



The  
Overlake School  
EST. 1967

Upper School

# Course Catalog 2026-27



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Please visit [Overlake.org](https://www.Overlake.org) to learn more about our programs and to contact Overlake department chairs for more information.

# Credits and Course Requirements

A semester course at the Overlake School is equivalent to .5 credit. A minimum of 23 credits successfully completed during grades 9-12 is required for graduation. This total may include credits from another high school only if you transferred to Overlake after 9th grade. The normal and suggested course load is 6 classes each semester. Students may take no fewer than 5 classes in a given semester and no more than seven classes in a given semester without permission from their Grade Level Dean. In addition, all senior students are required to take a minimum of four courses each semester in some combination of English, Social Studies, Science and, Mathematics.

## Credit Requirements for Graduation

Each student is responsible for completing all requirements for graduation. In addition, each year all students must complete a project week activity, and at least fifteen hours of community service. All students must also meet the co-curricular and outdoor education requirements. All seniors are required to participate in a project in May of their senior year. The Registrar issues at least one notice to each student and his or her advisor regarding the completion of graduation requirements, usually two semesters before anticipated graduation.

## Transfer Credits

If a student transfers to Overlake from another high school, the student's credits will transfer, but will not show on the student's Overlake transcript. These transfer credits will be used to determine course placement, but will not be calculated into the student's Overlake yearly or cumulative GPA. The student is responsible for requesting the official transcript from the attended school be sent to the registrar.

## Credits Earned in Middle School

Credits for Upper School courses taken in the Middle School will not be reflected on the student's Upper School transcript, nor will these credits count toward the student's graduation requirements. All credits for graduation must be earned while the student is matriculating in the Upper School.

## Participation in Graduation Ceremony

All requirements for graduation are to be completed and the student is to be in good standing on the Friday **before** Commencement.

## Double Counting

A course cannot be used to fulfill more than one graduation requirement.

# Upper School Graduation Requirements

Subject	Credits/Years	Specific Courses
<b>English</b>	4 credits	<ul style="list-style-type: none"> <li>English 9</li> <li>English 10</li> <li>4 semesters of English 11-12 electives</li> </ul>
<b>Mathematics</b>	3 credits	<ul style="list-style-type: none"> <li>3 years of core mathematics courses: Algebra, Geometry, Algebra 2, Precalculus, Calculus, AP Calculus AB, AP Calculus BC, Discrete Math, or Linear Algebra</li> </ul>
<b>Social Studies</b>	3 credits	<ul style="list-style-type: none"> <li>World History 9</li> <li>World History 10</li> <li>US History (11th Grade)</li> </ul>
<b>Science</b>	3 credits	<ul style="list-style-type: none"> <li>Life on Our Planet (9th Grade)</li> <li>Earth's Chemical Systems or Honors (10th Grade)</li> <li>Physics or Honors (11th Grade)</li> </ul>
<b>World Languages</b>	2-4 credits	<ul style="list-style-type: none"> <li>3 years of 1 language or</li> <li>2 years each of 2 languages or</li> <li>2 years of languages including the completion of Level IV</li> </ul>
<b>Arts</b>	2 credits	<ul style="list-style-type: none"> <li>4 semesters of Art electives</li> <li>At least 1 semester must be in a visual art and at least 1 semester must be in a performing art</li> </ul>
<b>Physical Education &amp; Health</b>	2 credits	<ul style="list-style-type: none"> <li>9th Grade PE</li> <li>Lifeskills (Health)</li> <li>2 additional semesters of PE electives</li> <li><i>Athletics for PE Credit may fulfill 1 credit of PE for qualifying students</i></li> </ul>
<b>Service Learning</b>	60 hours	
<b>Project Week</b>	1 week annually, all 4 years	
<b>Senior Project</b>	3 weeks in May of Senior year	
<b>Outdoor Education</b>	1 overnight or 2 day trips	

# Arts

The Overlake Arts department mission is to engage students in creative thinking through a broad spectrum of opportunities.

## Music

Upper School 9th - 12th Grade (electives)		
Chamber Choir	String Orchestra	AP Music Theory
Concert Band	Concert Choir	Advanced Chamber Music
	Jazz Band	

### Chamber Choir

Grades Offered: 9, 10, 11, 12 Prerequisite Needed Elective

Full year recommended; may be taken as a semester course.

Prerequisite: By audition only, spring of previous year.

Previous choral experience is recommended, but not required.

The Overlake Chamber Choir is a select vocal ensemble open to all upper school students **by audition only** (the audition will include matching pitch, sight-reading, a short melodic exercise, and assessing the student's ability to sing independently within a 4-part ensemble.) Members should possess skills in musicianship, teamwork, collaboration, and leadership. This course will emphasize healthy vocal production, ensemble skills, music theory, sight singing, and creating a positive group dynamic. Musical focus will be placed on a variety of styles and languages, and the study of challenging choral repertoire, both accompanied and a cappella.

### Concert Band

Grades Offered: 9, 10, 11, 12 Prerequisite Needed Elective

Zero Block elective. Full year recommended; may be taken as a semester course.

Prerequisite: Skill proficiency on one of the instruments listed below.

This course is designed to advance performance skills in a symphonic ensemble setting, and to offer further leadership experience to upper school students wishing to hone their skills and technique on their instrument. Emphasis is placed on refining the basic skills of intonation, dynamics, articulation, balance, blend, and phrasing through rehearsal and performance of a variety of concert band, pep band, and jazz repertoire. There is no limit to the number of instruments that can participate in this group. Concert band instruments include trumpet, trombone, French horn, baritone, tuba, flute, clarinet, oboe, saxophone, percussion and string or electric bass.

### Concert Choir

Grades Offered: 9, 10, 11, 12 Elective

Zero Block elective. Full year recommended; may be taken as a semester course.

The Overlake Concert Choir is a performance ensemble class designed for all grades in the upper school, regardless of previous singing experience. This is a great course for singers of all skill levels, particularly those who wish to begin the study of voice and choral singing. Students will rehearse choral literature in many styles and languages in preparation for the Winter Concert (December), the Spring Concert (April or May), school assemblies, graduation, and other performance opportunities throughout the year. This course will emphasize healthy vocal production, ensemble skills, basic music theory, strong group dynamic and collaboration, and sight singing.

### Jazz Band

Grades Offered: 9, 10, 11, 12 Prerequisite Needed Elective

Full year recommended; may be taken as a semester course.

Prerequisite: New players interested in auditioning must currently be enrolled in Concert Band. Auditions will be held in the Spring of the previous year for enrollment in the fall. Interested students should see the director for a set of audition music as early as possible to prepare an audition. Proficiency on saxophone, trumpet, trombone, piano, bass, guitar and drums is required.

The Overlake Jazz Band is an active ensemble, performing frequently on and off campus for a variety of audiences. The musical focus will include a variety of jazz standards from the big band and be-bop eras as well as contemporary swing and jazz/rock compositions. Students in Jazz Band are required to commit to a rigorous rehearsal/practice schedule and several community performances throughout the year. In addition to performance repertoire, classroom activities will include the study of improvisation, memorization of scales, and the opportunity to work with guest artists.

## AP Music Theory

Grades Offered: 9, 10, 11, 12

Prerequisite Needed

AP

Elective

AP Music Theory is a college-level course designed to cultivate an understanding of music and how it is structured. Students will analyze performed and notated music and explore the concepts of pitch, rhythm, form, and musical design. Although this course will focus on music theory that is based on Western European notation, it is just one of many ways of listening and writing music, so other styles and genres will be studied for context and comparison. Students will prepare for the AP Music Theory exam in May, and their final project will be an in-depth study of a piece of music and attendance at a live performance of that piece in the Seattle area.

**Please note: Although there are no official prerequisites for AP Music Theory, prospective students should be able to read and understand musical notation and have basic performance skills with voice or an instrument in order to successfully keep up with the rigor of this course.**

## String Orchestra

Grades Offered: 7-12

Prerequisite Needed

Elective

Zero Block elective. Full year recommended; may be taken as a semester course.

**Prerequisite: At least two years previous string playing experience; proficiency determined by instructor.**

The Overlake String Orchestra is open to string players in grades 7 through 12 with at least two years of previous playing experience, or permission of the instructor. This ensemble plays three concerts a year featuring music for string orchestra and small chamber ensembles, as well as selected works including woodwinds and brass, and concertos featuring student soloists. There are opportunities to perform in solo and ensemble festivals at both the middle and upper school level. Emphasis is on developing and improving ensemble and individual performance skills, as well as sight-reading ability. Repertoire will include music from a variety of composers and genres.

## Advanced Chamber Music

Grades Offered: 9, 10, 11, 12

Elective

Fall semester elective.

**Prerequisite: Audition with instructor.**

This audition-only course is designed for highly-motivated, advanced high school pianists, string and woodwind players, especially those who plan on continuing their music education beyond high school. In this fall-semester class, students will rehearse the rich and diverse repertoire written for small ensembles (trios, quartets, and quintets) with the goal of performing at the winter concert and the Northlake Solo and Ensemble contest in February. Unlike orchestra, ensembles will perform with one player per part and without a conductor, requiring a high degree of individual responsibility from each student. The class

will focus on developing overall musicianship, aural awareness, and communication (verbal and non-verbal), as well as providing students with practices that strengthen leadership, decision-making, compromise, creativity, and personal accountability.

# Theater

Upper School

9th - 12th Grade

(electives)

Theatrics

Play Production

Actor's Workshop

Musical Production

## Musical Theater Production

Grades Offered: 9, 10, 11, 12

Prerequisite Needed

Elective

**\*Not offered this year\***

Semester elective.

**Prerequisite: Previous theater experience is recommended, though not required.**

This semester-long course is designed for students with particular interest in musical theater performance. In this course, students will have the opportunity to integrate their skills in acting, singing, and dance in a challenging and intricate musical theatre production. Past productions include *Into the Woods*, *The Spitfire Grill*, *The 25th Annual Putnam County Spelling Bee*, *Big Fish*, and *The Addams Family*. Students taking this class must approach their craft of acting with professionalism and leadership. The cast will be required to commit to a rigorous rehearsal schedule in the final weeks before performance which includes after school and weekend commitments.

## Play Production

Grades Offered: 9, 10, 11, 12

Prerequisite Needed

Elective

Fall semester elective.

**Prerequisite: Prior theater experience is preferred, but not required. Availability for after school rehearsals is required during the weeks prior to performance.**

This semester-long class is designed for acting students with particular interest and experience in acting and stage performance. This class culminates in a production that will be presented for the school community as well as for the public. Students taking this class must approach their craft of acting with professionalism and leadership. The course will focus on auditions, script analysis, acting methods, movement and vocal work, and performance preparation. Past productions include *Love/Sick*, *Macbeth*, *12 Angry Men*, *Nicholas Nickleby*, *Radium Girls*, *Almost, Maine* and *Our Town*. The cast will be required to commit to a rigorous rehearsal schedule in the final weeks before performance which includes after school and weekend commitments.

## Theatrics

Grades Offered: 9, 10, 11, 12

Elective

Fall semester elective.

In Theatrics, we will explore a variety of different ways to create theatre. Students will explore acting methods, voice over work, musical theatre, stage combat, gore makeup, and even a directing unit! Come experience a new way to look at the world of theatre. **No experience necessary, but a willingness to engage with new ideas is a must!**

## Actor's Workshop

Grades Offered: 9, 10, 11, 12

Elective

Semester elective.

This performance-based course introduces students to the foundational techniques of acting through a structured progression of physical, vocal, and scene work. Students will develop skills in communication and storytelling with a focus on voice (articulation, projection, intention and pacing), the body, and the concepts in Stanislavski's acting method. Objective, obstacle, given circumstances, and tactics will be explored through monologues, group scenes, and larger ensemble pieces, including classical and contemporary realistic drama. This course is designed for students who are interested in developing performance skills, building confidence, and deepening their understanding of character and storytelling.

# Visual Art

## Upper School

### 9th - 12th Grade

(electives)

Drawing	Photography 1 and 2	Stagecraft
Sculpture	Media Production	Advanced Studio Art
Graphic Design	Advanced Film & Media	Mixed Media Art
Painting		Yearbook Production

## Advanced Studio Art

Grades Offered: 9, 10, 11, 12

Prerequisite Needed

Elective

Fall semester elective.

Prerequisite: One semester Upper School visual art elective.

Advanced Studio Art is for the student who has taken at least one US Visual Art class in Painting, Drawing, Sculpture, or Mixed Media, and has a desire to explore the medium more fully. This class is an intermediate to advanced level course, where students will be expected to work independently and responsibly on each chosen project with supervision and guidance from the instructor. Students will have the studio space to make a body of work in the medium (or mediums) they have selected, including - but not limited to - painting, sculpture, drawing, 2-D or 3-D design.

## Drawing

Grades Offered: 9, 10, 11, 12

Elective

Fall semester elective.

