



2021 - 2022

Oxbridge Academy Course Catalog



OXBRIDGE ACADEMY 2021-2022 COURSE CATALOG

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

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

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

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

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

Table of Contents

	Page
Graduation Requirements Grade 9-12	3
Arts – Visual	4
Arts – Introductory Performing	8
Arts – Theater	8
Arts – Music	9
Arts – Dance	10
English	11
World Language – Spanish	15
World Language – French	18
World Language – Chinese	20
World Language – American Sign Language	21
Mathematics & Computer Science	22
Science – Physics	28
Science – Chemistry	31
Science – Biology	32
Social Science – History	33
Social Science – Government, Economics, Psychology	35
Health and Wellness	39

Oxbridge Academy Graduation Requirements

Students must meet the following graduation requirements to earn a diploma:

Subject Area	Credits	Required Courses
English	4	4 credits of English while in high school.
Mathematics	4	4 credits of Math while in high school (at a minimum through Algebra II) <i>**With proof of completion of Algebra I, Geometry, and Algebra II</i>
Science	3	At least one credit each in Physical Science with Lab (Physics), Chemistry with Lab (Chemistry), and Biological Science with Lab (Biology).
Social Sciences	3	Consisting of World History (9 th), United States History (10 th), and Government & Economics
World Languages	3	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.
Health and Wellness	1	A one-credit course in Lifetime Health and Fitness is required for all freshmen.
Visual and Performing Arts	2	One-half credit in Introduction to Visual Arts and one-half in Introduction to Performing Arts courses are required for all freshmen. Note: Freshman students who already have proficiency in either the visual arts and/or the performing arts (Band, Orchestra, Theater, or Chorus) as demonstrated by portfolio or audition/permission of the instructor are exempt from the two sequences of Visual and Performing Arts. In addition, students who wish to pursue Debate or Honors Computer Science 1 instead of the Visual or Performing Arts are exempt from the requirement. There are additional elective offerings for grades 10-12.
Electives	4	A student may take an additional core subject course or any other course of special interest to meet the elective requirements.

Things to Know

- Students earn one credit for a year-long course and 1/2 credit for a semester course. Course credits are awarded only at the end of the course.
- Students must earn a minimum of 24 credits to graduate and a minimum of 6 credits per year.
- The yearly academic program should include a minimum of five academic courses each year.
- Students in 9th grade who elect Debate, Band, Orchestra, Chorus, Theater, or Honors Computer Science^{1*} will be exempt from the Freshman Visual Art/Performing Art credit. These students will still be required to fulfill the additional 1 credit in Art.
- Any requested exceptions to graduation requirements will be considered on an individual basis.
- Oxbridge Academy reserves the right to evaluate each student's transcript at the time of entrance to determine which transfer credits will be accepted from another school.
- Online Learning courses may not be taken for Oxbridge credit in lieu of Oxbridge Academy courses unless there is an irresolvable scheduling conflict and/or prior written approval.

^{*}must have completed Honors Algebra 1 and Honors Geometry.

Arts – Visual

INTRODUCTION TO THE VISUAL ARTS

Semester Course. No prerequisites. Open to Freshmen only.

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

MIXED MEDIA SCULPTURE 1

Semester course. No prerequisites

This beginning sculpture course introduces students to a range of creative building and design methods in 3D Art, with no experience necessary. Students will explore traditional and non-traditional materials as they make original works of art. Students will learn how to design and build sculptural projects using the methods of planar construction, clay modeling, found object assemblage, and more. Upon completion of this course, students may choose to move on to other 3D Art classes such as Mixed Media Sculpture 2, Ceramics, or 3D Construction and Design.

MIXED MEDIA SCULPTURE 2

Semester course. Prerequisite: Mixed Media Sculpture 1

This class is a continuation of the mixed media sculpture 1 course. Students will build upon skills learned in the previous course such as planar construction, clay modeling, and found object assemblage. This course will introduce new building techniques such as the construction of large-scale installation art, carving, figure sculpting, and 3D digital design. Throughout the semester students will study methods of sculpting embraced by exciting, contemporary sculptors while building their portfolio and design skillset. This advanced level course is recommended for students who are on-campus learners in at least a part-time capacity.

PHOTOGRAPHY 1

Semester course. No prerequisites

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

PHOTOGRAPHY 2

Semester course. Prerequisite: Photography 1 or Instructor Permission

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.

DIGITAL GRAPHIC DESIGN 1

Semester course. Prerequisite: None

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

DIGITAL GRAPHIC DESIGN 2

Semester course. Prerequisite: Digital Graphic Design 1

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

VIDEOGRAPHY 1

Semester course. Prerequisite: None

Students will learn the basics of video, such as camera operation, camera angles, sound, editing, and basic script writing. 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.

VIDEOGRAPHY 2

Semester course. Prerequisite: Videography 1

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

MOTION GRAPHICS ANIMATION 1

Semester course. Prerequisite: Digital Graphic Design 1

In Motion Graphics Animation 1, students will learn the basics of animating video and graphics using layout, motion, and scaling. Students will be introduced to Adobe Photoshop, Illustrator, and After Effects. Students will apply their knowledge to real-world animation projects.

MOTION GRAPHICS ANIMATION 2

Semester course. Prerequisite: Motion Graphics Animation 1

Students will become proficient users of Adobe Photoshop, Illustrator, and After Effects, learning new animation design techniques that include motion easing, scale easing, and advanced masking. Projects will include real-world animation projects, resulting in the creation of an animation portfolio.

