

# Course Descriptions

Los Gatos High School  
2019 - 2020

## English Course Descriptions

LGHS courses in English are designed to develop communication skills in reading, writing, speaking, and listening, as well as to develop an appreciation for literature. 40 units of English are required for graduation with 10 units required each of the 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grades. Summer reading is required for all college preparatory classes. All English classes have been aligned with the California state framework.

### **P-English 9**

*Grade 9*

P-English 9 is a college-preparatory course in literature, composition, grammar, and language. Students study literary forms of the short story, the novel, drama, and poetry. The course emphasizes development of composition skills in expository, narrative, and descriptive writing. Grammar fundamentals, including syntax, coordination, and subordination are an integral part of this course, as are spelling and vocabulary development. **Required summer reading for P-English 9:** *Breaking Through* by Francisco Jimenez.

### **P-English 9 Honors**

*Grade 9*

P-English 9 Honors is a college-preparatory honors course designed for students who have demonstrated excellence in English. English 9 Honors provides in-depth study and analysis of literature and the writing of composition with particular emphasis on exposition. Extensive outside reading, vocabulary, spelling, usage, sentence patterns, and the development of critical thinking skills augment the curriculum. Extensive summer reading is required. **Required summer reading for P-English 9H:** In addition to reading *Breaking Through* by Francisco Jimenez, students should read either *The Chosen* by Chaim Potok or *A Tree Grows in Brooklyn* by Betty Smith. The book not read over the summer will be required reading at the start of the fall semester.

### **P-English 10**

*Grade 10*

This is a college preparatory composition/ literature course, which emphasizes vocabulary building, literature analysis and full-length essays with attention given to punctuation, sentence structure, and style. One Shakespearean play and participation in one team debate is required.

### **P-English 10 Honors**

*Grade 10*

English 10 Honors is a college-prep class for students with strong skills and ability in comprehension and written expression. This course emphasizes literature and analytical expository writing which reflects higher cognitive skills. English 10H requires development of oral communication skills, including a unit on Oxford debate.

## **P-English 11**

### *Grade 11*

This course covers literature, composition, and reading comprehension skills. The primary writing emphasis will be on full-length composition, formulating/developing a thesis, outlining, writing effective introductions, transitions, and conclusions. Expository and persuasive compositions and writing essay examination answers requiring basic literary analysis will be combined with a thorough review of grammar and syntax. SAT practice and vocabulary development are included.

## **P-English 11: Social Justice/Change**

### *Grade 11*

This is an introductory course to a potential two-year pathway of the study of social justice and change through the lens of literature, including the themes of class, race, gender, community, and the human condition. One of the underlying themes of the course will be analyzing the resilient nature of our society, specifically in regard to individuals who are able to overcome societal pressures and stratifications, in order to create change for all. This course invites students to examine social justice while creating opportunities for them to think, read, and write critically. It is an opportunity for authentic education and experiential learning to build a better world.

## **P-English Language/ Composition AP**

### *Grade 11*

English Language and Composition AP is an Advanced Placement college prep class that acquaints students with the styles, themes, and points of view of major writers. Emphasis is given to the philosophical and historical climate within which each writer lived and wrote. This course requires extensive literary analysis and writing.

## **P-English 12**

### *Grade 12*

This course further examines the three common strands of English: literature, composition, and language. The writing of a major research paper is an essential part of the course as well as preparation for the college essay and for college entrance exams.

## **P-English 12: Philosophy and Ethics**

### *Grade 12*

Philosophy and Ethics is a senior year English 12 class with a focus on the BIG questions of life. Some of our key questions will be: How do we lead a good life? Can we know anything? What does it mean to be human? How can we effect change in our world? We will use philosophical ideas to explore our own lives and our modern-day institutions, especially our systems of government, education, technology, justice, economics, and the media.

## **P-English 12: Social Justice/Change**

### *Grade 12*

This English 12 course will continue to focus on topics of social justice and change, including the themes of class, race, gender, community, and the human condition. It's a continuation from English 11: Social Justice/Change, but one does not need to have completed the English 11 level to join in English 12. One of the underlying themes of the course will be analyzing the resilient nature of our society, specifically in regard to individuals who are able to overcome societal pressures and stratifications, in order to create change for all. This course invites students to examine social justice while creating opportunities for them to think, read, and write critically. It is an opportunity for authentic education and experiential learning to build a better world.

