



OXBRIDGE
ACADEMY

COURSE CATALOGUE

— **2023 - 2024** —

PREFACE

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

Placement tests and teacher recommendations are used to offer students courses that appropriately match their skill level and promote success and engagement. Honors courses are more demanding and operate on an accelerated pace, challenging the most well-prepared students. Honors Seminar classes are the most rigorous courses offered by Oxbridge. They are taught at the college level and include 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 admission requirements. Since most successful college applicants exceed minimum graduation requirements, we recommend that candidates take the most rigorous academic program available to them that they can handle without undue stress.

Typically, a study hall is required for all ninth 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.

A student's ability to enroll in an elective is dependent upon seat availability in the requested course. Each year, students can choose up to three electives in order of priority. If you do not receive your primary choice, we will attempt to enroll you in your alternate choices if possible. Please know there are no guarantees, and core courses take precedence over electives.



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GRADUATION REQUIREMENTS

ENGLISH | 4 Credits

All students are required to complete 4 credits of English.

MATH | 4 Credits

All students are required to complete 4 credits of Math while in high school. All students must show completion of Algebra I, Geometry, and Algebra II prior to graduation.

SCIENCE | 3 Credits

All students are required to earn one credit each in Physics, Chemistry, and Biology.

SOCIAL SCIENCES | 3 Credits

All students are required to earn one credit in World History, United States History, and Government and Economics.

WORLD LANGUAGES | 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.

FINE ARTS | 2 Credits

Two credits of Fine Arts. Students are encouraged to take one credit during their freshman year.

HEALTH & WELLNESS | 1 Credit

All students must complete Lifetime Health & Fitness.

ELECTIVES | 4 Credits

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

THINGS TO KNOW

- Students earn one credit for a year-long course and .05 credit for a semester course. Course credits are awarded only at the end of the course. Oxbridge does not offer quarter-long courses.
- Students must earn a minimum of 24 credits to graduate. Graduation requirements reflect the minimum requirement; many students exceed graduation requirements.
- Students must enroll in seven courses per semester unless they have prior permission for a reduced schedule from the Academic Dean.
- Students should meet with their advisor and college counselor annually to develop a four-year plan that will help them achieve their academic goals.
- Requested exceptions to graduation requirements will be considered on an individual basis by the Assistant Head of School.
- Oxbridge Academy reserves the right to evaluate each student's transcript at the time of entrance to determine which transfer credits can be used to meet Oxbridge Academy graduation requirements.
- Online Learning courses may not be taken for Oxbridge credit in lieu of Oxbridge Academy courses unless there is an irresolvable scheduling conflict and written approval from the Assistant Head of School.

FINE ARTS

VISUAL ARTS



2D ART

STUDIO ART: DRAWING I

SEM - No Pre-Requisite

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. Through this course, students will have the opportunity to draw from observation as well as from their own interests for themed drawings. This course prepares students for all advanced level 2D Art courses.

STUDIO ART: DRAWING II

SEM - Drawing I Required

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.

STUDIO ART: PAINTING I

SEM - No Pre-Requisite

This introductory painting class, teaches proper safety, tools, and techniques of each medium 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 II

SEM - Painting I Required

Painting II 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.

2D ART 3

SEM - Drawing II OR Painting II Required

This course focuses on utilizing several traditional art-making techniques to create more dynamic compositions. Building on drawing and painting skills, students are encouraged to create and destroy; work with layers; and utilize a variety of materials to express their individual vision. Projects range from abstract to representational, as developed from personal interests, social topics, and historical and contemporary art influence.

2D ART 4

SEM - 2D Art 3 Required

This course focuses on utilizing several traditional art-making techniques to create more dynamic compositions. Building on drawing and painting skills, students are encouraged to create and destroy; work with layers; and utilize a variety of materials to express their individual vision. Projects range from abstract to representational, as developed from personal interests, social topics, and historical and contemporary art influence.

3D CONSTRUCTION & DESIGN I

SEM - No Pre-Requisite

This course introduces students to design and building methods that help them to develop an understanding of 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.

CERAMICS I

SEM - No Pre-Requisite

Students in Ceramics I are introduced to basic processes of making both traditional and contemporary sculptural works in clay through handbuilding methods. Students will explore historical examples of ceramic vessels as well as modern, influential ceramic artists who 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 II.

3D CONSTRUCTION & DESIGN II

SEM - 3D Construction & Design I Required

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 II

SEM - Ceramics I Required

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

MIXED MEDIA SCULPTURE I

SEM - No Pre-Requisite

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. Upon completion of this course, students may choose to move on to other 3D art classes such as Mixed Media Sculpture II, Ceramics, or 3D Construction & Design.

MIXED MEDIA SCULPTURE II

SEM - Mixed Media Sculpture I or 3D Construction & Design I Required

Students will build upon skills learned in the first Mixed Media Sculpture 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 sculpturing. Throughout the semester students will study methods of sculpting embraced by contemporary sculptors while building their portfolio and design skill set.