US Drawing is an introductory course with emphasis on basic drawing skills using a variety of materials and techniques. Drawing is a fundamental activity in the visual arts which involves critical thinking, learning to ask questions, and making judgments. This course introduces students to a visual art vocabulary that helps to interpret and understand works of art. Students will be challenged to deepen their experience as an artist by experimenting, taking creative risks, practicing, receiving constructive feedback, reflecting, revising, and refining work over time.

## Graphic Design

Grades Offered: 9, 10, 11, 12

Elective

Semester elective; offered both fall and spring.

Graphic Design shapes how we interpret the world—through the digital platforms we use, the brands we trust, and the visuals that influence our choices every day. This course

invites students to think creatively and intentionally about visual communication while developing skill with professional tools and techniques. Students will build fluency in *Adobe Photoshop*, *Adobe Illustrator*, and *Procreate*, alongside hands-on design processes. Through portfolio-focused projects—including logos, posters, book covers, packaging, and other projects—students learn to translate ideas into compelling visual forms. The course also emphasizes design thinking, critique, and iteration, as well as exposure to influential designers and contemporary practices. Students leave with a polished portfolio and practical skills they can apply beyond the classroom—whether creating presentations, promoting events, building personal brands, or communicating ideas with clarity and impact.

## Media Production

Grades Offered: 9, 10, 11, 12

Elective

Semester elective; offered both fall and spring.

Media Production is a hands-on course where students explore the world of video, audio, and digital media creation. In this class, students will learn the fundamentals of producing content using industry-standard tools and software, including *Adobe Premiere*, *After Effects*, and *Audition*. Through individual and group projects, students will develop skills in storytelling, camera operation, sound design, and post-production. Whether creating short films, podcasts, or digital content for social media, students will gain practical experience that prepares them for further study or careers in media production.

## Mixed Media Art

Grades Offered: 9, 10, 11, 12

Elective

Fall semester elective.

This hands-on course is a general introduction to the visual arts, with an emphasis on skill building and exploring a wide variety of materials and techniques. Students will work on two- and three-dimensional projects and learn basic drawing and painting skills, while focusing on the important elements and principles of art. This course will emphasize experimentation and creative risk taking.

## Painting

Grades Offered: 9, 10, 11, 12

Elective

### Spring semester elective.

US Painting is an introductory course which teaches basic painting skills using a variety of painting materials and techniques. This course introduces students to a visual art vocabulary that helps to interpret and understand works of art. Students will be challenged to deepen their experience as an artist by experimenting, taking creative risks, practicing, receiving constructive feedback, reflecting, revising, and refining work over time.

## Photography 1

Grades Offered: 9, 10, 11, 12

Elective

### Semester elective; offered both fall and spring.

We all have the ability to take picture with the fancy, tiny computer in our pockets, but how can you take *great* photographs that say something beyond the “selfie” and the candid? Looking at and creating photographs is an incredible way for people to connect, and to appreciate the world around us. This course will help students become thoughtful fine art photographers through shooting and editing photographs using digital cameras (DSLR)\*, cell phone cameras, and *Adobe* programs. Each student will build a web site portfolio and make prints to show off their work. \*Students do not need to have their own digital camera to take this course.\*

## Photography 2

Grades Offered: 10, 11, 12

Prerequisite Needed

Elective

### Spring semester elective.

**Prerequisite: Photography 1. If you have prior photography experience, but have not taken a course at Overlake, you will need to show examples of your work and get written permission from Danielle Troy.**

Photography 2 is a deeper exploration of photography as fine art. Students will continue working with digital photography while focusing on creativity through skill building. We will spend time viewing photographs in all genres from around the globe and explore the more personal side of making art. Photography 2 also allows students to explore film photography and darkroom printing. Tools used for this class will be cell phone cameras, smartphone apps, digital SLR cameras, *Adobe Photoshop* and *Lightroom*. \*Students do not need to have their own digital camera to take this course.\*

## Sculpture 1

Grades Offered: 9, 10, 11, 12

Elective

### Fall semester elective.

This hands-on course is an introduction to sculpture in the visual arts. Students spend the semester experimenting with 3-dimensional forms, shapes, balance, techniques, and materials. We will emphasize trial and error, along with experimentation, and move from traditional to experimental

skill building and conceptual ideas. *Sculpture 2* is offered depending on student interest and availability.

## Stagecraft

Grades Offered: 9, 10, 11, 12

Elective

**Fall semester elective. Students will be required to spend four hours outside of class at work parties or similar production events over the course of the semester.**

In this course, students will work as a production team to design, coordinate, and construct the technical elements for productions and concert events in the Fulton Performing Arts Center. Students will be involved in all phases of each project. The design process includes script analysis, brainstorming, design selection and creating construction drawings or models. The construction process involves skills of carpentry, painting, rigging flown in scenery, and special effects. Additionally, students develop working knowledge of lighting and sound aspects of theater. Finally, Stagecraft is involved in the strike of all scenery, properties, lighting, sound and special effects. This course is designed for students who wish to have a hands-on experience in “making theater happen.”

## Yearbook Production

Grades Offered: 9, 10, 11, 12

Elective

**Full-year elective. Meets two days a week after school. Students in yearbook cannot participate in more than one season of athletics.**

Help decide what's covered in the Overlake Odyssey while also developing editing, design and photography skills. Yearbook staff will brainstorm what theme to choose, as well as what topics to include, and everyone works on a variety of pages throughout the year. The main goal of this year-long class is to produce a high quality yearbook. One credit is earned for successful completion of Yearbook.

## Advanced Film & Media

Grades Offered: 10, 11, 12

Prerequisite Needed

Elective

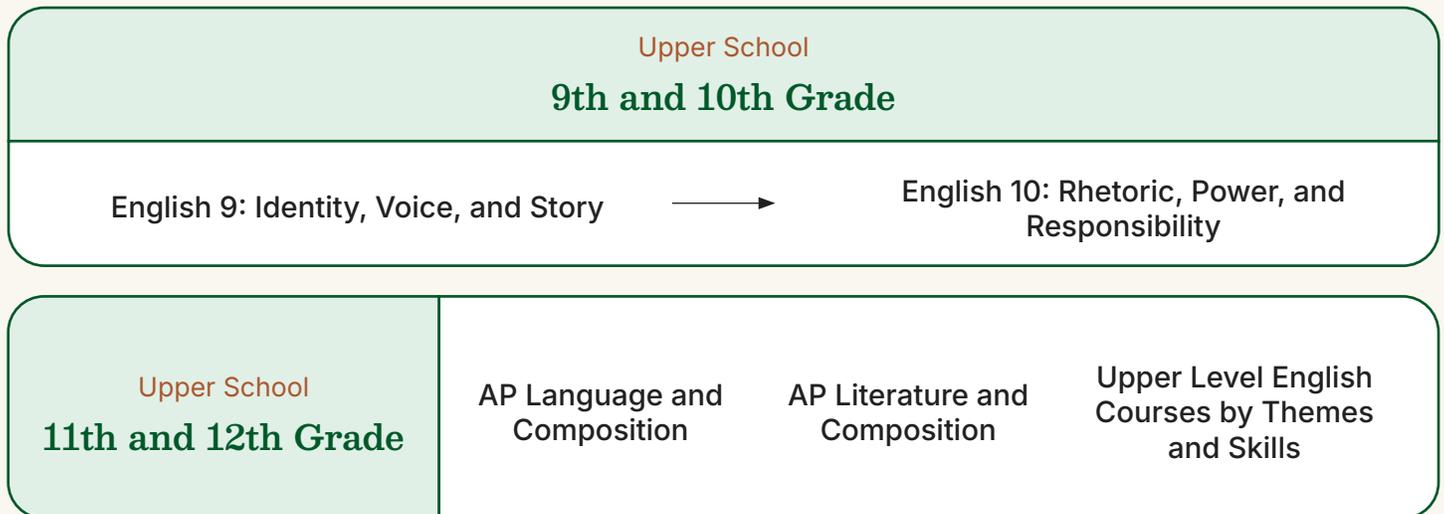
### Spring semester elective.

**Prerequisite: One semester of Graphic Design or Media Production, or permission of the instructor.**

Advanced Media Production is a hands-on course for students to produce storytelling content for authentic audiences in the digital media platforms of their interest. Students will choose a media platform and software as a concentration and work through the full production process individually or in groups. Concentrations include podcasting, documentary production, animation, UX (user experience) design, social media marketing, web design, or graphic design. Students will use industry standard software relevant to their concentration, including *Adobe Audition*, *Premiere Pro*, *After Effects*, *Illustrator*, *Photoshop*, *Procreate*, *Figma*, or other relevant resources. Topics also include project management, post-production workflows, and an introduction to emerging technologies in media. Students will develop a digital portfolio of published work from the course.

# English

The Overlake English Department fosters a passion for learning through the study of literature and writing.



## English 9: Identity, Voice, and Story

Grade Offered: 9

Required

How do individuals and communities tell the stories that shape who they are? In Grade 9, students explore how identity is expressed and constructed through fiction, poetry, drama, and visual media. Through close reading, discussion, and analytical writing, students examine voice, perspective, and cultural context, considering how individuals define themselves within families, communities, and larger social worlds. The course introduces key rhetorical concepts, including audience, purpose, and tone, and builds foundational skills in textual analysis, evidence-based writing, and clear claim development.

## English 10: Rhetoric, Power, and Responsibility

Grade Offered: 10

Required

How does language shape power, and how do individuals respond? In Grade 10, students examine how writers and speakers craft arguments and narratives to influence audiences and respond to the social and institutional forces that shape their world. Through sustained close reading and rhetorical analysis, students evaluate how language functions within systems of power, analyzing how argument, structure, and style shape meaning, credibility, and impact. The course emphasizes the development of nuanced claims, synthesis across texts and perspectives, and purposeful writing that adapts to audience and context, preparing students for advanced coursework.

## AP English Language and Composition

Grades Offered: 11, 12

Elective

AP

How do writers use rhetoric to shape arguments and influence audiences? In this college-level course, students examine nonfiction texts through the study of rhetoric and argument. Through analysis of primarily American essays, speeches, journalism, and visual media, students explore how writers construct arguments, develop claims, and respond to complex issues. The course emphasizes the close study of rhetoric and argumentation, focusing on how writers use structure, diction, syntax, tone, and evidence to influence audiences. Students develop skills in analytical, argumentative, and synthesis writing that mirror the expectations of introductory college composition courses. By the end of the year, they are prepared both for the AP examination and for the demands of college-level reading, writing, and critical thinking.

## AP English Literature and Composition

Grades Offered: 11, 12

Elective

AP

How do literary works across time and culture illuminate enduring questions about the human experience? In this college-level course, students examine poetry, prose, drama, and works of literary theory through close reading and critical analysis. Across historical periods and cultural contexts, students explore how authors create meaning through form, structure, language, and symbolism across genres and periods. Students consider how themes such as identity, power, love, and oppression are interpreted by authors from Antiquity to the 21st Century, as well as reflect on how these ideas relate to their own lives. Students refine their ability to craft nuanced interpretations framed by well-reasoned claims and grounded in precise textual evidence and sophisticated analysis. By the end of the year, they are prepared both for the AP examination and for the demands of college-level reading, writing, and critical thinking.

## Contemporary Human Studies

Grades Offered: 11, 12

Elective

In Grades 11 and 12, students may pursue advanced electives that extend literary study through interdisciplinary inquiry. These courses pair close reading and analytical writing with frameworks from psychology, philosophy, and emerging technologies, inviting students to examine complex questions about identity, behavior, innovation, and responsibility in a rapidly changing world.

## Beyond Human: AI, Innovation, and the Future of Identity

Grades Offered: 11, 12

Elective

What makes us human, and how might emerging technologies reshape that answer? In this forward-looking upper-level literature course, students explore the tension between human identity and artificial intelligence through novels, short fiction, film, and philosophy. As technologies once imagined in science fiction blur the boundary between human and machine, students examine questions of personhood, agency, responsibility, and what should remain distinctly human. Students strengthen their ability to reason through complex questions about the human-machine relationship, deepening their analytical skills and their understanding of how innovation may shape not only what we can do, but who we become.

## Mind, Brain, Behavior: Literature Through the Lens of Psychology

Grades Offered: 11, 12

Elective

What drives human behavior, and how do stories reveal the hidden workings of the mind? In this upper-level literature course, students examine novels, short fiction, memoir, and film through the frameworks of cognitive and social psychology. Drawing on concepts such as perception, memory, identity formation, and social influence, students explore how literature illuminates and complicates what science tells us about human behavior and identity. Students gain fluency in psychological concepts and use them to analyze literary texts, strengthening their analytical skills and deepening their understanding of the forces that shape human behavior.

