

LAKE MARY

PREPARATORY SCHOOL



# UPPER SCHOOL CURRICULUM GUIDE

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## MESSAGE FROM THE PRINCIPAL

Lake Mary Prep's Upper School offers students in 9th through 12th grade a well-rounded education that prioritizes academic rigor and diverse extracurricular experiences through student-centered learning. In addition to academic excellence, we recognize the importance of equipping students with transferable skills that will serve them beyond the classroom. Whether it's critical thinking, collaboration, problem-solving, communication, or innovation, these skills are essential for thriving in an ever-changing world. At LMP, we believe in fostering a safe, supportive, and inclusive environment where integrity, empathy, resilience, and kindness are prioritized in the development of the whole child. We strive to empower each student to understand the impact they can make as a lifelong learner, responsible citizen, and compassionate leader.

## MISSION & VISION

At Lake Mary Preparatory School, our goal is to ignite the full academic potential of every student. We use a whole-child approach to learning that promotes intellectual, emotional, and social growth while emphasizing problem-solving, critical thinking, and higher-order reasoning. This approach engages students in their development and encourages them to take ownership of their decisions and actions.

### MISSION

Lake Mary Preparatory School is a secular private school serving students from PreK through 12th grade. Our unifying mission is to ignite the full potential of every student by preparing them academically, socially, and emotionally so they can succeed in the ever-changing world around them.

### VISION

Create a safe learning environment surrounded by a culture of meaningful feedback, pedagogies, critical thinking, and challenging academics that inspire students to own their academic success and become responsible global citizens.



## HONOR CODE

The Honor Code embodies the character values that are considered an integral part of Lake Mary Preparatory School's student education. The Honor Code of Lake Mary Preparatory School is as follows:

### **"Integrity, Respect, and Responsibility - Always"**

#### **INTEGRITY**

Academic honesty is presenting only one's own work for evaluation (i.e. homework, tests, writing assignments, class assignments). This also includes adequately citing one's sources and not plagiarizing from any other sources, including the Internet.

#### **RESPECT**

Students are expected to show respect for themselves and others and exhibit proper behavior toward all members of Lake Mary Preparatory School, including teachers, administrators, parents and other students.

#### **RESPONSIBILITY**

Students are responsible for meeting all academic obligations, including classes, study halls, independent studies, appointments and homework in a timely manner. All students are expected to uphold their personal integrity and the integrity of the school environment; respect themselves, others and school property; exhibit responsibility for themselves and for the school.

Just as Lake Mary Preparatory School holds a standard of academic excellence, similar standards of excellence must also apply to student behavior and proper care of individual and school property.



## ADVANCED PLACEMENT

### What is Advanced Placement?

AP represents college level academic challenges. AP classes are college level courses offered in English, Math, Science, Social Studies, Foreign Language, and Art. The work students do in AP will help them develop skills and study habits that will be vital in college. Colleges recognize that applicants with AP experiences are adequately prepared for the demand required for college courses.

### How Difficult Are AP Courses?

Compared with regular high school courses, AP courses are more demanding. Depending on the subject, students may read and write more, analyze material, synthesize ideas, solve problems, and evaluate. The students investment in AP courses will aid in establishing invaluable virtues as well as promote lifelong learning.

Once enrolled in an AP course, the student is expected to maintain consistent performance, as evaluated by the instructor (semester grades of B- or higher). AP students are required to take the AP examination as their spring semester final examination.

### Advanced Placement Course Offerings

|                       |                                     |                         |                          |
|-----------------------|-------------------------------------|-------------------------|--------------------------|
| AP Biology            | AP Computer Science Principles      | AP Physics C: Mechanics | AP Statistics            |
| AP Calculus AB        | AP English Language & Composition   | AP Precalculus          | AP Studio Art 2D Design  |
| AP Calculus BC        | AP English Literature & Composition | AP Psychology           | AP United States History |
| AP Chemistry          | AP European History                 | AP Research             | AP World History: Modern |
| AP Computer Science A | AP Government & Politics: US        | AP Seminar              |                          |

## AP CAPSTONE DIPLOMA

AP Capstone is a College Board program that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. The program cultivates curious, independent, and collaborative scholars that will prepare students to make logical evidence-based decisions. AP Capstone is comprised of two AP courses - AP Seminar and AP Research - and is designed to complement and enhance the discipline-specific study in other AP courses.

Students at LMP may take AP Seminar in grade 11, followed by AP Research in grade 12. Students who earn a score of 3 or higher in AP Seminar, AP Research, and on four additional AP exams of their choosing, receive the AP Capstone diploma. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP exams receive the AP Seminar and Research certificate. Students earning the AP Capstone diploma will also receive public recognition during the award ceremony and at the LMP graduation ceremony.

## SOCIAL AND EMOTIONAL LEARNING (SEL)

At Lake Mary Preparatory School, we are committed to building a culture of empowerment and compassion that is grounded in active learning, community involvement and social responsibility. This culture is built through an embedded social-emotional curriculum. We focus on student character traits within our learning environment that enrich students' lives through perspective, reflection, self-management, resilience, connection and compassion. Our goal is to empower Lake Mary Prep students to be confident, compassionate, and well-rounded individuals who contribute positively to their communities and the world around them.