DIGITAL GRAPHIC DESIGN I

SEM - No Pre-Requisite

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.

VIDEOGRAPHY I

SEM - No Pre-Requisite

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.

MOTION GRAPHICS ANIMATION I

SEM - Digital Graphic Design II Required

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 a lyric video.

SOCIAL MEDIA MARKETING

New for 2023-24! - SEM - No Pre-Requisite | Fine Arts Credit

Students are introduced to digital marketing philosophies and techniques to prepare them for producing promotional materials across various social media platforms. Students will examine the inner workings of the most prevalent networks, studying algorithms, analytics, advertising, organic marketing, viral marketing, data collection, as well as recent trends that impact the world of marketing. Students will create written blogs, social media posts, photograph products, and produce video commercials for their personal or selected brand promotion to provide students with the tools necessary for social media content management.

DIGITAL GRAPHIC DESIGN II

SEM - Digital Graphic Design I Required

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.

VIDEOGRAPHY II

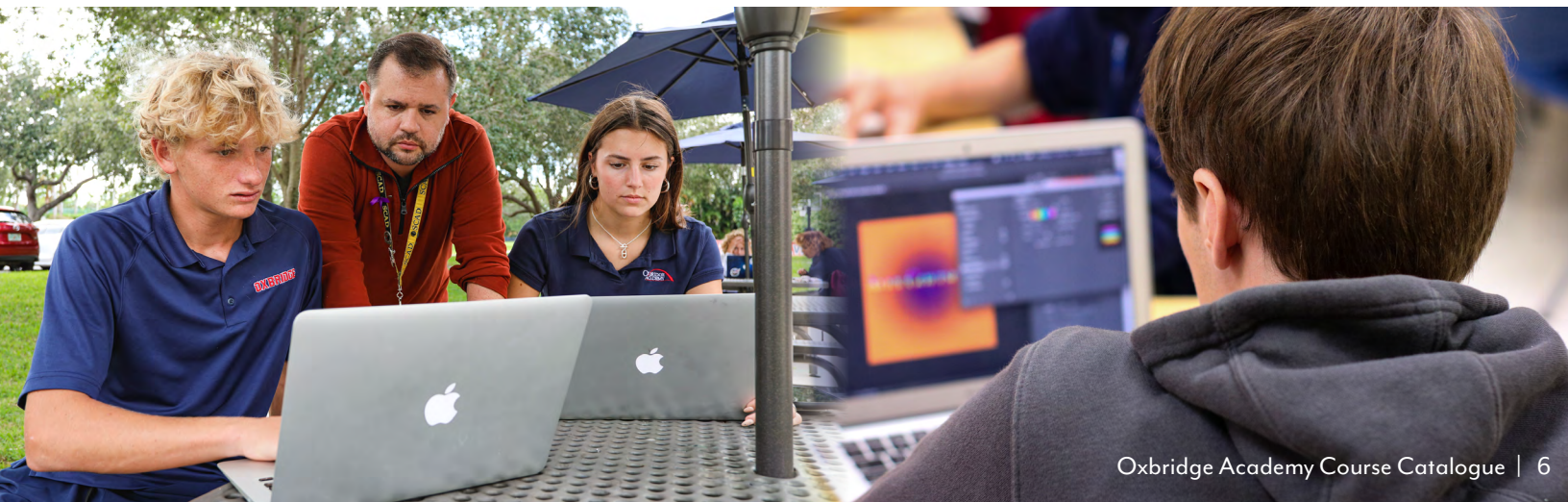
SEM - Videography I Required

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 recutting movie trailers, dynamic interviews, and movie shorts in different genres.

MOTION GRAPHICS ANIMATION II

SEM - Motion Graphics Animation I Required

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.



PHOTOGRAPHY

PHOTOGRAPHY I

SEM - No Pre-Requisite

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 II

SEM - Photography I OR Instructor Approval Required

This course is a continuation of Photography 1 and 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 DIGITAL MULTIMEDIA PRODUCTION - YEARBOOK

YEAR - English Credit - Honors English Required

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 in teams in accordance with their areas of focus such as photography, design, writing, and marketing, under the leadership of student editors.

PORTFOLIO DESIGN

HONORS PORTFOLIO DESIGN I

YEAR - 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 II

YEAR - Instructor Approval Required

This course is a continuation of Portfolio Design 1 and 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.

ART HISTORY

HONORS ART HISTORY: AMERICAN ART AND CULTURE

SEM - History Credit – No Pre-Requisite

Over the 20th century, America became recognized as one of the most, if not the most, powerful artistic and cultural forces in the world. This course will study why and how this came about ranging from 1900-1950, examining significant artistic achievements in the context of the culture that helped shape them.

FINE ARTS

PERFORMING ARTS



THEATER

ACTING

SEM - No Pre-Requisite

This course will teach the fundamentals of concentration, imagination, and improvisation through games and exercises in scene work and 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

SEM - No Pre-Requisite

This course will teach the 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 Oxbridge productions in a variety of ways. Physical work required.