## **P-English Literature/Composition AP**

*Grade 12*

English Literature and Composition AP is a college level English course that readies students for the demands of college work. It prepares students to analyze literary works, write research papers on literary subjects, develop stylistic and organizational skills in writing, and understand the works of the best-known writers. Students are prepared for both the SAT and AP exams. The class will review grammar and syntax as needed.

## **English Electives**

Please note: While this course is taught by an English teacher, it does not count toward the 40 units of English required for graduation.

### **P-Creative Writing**

*Grades 10 -12*

By studying a wide variety of short stories, novel excerpts, autobiographical narratives, films, poetry, and spoken word poems, students will examine how writers of the various genres appeal to audiences of all different types. While this class will focus primarily on the writing aspect of student creations, it will give students the opportunity to share their work in written, performance, and multi-media forms. Students will also explore ways to develop their own writing by modeling the techniques learned through close study of our favorites. They will learn how to evaluate peer work in a workshop setting, using a Socratic approach. In the same workshop setting, they will learn how to use classmates' responses to their creative work to improve and develop it. Sharing and performing work for an authentic audience is a critical component of this class.

### **P-Creative Writing Honors**

*Grades 11 -12*

This is for the second-year CW student or with prior approval from the instructor. By studying a wide variety of short stories, novel excerpts, autobiographical narratives, films, poetry, and spoken word poems, students will examine how writers of the various genres appeal to audiences of all different types. While this class will focus primarily on the writing aspect of student creations, it will give students the opportunity to share their work in written, performance, and multi-media forms. Students will also explore ways to develop their own writing by modeling the techniques learned through close study of our favorites. They will learn how to evaluate peer work in a workshop setting, using a Socratic approach. In the same workshop setting, they will learn how to use classmates' responses to their creative work to improve and develop it. Sharing and performing work for an authentic audience is a critical component of this class. CW Honors students will be expected to take a leadership role in sharing, workshopping, peer editing, presenting, and author-craft piece selection. CW Honor students will also be expected to complete additional readings and peer feedback responses.

### **Poetry Workshop & Publication**

*Grades 10-12*

Students will study a wide variety of poetry and song lyrics, participate in workshops with local poets, and write a lot of their own poetry – experimenting with style, structure, voice, meter, language, traditional forms, spoken word, and more. They will share their work in small and large group settings, as well as learn how to submit their work for publication. During the first semester, students will write, produce, publish, and promote their own ebook. During the second semester, students will produce, publish, and distribute an LGHS literary magazine. *Note: This class can be taken as a semester (fall or spring) or year-long course.*

# Mathematics Course Descriptions

The aim of the Mathematics Department is to provide students with a sequence of study to suit their needs and skills. The development of basic mathematical skills, logic, and critical thinking, the preparation for further training beyond secondary school mathematics, and the appreciation for the contribution of mathematics to civilization are among the objectives of the mathematics curriculum. Most math courses require a grade of C- or higher to advance to the next level. Please refer to the course sequence chart for additional prerequisites. Two years of math (reaching at least a minimum level of Algebra 1 equivalency) are required for graduation.

## **Algebra A**

In Algebra A, students will learn first semester Algebra 1 material, spread out throughout the whole school year. Topics include the introduction of variables, constants, expressions, equations, and functions. Students will learn how to solve, graph, and model with linear equations and inequalities. They will understand the meaning of a function and will apply their knowledge to model real situations. Furthermore, they will solve and model with systems of linear equations. Lastly, students will learn to conduct research and analyze statistical models.

## **P-Algebra B**

In Algebra B, students will learn second semester Algebra 1 material, spread out throughout the whole school year. The class will start with a review of Algebra A, and then it will continue with second semester Algebra 1 concepts. The main topics include simplifying expressions with exponents and radicals, operations with polynomials, and solving quadratic equations. Students will represent quadratic functions graphically and algebraically. They will learn to graph and solve quadratic equations, and will apply their knowledge to model real situations. Students will earn college prep Algebra 1 credit upon successful completion of both Algebra A and Algebra B.

## **P-Algebra 1**

This college prep course is designed to give students a foundation for all future mathematics courses. This course covers key algebra concepts and builds the algebraic foundation essential for students to solve increasingly complex problems. Students will explore: foundations of Algebra, solving equations and inequalities, an introduction to functions, linear functions, system of equation and inequalities, exponents, polynomials and factoring, quadratic functions and equations, radical expressions and equations, and an introduction to data analysis and probability. Algebra 1 focuses on algebraic thinking and multiple representations - verbal, numerical, symbolic, and graphical.