### Ideal Student Traits:

- Collaborative
- Adaptable
- Resilient
- Innovative
- Integrity
- Reflective
- Empathetic
- Global Thinker

## BRING YOUR OWN DEVICE PROGRAM

Lake Mary Preparatory School has identified the need to expand our laptop program into the middle school in order to equip our students with the skills needed to become proficient in our Six Pillars of Technology Framework which includes: professional-level publication, professional-level-presentation, original research, data analysis, statistics and probability, professional responsibility in a digital world, and engineering and design. These subject areas will prepare our students with skills that are expected of them when they enter Upper School.

All computers must arrive on the first day of school with:

- Anti-Virus Software with a current subscription that will not expire during the school year
- Anti-Malware Software with a current subscription that will not expire during the school year

## GRADUATION REQUIREMENTS

|                                                                                                               |                          |
|---------------------------------------------------------------------------------------------------------------|--------------------------|
| Language Arts (4.0 Credits)<br>English I, II, III, IV                                                         | 4.0                      |
| Mathematics (4.0 Credits)<br>Algebra I, Geometry, Algebra II<br>1 additional math offering                    | 3.0<br>1.0               |
| Science (4.0 Credits)<br>Biology<br>Chemistry<br>2 additional science offerings                               | 1.0<br>1.0<br>2.0        |
| Social Studies (4.0 Credits)<br>World History<br>American History<br>Government/Economics<br>1 other offering | 1.0<br>1.0<br>1.0<br>1.0 |
| World Languages (2.0 Credits)<br>2 consecutive years of a world language                                      | 2.0                      |
| Technology (1.0 Credit)                                                                                       | 1.0                      |
| Art (1.0 Credit)                                                                                              | 1.0                      |
| Physical Education (1.0 Credit)                                                                               | 1.0                      |
| Electives (5.0 Credits)<br>Includes additional courses from any area above.                                   | 5.0                      |
| <b>TOTAL CREDITS:</b>                                                                                         | <b>26.0</b>              |

### Recommended Laptop Specifications:

- Operating System: Apple MacOS 11 or newer, MS Windows 10
- Laptops running Chrome OS have been found to be incompatible with certain educational websites and are not permitted
- Tablet computers are not permitted unless they are running Microsoft Windows OS.  
Processor: Quad Core or better recommended
- Memory: 8 GB Minimum
- Hard Drive: 128 GB minimum, (SSD) Solid State Drive recommended; Wireless Networking: 802.11n compatible

## ENGLISH COURSE DESCRIPTIONS

### Honors English I

**Grade Level: 9**

English I is a survey of literature course with a focus on learning how to critically read and write about fiction, poetry, and drama. Themed units of study include personal identity, lost innocence, and individual encounters with morality and love. The writing process is reinforced throughout the course, and students will have the opportunity to compose, revise, and perfect multiple drafts of critical and creative pieces. Honors courses incorporate deeper discussion and higher levels of application and assessment in preparation for future AP coursework. A teacher recommendation is a prerequisite to be eligible for an Honors course.

### Honors English II

**Grade Level: 10**

English II focuses on college preparedness and emphasizes grammar, academic vocabulary building, and engaging projects. Students in this course cultivate a broader worldview and understand the universality of myths through the study of Jungian archetypes. Students will apply this knowledge to a variety of books and texts ranging from classic to contemporary. Writing skills will be honed as students complete analytical, argumentative, and research essays, as well as a variety of creative and scholarly pieces. Honors courses incorporate deeper discussion and higher levels of application and assessment in preparation for future AP coursework. A teacher recommendation is a prerequisite to be eligible for an Honors course.

### Honors English III

**Grade Level: 11**

English III examines the theme of identity through the reading of literature from a wide variety of authors and origins. Special emphasis is placed on the skills of close reading and annotation, as well as critical writing and employment of secondary sources. Students in this course build on the research and writing skills of English II, moving toward greater independent thought and work. Research, writing, and analysis are built from the themes and ideas of a variety of genres, including the novel, memoir, drama, historical non-fiction, short story, and poetry. Honors courses incorporate deeper discussion and higher levels of application and assessment in preparation for future AP coursework. A teacher recommendation is a prerequisite to be eligible for an Honors course.

### Honors English IV

**Grade Level: 12**

English IV and Honors English IV focus on introducing students to a variety of novels, poems, and other works of literature, relating each to the tropes and conventions of various literary genres. In this class, students use literature as a starting point from which to study universal themes and ideas. There will be an emphasis on independent work as students prepare for college courses and other future endeavors. Students will practice support and analysis in numerous writing assignments throughout the year. English IV focuses on helping students develop individual opinions and theories related to the texts that we read in class, and practicing how to support those ideas with specific primary and secondary source evidence. Throughout the year, we will practice writing in various forms and styles including but not limited to, handwritten essays, typed essays, research papers, discussion posts, and informal prompts, among others. Honors courses incorporate deeper discussion and higher levels of application and assessment in preparation for future AP coursework. A teacher recommendation is a prerequisite to be eligible for an Honors course.

## **AP English Language and Composition**

**Grade Levels: 11-12**

Prerequisite: English II

Students in this introductory level college course carefully read and analyze a wide variety of nonfiction. Understanding how authors use language to create meaning is perhaps the most crucial of concepts. Students also learn the history of rhetorical argument, how to frame and recognize arguments, and modern applications of rhetorical and persuasive techniques. All reading is designed to produce critical thinkers and writers and to prepare them for the AP English Language and Composition Exam. Students entering this class will have a strong foundation in critical thinking and writing. Summer reading and writing are required for entrance to this course. As this is a college level course, performance expectations are high, and the workload is challenging. This course is open to juniors and seniors whose past grades and work ethic indicate readiness for this college level course.