## Satire and Society: Story, Power, and Public Discourse

Grades Offered: 11, 12

Elective

**\*Not offered this year\***

How does humor shape what a culture sees, questions, and accepts as true? In this upper-level literature course, students examine satire, parody, and comedic storytelling across essays, fiction, poetry, drama, film, television, and digital media. Drawing on rhetoric, media studies, and free expression theory, students explore how humor functions as critique and persuasion, shaping public conversation and challenging cultural assumptions while

raising questions about responsibility and ethical limits. Students investigate how comedic forms operate within larger systems of power and influence, deepening their understanding of how narrative shapes public life in a rapidly evolving media landscape.

## Monsters and Meaning: Horror, Power, and the Human Condition

Grades Offered: 11, 12

Elective

**\*Not offered this year\***

Why do stories of fear, monsters, and the unknown endure across cultures and eras? In this upper-level literature course, students examine works of horror across fiction, film, and cultural texts to explore how fear reflects fundamental questions about identity, morality, and the limits of knowledge. Drawing on psychology and cultural theory, students investigate how horror gives shape to social anxieties, challenges assumptions about normalcy, and exposes tensions surrounding the body, technology, and power. Students examine how the figure of the monster reveals what societies repress, marginalize, or struggle to understand, deepening their understanding of fear as a force in shaping culture and human behavior.

# Experiential Education

Explore the unknown, Learn by doing, Lead by example, and Cultivate life-long learning.

## Ethical Leadership

Grades Offered: 9, 10, 11, 12

Elective

### Spring semester elective.

Ethical Leadership is a highly interactive, inquiry-based course that explores what it means to lead with integrity, empathy, and responsibility in a complex world. Students examine leadership as both a personal practice and a social responsibility, learning how values, communication, motivation, and group dynamics shape ethical decision-making.

Through reflection, discussion, readings, and experiential activities, students begin by looking inward, analyzing their own leadership styles, motivations, and value systems, before turning outward to study how leaders influence individuals, teams, organizations, and communities. Using leadership theory, case studies, and real-world examples, students investigate how ethical leaders build trust, navigate conflict, manage time and priorities, and create inclusive and effective group cultures.

Throughout the semester, students develop a practical “ethical leadership toolkit” they can use when facing difficult choices, uncertainty, and competing priorities. Emphasis is placed on emotional intelligence, empathy, communication, and motivation, helping students understand how ethical leadership is not only about making the right decision, but about how those decisions are made, communicated, and lived out.

A core feature of the course is its experiential focus. In late May, students participate in a three-day leadership practicum during Field Studies, where they apply their leadership and communication skills while working with small groups of 8th-grade students. This field-based experience allows students to test their leadership in real situations, receive feedback, and reflect on how their values and actions affect others.

Ethical Leadership prepares students to lead thoughtfully in school, in their communities, and beyond, building the confidence, ethical awareness, and practical skills needed to navigate ambiguity and guide others through it.

## Rock Climbing and Physical Education

Grades Offered: 9, 10, 11, 12

Elective

**Fulfills: Outdoor Education credit + Physical Education credit.**

This course blends the challenge of rock climbing with the foundations of physical education and movement literacy. Students will learn essential climbing movement skills—balance, footwork, core engagement, sequencing, dynamic and static movement, and efficient body positioning—through bouldering, top-rope climbing, and introductory lead climbing. Alongside climbing technique, students will build functional strength, endurance, flexibility, coordination, and overall fitness.

As part of the PE requirement, students will engage in structured movement training, conditioning, and progression-based skill work aligned with the National Association of Sports and Physical Education (NASPE) standards, including competency in motor skills, understanding movement concepts, maintaining personal fitness, responsible personal and social behavior, and valuing physical activity for health and enjoyment.

In addition to learning core climbing skills, students will explore other outdoor activities—such as hiking, navigation, or seasonal fitness adventures—as time and weather permit, reinforcing both physical education goals and outdoor competency.

Students will also support the Sixth Grade PE Instruction during simultaneous blocks. This class includes an outside-of-class component, offering authentic opportunities to apply skills in natural environments, practice responsible risk management, and deepen confidence in outdoor movement. Ideal for students seeking physical challenge, leadership growth, and a unique pathway to earning both PE and Outdoor Education credits.

## Theory and Practice of Social Change

Grades Offered: 9, 10, 11, 12

Elective

**\*Not offered this year\***

This course will prepare students to be thoughtful and effective agents of change within organizations and communities. Through theoretical foundations, skill building, and practical application of social change theory in community settings, students will explore the following questions:

- What is the history of the non-profit sector in the United States, and how has that history shaped social change work today? What are the limitations of non-profit organizations in the advancement of justice?
- Besides the non-profit sector, in what other contexts do social change movements operate? What strategies do movements employ and to what effect?
- How do my social identities and personal narratives impact my perspectives, realities, and worldviews? How do they impact my role in social change work?

Students will navigate these questions by learning from legacies of social change-makers, collaborating with community-based groups/organizations, engaging in dialogue with each other, and developing a reflexive practice (attending to the cultural, political, social, and ideological origins of one’s own perspective and voice). Students will be required to participate in a two-day community engagement field trip during school hours, TBD days in January, 2024, followed by deeper engagement with one organization throughout the semester. This course both uses and questions best practices in “service-learning,” including identifying issues of reciprocity, cultural humility, power relationships, and links to classroom learning. Students will demonstrate skills and habits of

reflection through observation, critical analysis, writing, and engaging with others in supportive discourse. Students will engage with a diversity of texts and experts in the social change field, examine community opportunities and solutions of personal relevance, and reflect on their own past and present experiences of social change within various spheres of life, including families, neighborhoods, communities, schools, and other systems.

# Interdisciplinary Studies

## Design Thinking: Design with Impact

Grades Offered: 9, 10, 11, 12

Elective

### Semester elective.

Design Thinking is a class intended to enable you to make your personal stamp on your Overlake experience.

The course is designed to introduce you to the IDEA Lab and to the mind-set and strategies that lead to successful exploration and innovation; the kind of work that is central to what the IDEA Lab is all about. Design Thinking is a course that will provide you the opportunity to be engaged in a process of research and innovation to craft a personal, in-depth inquiry into a self-selected area of interest, curiosity or passion. You will learn about the central elements of design-thinking and then use this approach to creatively address a problem or challenge you have identified, with the hopes of arriving at novel, sustainable solutions.

Design-thinking is experimental by nature, rooted in facing and tackling problems that truly impact humanity. Regardless of the subject of interest, developing your project will involve discovery, creative thinking, experimentation/prototyping, evaluation, and presentation. The course will introduce you to the components and traits of these steps with smaller, initial projects, all directing you to the development of your own work. Among the products you will produce will be a thorough portfolio chronicling your design-thinking process for your major project.

### Two Examples of Design Thinking:

1. The challenge: What can we do to make the Whitten Math and Sciences Center a true student hub at the Overlake School?  
The project involves the development and implementation of a business plan for putting a coffee cart into the new building
2. The problem: Gender-based violence in Rwanda continues to be a problem despite noteworthy progress on addressing and eliminating the problem. In 2019 35% of women reported being victims of some form of physical violence.  
The project involves the design and prototyping of a bracelet that will notify/alert police or emergency facilities when the wearer is in a dangerous situation.

## Engineering: Applications of Computer Science

Grades Offered: 9, 10, 11, 12

Elective

### Full-year elective.

Engineering: Applications of Computer Science is an engineering course that engages students in programming and computational thinking to solve hands-on engineering design challenges. For students with an interest in engineering, the course provides opportunities to design computing-enabled solutions to engineering problems. For students with an interest in learning to code or to apply

coding skills, the course's hands-on, human-centered approach motivates the development of programming and other computational thinking skills. For both groups, the course sparks curiosity and provides valuable experiences with computing, design, and problem-solving that will benefit all students, regardless of their future career goals.

Engineering: Applications of Computer Science offers students a unique opportunity to learn and apply programming and other computational thinking skills in the context of human-centered design projects. Students practice creativity, critical thinking, problem solving, collaboration, communication, and purposeful application of STEM and computing principles. Students who complete this course are well-placed to make informed decisions about future coursework in engineering, computer science, robotics, and related fields.

## Engineering Design and Analysis

Grades Offered: 10, 11, 12

Prerequisite Needed

Elective

### Full-year elective.

#### Prerequisite: Algebra I.

Engineering Design and Analysis is a year-long course that offers opportunities for students to build creative problem-solving and engineering design skills, collaborate to solve complex, modern problems, and build a strong foundation for future learning. This hands-on, team-based, inquiry-focused engineering design course provides meaningful learning experiences for students with diverse interests and learning styles. This class is open to students whether or not they are interested in becoming engineers. Regardless of their future career plans, students will develop valuable critical thinking and problem-solving skills as well as habits of mind that can be applied to any field.

Students in Engineering Design and Analysis will work to discover the engineering design process, make data-driven decisions, and work in multi-level teams to solve complex problems. Students will explore various fields of engineering through a series of design challenges that illustrate how engineering can improve people's lives and health, meet the special needs of different customer groups, and even enable creativity.

Overlake students who take this course have the opportunity to earn college credit for successful completion of the course. To earn credit, please see the information below:

#### Optional University of Texas - Austin Credit

UT-Austin Equivalent Course - ES 301 - Engineering and Design and Problem Solving (4.5 Quarter credits)

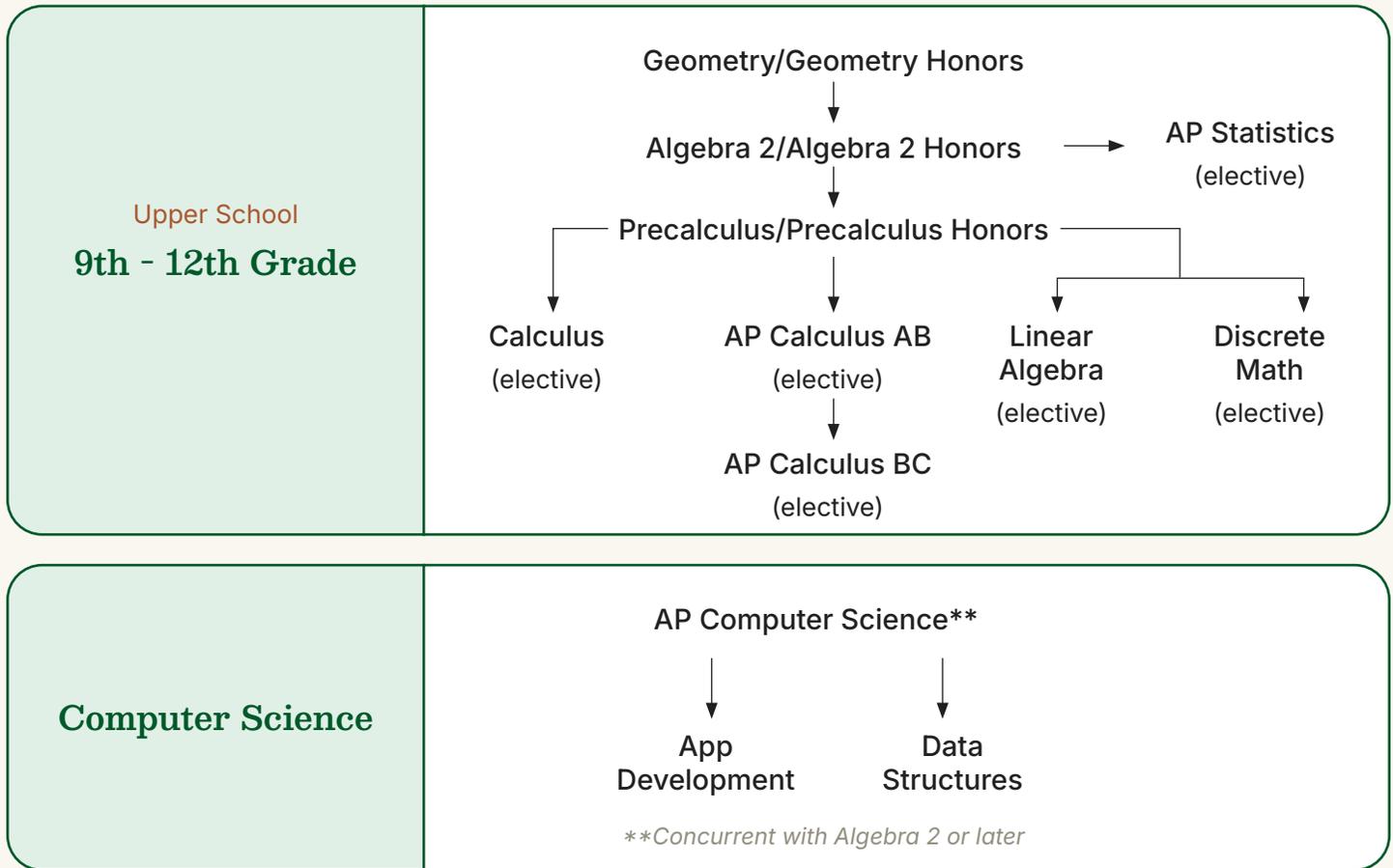
Cost - \$300 (subject to change)

**Course Description:** This Course uses a unique, multi-level engineering design process, highlighting engineering's potential to impact human lives.