## **Applied Math**

Applied Math is a course designed for students who have passed Algebra 1 or Geometry and would like to improve their skills before moving on to Geometry or Algebra 2. This class focuses on real-world applications of mathematics in fields such as finance, coding, and probability & statistics. Students will also improve their Algebra skills by utilizing an online program that provides diagnostic feedback and individualizes math support to target growth in critical math concepts. To help students understand that math makes sense outside of a textbook, the course will incorporate real world data and technological tools. The course will be built around collaborative tasks that require students to persevere in solving problems. Students will be asked to clarify their thinking, verify the reasonableness of their conclusions, explain their solutions in writing, and critique the reasoning of others.

## **P-Geometry**

Geometry focuses on a formal development of geometric skills and concepts. Students build their visualization, reasoning, and mathematical communication skills through the study of the following topics: congruence, similarity, parallel and perpendicular lines, triangles, quadrilaterals, polygons, circles, surface area, volume, right triangle trigonometry, transformations, probability, and proofs.

## **P-Geometry: Connections**

Geometry Connection includes more Algebra 1 review in connection with new Geometry topics. It has an algebraic approach to the following topics: congruence, similarity, parallel and perpendicular lines, triangles, quadrilaterals, polygons, circles, surface area, volume, right triangle trigonometry, transformations, and probability.

## **P-Algebra 2**

This college-prep course reviews the basic concepts of Algebra 1 and continues with the study of linear functions and relations. Products and factors of polynomials, rational expressions, irrational and complex numbers, quadratic equations and functions, variation and polynomial equations, analytical geometry, exponential and logarithmic functions, and probabilities. Course content is not as extensive and the pace of the class is not as accelerated as Algebra 2 Accelerated.

## **P-Algebra 2 Accelerated**

P-Algebra 2 Accelerated students study linear functions and relations, inequalities, systems of equations and inequalities, quadratic functions and factoring, polynomials and polynomial functions, rational exponents and radical functions, exponential and logarithmic functions, rational functions, quadratic relations and conic sections, counting methods and probability, data analysis and statistics, and an introduction to trigonometry.

## **P-Trigonometry/Advanced Topics**

First semester is a study of circular functions, trigonometric functions, applications of trigonometry, and vectors. Second semester is a study of sequences, probability, logic, finance, matrices, and statistics.

## **P-Trigonometry/Pre-Calculus Honors**

First semester is a study of trigonometric functions, applications of trigonometry, solutions to triangles, and vectors. Second semester is a study of conic sections, exponential and logarithmic functions, sequences and series, polar equations, limits, and continuity. Trig/PreCalc Honors is intended to prepare students to take AP Calculus and keeps that focus all year long.

## **P-Statistics**

The purpose of the Statistics course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data for students who prefer a pace that does not prepare students for the AP Statistics exam and therefore have more time to discuss and apply topics. Topics studied will include the following: graphical displays of data (e.g., dotplots, stemplots, and histograms). Measures of data (e.g., mean, median, standard deviation, and least-squares regression line), methods of conducting surveys and experiments, probability, the normal distribution and statistical inference, including tests of data (e.g., chi-square test). The course may be particularly useful for students planning on a college major of social science, health science, or business. A graphing calculator (e.g., TI83 or TI84) is required.

### **P-Statistics AP**

The purpose of the Statistics AP course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics studied will include the following: graphical displays of data (e.g., dotplots, stemplots, and histograms). Measures of data (e.g., mean, median, standard deviation, and least-squares regression line), methods of conducting surveys and experiments, probability, the normal distribution and statistical inference, including tests of data (e.g., chi-square test). The course may be particularly useful for students planning on a college major of social science, health science, or business. A graphing calculator (e.g., TI83 or TI84) is required.

### **P-Calculus AB AP**

This is a first-year college calculus course for advanced mathematics students. The fundamentals of differential and integral calculus are covered. Topics include limits, continuity, derivatives, related rates, optimization, the Fundamental Theorem of Calculus, applications of integration, and first order differential equations. The course prepares students for the AB Calculus Advanced Placement examination. A graphing calculator (e.g., TI83 or TI84) is required.

### **P-Calculus BC AP**

Calculus BC includes all topics covered in Calculus AB, plus additional topics of polar graphs, vectors, series, and differential equations. Calculus BC moves at a much faster pace than Calculus AB. The course prepares students for the BC Calculus Advanced Placement examination. A graphing calculator (e.g., TI83 or TI84) is required.