## **AP English Literature & Composition**

**Grade Level: 12**

Prerequisite: English III

This course prepares students to become careful and critical readers and writers. Students are engaged in reading representative works from various literary eras and genres. In this course, students will improve their skills in close reading, paying careful attention to historical context as well as textual details such as structure, style, theme, figurative language, archetype, tone, and attitude. Thoughtful interpretation and critical writing through various approaches will take place throughout the course. Students entering this class are expected to have a strong foundation in critical thinking and writing. As this is a college level course, performance expectations are high, and the workload is challenging. Writing assignments take many forms including practicing AP prompts from past AP Literature exams that are evaluated by peers and the teacher. Assignments may include reaction papers, practice essays in various modes and representing different critical approaches, larger projects involving research and requiring MLA citation, and other assignments throughout the year.



## SCIENCE COURSE DESCRIPTIONS

### Honors Biology

**Grade Level: 9**

This course provides a general overview of the study of living organisms. The major units covered are the scope and science of biology, ecology, cells, energy transformations, genetics, the history of life and early earth, evolution, taxonomy, microorganisms, plants, and animals. Students will show mastery of fundamental concepts of the previously mentioned topics and problem-solving skills using scientific inquiry in a laboratory setting. Honors courses incorporate deeper discussion and higher levels of application and assessment in preparation for future AP coursework. A teacher recommendation is a prerequisite to be eligible for an Honors course.

### Honors Chemistry

**Grade Levels: 10-11**

Prerequisites: Biology and Algebra I

This course focuses on the understanding of the physical and chemical changes that occur in natural phenomena. The course discusses a variety of topics, from Atoms and the Periodic Table to Calorimetry and Acids & Bases. The lab component of this course provides students with hands-on opportunities to master the standards and develop a scientific mindset for problem-solving. Honors Chemistry discusses a variety of topics, from Quantum Atomic Theory and Stoichiometry to Thermochemistry and Rates & Equilibrium. Honors courses incorporate deeper discussion and higher levels of application and assessment in preparation for future AP coursework. A teacher recommendation is a prerequisite to be eligible for an Honors course.

### Honors Physics

**Grade Levels: 11-12**

Prerequisites: Algebra II and Chemistry, Co-requisite: Algebra II

This course teaches an understanding of the physical world using mathematical equations, models, and experimental results. The lab component for this course allows for hands-on application of the concepts taught. Course topics include Newtonian mechanics, energy, momentum, wave characteristics, and electricity. Honors courses incorporate deeper discussion and higher levels of application and assessment in preparation for future AP coursework. A teacher recommendation is a prerequisite to be eligible for an Honors course.

### AP Physics C: Mechanics

**Grade Levels: 11-12**

Prerequisites: Physics, AP Calculus AB (prerequisite and/or co-requisite), and Teacher Recommendation

This course is designed for students who plan to specialize in physical science or engineering and is strongly recommended as a second-year physics course. Students are expected to develop a deep understanding of the fundamentals of classical mechanics and apply their critical thinking skills to complex physical problems. Students will use methods of differential and integral calculus to solve and understand physical problems.

### AP Biology

**Grade Levels: 10-12**

Prerequisites: Biology, Chemistry, and Algebra I Recommended

This course is taught at the college level for upper school students who have demonstrated proficiency and interest in the field of biology. The course content is divided into the following four Big Ideas: Evolution, the diversity, and unity of life; Biological systems, free energy, and homeostasis; Living systems, genetics, and cell communication; and Ecology. This course has an increased emphasis on science practices and inquiry-based learning. Students are encouraged to focus on the relationships, processes, mechanisms, and applications of concepts.

### AP Chemistry

**Grade Levels: 11-12**

Prerequisites: Chemistry, Algebra II, and Teacher Recommendation

The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore content such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium.



## MATHEMATICS COURSE DESCRIPTIONS

### Algebra I (Standard or Honors)

Grade Levels: 7-9

Prerequisite: Pre-Algebra

This course begins the study of the structure of Algebra. Course topics include real numbers, solving and analyzing linear equations, graphing relations and functions, solving linear inequalities, polynomials, factoring, quadratic functions, radical expressions, and rational expressions.

### Geometry (Standard or Honors)

Grade Levels: 8-10

Prerequisite: Algebra I

In this course, students study congruent segments and angles, circle chords, secants and tangent segments, parallel and perpendicular lines, angle measure in triangles, direct and indirect triangle congruence and similarity, proofs, logic, similar triangles, transformations, the Pythagorean Theorem, geometric constructions, coordinate geometry, and surface area and volume of solids.

### Algebra II (Standard or Honors)

Grade Levels: 9-11

Prerequisites: Geometry

This course continues the study of the structure of Algebra and covers topics including relations, functions, graphs, polynomial and rational expressions, exponents, logarithms, complex numbers, sequences, series, and word problems. A TI-Nspire CX calculator is required for this course.



### **Probability & Statistics**

**Grade Levels: 11-12**

This course covers the collection, analysis, and interpretation of data, while exploring probability theories and distributions. Students will be able to interpret hypotheses and make connections between studies, experiments, and probabilities.

### **AP Pre-Calculus**

**Grade Levels: 10-12**

This course prepares students for other college-level mathematics and science courses. Through regular practice, students build deep mastery of modeling and functions, and they examine scenarios through multiple representations. The course framework delineates content and skills common to college precalculus courses that are foundational for careers in mathematics, physics, biology, health science, social science, and data science.