Website: [www.engineeryourworld.org](http://www.engineeryourworld.org)

# Mathematics and Computer Science

The Overlake Math & Comp Sci Department provides students with the foundations necessary for college as well as 21st-century careers.



## Geometry

Prerequisite Needed

**Prerequisite: Algebra I.**

The purpose of the traditional full-year course in Geometry is twofold. It is important that students learn the properties and relationships among geometric figures. Primarily, however, the study of geometry provides fundamental insight into how an axiomatic system works. Development of logical and critical thinking skills and communication with precise language and symbols is emphasized. Special attention is given to writing sound mathematical definitions, formulating reasonable postulates, and proving claims about geometric figures. Both the honors and the regular level classes provide review of algebraic concepts throughout the year in preparation for Algebra II.

## Honors Geometry

Prerequisite Needed

**Prerequisite: Algebra I.**

The purpose of the traditional full-year course in Geometry is twofold. It is important that students learn the properties and relationships among geometric figures. Primarily, however,

the study of geometry provides fundamental insight into how an axiomatic system works. Development of logical and critical thinking skills and communication with precise language and symbols is emphasized. Special attention is given to writing sound mathematical definitions, formulating reasonable postulates, and proving claims about geometric figures. Honors-level students are expected to achieve a high degree of mastery and be able to work independently. Advanced topics may be integrated into the honors course at the discretion of the instructor. Both the honors and the regular level classes provide review of algebraic concepts throughout the year in preparation for Algebra II.

## Algebra II

Prerequisite Needed

**Prerequisite: Geometry.**

This course is designed to greatly expand students' understanding of functions and to broaden the algebraic skill set. Students explore polynomial, exponential, logarithmic, rational and radical functions as well as special functions and conic sections. Students deepen their understanding by investigating the inverses of functions. Properties and evaluation of functions, techniques in problem-solving, and inequalities are addressed throughout

the year. All of the topics in this course are explored both analytically and graphically, with and without the aid of a graphing calculator. Both honors and regular Algebra II will address a core curriculum necessary to the study of Precalculus.

## Honors Algebra II

Prerequisite Needed

**Prerequisite: Geometry.**

This course is designed to greatly expand students' understanding of functions and to broaden the algebraic skill set. Students explore polynomial, exponential, logarithmic, rational and radical functions as well as special functions and conic sections. Students deepen their understanding by investigating the inverses of functions. Properties and evaluation of functions, techniques in problem-solving, and inequalities are addressed throughout the year. All of the topics in this course are explored both analytically and graphically, with and without the aid of a graphing calculator. Honors-level students are expected to achieve a high degree of mastery and be able to work independently. Advanced topics may be integrated into the honors course at the discretion of the instructor. Both levels of Algebra II will address a core curriculum necessary to the study of Precalculus.

## Precalculus

Prerequisite Needed

**Prerequisite: Algebra II.**

Students gain broader and deeper understanding of polynomial, rational, exponential, and logarithmic functions by further investigating their properties and applications. A thorough study of trigonometric functions completes the skill set necessary for the study of calculus. Both honors and regular Precalculus will address a core curriculum necessary to the study of Calculus.

## Honors Precalculus

Prerequisite Needed

**Prerequisite: Algebra II.**

Students gain broader and deeper understanding of polynomial, rational, exponential, and logarithmic functions by further investigating their properties and applications. A thorough study of trigonometric functions completes the skill set necessary for the study of calculus. The honors-level class will apply skills to more difficult, multi-stage problems and move at a faster pace. Honors-level students are expected to achieve a high degree of mastery and be able to work independently. Advanced topics may be integrated into the honors course at the discretion of the instructor. Both levels of Precalculus will address a core curriculum necessary to the study of Calculus.

## AP Calculus (AB)

Prerequisite Needed

AP

Elective

**Prerequisite: Precalculus and current teacher's recommendation.**

The workload, pace, and content of this course is comparable to a college-level calculus course covering limits, continuity, differentiation, and an introduction to integral calculus. Topics in differential equations are also introduced. The College Board AP Calculus AB exam is administered nationally by all participating schools on a predetermined date in May. The College Board website provides the exam date and detailed description of the curriculum, which must be covered in its entirety. Students should expect a high degree of independent learning. Some colleges and universities offer college credit or advanced placement to students passing the exam at a high level. Students are encouraged to investigate these possibilities.

## AP Calculus (BC)

Prerequisite Needed

AP

Elective

**Prerequisite: AP Calculus AB or Calculus with current teacher's recommendation.**

First-year concepts of differentiation and integration are extended to polar, parametric, and vector functions. Students master new methods for evaluating limits, evaluating integrals, and solving differential equations. Series and tests for their convergence as well as power series and polynomial approximations are studied. The workload, pace, and content of this course is comparable to a second or third semester course at colleges and universities.

## Calculus

Prerequisite Needed

Elective

**Prerequisite: Precalculus.**

This capstone course in high school mathematics introduces students to the concepts of differential and integral calculus. This course provides a rigorous alternative introduction to Calculus without the stress or focus on preparing for an AP exam. Fall semester includes derivatives, related rates, curve-sketching and optimization. Spring semester introduces definite and indefinite integrals, area and volume. Through practice with applied problems, students learn to communicate their methods using appropriate language, symbols and units. A solid understanding of geometry, functions, and trigonometry is necessary for success in this course. Students who complete this course can still elect to take AP Calculus AB the following year.

## Linear Algebra

Prerequisite Needed

Elective

**Fall semester elective.**

**Prerequisite: Precalculus or Precalculus Honors.**

Linear algebra is a branch of mathematics studying linear

equations and their relationships to matrices and vector spaces. This topic is a fundamental component of many important mathematical applications including finance, cryptography, artificial intelligence, web search, computer graphics and more. The course will cover the basic elements of a college-level Introduction to Linear Algebra course, including: matrix algebra; determinants; elementary vector spaces; linear transformations; and characteristic equations and eigenvalues. As time and resources permit, students will use computing technologies to create and explore applications of linear algebra.

## Discrete Mathematics

Prerequisite Needed Elective

Spring semester elective.

Prerequisite: Precalculus or Precalculus Honors.

Discrete Mathematics is the study of mathematical structures that are discrete, separated or distinct; in contrast with Calculus which deals with continuous change. It is an important area of pure and applied mathematics, as well as providing the mathematical basis for the understanding of computers and modern computation. Discrete Mathematics is also important in the sciences, where it has increasing application in many areas, an exemplar of which is the understanding of DNA sequences in molecular biology. This course will cover topics based on instructor and student interest such as Boolean logic; enumerative combinatorics; recurrence relations; relation theory and lattices; voting theory; theoretical computer science and computability theory; and graph theory.

## AP Statistics

Prerequisite Needed AP Elective

Full-year elective. This course is intended as a second math elective and cannot be taken in lieu of a course in the normal sequence until the senior year. Even seniors are strongly encouraged to take their regular math course concurrently.

Prerequisite: Algebra II.

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes:

1. Exploring Data: Describing patterns and departures from patterns
2. Sampling and Experimentation: Planning and conducting a study
3. Anticipating Patterns: Exploring random phenomena using probability and simulation
4. Statistical Inference: Estimating population parameters and testing hypotheses

Successful AP statistics students have good quantitative reasoning, good reading comprehension, clear written communication and consistent study habits. Students will be challenged to think critically about data, to use statistical methods with a deep level of understanding, and to write persuasive responses to real-world questions. A graphing calculator will be the student's constant companion.

## AP Computer Science

Prerequisite Needed AP Elective

Full-year elective. This course is recommended as a second math elective. Seek departmental advice if taking this course in lieu of a course in the normal sequence.

Prerequisite: Algebra II.

AP Computer Science covers the course content defined by the College Board's AP curriculum and prepares students for the advanced placement exam in May. The course teaches the Java programming language and reviews and elaborates on the fundamental methods of object-oriented programming. Much of the material is based on the implementation and analysis of common data structures including arrays and array lists. Basic algorithms for sorting and searching are presented and their asymptotic behavior is analyzed. Students enhance their program design, implementation, testing, and debugging skills through frequent programming projects. Finally, they gain experience reading, understanding and modifying a substantial pre-existing program.

## Post-AP CS: Data Structures

Prerequisite Needed Elective

Fall semester elective.

Prerequisite: Successful completion of AP Computer Science or equivalent. Questions about permission should be emailed to the department chair.

Programming Language: Java. The AP Computer Science prerequisite course prepares students with little to no prior experience to understand and engage in object-oriented programming with the Java language. This course gives students the skills generally attained during the second course in a college-level CS introductory sequence. The goals of this course build upon and extend the content from the AP course, requiring a thorough understanding of the previous learning objectives. This course primarily presents concepts of data abstraction and encapsulation. The structures taught and implemented include stacks, queues, linked lists and binary trees, as well as comparisons to arrays and array lists. Students also gain experience with recursion, analysis of complexity, and use of predefined collection classes. They use the concepts presented in class to create, debug, modify, and test a variety of programming projects of differing complexity.

## Post-AP CS: App Development

Prerequisite Needed Elective

Spring semester elective.

Prerequisite: Successful completion of AP Computer Science or equivalent. Questions about permission should be emailed to the department chair.

Programming language: Java. Students with a working knowledge of object-oriented programming fundamentals in java will be given the opportunity to further practice and extend those skills in this applied course. This course focuses on student engagement in the learning process

through a practical, collaborative approach that allows for a creative and authentic experience. The majority of activities will be centered around learning and practicing the details of developing mobile apps using core OOP principles and various APIs available. Concepts related to the process rather than coding, such as best practices of mobile development and strategies of completing large projects in teams, will be presented and implemented as well. The final goal of the course will be to complete, in a group, a thoroughly polished Android app incorporating all skills learned during the semester.

# Physical Education

Physical Education is an essential part of the total Overlake educational process.



## 9th Grade PE

Grade Offered: 9

Required

Required for all 9th grade students. All 9th graders will be automatically enrolled in this course.

This course is an introduction to upper school physical education. It will include components from each of the elective courses offered at Overlake.

Our main objectives in this course are to:

1. Give our students the opportunity to explore different aspects of physical education in order to give them more intentional options for future PE classes
2. Conduct specific fitness tests in order to determine areas of strength and weakness
3. Help students demonstrate competency in a variety of motor skills
4. Help students apply knowledge of concepts, principles, strategies, and tactics related to movement and performance
5. Encourage students to demonstrate the knowledge and skill necessary to achieve and maintain a health-enhancing level of physical activity and fitness

All 9th graders will be placed in this course and there is an option to take this course during the school day and at the zero block hour.

## Rock Climbing and Physical Education

Grades Offered: 9, 10, 11, 12

Elective

Fall semester elective. Fulfills: Outdoor Education credit + Physical Education credit

This course blends the challenge of rock climbing with the foundations of physical education and movement literacy. Students will learn essential climbing movement skills—balance, footwork, core engagement, sequencing, dynamic and static movement, and efficient body positioning—

through bouldering, top-rope climbing, and introductory lead climbing. Alongside climbing technique, students will build functional strength, endurance, flexibility, coordination, and overall fitness.

As part of the PE requirement, students will engage in structured movement training, conditioning, and progression-based skill work aligned with the National Association of Sports and Physical Education (NASPE) standards, including competency in motor skills, understanding movement concepts, maintaining personal fitness, responsible personal and social behavior, and valuing physical activity for health and enjoyment.

In addition to learning core climbing skills, students will explore other outdoor activities—such as hiking, navigation, or seasonal fitness adventures—as time and weather permit, reinforcing both physical education goals and outdoor competency.

Students will also support the Sixth Grade PE Instruction during simultaneous blocks. This class includes an outside-of-class component, offering authentic opportunities to apply skills in natural environments, practice responsible risk management, and deepen confidence in outdoor movement. Ideal for students seeking physical challenge, leadership growth, and a unique pathway to earning both PE and Outdoor Education credits.

## Lifeskills

Grade Offered: 9, 10

Required

Semester course; offered both fall and spring. 9th and 10th grade requirement.

As a college-preparatory school, core academic skill areas are a major focus to inspire excellence and to develop intellectual curiosity. To further Overlake's mission to teach responsibility, embrace diversity, and foster a compassionate community, core lessons in the Lifeskills curriculum focus on understanding and competency in skills beyond academic subject areas necessary in

developing the “whole student” and leading to interpersonal, physical, and professional success. Issues related to personal responsibility, safety, effective communication, and decision-making are explored in an activity-oriented classroom, where discussion, hands-on practice, and guest speakers provide students with meaningful opportunities for gaining knowledge and developing competency in areas vital for responsible participation in adult life. Units include Social-Emotional Wellness, Cultural Competency, Mental Health and Wellness, Physical & Sexual Safety and Wellness, and Basic Competencies.