DRAWING 1

Semester course. Prerequisite: None

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

DRAWING 2

Semester course. Prerequisite: Drawing 1

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

PAINTING 1

Semester course. Prerequisite: None

As an introductory painting class, the class teaches proper safety, tools, and techniques of each medium in order to establish best practices and craftsmanship skills. Projects are based on personal photographs about 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.

PAINTING 2

Semester course. Prerequisite: Painting 1

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

2D ART: MIXED MEDIA 1

Semester course. Prerequisite: Drawing or Painting

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

2D ART: MIXED MEDIA 2

Semester course. Prerequisite: 2D Mixed Media 1

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

3D CONSTRUCTION & DESIGN 1

Formerly Wood & Metal Working 1. Semester course. Prerequisite: None

This course introduces students to a range of fabrication techniques that are used in the creation of both functional and sculptural works. The class teaches students elements of 3D design and construction, including wood joint fabrication, an introduction to power tools, additive and subtractive methods of building, and more. This course prepares students for advanced topics of study in 3D Construction and Design 2.

3D CONSTRUCTION & DESIGN 2

Formerly Wood & Metal Working 2. Semester course. Prerequisite: None

This course is designed to build on the concepts and techniques introduced in 3D Construction and Design 1. Students will explore innovative additive and subtractive methods of fabrication, maquette building, industrial design, and more. Students will also propose and build an independent construction project of their own design. This advanced level course is recommended for students who are on-campus learners in at least a part-time capacity.

CERAMICS 1

Semester course. Prerequisite: None

Students in Ceramics 1 are introduced to the basic processes of making both traditional and sculptural works in clay through hand-building methods. In addition to exploring historical examples of ceramic vessels, students learn about some of the influential art movements embraced by ceramics in recent years, such as Pop and Funk. This course is a general survey of clay working methods and prepares students who want to develop their skills further in Ceramics 2 or Mixed Media Sculpture.

CERAMICS 2

Semester course. Prerequisite: Ceramics 1

This class is designed to further develop methods of clay working explored in Ceramics I. Members of the class learn how to design and build works of clay art using combined hand building techniques. Students will also learn more about the artistic trends developing in the world of contemporary ceramics. This advanced level course is recommended for students who are on-campus learners in at least a part-time capacity.

PORTFOLIO DESIGN 1

Semester course. Prerequisite: Instructor Approval

This course is for students who have completed both beginning and intermediate levels of 2D Art courses and are seeking a more intensive focus on their drawing and painting 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 have access to a wide range of drawing, painting, printmaking, and mixed-media materials. This comprehensive collection of work is designed to establish a portfolio suitable for college applications.

PORTFOLIO DESIGN 2

Semester course. Prerequisite: Portfolio Design 1

This course is a continuation of Portfolio Design I 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.

Arts – Introductory Performing

INTRODUCTION TO THE PERFORMING ARTS

Semester course. Prerequisite: None. Open to freshmen only

This required course for all freshmen provides experience in several dimensions of the performing arts: chorus, acting, movement, and stagecraft. Over the course of a semester, students will participate in each category of the performing arts through work with specialists in those areas. The goal of the course is to introduce freshmen to the range of performing arts experiences in which they might choose to specialize at a later point in high school.

Arts – Theater

ACTING

Year Course. Prerequisite: None

Learn 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

Semester Course. Prerequisite: None

Learn about “behind-the-scenes” activities like set design and building, scenic painting, lighting, special effects, sound design, crafts, and costuming. This class prepares members of the technical crew behind all school productions in a variety of ways. Physical work required.

HONORS PERFORMING ENSEMBLE

Year Course. Prerequisite: Audition & Instructor Approval

The fall semester will be focused on preparing for our competitions: Florida Theater Conference One-Act Festival, District Thespian One-Act Festival, District Thespian IEs, 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 learn, rehearse, and present a play and/or musical to perform for the public. Advanced acting techniques, choreography/movement, and classical theater in performance are important parts of the curriculum.

Arts – Music

DIGITAL MUSIC

Semester Course. Prerequisite: None

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 music tracks for digital movies and other audio-visual projects.

STUDIO RECORDING & PRODUCTION

Year Course. Prerequisite: Digital Music

Students will develop recording technique skills, 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.

OXBRIDGE ROCK & CONTEMPORARY MUSIC ENSEMBLE

Year Course. Prerequisite: None

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 Course. Prerequisite: None

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 Course. Prerequisite: None

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 Course. Prerequisite: Instructor Approval

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

BEGINNING PIANO

Semester Course. Prerequisite: None

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

GUITAR

Semester Course. Prerequisite: None

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.

OXBRIDGE CHORALE

Year Course. Prerequisite: Instructor Approval

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.

Arts – Dance

DANCE REPERTORY

Year Course. Prerequisite: Audition Only

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.

DANCE FOUNDATIONS

Year Course. Prerequisite: None

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

English

ENGLISH 1:

Year Course. Prerequisite: None

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 Course. Prerequisite: Department Approval

Honors English 1 is a survey course of 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 students to 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 Course. Prerequisite: English 1

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

HONORS ENGLISH 2:

Year Course. Prerequisite: English 1 & Department Approval

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

HONORS SEMINAR ENGLISH 2: AMERICAN LITERATURE:

Year Course. Prerequisite: Honors Seminar World History 1 & Department Approval

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. 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 Course. Prerequisite: English 2

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 and cultural contexts. As students explore the actions of protagonists who experience the impact of the world around them, they will examine questions about success and disappointment in working for change. In some cases, individuals triumph in overcoming 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 centuries.