### **AP Calculus AB**

**Grade Levels: 12**

Prerequisite: AP Pre-Calculus or Honors Pre-Calculus with Teacher Recommendation

This course is an introductory college-level calculus course. Students cultivate their understanding of differential and integral calculus through engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions. This course is comparable to taking Calculus I in college.

### **AP Calculus BC**

**Grade Level: 12**

Prerequisite: AP Calculus AB

This course is an introductory college-level calculus course. Students cultivate their understanding of differential and integral calculus through engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions. This course is comparable to taking Calculus II in college.

### **AP Statistics**

**Grade Levels: 10-12**

Prerequisites: Algebra 2 and Teacher Recommendation

This course draws connections between all aspects of the statistical process including design, analysis, and conclusions. AP Statistics teaches students how to communicate methods, results, and interpretations using the vocabulary of statistics. Class discussion is encouraged to develop the student's ability to communicate statistically. A TI-Nspire CX graphing calculator is required for this course.

## HISTORY COURSE DESCRIPTIONS

### Honors World History

**Grade Level: 9**

In this course, students will further develop their ability to think analytically and critically as they refine their historical knowledge. Students will utilize both primary and secondary sources and case study interpretations will be developed. This course will cover the approximate historical eras of Prehistoric times through Imperialism. Honors courses incorporate deeper discussion and higher levels of application and assessment in preparation for future AP coursework. A teacher recommendation is a prerequisite to be eligible for an Honors course.

### Honors Modern World History

**Grade Level: 10**

This course examines historical patterns and changes to analyze how history informs decision making today. Students will enhance their knowledge of world affairs and international relations. By the end of this course, students will be able to critically discuss the causes and effects of current world issues and their implications. Analysis of historical documents is emphasized. Honors courses incorporate deeper discussion and higher levels of application and assessment in preparation for future AP coursework. A teacher recommendation is a prerequisite to be eligible for an Honors course.



### **Honors United States History**

**Grade Level: 11**

This course examines the history of the development of the United States by examining connections to the past to prepare students to become participating members of a democratic society. Students will trace and interpret the political, economic, and sociological development of the United States. The content emphasis is on the years immediately preceding the Civil War to the present, with a focus on inquiry and interpretation. Honors courses incorporate deeper discussion and higher levels of application and assessment in preparation for future AP coursework. A teacher recommendation is a prerequisite to be eligible for an Honors course.

### **Honors United States Government**

**Grade Level: 12**

This course will explore the political theory and everyday practices that shape our government and public policies. Students will develop a critical understanding of the government's development, structure, and the rights and responsibilities of citizenship.

### **Honors Economics with Financial Literacy**

**Grade Level: 12**

This course serves as an advanced introduction to the discipline of economics. The course will cover both microeconomics and macroeconomics. Students are introduced to the basics of Financial Literacy including budgeting, savings, credit, loans, insurance, and investing. In addition, the course includes the study of the stock market, real estate, and entrepreneurship. Critical analysis, research, and writing skills will be strongly emphasized and developed throughout the year.

### **AP World History: Modern**

**Grade Level: 9**

Prerequisite: Teacher Recommendation

This course is designed to be the equivalent of a freshman college survey course in World History. Students will explore history from 1200 C.E. to the Modern Era through a variety of themes. Critical analysis skills will be developed and applied. Writing skills are a central focus as students work to analyze documents, compare periods of world history, and understand why continuity and change occurs.



### **AP European History**

**Grade Level: 10**

Prerequisite: Teacher Recommendation

This course is designed to be the equivalent of a freshman college survey course in Western Civilization. Students will examine the history of Europe from the late Middle Ages to the present day from many perspectives including cultural, intellectual, and artistic. Writing skills are a central focus as students work to analyze documents, compare periods of European history, and understand why continuity and change occurs. Students' ability to respond to multiple choice questions, short answer, long essays, and DBQs will be developed through the year in preparation for the AP exam.

### **AP United States History**

**Grade Level: 11**

Prerequisite: Teacher Recommendation

This course is designed to be the equivalent of a freshman college survey course in American History. Topics include the major events of United States history since the 15th century, focusing in particular on the political, social, and economic causes and effects of those events. Writing skills are a central focus as students work to analyze documents, compare periods of United States history, and understand why continuity and change occurs. Students' ability to respond to multiple choice questions, short answer, long essays, and DBQs will be developed through the year in preparation for the AP exam.

### **AP United States Government and Politics**

**Grade Level: 12**

Prerequisite: Teacher Recommendation

This course is designed to be the equivalent of a freshman college survey course in American government. Students will develop a critical understanding of the government's origins, development, structure, and role in making and enforcing public policy. Students will make connections between course content and current affairs and develop the ability to respond to multiple choice questions and free response essays in preparation for the AP exam.



## WORLD LANGUAGE COURSE DESCRIPTIONS

### Spanish I

**Grade Levels: 9-11**

Prerequisite: None

This is an introductory course to the Spanish language. Students will develop comprehension skills in Spanish through listening, speaking, writing, and reading. Students will learn basic grammar, vocabulary, and cultural aspects of the language through thematic units. By the end of this course, students will be able to communicate using simple sentences to express ideas on various topics.

### Spanish II

**Grade Levels: 9-12**

Prerequisite: Spanish I or Teacher Approval (upon completion of a placement test)

This course will strengthen students' use of the language through the communicative skills of listening, speaking, reading, and writing through thematic units. Students will expand their vocabulary using culturally authentic sources and communicate using complex sentences orally and in writing.