# Science Course Descriptions

Courses in the Science Department are designed to provide students with the opportunity to investigate the fundamental laws and principles that govern the universe and to understand the phenomena, which affect us in our daily lives. A minimum of ten units of physical science and ten units of life science is required for graduation; science is required in the freshman year.

## **P-Earth/Space Science**

*Grades 9-12*

Earth/Space Science (ESS) is a hands-on, engaging college-preparatory course in physical science that addresses a broad range of topics and is designed to prepare students for success in Biology, Chemistry, Physics and other advanced science courses at LGHS. The ESS course introduces students to main principles of the physical sciences through an overview of chemistry, astronomy, cosmology, meteorology, oceanography, geology, and nuclear science.

Students can set themselves up for success along the science pathway at LGHS by starting with the ESS course. Earth/Space Science gives students opportunities to develop and practice organizational, test-taking and critical thinking skills that contribute to success throughout high school through participation in challenging interdisciplinary labs and activities. The curriculum provides students with an overview of high school sciences and exposure to foundational lab skills and techniques in the context of real-world examples and experiences.

## **P-Biology**

*Grades 9-12*

Biology is a fast-paced, critical thinking college-preparatory laboratory course in life science, traditionally taught at the sophomore level and beyond that is open to freshmen. Only students who have strong reading, writing and analytical skills, as well as strong organizational and study habits, should attempt Biology as freshmen.

The Biology course has two major aims: the first is to ensure that students become knowledgeable about many biological facts and the concepts that are built on them, and the second is to understand what science is and the inter-disciplinary nature of it. Students participate in a variety of laboratory activities throughout this course and continue to develop solid skills in scientific procedure as well as critical thinking. Specific areas covered in Biology include ecology, population dynamics, cells, biochemistry, reproduction, genetics, evolution, plant and animal structure and function, and biotechnology.

## **P-Biology H**

*Grade 9*

Biology Honors is a freshman level honors course for which a placement test is required as part of the entrance process. The Biology Honors course is heavily laboratory-oriented with a high-level critical thinking emphasis. Biology Honors primarily focuses on molecular biology but also covers ecology, genetics, bioethics, anatomy, evolution, and a variety of other specialized sub-fields. Mostly, the class is dedicated to learning about human beings and the biologic world humans live in. In this course, students expand their thinking ability and knowledge by conducting laboratory experiments (including long-term projects), contributing to class discussions, reading and answering questions from textbooks, watching science videos, and taking part in interactive lectures and class activities. Much of the reading for this course is at a 12th grade level or above. Students who take Biology Honors will be asked to complete laboratory and observational work during tutorial and after school. Completing daily homework assignments of approximately one hour is mandatory.

## **P-Biology AP**

*Grades 11-12*

Biology AP, intended to be the equivalent of a first-year college biology course, prepares students to pass the Advanced Placement Biology examination. Students will achieve the following: (1) the knowledge of facts, principles, and processes of biology, (2) an understanding of the means by which biological information is collected and interpreted, (3) how a hypothesis is formulated, and (4) an understanding that science is a human endeavor with social consequences.

## **P-Chemistry in the Community (ChemCom)**

*Grades 10-12*

ChemCom is a course created by the American Chemical Society as an alternative to traditional high school chemistry. The course is thematic, focuses on chemistry as related to community concerns, including water supply and contamination, the atmosphere and pollution, and material consumption and conservation. ChemCom is appropriate for college-bound students, as it fulfills the UC requirement for a laboratory science, but it does not meet the prerequisites for AP Chemistry.

## **P-Chemistry**

*Grades 10-12*

This course specifically prepares students for college chemistry and biological science, physical science, engineering, medicine, nursing, or technical fields. Physical and chemical processes are introduced with an emphasis on theory, problem solving, and laboratory work.

## **P-Chemistry AP**

*Grades 11-12*

This course, intended to be the equivalent of a first year college course, prepares students to pass the Advanced Placement Chemistry examination. Students will achieve the following: the knowledge of facts, principles, and procedures of chemistry and an understanding of the relationship between the principles of chemistry and their application in today's society. Lab and problem solving skills are emphasized.

## **P-Physics**

*Grades 11-12*

This is an introductory college prep course designed to increase knowledge of physics. Mastery of physical concepts as they apply to everyday life will be emphasized. Laboratory exercises will reinforce the concepts and will include extensive use of the computer as a tool to make measurements.