HONORS ENGLISH 3:

Year Course. Prerequisite: English 2 & Department Approval

Students will read works of fiction, nonfiction, poetry, personal narrative, and drama that focus on the human condition, specifically efforts of individuals to make a difference in their social and cultural contexts. As students explore the actions of protagonists who experience the impact of the world, they will examine questions about success and disappointment in working for change. In some cases, individuals triumph in overcoming 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 Course. Prerequisite: Open to Juniors with Instructor Approval

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

COLLEGE WRITING (HONORS AVAILABLE):

Semester 1 Course. Prerequisite: Required for all Seniors not in Honors Seminar 4

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

HONORS SEMINAR ENGLISH 4: GREAT BOOKS:

Year Course. Prerequisite: Open to Seniors with Instructor Approval

Students in this course will read works of literature that have withstood the test of time and offer distinct insights into the nature of human experience. Through close reading, discussions, research, presentations, and extensive writing, students will become familiar with the themes and issues embedded in these texts. Teachers select from a wide range of texts, including Morrison's *Beloved*, the Greek theater, Atwood's *The Handmaid's Tale*, Shakespeare's *King Lear*, and Melville's *Moby Dick*. Students also complete a semester-long research project on a work of poetry or fiction.

ENGLISH 4: FILM AS LITERATURE (HONORS AVAILABLE):

Semester Course. Prerequisite: Open to Seniors as Second Semester Elective

In Film as Literature, the teacher will choose a relevant common theme for films viewed in the course. Students will view films from a variety of genres selected for their contributions to the thematic focus. We view, discuss, and critique 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.

ENGLISH 4: AFRICAN-AMERICAN LITERATURE (HONORS AVAILABLE):

Semester Course. Prerequisite: Open to Seniors as Second Semester Elective

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 (HONORS AVAILABLE):

Semester Course. Prerequisite: Open to Seniors as Second Semester Elective

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

ENGLISH 4: CONTEMPORARY WOMEN'S LITERATURE (HONORS AVAILABLE):

Semester Course. Prerequisite: Open to Seniors as Second Semester Elective

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

CREATIVE WRITING 1:

Semester Course. Prerequisite: Open to Sophomores, Juniors, and Seniors

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

CREATIVE WRITING 2:

Semester Course. Prerequisite: Honors Creative Writing 1

Creative Writing 2 offers students the opportunity to deepen their writing experience. Various genres will be considered, including poetry, fiction, creative non-fiction, screen writing, and drama. By the end of the semester, students will have created a self-directed work in a genre of their interest. Students will revise their work to hone the skills acquired in Creative Writing and Creative Writing Honors.

PEER TUTORING & COMPOSITION:

Semester Course. Prerequisite: Open to Sophomores, Juniors, and Seniors with Teacher Recommendation

This semester-long class prepares students to work as peer tutors in the Oxbridge Writing Center. With the guidance of the instructor, students will consider how to best help other student writers work through all stages of the writing process—from brainstorming in response to a writing prompt to polishing a final draft of an essay. Students in the class will also learn the conventions of writing for different disciplines and refine their own writing and revision processes by reading *The Longman Guide to Peer Tutoring*. For the last part of the course, students will complete a practicum where they put their skills to use tutoring other student writers.

HONORS DIGITAL MULTIMEDIA YEARBOOK JOURNALISM:

Year Course. Prerequisite: Concurrently Taking English Honors or Higher, or with Instructor Permission

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 be involved with 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.

DEBATE 1: INTRODUCTION TO PUBLIC SPEAKING

Year Course. Prerequisite: None

Students learn and try eight 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.

HONORS DEBATE 1: INTRODUCTION TO PUBLIC SPEAKING

Year Course. Prerequisite: Instructor Approval

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

DEBATE 2 / HONORS DEBATE 2:

Year Course. Prerequisite: Debate 1 or Instructor Approval

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

HONORS SEMINAR DEBATE 3:

Year Course. Prerequisite: Debate 2 or Instructor Approval

Debate 3 focuses on a critical analysis of arguments and honing rhetorical ability. Students will engage arguments written by non-governmental organizations, governments and, individual policy makers to critically review the premises, logic, and impacts of 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.

HONORS SEMINAR DEBATE 4:

Year Course. Prerequisite: Honors Seminar 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.

Language – Spanish

SPANISH 1:

Year Course. Prerequisite: None

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. It will also teach words, phrases and idioms that one will need to communicate in a Spanish-speaking country. One will also learn to tell other Spanish speakers about oneself and ask other questions about themselves in various tenses. Students are expected to reach novice-low to novice-mid levels of proficiency.

SPANISH 2:

Year Course. Prerequisite: Spanish 1

Students in Spanish 2 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.

HONORS SPANISH 2:

Year Course. Prerequisite: Spanish 1 & Instructor Approval

This course is for students who have shown substantial self-motivation and previous success in Spanish 1. Students in the course will advance at a faster, yet more in-depth pace. They will master grammatical topics such as the indicative, imperative, and subjunctive moods. Emphasis is placed on increasing the student's active vocabulary through authentic materials. Cultural aspects are taught through the history, geography, gastronomy, and pop culture of Spanish-speaking countries. Oral, written, listening, and reading assessments are essential components of the class; by the end of the year, students will have accomplished a variety of novice-high functional skills.