## Strength & Conditioning for Athletic Performance

Grades Offered: 10, 11, 12

Elective

**Semester course; offered both fall and spring.**

This course is designed to help students build the strength, speed, endurance, and confidence needed to perform at their best in athletic and physical activities. Through age-appropriate strength training, cardiovascular conditioning, mobility work, and injury-prevention exercises, students will develop sound movement patterns and lifelong fitness habits.

Students will learn proper technique, goal-setting strategies, and training principles used by athletes at all levels. Emphasis is placed on personal progress, teamwork, and safe training practices. Whether preparing for competitive sports or seeking to improve overall fitness, this course supports students in becoming stronger, more resilient, and more self-aware athletes.

## Introduction to Sports Medicine

Grades Offered: 10, 11, 12

Elective

**Spring semester elective. Open to 11th and 12th grades, and to students in 10th grade by permission of the teacher.**

Introduction to Sports Medicine is a class for students who would like to learn about the human body and how it relates to human function, injury/prevention or injury, and treatment of injury as well as dealing with emergency situations and First Aid/CPR. Students will use a combination of group projects, laboratory activities, and classroom tasks to learn and use the training skills and leadership skills required of an athletic trainer. Students will be expected to complete a minimum of 3 events (athletic contests/games) of practical training outside of the classroom as part of the class requirements. Events can also be accumulated by helping after school in the athletic training room. During this time students will be expected to act in a professional manner, assist as needed, and work to master the skills they have been introduced to in the classroom. Students may select the events or times they wish to cover, but there will be a limited number of spots depending on the event. Students may not cover events in which they are involved (e.g. basketball player covering own basketball game).

## Team Sports

Grades Offered: 10, 11, 12

Elective

**Semester elective; offered both fall and spring.**

Basic game skills and game strategies will be taught in this course with an additional emphasis on learning game rules. Team sports may include basketball, soccer, flag football, volleyball, gola, team handball, lacrosse, softball, floor hockey, field hockey, cricket, ultimate frisbee, netball, fistball, korfbal, rugby, and fitness drills specific to the sport. To promote and encourage student input, class members will work together to choose the sports or activities they would like to explore during the semester.

## Yoga

Grades Offered: 10, 11, 12

Elective

**Zero Block elective; offered both fall and spring.**

This class is designed for individuals interested in learning and practicing the art of yoga. This yoga study will blend styles of Hatha (Gentle), Vinyasa (Flow), Ashtanga (Power), Iyengar (Alignment), and Kundalini (Breath) yoga. Benefits of this collection of studies will include a focus on alignment through postures or use of props, weight-bearing exercise, and increasing flexibility through breath connection to movement. Yoga establishes a framework for lifelong fitness, developing core strength, safe stretching practices, health, and well-being rooted in kinesiology and philosophy. Students will increase awareness of skeletal and muscular systems while deepening strength, balance, flexibility, and focus through various sequences of yoga asanas or postures. Students will learn how yoga may enhance, repair, relax, or rebalance the muscles and the mind given all the demands of modern life. Additionally, students will complete reflective written assignments each quarter establishing goals, intentions for practice, reflecting upon progress and concepts for emphasis in future practice.

## Athletics for PE Credit

Grades Offered: 10, 11, 12

Elective

**Eligibility: Only Sophomores, Juniors, and Seniors may apply for Athletics for PE credit.**

**Requirements: To earn PE credit, students must participate in two Overlake sports seasons within the same school calendar year.**

**Seniors cannot count a spring sport from their Senior year toward this credit.**

**Athletics for PE does not replace 9th grade PE or Life Skills.**

**Maximum Applications:** Students may apply for Athletics for PE credit up to two times. To earn the full 1 PE credit, students will need to complete two sports seasons in two separate school years (Junior and/or Senior years, or Sophomore year if a spring sport is included).

To apply, fill out [this form](#) once you have completed your second sports season each year.

# Science

The aim of the Overlake Science department is to capitalize on students' curiosity to engage them in a rich exploration of the natural world.



**Upper School**  
**Full-Year Electives\***

AP Biology  
AP Chemistry  
AP Physics  
AP Environmental Science

**Upper School**  
**Semester Electives\***

Anatomy and Physiology  
Forensic Science  
Net Zero 2050  
Evolutionary Biology & Comparative Anatomy

*\*Upper-Level Science Electives (courses subject to change)*

## Life on Our Planet

Grade Offered: 9

Required

Required 9th grade course.

In this course, ninth graders engage in the practices of science to explore life at different scales, from the chemistry of biological molecules to the global flow of matter and energy. Students explore the relationship between molecular and cellular structures of organisms and their life functions, the transmission of traits across generations, the role of evolution in driving biodiversity, and the interdependent relationships between living things and Earth's environment. Emphasis is placed on constructing explanations for biological phenomena, including the ability to connect structure to function and model the interactions among different scales of a system.

## Earth's Chemical Systems

Grade Offered: 10

Required

Prerequisite Needed

Full-year option for 10th grade science.

Prerequisite: Life on Our Planet.

In this course, students investigate atomic and molecular structure, chemical reactions, and conservation and transfer of energy on the atomic and global scale. Through an

exploration of atomic structure, students explain trends in elemental properties, chemical bonding, radioactivity, and generation of nuclear power. Chemical bonding in turn drives differences in the physical and chemical properties of matter. Students model how substances combine and change via collisions to explain rates of reaction and energy changes. Emphasis is placed on developing particle-level models, analyzing data, and mathematical reasoning to explain phenomena.

## Earth's Chemical Systems: Honors Option

Grade Offered: 10

Prerequisite Needed

Elective

Full-year option for 10th grade science.

Prerequisite: Life on Our Planet plus recommendation of 9th grade teacher. Algebra II is a required co-requisite.

In the honors option for Earth's Chemical Systems, students will explore the same concepts as in the non-honors course, though the depth and pace of the course will reflect a higher level of rigor. The honors section is best suited for students who tend to pick up concepts more quickly and can master introductory problem-solving strategies with fewer examples needed. This allows the class to investigate more advanced applications of concepts and to solve more complicated problems. As an honors level course, it is expected that students enter the course with strong

work habits, complete homework on a nightly basis, read independently for understanding, and demonstrate self-advocacy skills.

## Physics of Our Universe

Grade Offered: 11

Required

Prerequisite Needed

Full-year option for 11th grade science.

Prerequisite: Earth's Chemical Systems.

Physics of Our Universe is a year-long, laboratory-based course based on the Next Generation Science Standards (NGSS). The class integrates Physics, Earth and Space Science, and Engineering Practices. Topics to be investigated include Forces and Motion, Momentum and Collision, Energy, Rotational Motion, Space Science, Waves, and Electricity and Magnetism. Each unit is anchored by relevant phenomena and several student-centered labs and/or investigations. By using science and engineering practices, evidence from experiments, research, and observations, students will learn how to formulate questions, evaluate claims, use mathematics and computational thinking, and develop models to make interpretations and investigate the natural world.

## Physics of Our Universe: Honors Option

Grade Offered: 11

Prerequisite Needed

Elective

Full-year option for 11th grade science.

Prerequisite: Earth's Chemical Systems and recommendation of current science teacher.

In the honors section of the physics class, students will explore the same concepts as in the non-honors course, though the depth and pace of the course will reflect a higher level of rigor. The honors section is best suited for students who tend to pick up concepts more quickly and can master introductory problem-solving strategies with fewer examples needed. This allows the class to investigate more advanced applications of concepts and to solve more complicated problems. As an honors level course, it is expected that students enter the course with strong work habits, complete homework on a nightly basis, read independently for understanding, and demonstrate self-advocacy skills.

## AP Biology

Grades Offered: 11, 12

Prerequisite Needed

AP

Elective

Year-long elective.

Prerequisite: Earth's Chemical Systems and recommendation of 10th or 11th grade science teacher.

This year-long course focuses on the central ideas of biology. The course focuses on fundamental principles of evolution, cell structure and function, genetics, and ecology. The curriculum is demanding its scope and its level of sophistication, with emphasis placed on the application of biological principles to explain experimentally derived data and results. Students will read a variety of materials from textbooks to online scientific journals. As an AP course, AP Biology is equivalent to a first-year college biology course

and often ends with taking the Advanced Placement exam in May. It is expected that students enter the course with strong work habits, complete homework on a nightly basis, read independently for understanding, and demonstrate self-advocacy. Students should expect to spend roughly an amount of time working outside of class equal to that spent in class. Lab reports and special projects may add to this time.

## AP Chemistry

Grades Offered: 11, 12

Prerequisite Needed

AP

Elective

Year-long elective.

Prerequisite: Earth's Chemical Systems and recommendation of 10th or 11th grade science teacher.

This year-long, college level course expands upon many of the topics introduced in earlier courses. Students will begin with a study of the nature of matter, examining topics ranging from atomic structure to the structure and properties of matter to chemical reactions. An in-depth, experimental approach to the study of the behavior of matter will occur through an examination of reaction kinetics, equilibrium systems, and thermodynamics. Laboratory work plays a key role in the structure of the course, with emphasis placed on the application of chemical principles to explain experimentally derived data and results. While the Advanced Placement test is an important goal, emphasis will be placed on developing critical thinking and problem-solving skills. As an AP course, AP Chemistry is equivalent to a first-year college inorganic chemistry course. Therefore, it is expected that students enter the course with strong work habits, complete homework on a nightly basis, read independently for understanding, and demonstrate self-advocacy skills. Students should expect to spend roughly an amount of time working outside of class equal to that spent in class. Lab reports and special projects may add to this time.

## AP Physics C: Mechanics

Grade Offered: 12

Prerequisite Needed

AP

Elective

Year-long elective.

Prerequisite: Physics of Our Universe and recommendation of physics teacher, plus completion or current enrollment in calculus.

This year-long college level course is an in-depth, calculus-based study of physics. It addresses the concepts of mechanics introduced in Physics of Our Universe but delves into the topics with much greater depth by employing an experimental and quantitative analytical approach to the material. Topics for study include Newtonian mechanics, the work-energy theorem, momentum and impulse, angular momentum, circular motion, rotational kinematics, dynamics and statics, and simple harmonic motion. All these topics will be covered at the calculus-based level and use of calculus in problem-solving and derivations increases as the course progresses. As an AP course, AP Physics C is equivalent to a first-semester college mechanics course. Therefore, it is expected that students enter the course with strong work habits, complete homework on a nightly basis, read independently for understanding, and demonstrate

self-advocacy skills. Students should expect to spend roughly an amount of time working outside of class equal to that spent in class. Lab reports and special projects may add on to this time.

## AP Environmental Science

Grades Offered: 10, 11, 12

Prerequisite Needed

AP

Elective

Year-long elective.

**Prerequisite:** Earth's Chemical Systems and recommendation of 10th or 11th grade science teacher.

The goal of this course is to provide students with the scientific principles, concepts, and methodologies to understand the complexities of environmental science. This involves investigating the flow of matter and energy through the living and non-living parts of the plane; identifying and analyzing environmental problems both natural and human-made; and examining solutions for resolving and/or preventing those problems. This course promotes environmental literacy to enable informed decision-making regarding issues that impact the environment and society. Additionally, this course will help establish and build a sense of stewardship for the environment, illustrating throughout the course that one person can make a difference. Environmental science is an interdisciplinary study that draws from the biological, physical, chemical, and earth sciences, as well as social sciences such as economics, politics, and sociology. Critical thinking and problem-solving applications are emphasized. As an AP course, AP Environmental Science is equivalent to a first-year college course. Therefore, it is expected that students enter the course with strong work habits, complete homework on a nightly basis, read independently for understanding, and demonstrate self-advocacy skills. Students should expect to spend roughly an amount of time working outside of class equal to that spent in class. Lab reports and special projects may add on to this time.

## Anatomy & Physiology

Grades Offered: 10, 11, 12

Prerequisite Needed

Elective

Fall semester elective.

**Prerequisite:** Life on Our Planet, plus teacher recommendation for 10th graders.

How does the human body perform under stress—and why does it sometimes fail? In this science elective, students explore the structure and function of major body systems through the lens of performance, adaptation, and resilience. Rather than studying systems in isolation, the course examines how the nervous, muscular, cardiovascular, respiratory, and endocrine systems work together during exercise, stress, recovery, and injury.

Students investigate real-world questions such as how the body delivers oxygen during intense activity, how hormones regulate stress and energy, why sleep and recovery matter for performance, and how the body responds to physical and psychological stress. Through hands-on labs, data analysis, case studies, and model-building, students learn core anatomical structures and physiological mechanisms while applying them to meaningful, human-

centered problems. This course emphasizes in-class inquiry, collaborative problem-solving and evidence-based reasoning and offers a rigorous and engaging way to understand how the human body works—and what it takes to keep it functioning at its best.

## Forensic Science

Grades Offered: 10, 11, 12

Prerequisite Needed

Elective

**\*Not offered this year\***

Semester elective.