PERFORMANCE ENSEMBLE

YEAR - Audition & Instructor Approval Required

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, and the English-Speaking Union Shakespeare Monologue Competition. Students enrolled in this class will have priority sign up for the five 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.



MUSIC



DIGITAL MUSIC

SEM - No Pre-Requisite

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 music theory and composition and the skills to create musical tracks for digital movies and other audio-visual projects.

STUDIO RECORDING & PRODUCTION

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. Completion of Digital Music 1 and 2 is preferable.

ROCK & CONTEMPORARY MUSIC ENSEMBLE

YEAR - No Pre-Requisite

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

YEAR - No Pre-Requisite

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.

STRINGS CHAMBER ENSEMBLE

YEAR - No Pre-Requisite

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.

JAZZ ENSEMBLE

YEAR - Departmental Approval Required

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

CHORALE

YEAR - Departmental Approval Required

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.

GUITAR

SEM - No Pre-Requisite

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.

BEGINNING PIANO

YEAR - No Pre-Requisite

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.



DANCE



DANCE FOUNDATIONS

SEM - No Pre-Requisite

This course emphasizes ballet and 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 REPERATORY

SEM - Instructor Approval 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.

ENGLISH DEBATE



DEBATE 1

YEAR - Offered at Regular & Honors Level - No Pre-Requisite

Students learn and try eight 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 interpersonal and work-world communication strategies and real-world applications/public speaking formats, such as job interviewing and written and oral presentation skills.

DEBATE 2

YEAR - Debate 1 or Instructor Approval Required

Debate 2 builds on the fundamentals taught in Introduction to Speech and Debate. This course is meant for students who are looking for a less competition-focused debate class. The course focuses on current event issues related to economics, government policy, international relations, and contemporary social issues facing the U.S. and the world. This course focuses on practical discussion and debate of contemporary topics, giving special weight to informal argumentation and critical thinking. Through lectures, seminars, readings, and in-class debate, students will continue to develop their ability to articulate their views, as well as analyze opposing viewpoints.

HONORS DEBATE 2 - COMPETITION DEBATE

YEAR - Offered at Regular & Honors Level - Debate 1 or Instructor Approval Required

This class builds on the fundamentals taught in Introduction to Speech and Debate, giving special weight to developing the skills needed for competing in Speech and Debate tournaments at the national level. The course focuses on an in-depth analysis of issues related to economics, government policy, international relations, as well as relevant social issues. Specific focus is given to understanding and deconstructing opposing viewpoints. Students will develop the skills needed to actively and successfully participate in Speech and Debate tournaments. Over the course, students will engage in advanced critical thinking, case construction, flowing techniques, and rhetorical development. Students are required to participate in four tournaments over the course of the year.

HONORS SEMINAR DEBATE 3 - VARSITY COMPETITION DEBATE

YEAR - Instructor Approval Required

Debate 3 focuses on a critical analysis of arguments and honing rhetorical ability. Students will engage with arguments written by NGO's, governments, and individual policy makers to critically review the premises, logic, and impacts of the 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. Students focus on their rhetorical technique and develop the skills needed for persuasion and effective argument presentation. Regular participation in tournaments is required for all students.

HONORS SEMINAR DEBATE 4 - ADVANCED COMPETITION DEBATE

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 on 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 written and enacted policies and their long-term impacts. Students will analyze these policies through the lens of short-term and long-term impact and apply this skill to national speech and debate association topics. Debate 4 will also focus on critical analysis of rhetorical analysis in both written and video texts to continue bolstering students' written and oral communication. Regular participation in tournaments is required. Students will complete an approved practicum assignment before the end of the course.

ENGLISH



ENGLISH 1

YEAR - No Pre-Requisite

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

YEAR - Dept. Approval Required

This course surveys classic and modern literature where 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 the art of Socratic discussion as it relates to literature; 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

YEAR - English 1 Required

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

YEAR - English 1 & Dept. Approval Required

This course 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

YEAR - Honors English 1 & 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

YEAR - English 2 Required

Students will read works of fiction, nonfiction, poetry, personal narrative, and drama that focus on the efforts of individuals to develop empathy and make a difference in their social 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

YEAR - English 2 & Dept. Approval Required

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 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. Students are expected to read a significant number pre-20th century texts.

HONORS SEMINAR ENGLISH 3: BRITISH LITERATURE

YEAR - English 2 and Dept. Approval Required

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*

SEM - Offered at Regular & Honors Level - English 3 | Required for all Seniors NOT enrolled in Honors Seminar English 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.

ENGLISH 4 COURSES

ENGLISH 4: FILM AS LITERATURE

SEM - Offered at Regular & Honors Level - English 3 Required

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 various films from a variety of genres, much the same we study great literature. Plot or story line, character development, setting and context, theme or message, and the author's intent are all closely examined. Students will understand the mechanics of film as a storytelling vehicle and use technical filmmaking terms in their analysis. Numerous critical analysis essays and one major research paper is required.