SPANISH 3:

Year Course. Prerequisite: Spanish 2

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.

HONORS SPANISH 3:

Year Course. Prerequisite: Spanish 2 or Honors Spanish 2 & Instructor Approval

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

SPANISH 4:

Year Course. Prerequisite: Spanish 3

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.

HONORS SPANISH 4:

Year Course. Prerequisite: Spanish 3 or Honors Spanish 3 & Instructor Approval

Spanish 4 Honors is an advanced-level course designed to improve motivated students' proficiency in Spanish through a variety of contexts. In addition to communicative activities where students will be expected to exchange biographical information and life experiences, students will also dive into the Hispanic literary canon. In-depth readings of short stories and poetry from a variety of authors such as Ana Maria Matute, Jorge Luis Borges, and Sor Juana Ines de la Cruz will expose students to college-level coursework and assessments, as well as expand their cultural understanding. Through discussions of readings and exposure to contemporary media, students will develop a more profound understanding of grammar and vocabulary, as well as greater linguistic proficiency. Students are expected to reach intermediate-high to advanced-low levels of proficiency in all communicative areas of speaking, reading, listening, and writing.

SPANISH 5:

Year Course. Prerequisite: Spanish 4

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

HONORS SPANISH 5:

Year Course. Prerequisite: Honors Spanish 4 & Teacher Recommendation

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

HONORS SEMINAR SPANISH 6:

Year Course. Prerequisite: Honors Spanish 5 & Teacher Recommendation

The Honors Seminar Spanish Language and Culture course aims to develop students' mastery of the four language skills: reading, writing, listening, and speaking through extensive interpretive, interpersonal, and presentational tasks. Students sharpen their communicative skills in Spanish through advanced study in rigorous grammar, literature, and culture, and students learn about culture through the use of authentic materials that are representative of the Spanish-speaking world. Class is conducted completely in Spanish and includes frequent writing and integration of skills. 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.

Language – French

FRENCH 1:

Year Course. Prerequisite: None

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.

HONORS FRENCH 1:

Year Course. Prerequisite: Teacher Recommendation

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. This course is offered to students who show substantial motivation and previous experience in French and who wish to advance at a faster yet also more in-depth pace. Students are expected to reach novice-mid to novice-high levels of proficiency.

FRENCH 2:

Year Course. Prerequisite: French 1

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.

HONORS FRENCH 2:

Year Course. Prerequisite: French 1 & Instructor Approval

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. This course is offered to students who show substantial motivation and previous experience in French and who wish to advance at a faster yet also more in-depth pace. Students are expected to master novice-mid to novice-high levels of proficiency.

FRENCH 3:

Year Course. Prerequisite: French 2

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

HONORS FRENCH 3:

Year Course. Prerequisite: French 2 & Instructor Approval

Students review different ways of discussing the past and learn to recognize less-used past tense forms in poetry and literature, focusing on the tales of Charles Perrault. New emphasis is placed on written expression as students rewrite endings to classic French stories. Students learn to talk about what is going to happen in the future and learn to speak about hypothetical events. They delve deep into French gastronomy and learn to make suggestions and give orders with varying degrees of politeness. Emphasis is placed on both understanding and using different ways of asking questions. This course is offered to students who show substantial motivation and previous experience in French and who wish to advance at a faster yet also more in-depth pace. Students are expected to master intermediate-low levels of proficiency.

FRENCH 4:

Year Course. Prerequisite: French 3

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

HONORS FRENCH 4:

Year Course. Prerequisite: French 3 & Instructor Approval

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. This course is offered to students who show substantial motivation and previous experience in French and who wish to advance at a faster yet also more in-depth pace. Students are expected to master intermediate-mid to intermediate-high levels of proficiency.

HONORS SEMINAR IN FRENCH CULTURE & LITERATURE A:

Year Course. Prerequisite: Honors French 4 & Instructor Approval

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

HONORS SEMINAR IN FRENCH CULTURE & LITERATURE B:

Year Course. Prerequisite: Honors French 4 & Instructor Approval

Honors Seminar in French B 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. This course is offered in alternating years with Honors Seminar in French A.

Language – Chinese

HONORS CHINESE 1:

Year Course. Prerequisite: None

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

HONORS CHINESE 2:

Year Course. Prerequisite: Chinese 1 & Instructor Approval

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

HONORS CHINESE 3:

Year Course. Prerequisite: Chinese 2 & Instructor Approval

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

HONORS CHINESE 4:

Year Course. Prerequisite: Chinese 3 & Instructor Approval

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

HONORS CHINESE 5:

Year Course. Prerequisite: Chinese 4 & Instructor Approval

Students will develop advanced proficiency in Chinese and also 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 SEMINAR CHINESE 5:

Year Course. Prerequisite: Chinese 4 & Instructor Approval

This course develops students' overall fluency in the language. Students will read and analyze literary works such as the biography of Yao Ming and *Journey to the West* and give various types of oral presentations based on their reading and cultural activities. In addition, students will learn how to conduct close readings of texts and analyze literature. Students will practice the process of writing short descriptive, reflective, and interpretive essays.

Language – American Sign Language

AMERICAN SIGN LANGUAGE 1:

Year Course. Prerequisite: None

This introductory course will focus on developing the basic expressive and receptive skills necessary to communicate with deaf persons. 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 persons.

