, gamma ray bursts, and other denizens of the universe.

#### **Aviation 101**

#### **Semester - No Prerequisites**

This is the first of a six-semester elective program in which students will be introduced to aviation, aeronautical, and aerospace science. Taught as a project-based class, this introductory course will study the history of flight, physics of flight, aircraft systems, engines, instruments, air traffic control procedures, and weather. Included in the course are several field trips to local airports and IFLY along with guest lessons from local pilots and aeronautics engineers. Students will have the opportunity to apply their knowledge through approximately 5 hours in a full-motion Cessna 172 flight simulator.

#### **Aviation 201**

#### **Semester - Aviation 101**

In this project-based course, students will study the history of the space program, satellites, rocketry, human physiology and space flight, long term space projects such as the Mars mission, ISS, and a possible moon base. Students will continue their flight training in the flight simulator over the semester.

#### **Aviation 301**

#### **Semester - Aviation 201**

This course covers the physics of flight using mathematical formulas to determine lift, thrust, drag coefficients, and surface area to weight ratios. We will begin the process by developing engineering skills through short-term projects and experiments. The focus is to develop the skills of would-be pilots and engineers. Topics such as electrical systems, airport security, and airport design will also help students prepare for the next step in becoming a pilot.

#### **Aviation 401**

#### **Semester - Aviation 301**

This course emphasizes aeronautical and aerospace engineering. Students will learn about keeping a professional engineering journal as they take on 4-5 design challenges. Examples of these design challenges may include creating and testing airfoils using 3D printing and designing and building a working wind tunnel.

#### **Aviation 501**

#### Semester - Aviation 401 & Dept. Approval Required

This course teaches students the fundamentals of cross-country flying, which includes planning a route of flight, navigating a route of flight, interpreting aviation weather reports/maps, and preparing the aircraft's weight and balance. Students will obtain approximately 10 hours in a Cessna 172 full-motion simulator, and by the end of the course should be able to perform a solo flight in the simulator without instructor input.

#### **Aviation 601**

#### Semester - Aviation 501 & Dept. Approval Required

In this course, the emphasis will be on preparing the student to successfully complete the Private Pilot Written Exam. Students will utilize the flight simulator for approximately 10 hours to practice their private pilot maneuvers or be introduced to instrument flying, which is flying exclusively by the use of instruments and without the use of outside references to maintain aircraft control.





#### **Chemistry**

#### Full Year - Physics

In this course, students use mathematical models to examine the basic principles of composition and interaction of matter: atomic structure, kinetic molecular theory, the mole, stoichiometry, reaction types, equilibrium, chemical kinetics, gas laws, and energy transfers. Teaching strategies focus on the cumulative connection of concepts, quantitative analytical problem-solving skills, study skills, use of the scientific method, and proper experimental techniques. Experiments are conducted on a regular basis to reinforce the connections between the mathematical models and concepts presented in class.

#### **Honors Chemistry**

## Full Year - Honors Physics, Must be concurrently taking higher level math course, and Dept. Approval

Honors Chemistry students examine the composition and interaction of matter and energy. Teaching strategies focus on the cumulative connection of concepts, quantitative analytical problem solving, inferential problem solving, use of the scientific method, and proper experimental techniques. Experiments illustrate and reinforce the concepts and mathematics learned. While going in depth and covering more advanced topics in chemistry, honors students are expected to learn at an increased pace, held to higher standards, and are given a greater degree of academic freedom and responsibility.

#### **Honors Seminar in Chemistry - Full Year**

#### Honors Chemistry, Must be concurrently taken with Honors Biology, Algebra 2 or Higher, Dept. Approval required

After a brief review of important concepts from Honors Chemistry, this course will focus on advanced topics in preparation for college level courses. The first semester will introduce thermodynamics, reaction rates, equilibrium and oxidation reduction chemistry and nuclear chemistry. The second semester will focus more on organic chemistry, nomenclature, organic reactions, and organic synthesis. This will be a lab based course where you will learn advanced lab techniques such as distillation and purification, gas chromatography, UV-Vis spectroscopy and organic synthesis. The pace will be fast and outside reading/notes, using a flipped classroom, help create more lab time and problem-solving explanations.

# Biology

**Biology** 

#### Full Year - Physics and Chemistry Required

The biology curriculum is based around the essential questions, "What is life?" and "How do living organisms function individually and within their respective environments?" This course covers biochemistry, cell structure and function, cell energetics, genetics, protein synthesis, biotechnology, evolution, and biodiversity. Each unit is designed to cover a series of concepts and theories and is accompanied by hands-on lab work allowing students to see the material they are studying in action. Throughout the study of biology, students will acquire knowledge that will enable them to confront a variety of scientific questions that affect their daily lives and the future of the natural world.