ENGLISH 4: AFRICAN AMERICAN LITERATURE

SEM - Offered at Regular & Honors Level - English 3 Required

African American Literature is a semester-long course that uses texts, film, and music by African Americans as primary entry points into historical and contemporary conversations about race and racism, community, the impact of slavery and the diaspora, cultural traditions and cultural appropriation, mainstream and underground hip-hop, materialism, and consciousness.

ENGLISH 4: PRACTICAL WISDOM

SEM - Offered at Regular & Honors Level - English 3 Required

This course focuses on entrepreneurial and thought-provoking literature and personal and professional growth. Students will be required to keep a detailed 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.

ENGLISH 4: CONTEMPORARY WOMEN'S LITERATURE

SEM - Offered at Regular & Honors Level - English 3 Required

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.

HONORS SEMINAR ENGLISH 4: GREAT BOOKS

YEAR - Honors Seminar English 3 Required

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 *Crime and Punishment*, Shakespeare's *King Lear*, and Melville's *Moby Dick*.

CREATIVE WRITING I

SEM - Open to Sophomores, Juniors, and Seniors

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 II

SEM - Creative Writing I Required

This course offers students the opportunity to deepen their writing experience. Various genres will be considered including poetry, fiction, creative nonfiction, screenwriting, 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 I.



WORLD LANGUAGES



SPANISH

SPANISH 1

YEAR - No Pre-Requisite

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

YEAR - Offered at Regular and Honors Level - **Spanish 1 Required**

Students will work on developing 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

YEAR - Offered at Regular and Honors Level - **Spanish 2 Required**

Students in Spanish 3 will expand the depth and breadth of their 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

YEAR - Offered at Regular and Honors Level - **Spanish 3 Required**

Spanish 4 is an advanced-level course designed to improve students' communicative skills in Spanish through a variety of contexts, with an emphasis on spoken communication. 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-mid levels of proficiency.

SPANISH 5

YEAR - Offered at Regular and Honors Level - **Spanish 4 Required**

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.

HONORS SEMINAR IN SPANISH LANGUAGE & CULTURE

New for 2023-24! YEAR - Honors Spanish 5 and Dept. Approval Required

This course develops language mastery with a focus on interpretive, interpersonal, and presentation skills. Students sharpen their communication skills through advanced study and rigorous grammar, literature, and culture. Students learn about culture through the use of authentic materials that are representative of the Spanish-speaking world. Honors Seminar Spanish Language and Culture is a language acquisition course designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where Spanish is spoken. This class is conducted completely in Spanish.

SPANISH FOR HERITAGE SPEAKERS

YEAR - Dept. Approval Required

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.

FRENCH

FRENCH 1

YEAR - Offered at Regular and Honors Level - No Pre-Requisite

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

YEAR - Offered at Regular and Honors Level - 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

YEAR - Offered at Regular and Honors Level - 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 how to talk about the future and 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

YEAR - Offered at Regular and Honors Level - French 3 Required

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 LANGUAGE AND CULTURE I & II

YEAR - French 4 and Dept. Approval Required

Honors Seminar in French 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.

CHINESE

HONORS CHINESE 1

YEAR - No Pre-Requisite

This course is designed for students who have had no prior experience in Chinese language and are interested in learning basic Chinese language and culture. Oral communication will be emphasized 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 3

YEAR - Chinese 2 & Dept. 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.

HONORS CHINESE 5

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.

HONORS CHINESE 2

YEAR - Chinese 1 & Dept. Approval Required

Students continue their study of Chinese by 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 4

YEAR - Chinese 3 & Dept. 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.

ASL

AMERICAN SIGN LANGUAGE 1

YEAR - No Pre-Requisite

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

YEAR - Offered at Regular and Honors Level - ASL 1 Required

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

YEAR - Offered at Regular and Honors Level - ASL 2 Required

American Sign Language 3 is based on nonverbal foundation and focuses on developing expressive and receptive skills in American Sign Language. The purpose of this course is to enable students to develop basic skills in American Sign Language through a linguistic, communicative, and cultural approach to language acquisition. Emphasis is placed on receptive and expressive signing, applied grammar, and real-life applications.

MATH



ALGEBRA I

YEAR - Offered at the Regular and Plus Level - 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.

GEOMETRY

YEAR - Offered at the Regular, Plus, and Honors Level - **Algebra I Required, Dept. Approval Needed for Honors**

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.

ALGEBRA II

YEAR - Offered at the Regular and Plus Level - **Geometry Required**

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 II HONORS

YEAR - **Minimum "B" Average in Honors 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 as well as trigonometric functions, formulas, graphs, and identities. Topics are taught at a greater depth than Algebra 2. Students are expected to synthesize and apply the material beyond examples discussed in class.

TRIGONOMETRY

SEM - **Algebra II Required**

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

SEM - **Algebra II Required**

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 (**NOT OFFERED FOR 2023-2024**)

SEM - **Selected Topics in Mathematics Required**

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

SEM - Open to Seniors Only

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 *The Richest Man in Babylon* by George S. Clason.