### Honors Spanish III

**Grade Levels: 10-12**

Prerequisite: Spanish II or Teacher Approval (upon completion of a placement test)

In this course, students will be presented with advanced grammar structures while reviewing, reinforcing, and gradually expanding previously studied concepts and vocabulary. Thematic units guide students to use authentic language through structured practice achieving creative personalized expression. Students will express themselves in the language and perform at a higher level of proficiency.

### Honors Spanish IV

**Grade Levels: 11-12**

Prerequisite: Spanish III or Teacher Approval (upon completion of a placement test)

In this course, students study advanced and complex grammar that will broaden their understanding of the written and spoken language. Analysis and interpretation of authentic sources in literature, art, history, and current events will further students' understanding of Spanish culture. Students will read, write, and speak at an advanced level introducing them to Pre AP Language and Culture activities.

### AP Spanish

**Grade Level: 9-12**

This course is designed as an intermediate/advanced (third or fourth semester college-level) Spanish class. Students will develop interpretive, interpersonal and presentational skills by engaging with sources like podcasts and short stories while speaking and writing in both formal and informal registers. The context of this communication is in the exam themes of Families and Communities, Personal and Public Identities, Beauty and Aesthetics, Science and Technology, Contemporary Life and Global Challenges. Students will experience the study of language in engaging ways with the goals to understand spoken Spanish from different countries, hold conversations in real-world situations and be able to write emails and essays that compare the richness and diversity of the Hispanic world with their own culture.

## Chinese II

Grade Level: 9-12

Prerequisite: Chinese I

In this course, students will continue to develop listening, speaking, reading, and writing skills. They will keep learning on themes that are relevant to the everyday lives of students. Emphasis is placed on the development of listening and speaking skills and on the acquisition of the fundamentals of applied grammar.

## Honors Chinese III

Grade Level: 10-12

Prerequisite: Chinese II and Teacher Approval (upon completion of a placement test)

Students who have successfully completed Chinese II continue to enlarge their vocabulary, study and review grammar, and gain increased fluency through using authentic material. There is increased emphasis on writing, discussions and presentations on the topics related to daily life & Chinese culture.

## Honors Chinese IV

Grade Level: 11-12

Prerequisite: Honors Chinese III and Teacher Approval (upon completion of a placement test)

This course expands conversational and written skills and examines Chinese culture and society. Emphasis is placed on the skills needed for using more authentic materials and writing short essays. By the end of this course, students will communicate effectively.



## ELECTIVE COURSE DESCRIPTIONS

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### General Electives

#### AP PSYCHOLOGY

**Grade Level: 10-12**

Prerequisite: None

This course is designed to be the equivalent of a freshman college survey course in psychology. Students will be introduced to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students also learn about the ethics and methods psychologists use in their science and practice. At the end of this course, students will take the AP Psychology Exam.

#### AP SEMINAR

**Grade Level: 11-12**

Prerequisite: Teacher Recommendation

In this course, students develop and strengthen analytical skills as they explore current events. Students practice close reading and analysis of articles, identifying themes, and building support for arguments. Students also learn to consider issues from multiple perspectives, evaluate the strength of arguments, and make logical fact-based decisions. AP Seminar students are assessed with two performance tasks in the second semester and an exam in May. Performance tasks consist of a team project and presentation, and an individual research-based essay and presentation.

#### AP RESEARCH

**Grade Level: 12**

Prerequisite: AP Seminar

This course allows students to design, plan, and conduct a yearlong research-based investigation on a topic of individual interest, documenting their process with a portfolio. Students demonstrate the ability to apply scholarly understanding to real-world problems and issues by learning how to understand research methodology, employ ethical research practices, and synthesize information to build, present, and defend an argument. The course culminates with an academic paper and a presentation with an oral defense.

#### INTERNAL INTERNSHIP COURSE

**Grade Level: 10-12**

LMP is excited to offer an Internal Internship full-year course where students will be paired with LMP staff and faculty experts working across various fields. Accepted students can expect application of education and career exploration, will gain experience and increase marketability, and will receive networking opportunities with field experts. Student interns will learn how to work in a professional environment, build their resume, receive professional feedback, and gain leadership skills. Students will need to complete an application and be selected to participate in this course opportunity.

## ELECTIVE COURSE DESCRIPTIONS

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### Science

#### **BIOSCIENCE HONORS: TOPICS IN PUBLIC HEALTH**

**Grade Level: 10-12**

This high school bioscience course introduces students to the science and real-world impact of public health by exploring how biological, environmental, and social factors influence human well-being. Students investigate infectious diseases such as Influenza and COVID-19, examining how pathogens spread and how prevention strategies protect communities. The course also addresses chronic conditions including Type 2 Diabetes and Cardiovascular Disease, highlighting the roles of nutrition, genetics, and lifestyle choices. In addition, students explore mental health topics such as depression, environmental health concerns like air and water pollution, and the impact of substance use and health disparities on populations. Through hands-on investigations, data analysis, and project-based learning, students develop scientific literacy and critical thinking skills while applying concepts such as genetic mutation to real-world health challenges. By the end of the course, students will be equipped to recognize pseudoscientific claims and evaluate public health issues to improve community health.

#### **ENVIRONMENTAL SCIENCE HONORS: IMMERSING IN FLORIDA'S LIVING LAB**

**Grade Level: 10-12**

Step outside into The Backyard and turn our campus into your classroom! Environmental Science: Immersing Florida's Living Lab is a hands-on exploration of Florida's ecosystems, where students become environmental scientists, conservationists, and storytellers. Through field research, water testing, species identification, and sustainability projects, you'll investigate the delicate balance of our natural world and discover ways to protect it. Whether you're restoring habitats, tracking wildlife, or designing campus sustainability initiatives, this course puts you in the heart of real-world environmental science.