AMERICAN SIGN LANGUAGE 2:

Year Course. Prerequisite: ASL 1

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

AMERICAN SIGN LANGUAGE 3:

Year Course. Prerequisite: ASL 2

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

HONORS AMERICAN SIGN LANGUAGE 3:

Year Course. Prerequisite: ASL 2 & Instructor Approval

American Sign Language 3 Honors 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.

AMERICAN SIGN LANGUAGE 4 (NOT OFFERED FOR 2021):

Year Course. Prerequisite: ASL 3

American Sign Language 4 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.

Mathematics & Computer Science

ALGEBRA 1:

Year Course. Prerequisite: None

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

ALGEBRA 1 PLUS:

Year Course. Prerequisite: None

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

GEOMETRY:

Year Course. Prerequisite: Algebra 1

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

GEOMETRY PLUS:

Year Course. Prerequisite: Algebra 1

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

HONORS GEOMETRY:

Year Course. Prerequisite: Algebra 1 & Department Approval

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

ALGEBRA 2:

Year Course. Prerequisite: Geometry

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

ALGEBRA 2 PLUS:

Year Course. Prerequisite: Geometry

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

HONORS ALGEBRA 2:

Year Course. Prerequisite: Geometry

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

TRIGONOMETRY:

Semester 1 Course. Prerequisite: Algebra 2

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

SELECTED TOPICS IN MATHEMATICS:

Semester 2 Course. Prerequisite: Algebra 2

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

STATISTICS WITH APPLICATIONS:

Semester 1 Course. Prerequisite: Selected Topics

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

PERSONAL FINANCE:

Semester 1 or 2 Course. Prerequisite: Open to Seniors Only

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

FUNCTIONS, STATISTICS, & TRIGONOMETRY:

Year Course. Prerequisite: Algebra 2

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

HONORS PRE-CALCULUS:

Year Course. Prerequisite: Minimum of a B in Honors Algebra 2 & Department Approval

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

PROBABILITY & STATISTICS:

Semester 1 Course. Prerequisite: FST

This course provides an elementary introduction to probability and statistics with applications. Topics include basic probability models, random variables, discrete and continuous probability distributions, statistical estimation and testing, confidence intervals, and an introduction to linear regression.

HONORS PROBABILITY & STATISTICS:

Semester 1 or 2 Course. Prerequisite: Honors Pre-Calculus & Department Approval

In this course, students explore the binomial distribution, the normal distribution, confidence intervals, and 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.

INTRO TO CALCULUS:

Semester 2 Course. Prerequisite: FST

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 THE 2021-2022 YEAR):

Semester Course. Prerequisite: Intro to Calculus

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

HONORS CALCULUS A:

Semester 1 Course. Prerequisite: Minimum of a B in Honors Pre-Calculus & Department Approval

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

HONORS SEMINAR CALCULUS B:

Semester 2 Course. Prerequisite: Minimum of a B in Honors Calculus A & Department Approval

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

HONORS SEMINAR MULTIVARIABLE CALCULUS (NOT OFFERED FOR THE 2021-2022 YEAR):

Year Course. Prerequisite: Honors Calculus B

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

HONORS SEMINAR DIFFERENTIAL EQUATIONS:

Year Course. Prerequisite: Honors Calculus B

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

HONORS SABERMETRICS (NOT OFFERED FOR THE 2021-2022 YEAR):

Semester 2 Course. Prerequisite: Probability & Statistics, One Semester of Calculus (Any Level), & Instructor Approval

Sabermetrics is the study of the statistics behind baseball. Students will use “Sabermetrics,” designed by Bill James. These theories include but are not limited to: base runs (BsR), batting average on balls in play (BABIP), defense independent pitching statistics (DIPS), on-base plus slugging (OPS), player empirical comparison and optimization test algorithm (PECOTA), peripheral ERA (PERA), super-linear weights, value over replacement player (VOPR), WHIP, wins above replacement (WAR). Fielding independent pitching (FiP). Students will use Excel spreadsheets to calculate the formulas and interpret the results and will collect data daily to align their spreadsheets with the MLB teams.

HONORS COMPUTER SCIENCE 1:

Semester 1 or 2 Course. Prerequisite: Must Have Completed Honors Algebra 1, Honors Geometry, & Concurrently Taking Honors Algebra 2 or Higher

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

HONORS COMPUTER SCIENCE 2:

Year Course. Prerequisite: Honors Computer Science 1

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

HONORS WEB APPLICATION PROGRAMMING (NOT OFFERED FOR THE 2021-2022 YEAR):

Year Course. Prerequisite: Honors Computer Science 2

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#:

Year Course. Prerequisite: Honors Computer Science 2

Students will learn how to create two-dimensional and three-dimensional 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 & PHYSICS PROGRAMMING (NOT OFFERED FOR THE 2021-2022 YEAR):

Semester Course. Prerequisite: Honors Computer Science 2

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 1:

Semester 1 Course. Prerequisite: 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 2:

Semester 2 Course. Prerequisite: Honors Seminar A.I. & Computational Modeling 1

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

DIGITAL LOGIC 1:

Semester 1 Course. Corequisite: Honors Algebra 2 or Algebra 2 Plus with Instructor Approval

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

DIGITAL LOGIC 2:

Semester 2 Course. Prerequisite: Digital Logic 1 & Instructor Approval

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

Science – Physics

PHYSICS:

Year Course. Prerequisite: None

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 Course. Prerequisite: Concurrently taking Honors Geometry, Honors Algebra 2 or Higher-Level Mathematics Course

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

HONORS SEMINAR IN PHYSICS: MECHANICS:

Semester Course. Prerequisite: Honors Physics, Calculus, & Instructor Approval

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:

Semester Course. Prerequisite: Honors Physics, Honors Seminar in Physics: Mechanics, Calculus, & Instructor Approval

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

MATERIAL SCIENCE ENGINEERING (NOT OFFERED FOR THE 2021-2022 YEAR):

Year Course. Prerequisite: None

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

ASTRONOMY: SOLAR SYSTEM:

Semester Course. Corequisite: Algebra 2

Astronomy, the study of the universe, was the first science, and it remains a cutting edge and viable research discipline even today. In the first semester, we study the solar system from the sun to the Kuiper belt and everything in between. Through it all, we ask: Where do we come from and where are we going?