## **P-AP Physics 1**

*Grades 11-12*

The AP Physics 1 course is designed to enable students to develop the ability to reason about physical phenomena using important science process skills such as explaining causal relationships, applying and justifying the use of mathematical routines, designing experiments, analyzing data and making connections across multiple topics within the course. This AP Physics 1 course is equivalent to the first semester of a typical introductory, algebra-based college physics course.

## **P-Physics C: Mechanics AP**

*Grades 11-12*

This is an introductory college level general physics course, which emphasizes problem-solving techniques using algebra and trigonometry. Students achieve the following: (1) the understanding of basic physics principles, (2) the development of mathematical skills to solve problems in physics, and (3) the understanding of how physics relates to modern technology.

## **P-Environmental Science AP**

*Grades 11-12*

The goal of the Environmental Science AP course is to provide students with the specific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems, both natural and human-made, to evaluate the risks associated with these problems and to examine alternative solutions for resolving or preventing them.

## **P-Agroecology 1, 2**

*Grades 10-12*

Agroecology is the scientific study of sustainable agriculture, which treats the farm or garden as an ecosystem and considers the interactions between the living and non-living aspects of the environment. Each student learns to cultivate a raised garden ecosystem from seed to harvest. Students spend the majority of class time in the gardens applying knowledge. Areas of study include drip irrigation, plant anatomy and physiology, composting theory and techniques, soil science, and plant propagation via direct seeding, transplanting, and cuttings. This class satisfies graduation requirements for both a practical arts and one of two science classes needed. This class also counts as a UC and CSU approved lab science course.

## **P-Advanced Science Research 1, 2, 3**

*Grades 10-12*

Advanced Science Research is an advanced laboratory science course, which meets the UC requirement for an applied arts elective. Under the guidance of the instructor, students will design and implement laboratory and field research projects using standard techniques. The skills learned in this class will replicate real-world research skills used by the science community. All students are expected to present their work at the Synopsys Championship (Santa Clara Valley Science and Engineering Fair Association) in March and continue to compete in State and National Fairs as their projects warrant.

## **P-Anatomy and Physiology**

*Grades 11-12*

Anatomy and Physiology is a laboratory-based elective course for students who have successfully completed Biology and are interested in expanding their knowledge of life sciences, medicine, and/or how their own body functions. Topics of study focus primarily on the physiology of the major human body systems with an emphasis on connections to health. The course is hands-on with labs, dissections, virtual surgeries, debates, and projects. Dissections occur regularly, including dissections of animal kidneys, larynges, eyeballs, bones, and other specimens. We also examine diseases of each body system to better understand what each body system does for us. This class is for college-bound students with good study skills.

## **Social Studies Course Descriptions**

30 units of Social Studies are required for graduation. Social Studies classes provide background knowledge that enables students to understand past and present cultural, global, and national policies and practices.

### **P-World History**

*Grade 10*

World History is a required sophomore social science course intended to deepen understanding of ancient and modern world cultures. The scope is worldwide with a concentration on Western civilization through the end of the Cold War. Disciplines such as anthropology, geography, religion, and sociology are used to aid in the understanding of events and personalities of the past. World History is required for graduation.

### **P-European History AP (fulfills sophomore World History requirement)**

*Grade 10*

The Advanced Placement program on European History will provide a broad overview of European history and cultures from 1450 to the present, in addition to providing a basic narrative of events and movements. This class will encourage students to develop (a) an understanding of some of the principal themes in modern European history, (b) an ability to analyze historical evidence, and (c) an ability to express that understanding and analysis in writing. The students will be instructed in the various methodologies for historical research while helping students build the necessary skills for critical evaluation of conflicting interpretations of historical questions.

### **P-United States History**

*Grade 11*

U.S. History is a required college prep junior year course. During the first semester, students study significant factors leading to changes in American agriculture, industry, commerce, and society in the 1800s and early 1900s and identify the connections between history and current events. In second semester, students study political, economic, and social reforms of 20th Century and trace causes, progress, and results of World War I, the Great Depression, World War II, and the pre- and post-Cold War eras.

### **P-United States History AP**

*Grade 11*

In U.S. History AP, students will study the following: establishment of the 13 colonies, the American Revolution, the creation of the Constitution, the economic/social differences among the North, South, and West and the Civil War. Students study the process of 19th century urbanization and resultant stresses which it imposed upon society. The study of primary sources and original documents augment and enhance the course.

### **P-United States Government**

*Grade 12*

U.S. Government/Politics is a required senior year semester course. Students study the structure, process, and problems of government at the national, state, and local levels. Emphasis is given to current events.