#### **SOLVE: APPLIED ENGINEERING HONORS**

**Grade Level: 9-12**

Ever wondered how physics and engineering come together to create real, working devices? In Solve: Applied Engineering, you'll design, build, test, and refine mechanical and energy-powered projects like mousetrap cars, solar-powered racers, fan-propelled cars, VEX robotic vehicles, and trebuchets. You'll explore key engineering principles—such as energy transfer, aerodynamics, structural integrity, and mechanical advantage—while applying the scientific method to analyze and improve your designs. From crafting a Rube Goldberg machine to experimenting with solar cells and optics, this hands-on course challenges you to think critically, collaborate, and bring ideas to life.

#### **FORENSIC SCIENCE**

**Grade Level: 9-12**

Forensic Science is a full-year, multi-disciplinary survey course in which students will gain an introduction to the various areas of Crime Scene Investigation, Evidence Collection and Processing through engaging hands-on activities. Areas of study include, but are not limited to: forensic art and reconstruction, ethics and professional practice, forensic psychology, the role of biology, osteology, pharmacology, and entomology in forensics, various applications of forensic fieldwork including mock crime scenes, as well as a variety of forensic technologies including serology and DNA.

## Outdoors/Wellness/Leadership

### CHALLENGE: PHYSICAL EDUCATION

**Grade Level: 9-12**

This course offers students the opportunity to enhance their physical health and fitness through a combination of exercises and team sports. Focusing on improving strength, speed, and agility, students will participate in various activities that challenge their physical limits and track their progress with regular fitness assessments. As they engage in team sports, students will develop teamwork, communication, and problem-solving skills in a competitive setting. The course provides a chance for personal growth and encourages students to build healthier, active lifestyles.

### STRENGTHEN: PERSONAL FITNESS

**Grade Level: 9-12**

Personal Fitness is designed for students who are serious about improving their strength, conditioning, and overall health. Students will participate in structured workouts targeting strength, endurance, flexibility, and other components of fitness while learning how each impacts the body. Along with a deeper understanding of exercise science, students will also learn how other factors such as nutrition, hydration, proper sleep and recovery impact performance. This is an active, goal-oriented class where students are expected to work hard, track progress, and push themselves to improve.”

Prerequisites: Upper School student who has successfully completed Physical Education and/or HOPE.

### CULTIVATE: ROOTS TO RECIPES

**Grade Level: 9-12**

What if your classroom was a garden, a kitchen, and a science lab all in one? Cultivate: Roots to Recipes is a hands-on, student-driven journey through growing, harvesting, and cooking—connecting science, sustainability, and culture through food. From seed to plate, you’ll experiment with plant science, design your own recipes, and explore the environmental and cultural impact of what we eat. You’ll test soil, compare crop varieties, cook with locally sourced ingredients, and even develop a school-wide farm-to-table showcase. Whether you’re interested in sustainability, nutrition, culinary arts, or just love food, this course is about discovery, innovation, and creating something delicious.

*Please note that students will occasionally be asked to purchase and bring in grocery items over the course of the year.*



### **EXPLORE: OUTDOOR ADVENTURE & LEADERSHIP**

**Grade Level: 9-12**

Are you ready to challenge yourself, build resilience, and develop leadership skills in the great outdoors? Explore: Outdoor Adventure & Leadership is an action-packed, hands-on course where students learn teamwork, communication, and problem-solving through real-world challenges. Whether you're navigating a low ropes course, cooking over an open fire, or tackling a mountain biking trail, you'll push your limits while working collaboratively with your peers. This course isn't just about adventure—it's about learning how to lead, adapt, and support others in dynamic environments. Most activities will take place in The Backyard, our on-campus outdoor learning space, where you'll engage in activities like kayaking, hiking, and outdoor survival skills. If you're looking for an exciting way to develop confidence, resilience, and leadership while exploring the natural world, this is the class for you.

### **NAVIGATE: GROWTH THROUGH LEADERSHIP & CONNECTION**

**Grade Level: 9-12**

This course is designed to empower students who are interested in becoming the leaders of tomorrow. Through hands-on activities, collaborative projects and real world applications, students will develop leadership skills, foster inclusive school communities through mentoring younger students as they transition to middle school/high school, and support their peers in meaningful ways. This class is an opportunity to make a real difference in your school while developing leadership skills that will serve you for life. Think of this as "real-world leadership training" where you'll practice the skills employers, colleges, and communities are looking for. You'll gain experience in communication, problem-solving, and mentorship—skills that will set you apart in college, job interviews, and beyond.

### **REACT: SPORTS MEDICINE & ATHLETIC TRAINING**

**Grade Level: 9-12**

Step into the world of sports medicine and athletic training, where science meets performance. In this hands-on course, you'll explore injury prevention, treatment, and rehabilitation while gaining real-world experience on the sidelines of Lake Mary Prep athletic events. Learn the fundamentals of anatomy, medical terminology, and tissue healing, and apply your knowledge through taping, wrapping, and protective equipment techniques. Dive into the psychology of recovery, the role of nutrition in healing, and the fast-paced decision-making required in sports healthcare. Whether you aspire to a career in sports medicine, physical therapy, or athletic training, this course provides the skills and experience to take your passion for health and athletics to the next level.