#### **Honors Biology**

## Full Year - Honors Physics & Chemistry, Concurrent with Algebra 2 or higher, Dept. Approval Required

This course includes an in-depth study of many topics including the scientific method, biochemistry, cell structure and function, genetics, evolutionary processes, energetics, biotechnology, classification, and ecology. Lab investigations play a key role in the course. Students will be introduced to experimental design that emphasizes the acquisition of specific skills such as writing and speaking effectively, statistical analysis, and problem solving.

#### **Honors Seminar in Biology**

**Full Year** 

#### Honors Biology, Higher level math, Dept. Approval Required

The Honors Seminar in Biology curriculum has been developed to cover the material of an introductory college biology course. Topics are covered in great depth, laboratory experiments are complex, and the time and effort required of students is significant. This course provides students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology.

## Honors Anatomy & Physiology

#### Full Year - B or Higher in Science Courses

Students who are curious about how their bodies function or are interested in a career in the medical field will enjoy this indepth look at the structures and functions of the human body. Students will engage in experimentation, dissection, and research projects designed to enhance their understanding of the human condition. This course will challenge students' critical thinking skills as they develop a longstanding appreciation for the complexity and beauty of the human body.

#### **Marine Biology**

#### Full Year - Biology or concurrent with Biology

Designed for a student who is interested in the marine environment, this project-based course focuses on marine life and the issues surrounding it. Students need to be able to swim as we take several snorkeling trips to observe the environments first hand.

#### **Environmental Field Research**

#### Full Year - Department Approval Required

Designed for the adventurous, outdoor-loving student in mind! This course covers the major Florida ecosystems and some pressing local environmental issues while helping students develop their research skills. Students go on multiple field trips to explore the local parks, refuges, and preserves of South Florida. Over the semester, students help local organizations to capture answers to pressing environmental questions.

## Artificial Intelligence: Applications, History & Current Issues (Honors Available)

Semester - Open to Sophomores and Above.

#### Co-requisites: Biology, US History, Algebra 2 or higher

subject This course introduces the of Artificial Intelligence (AI) by studying real-world applications past, present, and future. It also addresses the fundamental social and technical issues raised by the existence and pursuit of AI by humanity. This course will treat the subject from a variety of viewpoints and methods, including historical survey and discussion of ethical implications, both historical and hypothetical. This course will include some basic programming and hands-on technical projects. It is meant to provide exposure to the subject with less emphasis on math skills.

Physics, Chemistry and Biology are also available at the survey level. Survey level classes are specifically designed for students with diagnosed learning disorders.



# History

#### **World History**

#### **Full Year - No Prerequisites**

World History is the fascinating story of people and their problems, solutions, failures, and successes. Students will progress through an exploration of global history from the emergence of the human species to the 20th century with a particular emphasis on turning points. Students will hear diverse stories from around the world while gaining a deeper understanding of and appreciation for how the past led to the present. The World History course uses content as a framework for teaching skills; students will creatively reintegrate their knowledge through research, persuasive writing, and spoken dialogue. The course's flipped methodology ensures students receive content input at their own individual pace and allows class time to be reserved for individual conferencing, skill building activities, and application of knowledge.

#### **Honors World History**

#### Full Year - Department Approval Required

This course's curriculum is designed to inspire a fundamental appreciation for the people, events, and forces that have shaped the modern world. In the opening semester, students will explore the foundations of Eastern and Western Civilizations, namely Greece, Rome, China, and Mesopotamia before focusing on events such as the Crusades, Renaissance, Reformation, Ottoman Rule, and Tokogawa Shogunate. For the spring semester, students will explore the Imperial growth of Eastern and Western Empires that led to Global Warfare. Close attention will be paid to the development of each student's skills as a writer, researcher, critical thinker and discussion participant through multi-modal and multi-media projects.

#### **United States History**

#### Full Year - World History

The United States history course is designed to promote knowledge and appreciation of our country's past, present, and future. Students will understand that it is vital to comprehend our past in order to make informed decisions in the present and to positively impact the future. This course promotes a general understanding of the dominant patterns of American thought from colonial days through the Cold War. This course will help students develop an understanding of the social, political, economic, cultural, and military experiences that have played a crucial role in shaping the history of our country. Upon successful completion of this course, students will be better prepared to understand the significance of our country's history and our place in the world. The course emphasizes comprehension of higher-level text and analysis of primary and secondary texts together with associated maps, graphs, and pictoral materials.