PRE-CALCULUS

YEAR - Algebra 2 Required

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.

HONORS PRE-CALCULUS

YEAR - Minimum "B" Average in Honors Algebra II & Dept. Approval

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

DESCRIPTIVE STATISTICS & PROBABILITY

SEM - Pre-Calculus Required

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. The students will also explore probability, including learning how to find compound and conditional probabilities.

INFERENTIAL STATISTICS

SEM - Descriptive Statistics & Probability Required

This course builds upon all the ideas learned in Descriptive Statistics & 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 & STATISTICS

SEM - Honors Pre-Calculus Required

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.

INTRODUCTION TO CALCULUS

SEM - Descriptive Statistics & Probability Required

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

APPLICATIONS OF CALCULUS: BUSINESS (NOT OFFERED FOR 2023-2024)

SEM - 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

SEM - Minimum "B" Average in Honors Pre-Calculus & Dept. Approval

This course introduces 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

SEM - Minimum of a "B" Average in Honors Calculus A & Dept. 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

YEAR - Honors Seminar Calculus B Required

Multivariable Calculus is the calculus of the 3-D 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 (**NOT OFFERED FOR 2023-2024**)

YEAR - Honors Seminar Calculus B Required

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.



DIGITAL LOGIC

DIGITAL LOGIC I

SEM - Corequisite: Honors Algebra II or Algebra II Plus

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, flip-flops, memory, and finite state machines.

DIGITAL LOGIC II

SEM - Digital Logic I Required.

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.

COMPUTER SCIENCE



HONORS COMPUTER SCIENCE I

YEAR - Must be enrolled in Algebra II or Higher

This course 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 II

YEAR - Honors Computer Science I Required.

Honors Computer Science II is a course similar in structure to Honors Computer Science I 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.

HONORS WEB APPLICATION PROGRAMING

YEAR - Honors Computer Science II 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 as JavaScript, languages for database information retrieval such as SQL/MySQL, and markup languages such as HTML and CSS.

HONORS UNITY GAME DEVELOPMENT IN C#

(NOT OFFERED FOR 2023-2024)

YEAR - Honors Computer Science II Required

Students will learn how to create 2D and 3D video games using the Unity Game Development engine. During this time, students will develop proficiency in the C# programming language, as well as learn game physics and the basics of user interface design.

HONORS MATHEMATICS AND PHYSICS PROGRAMMING (NOT OFFERED FOR 2023-2024)

SEM - Honors Computer Science II Required

Students will use Processing, a flexible software sketchbook, to model topics that they have learned throughout their math and physics careers. Processing allows for graphical programming in a much more intuitive and natural way than the provided graphical user interface packages traditionally included with languages such as Java or Python.

HONORS SEMINAR ARTIFICIAL INTELLIGENCE & COMPUTATIONAL MODELING I

SEM - One Semester of Calculus

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 & COMPUTATIONAL MODELING II

SEM - Honors Sem. AI & Computational Modeling I Required

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. as learn game physics and the basics of user interface design.

SCIENCE



PHYSICS

YEAR - No Pre-Requisites

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

YEAR - Concurrent with Honors Algebra II, Honors Geometry or higher

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 an advanced mathematics class.

HONORS SEMINAR IN PHYSICS - MECHANICS

YEAR - Honors Physics, Calculus, and Dept. Approval Required

The curriculum 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. Calculus is embedded in the second semester topics.

HONORS SEMINAR IN PHYSICS - ELECTRICITY & MAGNETISM

YEAR - Honors Physics, Honors Seminar in Physics Mechanics, Calculus, and Dept. Approval

The curriculum has been developed to cover the material of an introductory college physics course. The study of electricity and magnetism includes the description of the motion of charges and currents using electric and magnetic fields and potentials. Topics covered include electrostatics, magnetism, electromagnetic induction, and waves. Familiarity with differential and integral calculus is assumed, and all the topics studied will make use of this level of math.

HONORS SEMINAR IN PHYSICS - MODERN PHYSICS

YEAR - Honors Physics, Honors Seminar in Physics Mechanics, Calculus, and Dept. Approval

We continue our study of physics introducing the subjects of Special Relativity, Quantum Mechanics, and Cosmology. Acquaintance with differential and integral calculus is assumed, as well as introductory classical mechanics and 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.

AVIATION



AVIATION 101

SEM - No Pre-Requisite

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 five hours in a full-motion Cessna 172 flight simulator.

AVIATION 201

SEM - Aviation 101 Required

In this project-based course, students will study the history of the space program, satellites, rocketry, human physiology and space flight. We will learn about careers in this industry and possibly take a trip to the Kennedy Space Center. Students will continue their flight training in the flight simulator over the semester.

AVIATION 301

SEM - Aviation 201 Required

Aviation 301 will cover the physics of flight to a much deeper level than Aviation 101 and 201, 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

SEM - Aviation 301 Required

In this course, the emphasis will be on aeronautical and aerospace engineering. Students will learn to classify aircraft by type, explore UAS (Drones) and learn about air density and how it affects airplane performance. We will also learn about the four forces of flight, aircraft stability and design characteristics.