**Prerequisite:** Life on Our Planet, plus teacher recommendation for 10th graders.

This cross-disciplinary, lab-based course will pull from knowledge in the fields of biology, chemistry, and physics to explore the science involved in forensic investigations. The class will feature hands-on learning as students analyze evidence and make conclusions based on their findings. Investigations will include analysis of blood evidence (such as blood typing, blood spatter, and DNA fingerprinting), physical evidence (such as soil and glass particles), trace evidence (such as hair and fibers), fingerprints, ballistics, forensic chemistry, and a look into modern biotechnology. Students will present their findings in a variety of ways, ranging from tests and quizzes, to papers, to presentations. An emphasis will be placed on continuing students' development in the practices of science, such as analyzing and interpreting data, engaging in argument from evidence, planning and carrying out investigations, and constructing explanations. Due to the hands-on nature of this course, adequate preparation for class is required and will involve regular homework.

## Net Zero 2050

Grades Offered: 11, 12

Prerequisite Needed

Elective

**\*Not offered this year\***

Semester elective.

**Prerequisite:** Earth's Chemical Systems.

There is consensus among climate scientists that we need to prevent the earth from warming by more than 1.5°C to avoid experiencing the most severe consequences of Climate Change. This requires decreasing our greenhouse gas emissions to zero by 2050. Achieving this goal requires unprecedented, rapid, and far-reaching transitions in energy, industry, buildings, transportation, land-use, and cities. This will be one of the greatest scientific, industrial, economic, political, and societal challenges that humanity has ever faced. We know that this will be a monumental task, but how exactly can this be done? In this course, students will learn the physics, chemistry, biology, and earth science behind the solutions to the Climate Change crisis. They will address questions such as:

- What are the advantages and disadvantages of different renewable sources of energy? What are the associated costs?
- How can we store energy so it is available when it is needed most?
- How can we electrify the transportation sector?

- How can we design homes that produce all the energy they use, with enough left over to meet our personal transportation needs?
- How can we remove carbon from the atmosphere?

Students in this course will be engaged in a variety of laboratory and research projects. They will develop their data analysis, critical thinking, and problem-solving skills. They will work independently and collaboratively, with the end goal of creating a detailed plan for how to decarbonize our economy and society. This course will help to prepare students for their future and allow them to take advantage of new career and business opportunities.

## Evolutionary Biology & Comparative Anatomy

Grades Offered: 10, 11, 12

Prerequisite Needed

Elective

Spring semester elective.

**Prerequisite: Life On Our Planet, along with teacher recommendation for 10th and 11th graders.**

What makes humans unique—and what do we share with other animals? In this rigorous science elective, students explore human origins by studying evolution, comparative anatomy, and primate biology. Rather than memorizing facts, students investigate how scientists use anatomical, fossil, and genetic evidence to reconstruct evolutionary relationships and define species.

The course places the human body in evolutionary context, asking not only how our bodies work, but why they are structured the way they are. Students grapple with big questions about human uniqueness, adaptation, and variation, and examine how evolutionary history shapes modern human biology and behavior.

This course emphasizes critical thinking, evidence-based argumentation, and college-level inquiry. Through labs, case studies, and a culminating seminar or poster symposium, students gain a rare and powerful perspective on what it means to be human.

## Astronomy

Grades Offered: 9, 10, 11, 12

Elective

**\*Not offered this year\***

**Semester elective. This course is equivalent to the Astronomy 101 course offered at the University of Washington, and may be taken for 5 UW credits.**

This semester-long course is an introduction to the universe, with an emphasis on conceptual rather than mathematical comprehension. Topics include modern theories of the universe, evolution of galaxies, quasars, stars, black holes, planets and solar systems. Current observational and research techniques will be explored through laboratory work. Students will have opportunities to utilize telescopes in both direct and remote observing. Major themes of astronomy which will be addressed in this course include:

- How has our understanding of our place in the Universe evolved over time?
- How are astronomers able to describe and understand complex phenomena utilizing only the light received

from distant sources?

- What is the role astronomy plays in our daily lives, and in the future of humanity?

## Materials Science

Grades Offered: 11, 12

Prerequisite Needed

Elective

**\*Not offered this year\***

Semester elective.

**Prerequisite: Earth's Chemical Systems.**

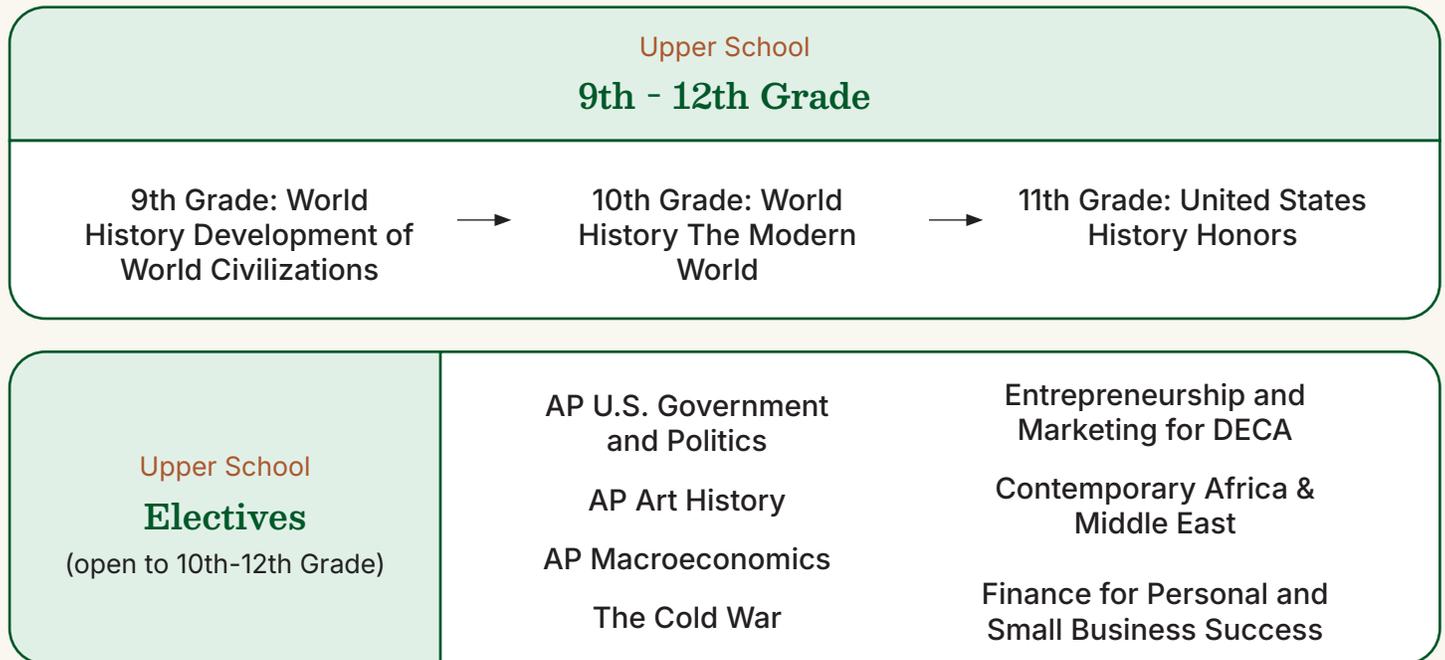
The course will introduce students to the fascinating world of materials science with a specific focus on daily polymers and composites. Materials Science is an interdisciplinary field that plays a crucial role in our daily lives, from the products we use to the technologies we rely on. By exploring the structure, process, properties and applications of polymers and composites through designed hands-on activities, students will

- gain a fundamental understanding of thermoplastic and thermoset materials.
- understand the molecular structure, classification, and properties of polymers.
- investigate the effects of temperature, composition and reinforcement on polymer properties.
- examine real-world application of thermoplastic and thermoset polymers and composites in industries like aerospace, automotive, construction etc.
- discuss the environmental impact of thermoplastic and thermoset polymers and composites.
- explore recycling and sustainable practices in materials science.

**Assessment and Evaluation:** Students will be evaluated through a combination of assessments, including quizzes, exams, laboratory reports, and project presentations. Class participation and engagement will also be considered in the final evaluation.

# Social Studies

The mission of the Overlake Social Studies department is to create a challenging, relevant, and engaging curriculum to inspire our students to become critical thinkers, effective communicators, and active and open-minded citizens of the world.



## World History 9: Development of World Civilizations

Grade Offered: 9

Required

In Grade 9 Social Studies, we examine the development of early human societies. In the first semester, we start with a brief unit exploring how history is written, by whom, and why that matters. Then we examine the social, political, economic, and cultural systems of the kingdoms of Nubia and Aksum in northeast Africa, the Qin and Han Dynasties in China, the Roman Republic in the Mediterranean, and indigenous societies in Central/South America and Pacific. In the second semester, we explore the changes that occurred as those global regions became increasingly interconnected through the spread of religious beliefs, trade networks and the exchange of knowledge/ideas, new technological innovations, and war/conquest.

Students work on a range of skills, including analytical writing, research, and effective public speaking (both in oral presentations and seminar discussions).

## World History 10: The Modern World

Grade Offered: 10

Required

In Grade 10 Social Studies, students gain an extensive knowledge of major changes and events of the 19th and 20th centuries in various parts of the world. Through varied and engaging activities in class and major assignments, they improve their skills in critical thinking, writing, discussing, presenting, and researching. By the course's end, students have gained an improved understanding of political, social, and economic world developments from 1800 to 1960. We

focus on themes of equality and justice, how major changes occur, and make links between what has happened in the past with events happening at the present.

## AP Human Geography

Grades Offered: 10, 11, 12

AP

Elective

Full-year elective.

AP Human Geography is a year-long introduction to topics and analysis of human geography. The course challenges students to evaluate data and physical geography through patterns and spatial organization, human impacts and interactions with the environment, and spatial processes and societal changes. Geopolitics, human migration, cultural processes, land-use, industrialization and economics, as well as fundamentals of geography and maps including statistical analysis and modeling, make up the body of the course. Students will explore concepts through projects, case studies, and written assessments in conjunction with preparation for the final AP exam in May.

## Contemporary Middle East and Africa

Grades Offered: 10, 11, 12

Elective

**\*Not offered this year\***

This course undertakes an interdisciplinary and contemporary view of the Middle East and Africa to understand in greater depth the history, economies, politics, social change, and arts of these important regions. Coursework will include a variety of source material and experiential learning.

## Honors United States History

Grade Offered: 11

Required

This course is a study of significant events and patterns in United States history. This is not a survey course; rather, the course is thematic. We want students to develop critical thinking and communication skills, explore topics in depth, and make connections to current events. Therefore, the course focuses primarily on the 19th to 21st centuries and past events are connected to life in the U.S. today.

As a result of taking this course, students will:

- Increase their knowledge and understanding of U.S. history.
- Increase their understanding of how past events inform the present.
- Become more informed and engaged citizens.
- Strengthen their critical thinking skills, including their ability to construct persuasive oral and written arguments.
- Increase their understanding of differing perspectives on key issues.

## AP Macroeconomics

Grades Offered: 11, 12

AP

Elective

Full-year elective.

AP Macroeconomics is a year-long, basic college level course that provides a general understanding of basic macro-economic concepts. In a time when there is so much discussion about priorities in the economy, business cycles, climate change, international trade, inflation and unemployment, this course will help students understand both how the economy functions and the alternative choices that we have. Students will gain a solid understanding of government fiscal, monetary policies, and international trade and how they impact employment, GDP, and growth. There are daily references to what is currently in the news such as the impacts of COVID, and students are constantly applying the theories to contemporary economic, political, and social issues. We will use a range of resources including graphs, charts, data analysis and videos to describe and explain economic concepts. We will also make use of resources in the community for case studies. Students will also research and present to the class on aspects of the economy.

## AP U.S. Government and Politics

Grades Offered: 11, 12

AP

Elective

Full-year elective.

The AP U.S. Government and Politics course challenges students to analyze and interpret the intentions of the various institutions that comprise the American political system and the U.S. government. The practical and theoretical understanding of policy-making and power as it pertains to Constitutional principles, federalism, political parties, interest groups and the media, and individual rights and liberties serves as the foundation of the course. Students will explore concepts through projects, case studies, and written assessments in conjunction with preparation for the final AP exam in May.

## Entrepreneurship and Marketing for DECA

Grades Offered: 11, 12

Elective

Fall semester elective.

This course will help students understand not only how enterprise and marketing can be used to build a firm for profit, but the principles and strategies can be used to solve many social and political problems. Students will be able to apply their learning in this course to DECA online challenges and competitive events. The course involves mostly active, project-based learning.

## The Cold War

Grades Offered: 11, 12

Elective

\*Not offered this year\*

One-semester elective.