ASTRONOMY: EVOLUTION OF THE UNIVERSE:

Semester Course. Corequisite: Algebra 2

Astronomy, the study of the universe, was the first science, and it remains a cutting edge and viable research discipline even today. In the second semester, we look at cosmology, the study of the cosmos. We take a look at different types of galaxies and also black holes, pulsars, quasars, gamma ray bursts, and other denizens of the universe. Through it all, we ask: Where do we come from and where are we going?

ARTIFICIAL INTELLIGENCE: APPLICATIONS, HISTORY, & CURRENT ISSUES (HONORS AVAILABLE)

Semester Course. Prerequisite: Open to Sophomores, Juniors, and Seniors.

Corequisite: 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. It will include some rudimentary programming and hands-on technical projects. It is meant to provide exposure to the subject with less emphasis on math skills.

AVIATION 101:

Semester Course. Prerequisite: None

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:

Semester Course. Prerequisite: Aviation 101

This course is the second in a six-semester elective series. In this project-based course, students will study the history of the space program, satellites, rocketry, human physiology and space flight, long term space projects such as the Mars mission, ISS, and a possible moon base. 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:

Semester Course. Prerequisite: Aviation 101 & 201

The third semester course in the series, 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:

Semester Course. Prerequisite: Aviation 101, 201, & 301

This course is the fourth in a series. In this course, the emphasis will be on aeronautical and aerospace engineering. Students will learn about keeping a professional engineering journal as they take on four to five design challenges. Examples of these design challenges include creating and testing airfoils using 3D printing and designing and building a working wind tunnel. Design challenges may change from year to year.

AVIATION 501:

Semester Course. Prerequisite: Aviation 101, 201, 301, 401, & Department Approval

This is the fifth course in series. 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:

Semester Course. Prerequisite: Aviation 101, 201, 301, 401, 501, & Department Approval

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

Science – Chemistry

CHEMISTRY:

Year Course. Prerequisite: Physics

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

HONORS CHEMISTRY:

Year Course. Prerequisite: Concurrently Taking Honors Algebra 2 or Higher-Level Math Course, Honors Physics, & Instructor Approval

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 TOXICOLOGY:

Year Course. Prerequisite: Honors Chemistry, Concurrently with Honors Biology, Algebra 2, & Instructor Approval

This is a college prep seminar course designed as an introduction to toxicology, a science that studies the effects that chemicals can have on living systems. These systems include human beings, animals, plants, and ecosystems. Emphasis will be placed on developing an understanding of toxicological principles and organic chemistry concepts, as well as decision-making and verbal and written communication skills as they relate to a professional career in the medical field.

Science – Biology

BIOLOGY:

Year Course. Prerequisite: Physics & Chemistry

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 that aids students in seeing 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 Course. Prerequisite: Honors Physics, Honors Chemistry, Algebra 2 or Higher-Level Math, & Instructor Approval

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 Course. Prerequisite: Honors Physics, Honors Chemistry, Honors Biology, Algebra 2 or Higher-Level Math, & Instructor Approval

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 Course. Prerequisite: Physics, Chemistry, & Concurrently Taking 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. Students need to be able to swim as we take several snorkeling trips to observe the 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.

ENVIROMENTAL FIELD RESEARCH (NOT OFFERED FOR THE 2021-2022 YEAR):

Year Course. Prerequisite: Instructor Approval

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 to capture answers to pressing environmental questions.

HONORS ANATOMY & PHYSIOLOGY:

Year Course. Prerequisite: B Grade or Higher in Science Courses or Instructor Approval

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 student's critical thinking skills as they develop a longstanding appreciation for the complexity and beauty of the human body.

Social Science – History

WORLD HISTORY:

Year Course. Prerequisite: Open to Freshmen

This course provides a look at the history of human experience from the Big Bang to the creation of a new globalized world of trade through the interdisciplinary application of project-based learning. Assignments provide a breadth of experience in acquiring an understanding and deeper appreciation of the world's many cultures. Students creatively reintegrate this knowledge through hands-on projects, including student-driven research, collaboration, technology. A variety of assessments are given to test the students' knowledge of content.

HONORS WORLD HISTORY:

Year Course. Prerequisite: Open to Freshmen with Department Approval

Beginning with the world's first civilizations, students engage in an innovative "CSI"-style study of world history, paying particular attention to the political, economic, and cultural development of regions of the world. The course invites students to examine how cultural /geographic biases have an impact on how we view world history. Students will apply this understanding of the history of specific regions to the modern world, shifting their focus to global rather than regional issues. Students will be expected to use of primary sources and maps when writing analytical essays.