AVIATION 501

SEM - Aviation 401 and Dept. Approval Required

This course teaches a student 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. This course is by recommendation only.

AVIATION 601

SEM - Aviation 501 and Dept. Approval Required

Aviation 601 will expose students to actual FAA test questions that they can expect to see on the Private Pilot Knowledge test. This course is suited for those students pursuing an aviation career and may already be in flight training. Topics will include Weather Theory as it applies to Aviation, Weather Services available to pilots, pre-flight planning, airport operations including Airport markings and signs, traffic pattern procedures and ATC communications. We will also review the different types of aeronautical charts pertinent to aviators.

ASTRONOMY - SOLAR SYSTEM

SEM - Co-Requisite: Algebra II

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. Through it all we ask, where do we come from and where are we going?

ASTRONOMY - EVOLUTION OF THE UNIVERSE

SEM- Co-Requisite: Algebra II

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

CHEMISTRY

CHEMISTRY

YEAR - Physics Required

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

YEAR - Concurrently taking Honors Algebra II or higher-level Math course, Honors Physics, and Dept. Approval Required

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

YEAR - Honors Chemistry, concurrently with Honors Biology, Algebra II, and Department 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.

FIELD RESEARCH

ENVIRONMENTAL FIELD RESEARCH

YEAR - Dept. 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. Throughout the semester, students perform hands-on field projects to collect data, all while helping local organizations capture answers to pressing environmental questions.

BIOLOGY

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?” Topics that are covered in this course include 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

YEAR - Honors Physics, Honors Chemistry, Algebra 2 or higher-level Math, and Dept. Approval Required

This course includes an in-depth study of a range of topics including the scientific method, biochemistry, cell structure and function, genetics, evolutionary processes, energetics, biotechnology, classification, and ecology. Laboratory investigations play an integral role in the course. Students will be introduced to experimental design with an emphasis on the acquisition of specific skills that include writing and speaking effectively, statistical analysis, and problem solving.

HONORS SEMINAR IN BIOLOGY

YEAR - Honors Physics, Honors Chemistry, Honors Biology, Algebra 2 or higher-level math, and 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.

MARINE BIOLOGY

YEAR - Pre-requisites: Physics, Chemistry | Co-requisite: Biology

Designed for a student who is interested in the marine environment, this course focuses on marine life and the issues surrounding it. It is a project-based class aimed at self-directed learning. Confident swimmers will be able to explore the marine environment first-hand on class snorkeling trips, as we take several snorkeling trips to observe environments firsthand. These trips include seining with Florida Fish and Wildlife and FAU Pine Jog, snorkeling Blue Heron Bridge and the Florida Keys, and several others.

PLANT BIOLOGY

New for 2023-24! YEAR - Pre-requisites: Chemistry | Co-requisite: Biology

Designed for the student that is interested in the amazing world of plants. This class will introduce students to plant anatomy, plant identification, economic botany, plant ecology and more. Students will spend time in the lab and outdoors on campus and at local parks. Students will participate in discussions of current research in the field, create oral presentations on special topics, write lab reports, and make a plant collection.

HONORS ANATOMY & PHYSIOLOGY

YEAR - “B” average or higher in prior science course or dept. approval required

Students who are curious about how their bodies function or are interested in a career in the medical field will enjoy this in-depth 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 long-standing appreciation for the complexity and beauty of the human body.

ARTIFICIAL INTELLIGENCE: APPLICATIONS, HISTORY & CURRENT ISSUES

SEM - Offered at the Regular and Honors level – Pre-requisite or Co-requisite: Algebra 2, Biology, US History

This course introduces the subject 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.

SOCIAL SCIENCES



WORLD HISTORY

YEAR - No Pre-Requisites

World History is the fascinating story of people and their problems, solutions, failures, and successes. Students will progress through an exploration of global history 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 knowledge through research, persuasive writing, and spoken dialogue. The course's flipped classroom methodology ensures students receive content input at their own individual pace and allows class time to be reserved for collaboration, peer-to-peer academic dialogue, individual student-teacher conferencing, skill building activities, and application of knowledge.

UNITED STATES HISTORY

YEAR - World History Required

The United States history course is designed to promote knowledge and appreciation of our country's past, present, and 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 pictorial materials.

HONORS SEMINAR IN UNITED STATES HISTORY

YEAR - Co-Requisite: Must be currently enrolled in Honors Seminar English 2 and have Dept. Approval

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 WORLD HISTORY

YEAR - Dept. 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. Students will explore global events with attention to processes, patterns, and interactions that impacted humanity on a global scale. Students will examine the origins of key social, political, environmental, cultural, and economic changes as well as their impact on society and their relevance to the course of global events. This course examines detailed content and requires students to engage in nuanced written and verbal discourse. Students should be prepared for a challenge and greater time commitment if they choose to undertake a course of study at the honors level.