### **THRIVE: THE ART & SCIENCE OF LIVING WELL**

**Grade Level: 9-12**

What does it mean to truly live well? This course is a transformative exploration of human development, self-actualization, and the habits that lead to a fulfilling life. Blending psychology, neuroscience, philosophy, and wellness science, this course guides students in discovering how to cultivate mental and physical well-being, build meaningful relationships, and create a life of purpose and joy. Through research-backed strategies and hands-on experiences, students will explore the science of happiness, productivity, resilience, and longevity. Topics include the power of mindset, emotional intelligence, sleep and nutrition, the role of movement and mindfulness, and the importance of connection and community. The course challenges students to develop practical habits for lifelong well-being while reflecting on what it means to live with intention and fulfillment.

## Entrepreneurial/Innovation

### ADVOCATE: LAW, COMMUNICATION & CRITICAL THINKING

Grade Level: 9-12

In a world where effective communication is the key to influence and success, this course empowers students with the essential skills to think critically, articulate ideas persuasively, and navigate complex discussions with confidence. Using the study of law as a dynamic framework, this course challenges students to analyze real-world legal cases, craft compelling arguments, and engage in structured debates, negotiations, and mock trials. Students will develop professional and personal communication skills that transcend the classroom—enhancing their ability to advocate for themselves, present ideas clearly, and engage in meaningful discourse. Whether pursuing law, business, STEM, or the arts, this course provides practical tools for college, careers, and leadership in any field.

### SPARK: INNOVATION STUDIO

Grade Level: 9-12

What if school wasn't just about learning, but about actually making things better? In Spark: Innovation Studio, you will tackle real challenges by asking one simple question: **How can we make this more effective?** That “this” could be anything: a product, a system at school, a community issue, or an everyday experience that could work better. You will work in teams to identify problems, connect with real people such as local organizations or community members, and develop solutions that have real impact. Through hands-on projects, you will brainstorm ideas, build prototypes, test them, and improve them based on feedback. Some projects will be connected to real world partners, while others will be based on big themes that push your creativity and thinking. This class is active, collaborative, and fast paced, with a focus on creativity, problem solving, communication, and teamwork. By the end, you will have a portfolio of projects and the confidence to take an idea and turn it into something meaningful in school, in your community, and beyond.



## Technology, Design and Digital Production

### **BUILD: CODE & CREATE**

**Grade Level: 9-12**

What does it look like when design, code, artificial intelligence, and cybersecurity all live in the same course? Build: Code & Create is a year-long technology elective that takes you from engineering a physical object in Fusion 360 to writing advanced Python programs, building with AI tools, and learning how systems stay secure, with woodshop fabrication running through the entire year. Every quarter adds a new layer. By the end, the skills are real and the work is yours to show. Model functional objects and assemblies in Fusion 360 using professional CAD tools, fabricate physical projects in the woodshop that connect digital design to real materials, write advanced Python programs using real-world data, APIs, and structured logic, use and evaluate AI tools, understanding how they work and where they fall short, and apply introductory cybersecurity concepts to understand how systems are protected and attacked.

### **AP COMPUTER SCIENCE PRINCIPLES**

**Grade Level: 9-12**

What happens when computer science is bigger than coding? AP Computer Science Principles is a college-level course that covers the full breadth of computing: how algorithms work, how data reveals patterns, how the internet runs, and what it means when technology shapes decisions that affect real people. Students write and analyze programs, work with data sets, and complete the AP Create Task — an original program of their own design that counts directly toward their AP exam score. No prior programming experience required. In this course, you will build original programs using algorithms, abstraction, and structured data, read and evaluate code to predict output, trace logic, and identify errors, explain how computing systems and the internet work at a structural level, complete the AP Create Task — a program you design, build, and document independently and examine the social, ethical, and legal consequences of computing decisions on individuals and communities. If you want a college-level computing course that covers how technology works and what it does in the world, this is where that conversation starts.

### **AP COMPUTER SCIENCE A**

**Grade Level: 10-12**

Prerequisite: Computer Coding and Programming or Teacher Recommendation

AP Computer Science A is equivalent to a first semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem-solving, design strategies and methodologies, the organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems.

## **PRODUCE: GRIFFIN NEWS NETWORK**

**Grade Level: 9-12**

Lights, camera, action! Produce: Griffin News Network puts you in charge of creating the stories that matter to our school community. From writing and filming to editing and broadcasting, you'll learn the ins and outs of media production while developing engaging content for students.

Cover campus events, interview key figures, and bring your creative vision to life—all while learning the skills used by professional journalists, filmmakers, and digital creators.



## **PUBLISH: THE LEGACY YEARBOOK**

**Grade Level: 9-12**

Step into the role of journalist, designer, photographer, and project manager as you help create The Legacy, our school's official yearbook! In this hands-on, production-based course, students plan, design, and publish a professional-quality yearbook that captures the voices and moments that define our school year. Students will gain experience in photography, writing, and layout design, while also developing key skills in organization, leadership, and collaboration. Working as part of a real-world production team, students will manage deadlines, solve problems, and make creative and strategic decisions that impact the final product. This course also includes coverage of events outside class time and requires a high level of responsibility and communication. This course is for students who are ready to take ownership of a project that truly matters.