#### **Honors United States History**

#### Full Year - World History and Dept. Approval

This offering is for students who are ready to meet the demands of college-level work. This course emphasizes post-1750 history, The U.S. Constitution, and the American political system. Considerable emphasis is placed on analytical writing skills and the factual knowledge necessary to deal critically with the challenges that faced the country in the past. Students are expected to read the class text, as well as primary sources, then be able to apply that knowledge to answering analytical and document-based essays.

#### **Honors Seminar United States History**

#### Full Year - Co-requisite Honors Sem English 2, Dept. Approval Required

This course explores fundamental questions about the history of the United States at the very highest academic level. How is American identity defined, maintained, and redefined? How do patterns of individualism and community diverge and converge? How have political systems, social structures, culture, and the economy in the United States evolved? To answer these and other questions, we will study primary sources and develop ideas both through discussion and formal and informal written responses. This is a university-level course, and as such, the readings, conversations, and essays will be rigorous and briskly paced. By the end of the year, students will be able to articulate sophisticated, nuanced positions on American history from the Colonial Era to the Cold War.

#### **Honors Seminar: Special Topics History Elective**

Full Year - Co-requisite: Honors Sem English 2, Dept. Approval This elective provides students with an opportunity to take a deep dive into a crucially important and narrowly defined historical theme, event, movement, or time period. While the topical focus of the course changes on an annual basis, and will be announced in advance of course selection, the skills focus of the course remains consistent. Students in this course will be provided with advanced instruction in historical research methodology and research paper composition. Students will demonstrate competence in research skills through the completion of an extended investigative project based on a research question of their own genesis. This course provides qualifying students considering a Social Science major with a unique and advantageous opportunity to develop historical thinking and research skills that are essential to success within the field.



Semester - United States History

This one-semester course is an introduction to the philosophical underpinnings, institutional structures and processes that comprise the United States government. The course revolves around two fundamental questions; What does it mean to live under a democratic system of government? What obligations and opportunities do citizens have for civic engagement? Skills include analytical writing, research, debate, dialogue and group work. This course seeks to create socially and politically informed students who possess the ability to make future decisions that will ensure their role as active, informed citizens.

#### **Honors U.S. Government**

#### Semester - United States History & Dept. Approval

US Government is the study of the formal and informal structures of government and the processes of the American political system. This course introduces students to key political ideas, institutions, policies, roles, and behaviors that characterize the political structure of the United States. This course includes both the study of general concepts used to interpret US government and politics and the analysis of specific examples of historical and contemporary policy decisions. Students will creatively reintegrate their knowledge through hands-on experiences driven by research, collaboration, and technology. A variety of assessments will test knowledge of content.

#### **Honors Seminar U.S. Government**

#### Semester - United States History & Dept. Approval

This course provides a college-level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behaviors. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments.

#### **Economics**

#### Semester - Open to Grades 11 & 12

Economics students will learn how scarcity impacts choice and resource allocation. These themes are considered from a range of viewpoints including the individual consumer, small businesses, national governments, and the global economy. Key topics include the laws of supply and demand, forms of business, government finances and influence, market types, economic systems, price, inflation, and unemployment. The course also makes connections to students' prior knowledge of history and politics.

#### **Honors Economics**

#### Semester - Open to Grades 11 & 12 with Dept. Approval

Honors Economics explores the principles of economic theories and relates them to "the ordinary business of life" (Alfred Marshall). Students will learn about scarcity and how the study of scarce resources led to the disciplines of microeconomics and macroeconomics. An emphasis will also be placed on the individual's role in the global economy with a concentration on contemporary economic and financial issues. Students in the honors course will also engage with pertinent economic models and higher-level graphing skills pertinent to the field. Finally, the class will participate in the Florida Stock Market Challenge and learn the basics of investing.

#### **Honors Seminar Economics**

#### Semester - Open to Grades 11 & 12 with Dept. Approval

This course provides students with a fundamental understanding of microeconomics and macroeconomics at an advanced level. Students will learn how to graph and analyze supply and demand models, market structures, and externalities. Students will also analyze economic data and explore macroeconomic models. An emphasis will be placed on the impact of monetary and fiscal policy on the economy. Through economic case studies, students will debate current economic issues and be challenged to think critically about how economics impacts their daily lives.



#### **Honors Seminar Microeconomics**

Semester - Economics, concurrent with Honors Pre-Calculus, Dept. Approval Required.