HONORS UNITED STATES HISTORY

YEAR - World History and Dept. Approval Required

This offering is for students who are ready to meet the demands of a fast-paced course. 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 essays, document-based essays, and multiple-choice questions. This course emphasizes the development of the necessary skills for collaborative work on creative and innovative projects.

HONORS SEMINAR IN HISTORY: WORLD'S FAIRS IN THE UNITED STATES

SEM - United States History, Dept. Approval Required

World's Fairs made the world modern, and they quickly became sites for countries to showcase their achievements, values, and plans for the future. No country embodied this twin spirit of celebration and ambition during the era of expositions more than the United States. Throughout the late 19th and 20th centuries, the fairs became a central showcase for the cultural, political, and economic changes occurring throughout the country. This course takes students on a journey of the World's Fairs in the United States from the 1876 Centennial Exposition in Philadelphia to the opening of a "permanent world's fair" at an Orlando theme park in 1982, allowing a deep examination of the political, technological, and cultural transformations occurring in the United States.

HONORS SEMINAR IN GOVERNMENT: TYRANNY & DEMOCRACY

YEAR - United States Government, Dept. Approval Required

This course offers an in-depth consideration of the emergence, transformation, and decline of both tyranny and democratic elements of government from prehistory through the 20th century. Particular attention is paid to Ancient Greece and Rome, the Enlightenment, and the Haitian Revolution. Students also read Robert Penn Warren's classic American political novel *All the King's Men*. Topics covered include state formation and geography; institutional theory; political philosophy; democracy and knowledge; and theories of leadership. We will read selections from ancient Greek and Roman history, philosophy, drama, and oratory, as well as correspondence, philosophical treatises, and political documents from the Enlightenment and the Atlantic Revolutions. The course includes a historical simulation and an opportunity to develop academic research and critical writing competency through the completion of an extended research project.

HONORS SEMINAR IN BRITISH HISTORY

New for 2023-24! - SEM - Dept. Approval Required, Cambridge Scholars Program Attendees Only

British History is a preparatory course for juniors attending the Cambridge Scholars Program. The course provides students with an overview of key events in British history and an in-depth examination of the program topic which varies annually. In addition to providing students with a content background that will allow deeper engagement with the Cambridge experience, this course provides advanced instruction in research skills necessary for work at the undergraduate level while at Cambridge and beyond Oxbridge. Following completion of the Cambridge Scholars Program, students will explore the History of Great Britain from 1066 through the 20th century.

HONORS AMERICAN CIVIL RIGHTS MOVEMENT

New for 2023-24! - SEM - United States History, Dept. Approval Required

In the 1950s and 1960s, the Civil Rights Movement swept through the South and dominated news coverage across the United States. This fight for freedom won many legal and political victories in the effort to end discrimination in the United States, and inspired others to mount their own equality campaigns. This course will examine the events, people, and themes involved in African Americans' struggle for freedom during the middle decades of the 20th century. Students will explore the broad historical context within which the movement arose; the various philosophies, strategies, expectations, and tactics of the activists and their opponents; and the legacies of the movement. We will explore these issues through primary and secondary source readings, documentaries and films, and through interactive lectures and class discussions.

MILES FROM THE MAINLAND - HONORS LEVEL

New for 2023-24! - SEM - World History, Dept. Approval Required

Islands have served as crucial spaces of human development since the earliest documented times. In this course, students will explore the social, political, cultural, environmental, and economic development of island societies and examine relationships between islands and continental events. From the most distant and isolated places on the globe to some of the most interconnected locations on the planet, the unique geography of islands provide opportunities to examine culture, technology, archeology, sociology, and exploration. After gaining a foundational understanding of island geography and relevant terminology, students will explore case studies from around the globe ranging from the Caribbean, Easter Island, the Hawaiian Islands, Polynesia, New Zealand, and Mauritius.



GEOGRAPHY OF RELIGION

New for 2023-24! - YEAR - World History Required

This course is a survey of the geography of religion. Building directly on skills and information learned in World History, this course provides a disciplinary framework for understanding how religion relates to culture, urban planning, and the environment around us. This course will focus on religious culture rather than theology; students are encouraged to enroll regardless of religious background. In addition, students will learn about such important geographic concepts as a feeling of place, sacred spaces, the concept of pilgrimage, the relationship between religion and environment, and cultural assimilation and differentiation over space.

GOVERNMENT

UNITED STATES GOVERNMENT

SEM - US History Required

This 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 UNITED STATES GOVERNMENT

SEM - US History and Dept. Approval Required

This course studies 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. Various assessments will test knowledge of content.

HONORS SEMINAR UNITED STATES GOVERNMENT

SEM - US History and Dept. Approval Required

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

SEM - Open to Juniors and Seniors

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

SEM - Open to Juniors and Seniors 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

SEM - Open to Juniors and Seniors 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

SEM - Economics, Co-Requisite: Honors Pre-Calculus, Dept. Approval

Microeconomics is the study of individuals and firms that 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

SEM - Economics, Co-Requisite: Honors Pre-Calculus, Dept. Approval

Macroeconomics is the study of the whole economy and attempts to explain the relationships between 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.