By understanding the historical development of the Cold War from multiple geopolitical perspectives, students will examine the legacy of the Cold War period as it relates to current international relations. The course digs into the origins of the Cold War, providing an overview of the different economic and political systems that characterized the tensions between the United States and the Soviet Union. Examination as to how the Cold War affected Europe, East Asia, the Middle East, and Latin America from multiple perspectives will provide context for topics like the Cuban Missile Crisis, the Korean and Vietnam Wars, the Soviet-Afghan War, and the Space Race. Discussions, simulations, primary-source readings, and student-designed projects will enable students to understand the legacy of the Cold War as it relates to twenty-first century geopolitical relationships and the continued diplomatic struggles that continue to affect our world today.

## AP Art History

Grades Offered: 10, 11, 12

AP

Elective

Full-year elective.

AP Art History is a year-long course that teaches students to visually analyze works of art and understand them within their historical context—i.e. intended use, audience, and role in a particular society, sociopolitical concerns, gender issues, patronage, function and setting. Spanning cultures across all continents and from prehistoric to contemporary times, in this course you'll explore the different social and cultural beliefs, political and economic systems, and scientific and technological advancements that have led to the creation of well-known sculptures, paintings, buildings, and many other types of art. AP Art History is the equivalent to a beginning college course. The material and concepts covered, as well as the time required for reading and research, will reflect this designation. Students will explore content through research, case studies, and written assessments in conjunction with preparation for the final AP exam in May.

## Finance for Personal and Small Business Success

Grades Offered: 10, 11, 12

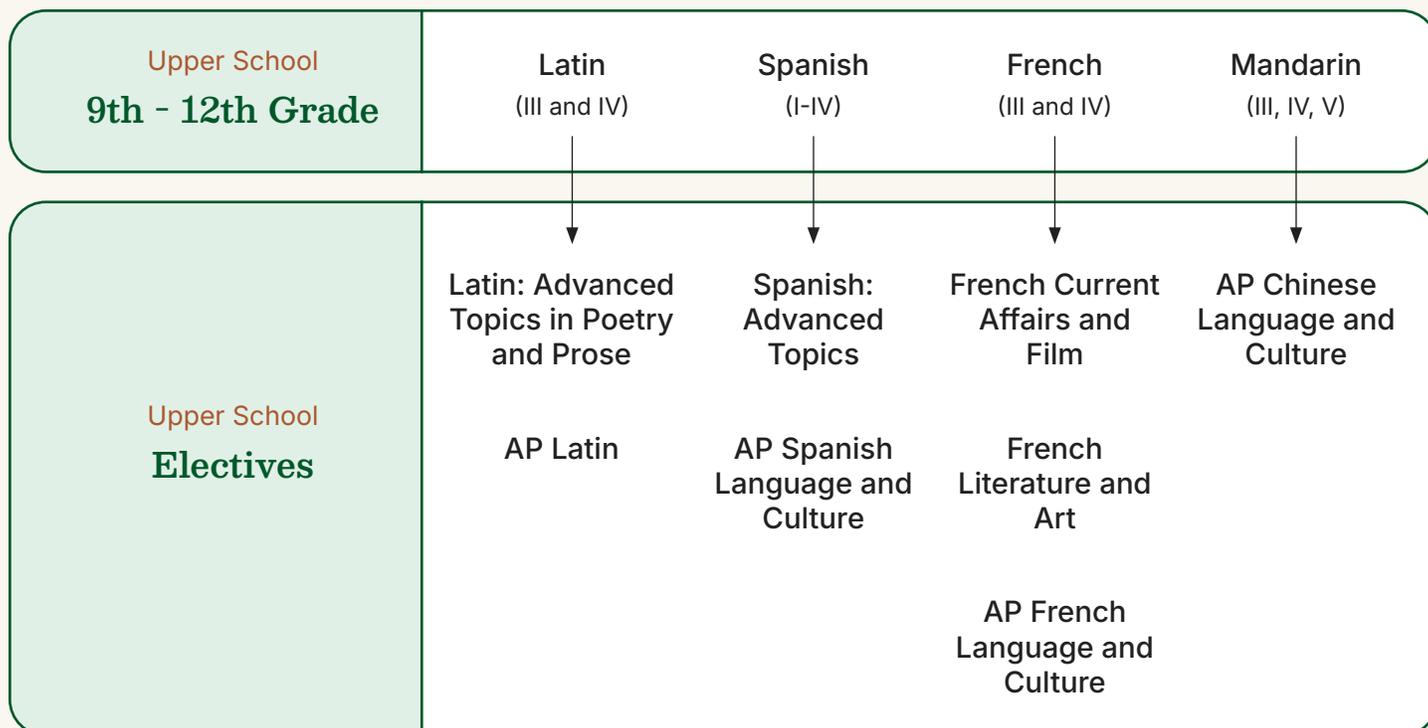
Elective

### Spring semester elective.

This course will meet the demands from students for an introduction to both personal and small business finance. It will meet the proposed WA state requirements for financial education. Regardless of a student's future income, solid financial literacy is essential for successful, secure adult life. Students will build their skills in personal money management, including budgeting, savings, credit management, filing taxes and debt strategies. The classes will involve practical application including designing a personal financial plan. To further understand business finance, the second part of the course will focus on understanding financial statements, cash flow management and basic accounting principles. Apart from the personal skills gained from taking this course, students taking part in Deca events will have a more solid foundation in financial terms and skills.

# World Languages

The Overlake World Languages program is designed to broaden students' understanding and appreciation for the diversity of world cultures by building linguistic and cultural competence through the study of language.



## Spanish I

Grades Offered: 9, 10, 11, 12

Elective

This course is designed for Upper School students who have little or no prior background in the language, introducing students to the Spanish language and to the culture of the Spanish-speaking world. Emphasis is placed on comprehension and speaking using a variety of strategies providing comprehensible input through stories and fun activities. Reading and writing are used to reinforce oral practice. Students develop a core vocabulary and knowledge of basic grammar necessary for communication. Students learn to speak of themselves, their families, friends and activities, and are introduced to the culture through films, cultural videos, music, scenarios and class discussions. Students prepare and present projects about some aspect of their lives.

## French I

Grades Offered: 9, 10, 11, 12

Elective

**\*Not offered this year\***

**Only runs when there are sufficient numbers.**

This course is designed for Upper School students who have little or no prior background in the language. It introduces students to the French language within the context of the contemporary French-speaking world and its cultures. While the course is aimed at bringing students to a novice level of proficiency in the four areas of language

acquisition—listening, speaking, reading and writing, its main emphasis is on comprehension and speaking. Reading and writing are used to reinforce oral practice. Students develop a core vocabulary and knowledge of the basic skills necessary for communication. Students learn to speak about themselves, their families, friends and activities, and are introduced to culture through films, cultural videos, music and other authentic materials. Students prepare and present projects about some aspect of their lives.

## Mandarin Chinese I

Grades Offered: 9, 10, 11, 12

Elective

**\*Not offered this year\***

**Only runs when there are sufficient numbers.**

Mandarin Chinese I is designed for Upper School students who have little or no prior background in the language. The course introduces students to the Mandarin Chinese language and the culture of the Chinese-speaking world. While the course aims to develop novice-level proficiency in listening, speaking, reading, and writing, its primary emphasis is on comprehension and speaking. Students learn pinyin, the phonetic system for Chinese pronunciation, and develop listening and speaking skills through interactive activities. Reading and writing are used to reinforce oral practice, with instruction in Simplified Chinese characters and an introduction to Traditional Chinese characters to highlight character formation and change. Chinese character recognition is further reinforced through additional reading materials, including short Chinese stories

aligned with lesson-unit themes. Students develop a core vocabulary and knowledge of basic grammar necessary for communication. They learn to speak about themselves, their families, friends, and activities, and are introduced to Chinese culture through films, cultural videos, music, scenarios, and class discussions. Students also prepare and present projects about aspects of their own lives.

#### Q&A

**Question:** Can I take Mandarin I if I've never studied Mandarin before?

**Answer:** Yes, the program is perfect for beginners or students who are new to the language.

**Question:** Can I take Mandarin I if I hear Mandarin at home and understand daily conversations, but cannot read or write in Chinese?

**Answer:** Yes, Mandarin I is an ideal choice if you want to improve your reading and writing skills in addition to your listening and speaking abilities.

**Question:** What will I learn in the first year of Mandarin?

**Answer:** In your first year, you'll learn:

- A system that uses the Roman alphabet (pinyin) to represent Chinese sounds.
- Proper pronunciation, with an emphasis on mastering the tonal differences in Mandarin.
- Around 250 basic to simple Chinese characters.
- How to express yourself on a variety of topics, such as introducing yourself and your family, discussing hobbies, talking about dates and time, visiting friends, and sharing daily school life experiences.
- Key Chinese holidays and traditions, with hands-on experiences celebrating the Mid-Autumn Festival and Lunar New Year.

## Spanish II

Grades Offered: 9, 10, 11, 12

Elective

In Spanish II, students will reinforce skills and concepts learned in Spanish I (or the MS A and B series) and continue building proficiency in the Spanish language. Speaking skills remain a major focus, but additional emphasis is placed on reading, writing, and listening comprehension. Thematic units are supplemented by selected short stories, poems, songs, conversational scenarios and films, helping students to develop a deeper understanding of the culture of various Spanish-speaking countries. Students prepare and present projects on some aspects of the culture of the Spanish-speaking world. In Spanish II students will expand upon their abilities to communicate by beginning to acquire and use the past tenses. Over the course of the year, students will reach a novice-high level of communication.

## French II

Grades Offered: 9, 10, 11, 12

Elective

**\*Not offered this year\***

**Only runs when there are sufficient numbers.**

French II students continue to build more proficiency in the language developed in French I (or the MS French A and B series). The development of speaking skills receives

major focus, but additional emphasis is placed on reading, writing, and listening comprehension. The primary text is supplemented by selected short stories, poems, cartoons, music, and films, and online sources to help students develop a deeper understanding of the cultures behind the French language. Students prepare and present projects on some aspects of the cultures of the French-speaking world.

## Mandarin Chinese II

Grades Offered: 9, 10, 11, 12

Elective

**\*Not offered this year\***

**Only runs when there are sufficient numbers.**

In Mandarin Chinese II, students reinforce skills and concepts learned in Mandarin Chinese I (or the MS Mandarin Chinese A and B series) and continue building proficiency in the Mandarin Chinese language. Speaking and listening skills remain a major focus, with increased emphasis on reading comprehension and writing. Accurate pronunciation and intonation continue to be stressed throughout the course. Students expand their ability to communicate through thematic units related to school life, shopping, transportation, weather, and dining. These units are supplemented by selected short readings, Chinese stories, films, online materials, and situational conversations, helping students develop a deeper understanding of the cultures behind the Chinese language. Students further develop both handwritten and word-processed Chinese writing, including the use of the pinyin input method, and improve written expression through guided writing tasks and real-world scenarios. Students prepare and present projects exploring aspects of Chinese language, culture, and daily life. Over the course of the year, students progress toward a Novice-Mid level of communication.

## Latin III

Grades Offered: 9, 10, 11, 12

Elective

This course continues from the study of Latin II (or MS Latin C), emphasizing reading and translation skills. The class begins by completing the advanced grammar concepts needed for reading authentic Latin texts. Initial readings focus on helping students make the transition to reading authentic Latin texts by introducing them to Latin prose and poetry in a graded format. Creative projects accompany the authors to give students a chance to enhance their experience of the reading. Throughout the course, grammar is reviewed through special activities that supplement the reading. Students also explore the daily life and history of Rome through original, literary sources. Etymology work is constantly emphasized as the students continue to strengthen their English vocabulary. Latin III students participate in the National Latin Exam.

## Spanish III

Grades Offered: 9, 10, 11, 12

Elective

Spanish III equips students with the proficiency to engage in meaningful conversations and comprehend complex information in Spanish while deepening their understanding of Spanish-speaking cultures. Designed for those who have

completed three years of middle school Spanish or Spanish II in Upper School, this course strengthens interpretive, interpersonal, and presentational skills through exploration of authentic texts, lively discussions, formal and informal presentations, and varied writing tasks, all while refining students' grammatical accuracy and depth of vocabulary use.

Students will explore thematic units such as personal relationships, daily routines and responsibilities, entertainment and pastimes, health and well-being, and travel and global citizenship while growing their ability to express themselves and comprehend more sophisticated language structures. Discussions about social customs, traditions, and current events in Spanish-speaking countries allow rich opportunities for cultural exploration, as well as a chance to reflect on students' own cultural identities and values as members of our global community.

By the end of the course, students will be able to confidently express their personal opinions and engage in more complex conversations in Spanish. They will be able to narrate past, present, and future events, comprehend diverse texts, and write with greater accuracy and clarity, all preparing them for advanced Spanish study and real-world communication.