Microeconomics is the study of individuals and firms. Typically, microeconomics attempts to explain the relationships between scarcity and choice, individual actions, business decision making, and the production process and marginal analysis. Students will study optimality, irrationality, externalities, markets, and utility theory of choice.

#### **Honors Seminar Macroeconomics**

Semester - Economics, concurrent with Honors Pre-Calculus, Dept. Approval Required.

Macroeconomics is the study of the whole economy and attempts to explain the relationships between economic growth, unemployment, inflation, interest rates, trade, and other economic factors. Students will study the business cycle, aggregate demand and supply, fiscal policy, monetary policy, and several macroeconomic theories. The course will conclude with a capstone project where students simulate a meeting of the Federal Reserve.

#### **Entrepeneurship 1**

Semester - Open to Grades 10 - 12

This class concentrates on the philosophy of entrepreneurship. We will ask questions such as: What is entrepreneurship, and can it be taught? We will then go through the process of creating a business and consider ways to grow a successful business. The goal of the class is not to turn every student into a small business owner but instead to encourage entrepreneurial thinking as they make everyday decisions.

#### **Entrepeneurship 2: Entrepreneurial Finance**

Semester - Entrepeneurship 1

This course expands on concepts from Entrepreneurship 1 by exploring the formal tools of venture development. We will cover the time value of money, the process of making a business plan, and how to read and understand financial statements, among other topics.

#### **Free Enterprise Institute Series**

#### Financial Markets 1

**Semester - Economics** 

This course provides a foundation for learning about financial markets. Students will explore the fundamentals of bonds, stocks, forex, options, and futures. A particular emphasis will be placed on how financial markets work and their impact on the economy. Students will also learn how to use fundamental and technical analysis to evaluate financial instruments. Current financial topics will also be covered such as cryptocurrency, meme stocks, and the increased role of technology in trading. In this interactive course, students will manage a mock portfolio to gain experience with investing.

#### **Financial Markets 2**

Semester - Financial Markets 1

In this semester course, students will build upon the knowledge learned in Financial Markets and apply those skills to the study of portfolio theory and application. Students will learn the basics of portfolio theory and management, taking a holistic view of financial markets. Topics such as risk management, diversification, and efficient markets will be discussed. Students will apply what they learn using a realistic investment simulator trading stocks, bonds, options, and futures in a mock portfolio with a concentration on portfolio management. Students will present their portfolios at the end of the semester, analyzing their performance. In addition, the class will be given the opportunity to manage a real portfolio of around \$5,000 from the class of 2008. This course aims to be interactive and practical, leading to a lifetime of investing.





#### **Psychology**

#### Semester - Open to Grades 10-12

This course is a study of human behavior and mental processes from diverse perspectives. Topics include psychology as a science, social psychology, biological bases of behavior, sensation and perception, and states of consciousness. Students will participate in and analyze research studies illustrating core content and processes in various fields of psychology and engage in individual research of psychological topics.

#### **Social Psychology**

#### Semester - Psychology

Social psychology focuses on the perceptions, thoughts, feelings, and behaviors of individuals and groups within a social context. Students will study the perspectives, research methods, and empirical findings of social psychology. Topics to be covered include impression formation, conformity, prosocial behavior, interpersonal attraction, persuasion, stereotyping, and prejudice.

#### Honors Seminar Abnormal Psychology 1

#### Semester - Social Psychology, Department Approval

This course introduces students to fundamental concepts, scientific principles, and history underlying abnormal human behavior. The course will be structured to facilitate learning about psychopathological behavior, which will be explored from various theoretical frameworks, including psychological, biological, and sociocultural perspectives. Psychiatric disorders will be discussed according to DSM-V diagnostic criteria, with special attention paid to etiological considerations and disorder-specific descriptions. Specific disorders to be reviewed include mood, anxiety, depression, posttraumatic stress disorder, and suicide. Current empirically based treatments for mental disorders will also be reviewed.

## Honors Seminar Abnormal Psychology 2 Semester - Honors Seminar Abnormal Psychology 1

This course is a continuation of the fundamental concepts and scientific principles underlying abnormal human behavior. Psychiatric disorders will be discussed according to DSM-V diagnostic criteria. Specific disorders to be reviewed include eating, body, schizophrenia, sexual, personality, aging, phobia, and child spectrum disorders (e.g., attention deficit/hyperactivity disorder, conduct disorder, etc.). Current empirically based treatments for mental disorders will also be reviewed.