HONORS SEMINAR WORLD HISTORY:

Year Course. Prerequisite: Open to Freshmen. Placement Exam & Department Approval

This thematic concentration reflects the burgeoning cultural history of the last 6,000 years and encompasses the study of the history of ideas, popular and elite cultures, material culture, work, leisure and consumption, and the formation of religious, gender, national, ethnic, and racial identities. Students in this class will explore the history of culture and ideas, the modes of their transmission, and the nature of their reception. Students learn to engage in close readings of a wide variety of historical sources and to interpret written texts and manuscripts as well as objects, art, architecture, film, theater, literature, photographs, oral traditions, performances, ceremonies, and customs. These interpretations are then grounded as students contextualize the sources within their particular times, places, and historical trends. By focusing on themes as well as content, this class offers students a specialized, in-depth examination of the history of our world.

U.S. HISTORY:

Year Course. Prerequisite: Open to Sophomores

United States History is a required class that is normally taken by students in 10th grade. The course covers our American journey from the nation's founding through today. Students will understand the dominant patterns of American thought from colonial days to the present, considering how specific challenges manifested in the past. Students will study specific historical events by analyzing original documents, maps, and historical articles, developing both critical thinking and analytical writing skills.

HONORS U.S. HISTORY:

Year Course. Prerequisite: Open to Sophomores with Department Approval

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

Year Course. Prerequisite: Open to Sophomores with Department 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 SEMINAR HISTORY & PHILOSOPHY OF SCIENCE

(NOT OFFERED FOR THE 2021-2022 YEAR):

Year Course. Prerequisite: Open to Juniors & Seniors with Instructor Approval

Philosophy of Science introduces students in their junior or senior years to the nature of scientific thinking and the processes that define the discipline. In order to enrich the students' understanding of science (and its paradigm transformations), we will conduct the study of science from a philosophical perspective. Interpersonal communication in the forms of reading, writing, and classroom discussions lie at the heart of this course. The ultimate objective of this course is to develop a full and rich interpretation of the role science played in Western culture and to put into perspective how technology became so integrated into our everyday lives.

HONORS SEMINAR IN EUROPEAN HISTORY:

Year Course. Prerequisite: Open to Juniors with Instructor Approval

Students will explore the events and movements that shaped the development of Western Civilization/European History in its intellectual, cultural, political, economic, and social dimensions. They will develop the ability to analyze, synthesize, and extrapolate historical evidence. This course is writing intensive; essays and a research paper will be required.

HONORS SEMINAR REVOLUTION:

Year Course. Prerequisite: Open to Juniors and Seniors with Instructor Approval

This course investigates revolutions as engines of historical change. It expands student understandings of revolution from the purely political to the social, cultural, and economic as well. We will explore fundamental questions about the causes and nature of revolutions by looking at how people overthrow their rulers, social norms, and cultural traditions to establish new governments, institutions, and traditions. This course examines how revolutionaries have attempted to establish their ideals and realize their goals, and asks whether radical upheavals require bloodshed, violence, or even terror. It seeks to explain why some revolutions succeed and others fail.

Social Science – Government, Economics, & Psychology

U.S. GOVERNMENT:

Semester Course. Prerequisite: Mandatory for Juniors & Transfer Students who have not Satisfied the Requirement

This one-semester introductory course examines the basic principles, democratic processes, and institutions of American government. The topics covered range from theories of individual rights and the federal government's management of the economy to the local government of Palm Beach County. Students discuss, debate, and analyze contemporary political issues. Skills emphasized include writing, research, debate, discussion, and group work.

HONORS U.S. GOVERNMENT:

Semester Course. Prerequisite: Mandatory for Juniors & Transfer Students who have not Satisfied the Requirement, with Department Approval

This one-semester course is an advanced introduction to the philosophical underpinnings, institutional structures, and processes that comprise our democratic 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 emphasized include analytical writing, research, debate, dialogue, and group work.

HONORS SEMINAR U.S. GOVERNMENT:

Semester Course. Prerequisite: Mandatory for Juniors & Transfer Students who have not Satisfied the Requirement, with Department Approval

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

ECONOMICS:

Semester Course. Prerequisite: Mandatory for Juniors & Transfer Students who have not Satisfied the Requirement

Students will explore the history of economics and learn how to think like an economist. Students will also learn about scarcity and how the study of scarce resources led to the disciplines of microeconomics and macroeconomics, as well as current developments within the discipline. An emphasis will also be placed on the role of the individual in the global economy, with a concentration on contemporary economic issues.

HONORS ECONOMICS:

Semester Course. Prerequisite: Mandatory for Juniors & Transfer Students who have not Satisfied the Requirement, with Department Approval

Students will explore the history of economics and learn how to think like an economist. This course also in Economics, students in the honors course will also read a current economics book, complete additional projects, and engage in higher-level economic graphing analysis.

HONORS SEMINAR ECONOMICS:

Semester Course. Prerequisite: Mandatory for Juniors & Transfer Students who have not Satisfied the Requirement, with Department Approval

In this semester course, students gain a fundamental understanding of microeconomics and macroeconomics. Students will learn how to graph and analyze supply and demand models, market structures, and market failures. Students will also interpret economic data and explore macroeconomic models. Students will learn how fiscal and monetary policy is used to impact the economy. This accelerated course strives to challenge students to think critically about how economics impacts their daily lives.

HONORS SEMINAR MACRO ECONOMICS:

Semester Course. Prerequisite: Open to Juniors and Seniors, Economics, Concurrent with Honors Pre-Calculus

Macroeconomics is the study of the whole economy. Typically, macroeconomics attempts to explain the relationships between economic growth, unemployment, inflation, interest rates, trade, and other economic factors. Students will study the business cycle, aggregate demand and supply, fiscal policy, and monetarism.