### French III

Grades Offered: 9, 10, 11, 12

Elective

French III equips students with the proficiency to engage in meaningful conversations and comprehend complex information in French while deepening their understanding of French-speaking cultures. Designed for those who have completed three years of middle school French or one year of French II, this course strengthens interpretive, interpersonal, and presentational skills through exploration of authentic texts, lively discussions, formal and informal presentations, and varied writing tasks, all while refining students' grammatical accuracy and depth of vocabulary use.

Students will explore thematic units such as personal relationships, daily life in a city, the world of media and its influence on society, justice and politics while growing their ability to express themselves and comprehend more sophisticated language structures. Discussions about social customs, traditions, and current events in French-speaking countries allow rich opportunities for cultural exploration, as well as a chance to reflect on students' own cultural identities and values as members of our global community.

By the end of the course, students will be able to confidently express their personal opinions and engage in more complex conversations in French. They will be able to narrate past, present, and future events, comprehend diverse texts, and write with greater accuracy and clarity, all preparing them for advanced French study and real-world communication.

### Mandarin Chinese III

Grades Offered: 9, 10, 11, 12

Elective

Mandarin Chinese III is designed for students who have completed Mandarin Chinese II (or MS Mandarin Chinese C)

and aims to develop ACTFL Intermediate-Low proficiency. Students strengthen interpretive, interpersonal, and presentational skills across listening, speaking, reading, and writing. While speaking and listening remain the primary focus, increased emphasis is placed on reading comprehension, including Chinese character recognition, and on writing short essays, with attention to grammatical accuracy and expanding vocabulary. Through thematic units—including directions, birthday celebrations, visiting a doctor, dating, living quarters, sports, and travel—students engage in more sustained conversations, express personal opinions, and make cultural comparisons. Instruction is enriched through authentic materials such as Chinese readings, contemporary films, pop songs, and short stories. Students improve written expression through tasks such as email responses and reading summaries and gain additional practice through interactions with native speakers. By the end of the course, students can participate in extended conversations, express and support opinions, narrate events across time frames, interpret a range of texts, and write with increased clarity—preparing them for advanced Mandarin study and real-world communication.

### Latin IV

Grades Offered: 9, 10, 11, 12

Elective

This advanced course of Latin emphasizes reading and translating skills. Students explore the daily life and history of Rome through original, literary sources. They will have an opportunity to read various ancient texts in order to investigate the Romans' views on topics such as Love, Customs, Movement of People, and Nature. In the past, such texts have included selections from Catullus, Horace, Martial, Vergil, Caesar, Sulpicia, Pliny, and Ovid. Creative projects complement and enhance students' reading of the authors, and grammar analysis, vocabulary, composition, etymology, and translation are core elements of the class. Students in Latin IV participate in the National Latin Exam. After Latin IV, students have a choice of going on to AP Latin or Advanced Topics.

### Spanish IV

Grades Offered: 9, 10, 11, 12

Elective

This course is designed to help students improve their oral communication skills through the practice of guided conversation and oral reports, as well as to enhance their written communication through developing formal and informal writing. Students focus on improving listening and reading comprehension through exposure to authentic sources, such as magazine and newspaper articles, the Internet, current music and film. Reading selections include short stories, poetry and excerpts from prominent Spanish speaking authors. Grammar is reinforced in the context of these authentic readings. Special effort is made to enhance vocabulary knowledge through exposure to thematic units containing more sophisticated vocabulary. Students also reach a deeper understanding of the culture and current history of the Spanish-speaking world through more in-depth study of literature and film. Students work on two larger projects relating to their lives and several aspects of the Hispanic culture. Spanish IV serves as additional skill-building for those students interested in continuing

the study of Spanish at the AP level in the future. Students have their choice of enrolling at the AP level, either AP Spanish Language or AP Spanish Literature, (with instructor permission) after successfully completing this course.

## French IV

Grades Offered: 9, 10, 11, 12

Elective

This course is designed to help students improve their oral communication skills through prompted and guided conversations, debates, and interviews. Written communication skills are enhanced through intensive reading and the practice of compositions and reports. Students continue to be exposed to authentic sources, such as magazine articles, the Internet, films, and literary works, and prepare oral and written reports on some related topics to reach a deeper understanding of the culture of the Francophone world. Through the news, students are introduced to global issues that they further explore in class through discussions, presentations and through written reports. Students read the work of Victor Hugo, *Les Misérables*, leading to philosophical discussions and profound analysis.

## Mandarin Chinese IV

Grades Offered: 9, 10, 11, 12

Elective

Mandarin Chinese IV builds on Mandarin Chinese III and supports students' progress toward ACTFL Intermediate-Mid proficiency in listening, speaking, reading, and writing. The course emphasizes oral communication through guided conversations and presentations, while strengthening reading comprehension and writing through authentic texts. Students expand vocabulary and grammatical accuracy by incorporating more complex sentence structures, formal vocabulary, and advanced expressions into both speaking and writing, while expressing personal opinions on familiar themes such as friends, school, sports, hobbies, and music. Instruction draws on authentic sources including Chinese articles, online materials, contemporary films, and popular music to deepen cultural understanding. Writing development includes short essays, email exchanges, and short creative tasks. Mandarin Chinese IV provides additional skill-building for students preparing for AP-level Mandarin and advanced real-world communication.

## Mandarin Chinese V

Grades Offered: 9, 10, 11, 12

Elective

Mandarin Chinese V builds on Mandarin Chinese IV and serves as a preparatory course for AP Chinese Language and Culture. The course is designed to support students' progress toward ACTFL Intermediate-High proficiency, with an emphasis on sustained, connected communication and increased linguistic sophistication. Speaking and listening remain the primary focus, with students expected to express ideas fluently, support opinions, and engage in extended discussions using advanced vocabulary, formal expressions, and complex grammatical structures. Additional emphasis is placed on reading comprehension of longer authentic texts, essay writing, and cultural interpretation. Students deepen their cultural understanding through extensive use of authentic materials, including

articles, websites, films, videos, songs, poems, and short stories. Through discussions, presentations, and analytical writing tasks, students strengthen the language skills, cultural knowledge, and academic readiness required for success in AP Chinese and advanced real-world communication.

## Latin Advanced Topics

Grades Offered: 9, 10, 11, 12

Elective

In this course, students expand their experience of the language by exploring different genres and areas of study in Latin. Advanced level Latin students pursue further development and refinement of rhetorical devices, meter, morphology, vocabulary, and syntax through the reading of the original texts of significant Latin prose authors or poets, based on student interest. Past authors have included Apuleius, Cicero, Tibullus, Sallust, Vergil and Catullus. Students will gain a deeper understanding of Roman history, culture, and literature through our exploration of these texts. Moreover, the basic principles of studying ancient art, archaeology, music, epigraphy, and paleography are introduced through our reading of the texts and through periodic presentations and projects.

## AP Latin

Grades Offered: 9, 10, 11, 12

AP

Elective

This course follows the newly revised College Board Advanced Placement Latin curriculum designed to prepare students for the examination in May. This year students will read selections from Vergil's Aeneid and Pliny's Letters in Latin, as well as extensive readings from both authors in translation. Students will also read a selection of Latin prose and poetry authors; these authors may change from year to year based on students' interest. This curriculum requires competency in both fluent reading and analysis of prose and poetry. Students will review grammar through the readings, and vocabulary is tested regularly to improve translation speed. The course includes a Spring Project, literary analysis through essay writing, as well as translation skills. This course requires total commitment on the part of each student and will demand extra preparation and participation.

## Spanish Advanced Topics - Cinema and Literature

Grades Offered: 9, 10, 11, 12

Prerequisite Needed

Elective

**Prerequisite:** Students can take this course after finishing Spanish IV.

This course is designed to help students expand their Spanish language proficiency and enrich their cultural understanding through an integration of films addressing relevant cultural and historical events and authentic literature in the target language. There will be continued emphasis on improving communication skills through practicing conversation, listening comprehension, and more sophisticated writing. Using film and literature as a guide, students will engage in a journey of exploration to better understand past and present Spanish-speaking

communities and cultures. Students will discuss their ideas and opinions in class and make cross-cultural comparisons to further develop their critical thinking skills orally and in writing in Spanish.

## AP Spanish Language and Culture

Grades Offered: 9, 10, 11, 12

Prerequisite Needed

AP

Elective

**Prerequisite: The recommendation of the student's current Spanish IV teacher and the upcoming AP teacher is required for entry to AP Spanish Language and Culture.**

This course is designed to prepare students for the Advanced Placement Spanish Language and Culture Examination. The course focuses on improving listening and reading comprehension, and oral and written communication skills. Students work on achieving the fluency necessary for sustained oral discourse, creating coherent written expression, synthesizing a variety of abstract and concrete input and to reaching a deeper understanding of the cultures of Spanish-speaking countries. Emphasis is placed on enhancing vocabulary, improving conversation and impromptu speaking capabilities, writing essays, listening to recordings of native speakers, reading authentic texts, reviewing advanced grammar and perfecting pronunciation. The class material is varied and includes news broadcasts and articles, original literature, films and songs in Spanish. Students prepare oral reports comparing aspects of Spanish-speaking cultures with similar topics in their own cultures. This course requires commitment on the part of the student and will demand extra participation and preparation.

\*Additional criteria considered by teachers for permission to enroll are the following:

- Interpersonal Communication - 90% or better in conversations and written interpersonal communication
- Presentational Communication - 90% or better in oral presentations and written compositions
- Participation and homework - 90% or better in participation and homework assignments
- Demonstration of engagement and thoughtful participation
- Demonstration to commit to the demands of an AP curriculum by taking responsibility for one's own learning

## French Current Affairs and Film

Grades Offered: 9, 10, 11, 12

Elective

This course is designed to help students build their language proficiency at an advanced level through a variety of cultural studies. There is continued emphasis on improving communication skills through practicing conversation, listening comprehension, and more sophisticated writing. Through articles, TV news, games, and films, students engage with relevant topics such as politics, economics, and lifestyle. They discuss their ideas and opinions in class and make cross-cultural comparisons between the laws in Francophone countries and in the United States. Students also learn about the educational system in France and other francophone countries. These

authentic sources provide the opportunity for cultural reflection using the French language.

## French Literature and Art

Grades Offered: 9, 10, 11, 12

Elective

**\*Not offered this year\***

This course is designed for students who have completed French through Current Affairs and Film and/or AP French Language and Culture. It allows all interested students to complete a fourth year of studies in advanced French. The course is organized around major works by French philosophers, novelists, playwrights, poets and/or cartoonists as well as around major art work by French painters, sculptors, photographers, designers, musicians and/or movie directors. The students focus on refining listening and reading comprehension, along with oral and written communication skills. The students reinforce their fluency in oral discourse, strengthen their ability to communicate through persuasive written expression, improve impromptu speaking capabilities, and attain a richer understanding of the culture of Francophone countries. The class material is varied and students prepare reports, write essays and poems, engage in oral conversation, and make presentations and short films.

## AP French Language and Culture

Grades Offered: 9, 10, 11, 12

Prerequisite Needed

AP

Elective

**Prerequisite: The recommendation of the student's current French IV teacher and the upcoming AP teacher is required for entry to AP French Language and culture.**

This course is designed to prepare students for the Advanced Placement French Language and Culture Examination. The course focuses on improving listening and reading comprehension, and oral and written communication skills. Students work on achieving the fluency necessary for sustained oral discourse, creating coherent written expression, synthesizing a variety of abstract and concrete input and to reaching a deeper understanding of the culture of Francophone countries. Emphasis is placed on enhancing vocabulary, improving conversation and impromptu speaking capabilities, writing essays, listening to recordings of native speakers, reading authentic texts, reviewing advanced grammar and perfecting pronunciation. The class material is varied and includes news broadcasts and articles, original literature, films and songs in French. Students prepare oral reports regarding aspects of the culture of the Francophone world. This course requires commitment on the part of the student and will demand extra participation and preparation.

\*Additional criteria considered by teachers for permission to enroll are the following:

- Interpretive Communication - 90% or better in reading and listening comprehension
- Interpersonal Communication - 90% or better in conversations and written interpersonal communication
- Presentational Communication - 90% or better in oral presentations and written compositions

- Demonstration of engagement and thoughtful participation
- Demonstration to commit to the demands of an AP curriculum by taking responsibility for one's own learning

## AP Chinese Language and Culture

Grades Offered: 9, 10, 11, 12

Prerequisite Needed

AP

Elective

**Prerequisite: Prerequisite: 90% or better in Mandarin V or instructor's permission required.**

AP Chinese Language & Culture is a full-year course that covers the equivalent of a second-year (or the fourth semester) of a college level course. This is an advanced Mandarin Chinese class aimed at equipping students both linguistically and culturally to communicate successfully using Chinese in the school setting and beyond. This course prepares students to demonstrate their level of Chinese proficiency across the three communicative modes: Interpersonal, Interpretive, and Presentational, and the five goal areas: Communication, Cultures, Connections, Comparisons, and Communities, as outlined in the Standards for Foreign Language Learning in the 21st Century. This course also requires significant dedication, demanding extra student preparation and participation in class.



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