ENTREPRENEURSHIP I

SEM - Open to Sophomores, Juniors, and Seniors

The first class will concentrate on the philosophy of entrepreneurship. We will ask questions such as: What is entrepreneurship, and can it be taught? From here we will 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 an entrepreneurial way of thinking as they make everyday decisions.

ENTREPRENEURSHIP II

SEM - Entrepreneurship I Required

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



FINANCIAL MARKETS I

SEM - Co-Requisite Economics

This course provides a foundation for learning about financial markets. Students will explore the fundamentals of bonds, stocks, foreign exchange, 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 II

SEM - Financial Markets I Required

Students will build upon the knowledge learned in Financial Markets I 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

PSYCHOLOGY

SEM - Open to Sophomores, Juniors, and Seniors

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 in various fields of psychology and engage in individual research of psychological topics.

SOCIAL PSYCHOLOGY

SEM - Psychology Required

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 ABNORMAL PSYCHOLOGY

SEM - Social Psychology Required

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 FORENSIC PSYCHOLOGY

SEM - Seniors Only - Abnormal Psychology, Dept. Approval Required

The American Psychological Association (APA) has favored the narrow definition of forensic psychology as “the application and practice of psychology in the legal system, particularly in courts.” The main areas in the legal system where a person can find a forensic psychologist, according to authors of the course text include: Police/Law enforcement, criminal and delinquent behavior/psychology, victimology and victim services, courtrooms, and in correctional facilities and/or prisons. This course will cover a broad spectrum of the various areas that involve law and psychology. This course will focus on some interrogation techniques and also briefly discuss behavior. The course uses visual aids that may be graphic (gore, gruesome) in nature to demonstrate various crimes that a forensic psychologist/psychiatrist would encounter with their job function.

HEALTH & WELLNESS



LIFETIME HEALTH & WELLNESS

YEAR - No Pre-Requisites | Required for all Freshmen

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.

STRENGTH & CONDITIONING I

SEM - Open to Sophomores, Juniors, and Seniors

This 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 & CONDITIONING II

SEM - Strength and Conditioning I Required

Strength & Conditioning II 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 & Conditioning I, 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 of fitness goals.



SPORTS MEDICINE I

FALL SEM - Open to Sophomores, Juniors, and Seniors

This course is designed for students interested in sports medicine-related fields. Sports Medicine I 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 first-aid and CPR certification that is valid for two years.

SPORTS MEDICINE II

SPRING SEM - Sports Medicine I Required

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 I and provides further knowledge on topics regarding injury assessment, injury pathology and clinical practices. Sports Medicine II 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 Health and Wellness staff members during practices and games.

YOGA

SEM - Open to Sophomores, Juniors, and Seniors

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

SEM - Open to Sophomores, Juniors, and Seniors

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.



MIDDLE SCHOOL



Oxbridge Middle opened in the fall of 2021 offering grades 7 and 8; in August 2023, we will open grade 6, enabling a broader constituency of students to receive an exceptional private school education. Through earlier engagement, we can build a stronger academic foundation, encourage critical thinking, develop world citizens, and foster future leaders who are prepared for success in the upper school and beyond.

GRADE 6

Grade 6 curriculum sets the foundation and expectations for success in middle school and beyond. Students can explore an array of subject matter in a broad and deep custom curriculum.



HUMANITIES
ANCIENT & CLASSICAL



MATHEMATICS
PRE-ALGEBRA*



SCIENCES
EARTH & SPACE



LANGUAGES
FRENCH & SPANISH



ARTS WHEEL
VISUAL & PERFORMING



ESSENTIAL SKILLS
LATIN & TECHNOLOGY



PE & HEALTH

GRADE 7

Grade 7 builds on the foundation of the previous year, giving students additional autonomy in their studies and more exposure to all the opportunities provided by Oxbridge Academy.



HUMANITIES
MEDIEVAL & EXPLORATION



MATHEMATICS
ALGEBRA*



SCIENCES
LIFE SCIENCE



LANGUAGES
FRENCH OR SPANISH



STEM WHEEL



ESSENTIAL SKILLS
ART & STUDY SKILLS



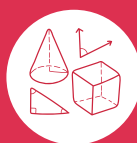
PE & HEALTH

GRADE 8

Grade 8 challenges students to expand their horizons and engage with the world. Students are able to choose electives based on their passions, and take on service projects that will prepare them for upper school and beyond.



HUMANITIES
UNITED STATES



MATHEMATICS
GEOMETRY*



SCIENCES
PHYSICAL SCIENCE



LANGUAGES
FRENCH OR SPANISH



ARTS OR STEM
SPECIALTY ELECTIVE



ENTREPRENEURSHIP
& PERSONAL PROJECT



PE & HEALTH

* Advanced Mathematics courses are available to those students who demonstrate aptitude and proficiency.