HONORS SEMINAR MICRO ECONOMICS:

Semester Course. Prerequisite: Open to Juniors and Seniors, Economics, Concurrent with Honors Pre-Calculus

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

PSYCHOLOGY:

Semester Course. Prerequisite: Open to Sophomore, Juniors, & 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 and processes in various fields of psychology and engage in individual research of psychological topics.

SOCIAL PSYCHOLOGY:

Semester Course. Prerequisite: Psychology

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

HONORS SEMINAR ABNORMAL PSYCHOLOGY 1:

Semester Course. Prerequisite: Open to Juniors & Seniors Only who have taken Psychology & Social Psychology with Instructor Approval

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

HONORS SEMINAR ABNORMAL PSYCHOLOGY 2:

Semester Course. Prerequisite: Honors Seminar Abnormal Psychology 1

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

ENTREPRENEURSHIP 1:

Semester Course. Prerequisite: None

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 encourage an entrepreneurial way of thinking as they make everyday decisions. We want the students to leave the class knowing two things: "Knowledge is power, and failure is part of the process."

ENTREPRENEURSHIP 2: ENTREPRENEURIAL FINANCE:

Semester Course. Prerequisite: Entrepreneurship

The second Entrepreneurship class is entitled Entrepreneurial Finance. This course will be reserved for the more serious students. We will cover the time value of money using the financial calculator HP12c, the process of making a good business plan, and understanding how to read and understand financial statements.

FINANCIAL MARKETS 1:

Semester Course. Prerequisite: Elective for Juniors/Seniors & Transfer Students who have Satisfied their Economics Requirement, with Department Approval

This course provides a foundation for learning about financial markets. Students will explore the fundamentals of bonds, stocks, options, and futures. A particular emphasis will be placed on how financial markets work and their impact on the economy. Students will also learn about fundamental and technical analysis. In this interactive course, students will manage a mock portfolio with several financial instruments to gain experience with investing.

FINANCIAL MARKETS 2:

Semester Course. Prerequisite: Financial Markets 1

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

CONTEMPORARY GLOBAL ISSUES:

Semester Course. Prerequisite: Open to Juniors & Seniors

The Contemporary Global Issues course introduces students to the myriad of issues faced in the world today. The purpose of this course is to gain broad-based exposure to some of the cultural, political, and economic challenges and benefits related to and arising from the processes of globalization. Students will choose and explore issues such as economic systems, human rights, world health, regional conflicts, environmental issues, nuclear proliferation, and/ or economic disparity. They will also be required to give oral and PowerPoint/ Keynote presentations. Students will evaluate the issues and propose solutions from a variety of perspectives.

CONTEMPORARY AMERICAN ISSUES:

Semester Course. Prerequisite: Open to Juniors & Seniors

The Contemporary American Issues course introduces students to the myriad of issues confronting the United States today. Emphasis will be placed upon America as a global, multi-cultural, and dynamic society in the 21st century, witnessing and being affected by changes locally, nationally, and internationally. Students will choose and explore one or more of the following issues: economic disparity, healthcare, immigration issues, and inequalities in the justice system, First and Second Amendment rights, and/or environmental issues. We will also investigate important issues as they arise. Students are required to participate in class, lead discussions, and write essays and responses to news articles. They will also be required to give oral and PowerPoint/ Keynote presentations.

COMPARATIVE RELIGIONS:

Semester Course. Prerequisite: Open to Sophomores, Juniors, & Seniors

Religion has impacted human thought, the arts, and literature. This course provides an introduction to the comparative study of the world's great religions. Students in this course will investigate the beliefs, practices, institutions, and cultural expressions of several world religions and the relationship between religion, politics, and social conflict across and between religious traditions. Students will gain an understanding of the nature of religion in an academic sense, as well as its meaning for believers and practitioners.

HONORS SEMINAR COMPARATIVE GOVERNMENT & POLITICS (NOT OFFERED FOR THE 2021-2022 YEAR):

Semester Course. Prerequisite: None

This course introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures, policies, and political, economic, and social challenges of countries around the world. Students compare the effectiveness of approaches to many global issues by examining how different governments solve similar problems. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments.

Health & Wellness Courses

LIFETIME HEALTH & WELLNESS:

Year Course. Prerequisite: Freshman Year

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

PILATES FUSION:

Semester Course. Prerequisite: Open to Sophomores, Juniors, & Seniors

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

STRENGTH & CONDITIONING 1:

Semester Course. Prerequisite: Open to Sophomores, Juniors, & Seniors

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

STRENGTH & CONDITIONING 2:

Semester Course. Prerequisite: Open to Sophomores, Juniors, & Seniors

Strength and Conditioning 2 is designed to provide students with educational instruction to promote high-quality workouts while minimizing the risk of injury. Building on concepts learned in Strength & Conditioning 1, students will use multiple forms of resistance exercise, and 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 1:

Fall Semester Course. Prerequisite: Open to Sophomores, Juniors, & Seniors

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

YOGA:

Semester Course. Prerequisite: Open to Sophomores, Juniors, & 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 students progress in their yoga practice, there will be opportunity to explore advanced *asanas* and breathing techniques and experience other forms of yoga including *hatha*, *vinyasa* and power yoga.

ZUMBA:

Semester Course. Prerequisite: Open to Sophomores, Juniors, & 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.