## Fine Arts/Humanities

### REFINE: VISUAL ARTS STUDIO

**Grade Level: 9-12**

This course is designed for upper school students who are ready to take their artistic skills to the next level. Students will deepen their understanding of the elements of art and design through advanced studio projects in both 2D and 3D formats. With an emphasis on craftsmanship, technique, and creativity, students will use art history to study different cultural perspectives, applying that knowledge to create meaningful artwork.

### TRANSFORM: HONORS ART PORTFOLIO

**Grade Level: 10-12**

This course is a self-directed, advanced course designed for students who are ready to immerse themselves in a focused artistic journey. In this course, students will build a cohesive portfolio centered around a specific artistic interest, exploring (any) media such as drawing, painting, photography, digital media, (textiles, jewelry, sculpture, or mixed media). Students will take creative risks, engage in independent research, and refine their conceptual and technical skills. Emphasis is placed on producing a high-quality body of work that demonstrates critical thinking, originality, and mastery of design principles.

### AP STUDIO ART 2D DESIGN

**Grade Level: 10-12**

Prerequisite: Portfolio or Teacher Recommendation

This course has been developed for students interested in showing artistic mastery of design. Artists may work in but are not limited to, content in drawing, painting, printmaking, mixed media, photography, and digital media. This course is evaluated by the submission of a portfolio at the end of the school year. The portfolio is 24 pieces of art divided into three sections: quality, breadth, and concentration. Students will research formal concepts, explore creative techniques, and display conceptual thinking.



## DECODE: THE ART OF FILM

**Grade Level: 9-12**

Step behind the lens and uncover the hidden language of cinema—where every shot, cut, and sound choice tells a deeper story. In this immersive course, you'll analyze film as an art form, cultural force, and storytelling medium. Through screenings, discussions, and creative projects, you'll deconstruct the techniques filmmakers use to captivate audiences, from cinematography and to editing and sound design. Whether you're an aspiring filmmaker, a critic in the making, or a movie lover eager to see films in a new light, this course invites you to decode, interpret, and engage with cinema like never before.

## DISCOVER: THE NATURE OF HUMANS

**Grade Level: 9-12**

*(Semester-Long Course to be paired with Art History)*

How has nature shaped human thought, art, and identity? This course is an interdisciplinary exploration of how the natural world inspires us as people. Students will look at examples from literature, philosophy, visual arts, music, and architecture created by, about, or in tribute to different aspects of nature. The class will venture out into nature to find inspiration and also analyze some of the most famous works of all kinds of art, all created in response to the great outdoors. This course examines the connection between the environment and human expression.

## GAZE: HONORS ART HISTORY

**Grade Level: 9-12**

*(Semester-Long Course to be paired with The Nature of Humans)*

Uncover the story of human creativity through the lens of art. Gaze: Honors Art History guides students through the progression of artistic expression across painting, sculpture, architecture, and photography. From the Renaissance and Impressionism to Pop Art and Modernism, students will explore how historical and cultural movements shape artistic innovation. Through discussion, analysis, and hands-on projects, this course emphasizes critical thinking, visual literacy, and the connections between art, society, and history.



## Performing Arts

### **ELEVATE: SYMPHONIC BAND**

**Grade Level: 9-12**

In this course, students will develop their technical and artistic abilities in an advanced ensemble setting. This course focuses on enhancing individual proficiency while fostering an exceptional collective sound through challenging symphonic band repertoire. Students will participate in multiple performances, including concerts, pep rallies, and home football games. Attendance at after-school events is required to achieve a cohesive and polished group performance.

### **VIBE: ROCK BAND**

**Grade Level: 9-12**

In this high-energy course, students will dive into the world of rock and roll, exploring its history, evolution, and key elements. From the 1950s to today, students will engage in performing iconic rock tunes while learning about the techniques and stylistic nuances that define this genre. Whether you're on guitar, bass, piano, drums, or vocals, you'll have the opportunity to collaborate and develop as a performer. The emphasis will be on band dynamics, improvisation, and creating rock adaptations that resonate with both classic and contemporary audiences. Get ready to make noise, experiment with sound, and rock out with your bandmates!

### **HARMONIZE: THE ORCHESTRAL EXPERIENCE**

**Grade Level: 9-12**

In this course, students will immerse themselves in the world of string orchestra music, refining their skills on violin, viola, cello, or bass. Through ensemble practice, they will work together to create seamless harmony and cohesion, interpreting a wide variety of orchestral works. This course will emphasize collaboration and musicality. Students will perform both on and off campus, daytime and evening performances, showcasing their growth as musicians and as part of a collective whole. Students should already have basic proficiency on their chosen instrument and reading music for this class.



## MASTER: DIGITAL MUSIC

**Grade Level: 9-12**

In this course, students will explore the exciting world where technology and music meet. Through hands-on experiences, students will compose, record, and produce original music using industry-standard software like Pre-Sonus Studio One (or similar programs). Students will dive into digital composition, sound design, and the intricacies of mixing and mastering to create high-quality tracks. Whether you're making electronic beats, producing full-band recordings, or crafting soundscapes, this course will give you the tools and techniques to shape your musical creations in the digital realm.

## PERFORM: THE ART OF THEATER

**Grade Level: 9-12**

This course invites students to step into the world of stagecraft, exploring the four essential pillars of theatre—script analysis, performance, directing, and design. Through contemporary scripts, improvisation, and audition preparation, students will refine their acting skills while also diving into the creative process behind set, lighting, and costume design. Collaboration is key, as students take on production-oriented challenges, provide meaningful critiques, and bring compelling performances to life. Whether onstage or behind the scenes, students will gain the confidence, adaptability, and artistry essential to theatrical storytelling.



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