# Health & Wellness

#### Lifetime Health and Wellness

#### Full Year - Required Freshman Year

This required course is a blend of Introduction to Leadership and Personal Development, Health and Physical Education. The first quarter of this course will allow students to explore the foundation of individual social identity, the connection of the human spirit, and the collaboration needed to work for a greater purpose. The remainder of this course will enable students to obtain the knowledge and skills necessary to develop and maintain a health-enhancing level of fitness and to increase physical competence, self-esteem, and the motivation to pursue lifelong physical activity and develop lifelong positive attitudes related to personal health, including mental, emotional, and social health. Health topics include personal health and communicable disease, stress management, nutrition and physical activity, drug awareness, safety and injury prevention, peer pressure, bullying and human sexuality.

#### **Pilates Fusion**

#### Semester - Open to Grades 10 - 12

This course is designed to provide students the opportunity to explore an alternative type of fitness in a small class setting that does not involve the weight room. This course is a Pilates-based, ballet-inspired workout that utilizes barre, mat Pilates, cardio, and strength training techniques. This fusion style class focuses on the core and emphasizes moves that will tone, stretch, and elongate muscles.

#### **Strength and Conditioning 1**

#### Semester - Open to Grades 10 - 12

Strength and Conditioning 1 is a basic level course for students who are new to the weight room, cardio equipment, and conditioning programs. This class is designed to familiarize students with the weight room and develop a fundamental understanding of strength and conditioning concepts. Multiple forms of resistance exercise, including free weights, weight machines, resistance bands, and conditioning/ agility activities will be incorporated to promote improvement of muscular strength, cardiovascular endurance, flexibility, agility, speed, balance, and core strength. Students will be instructed on proper lifting technique, basic strength and conditioning principles, nutritional considerations, and appropriate hydration.

## Strength and Conditioning 2 Semester - Open to Grades 10 - 12

Strength and Conditioning 2 is designed to provide students with educational instruction to promote high-quality workouts while minimizing the risk of injury. Building upon concepts learned in Strength and Conditioning 1, students will use multiple forms of resistance exercise, conditioning and agility activities to promote improvement of muscular strength, cardiovascular endurance, flexibility, agility, speed, balance, and core strength. Students will also study program design and will be able to create personalized and effective workouts for a variety or fitness goals.

#### Health & Wellness



#### **Sports Medicine 1**

#### Fall Semester - Open to Grades 10 - 12

This course is designed for students interested in sports medicine-related fields. Sports Medicine 1 is an introductory course that provides an overview of various aspects of the sports medicine field. This course will provide basic knowledge of sports medicine professions, injury prevention, anatomy and exercise physiology, and current issues related to sports related injury. The purpose of the First Aid portion of this course is to provide training in the skills necessary to make appropriate decisions regarding first aid care and how to provide care for injuries or sudden illness until professional medical help arrives. This course will also provide instruction for breathing emergencies, performing adult and pediatric CPR, and using an automated external defibrillator (AED) for victims of sudden cardiac arrest. At the completion of this course, students will receive certification by the American Heart Association that is valid for two years.

#### **Sports Medicine 2**

#### Fall Semester - Sports Medicine 1

This course provides detailed information regarding anatomy, kinesiology, etiology of injury specific to body parts, biomechanics, and injury rehabilitation. The material builds on the information taught in Sports Medicine 1 and provides further knowledge on topics regarding injury assessment, injury pathology and clinical practices. Sports Medicine 2 is designed to be a hands-on course with mandatory volunteer hours and internship work in the Oxbridge Health and Wellness clinic, as well as with one of the Oxbridge athletic trainers during practices and games.

#### Yoga

#### Semester - Open to Grades 10 - 12

This course is designed to safely introduce students to the benefits of yoga through postures, breathing techniques, and relaxation methods appropriate for all fitness levels. The emphasis of the class will be on asanas (poses) and vinyasa (flow) for increased flexibility and energy, improved health, and stress reduction. As the students progress in their yoga practice, there will be opportunity to explore advanced asanas and breathing techniques and experience other forms of yoga including hatha, vinyasa and power yoga.

#### Zumba

#### Semester - Open to Grades 10 - 12

Zumba is an interval style cardio-based workout with components of resistance training. It incorporates Latin and International music and dance moves to integrate some of the basic principles of aerobic, interval, and resistance training to maximize caloric output, cardiovascular benefits, and total body toning to achieve fitness goals. It includes easy to follow dance and fitness moves that students of all fitness levels and non-dancers can enjoy and benefit from.