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

*Grade 12*

This semester length AP course focuses on the kinds of questions political scientists try to answer. It is a course about the structure and operation of the U.S. government, the behavior of the electorate and politicians, and the process of policy decision-making. The course offers a rich introduction to the U.S. Constitution, the federal system of government, and, occasionally, the turbulent politics that it has produced. Students will gain the analytical perspective and knowledge to examine general propositions about government and politics, and the relationships between various institutions.

## **P-Economics**

*Grade 12*

Economics is a required senior year semester course. This course helps students understand the fundamentals of how our society allocates resources to overcome the problems of scarcity. There are three main parts to the course: an introduction to the study of economics, microeconomics, and macroeconomics.

## **P-Economics H**

*Grade 12*

Honors Economics is designed to give students a comprehensive understanding of the principles of economics that apply to whole economic systems and that are particularly relevant for making decisions at the state, national, and international levels. The course will focus on macroeconomic principles and their application in the United States. In addition to reading original source materials on macroeconomic theory and principles, students will be expected to keep up with current economic news, particularly news regarding the economic performance of the United States in relation to other countries, in the context of international trade and globalization.

## **Social Studies Electives Descriptions**

Please note: While these courses are taught by Social Studies teachers, they do not count toward the 30 units of Social Studies required for graduation.

### **Human Geography**

*Grade 9*

In seven thematic units, this class will study and examine the interrelationships of the physical, cultural, and economic geography of selected regions and will develop the necessary skill set that will help students have a greater academic achievement in the 10-12 grade Social Studies courses.

### **P-Psychology AP**

*Grades 11-12*

The AP course in Psychology introduces the systematic and scientific study of the behavior and mental processes of human beings and other animals. Included is a consideration of 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.

### **P-Social Entrepreneurship**

*Grades 10-12*

The focus of the course is to use business methods and ideas to help solve social and environmental challenges. Students will combine the knowledge and skills from many other fields (i.e. classes) with a passionate commitment to having a meaningful and sustainable social impact. The main approaches to learning in the class will be interdisciplinary, global and practical.

# World Language Course Descriptions

The World Language Department provides elective courses designed to acquaint students with the many aspects of the languages and cultures of selected lands. Interested students are encouraged to learn a world language whether the goal is conversational, vocational, or college-preparatory. World language classes emphasize speaking, reading, and writing. One year of a world language meets the LGHS Visual/Performing Art requirement for graduation. However, it does not meet the college Visual/Performing Art requirement. Two years of a world language meets the minimum admission requirement for most four-year colleges. (Three years is strongly recommended.)

## **P-French 1**

French 1 is an exciting course designed for students with limited or no experience with the French language. This course will explore Francophone cultures, and students will begin to develop the skills of listening, speaking, reading, and writing in a culturally appropriate context. At the end of this academic course, students will be able to converse with others in French by using appropriate greetings and talking about school subjects, family and friends, foods and cultural activities, and much more!

## **P-French 2**

In French 2, students will continue to develop the skills of listening, speaking, reading, and writing. Longer target language readings are introduced and students will begin to compose short essays. At the end of this academic course, some of the topics on which the students will be able to converse include: technology, art, travel, and cuisine.

## **P-French 3**

This course, taught entirely in French, will round out the basic knowledge acquired in levels 1 and 2 by focusing particular attention to more advanced conversations and composition. More complex points of grammar will be presented, and students are expected to apply these points in their daily communication. Further structured practice in the four skills and enhanced cultural awareness will enable students to perform communicative functions at a higher level. Students will read from and discuss a variety of literary sources.

## **P-French 4 H**

In French 4 Honors, students will participate in lengthy target language activities including debates and discussions. Some of the themes covered in the French 4 Honors course include: family life, the media and technology, historical movements and French holidays.

## **P-French Language AP**

In French 5 AP, students will work to perfect their skills and knowledge in order to be successful on the French Language AP Exam (given in May). Students are expected to participate in complex discussions regarding topics such as global challenges, personal and public identities, beauty and aesthetics, and contemporary life.

## **P-Japanese 1**

Japanese 1 is a course designed to introduce and develop the basics of listening, speaking, reading, and writing in Japanese and to prepare students for global citizenship. Students learn to understand and talk about a variety of topics, including self, family, likes and dislikes, school, food, hobbies, and activities. Emphasis in the first semester is on learning to recognize the symbols in the hiragana syllabary system and on language acquisition and listening comprehension rather than production. By

the second semester, students begin to write paragraphs and short stories, make oral presentations, participate in dialogues, and recognize and write simple kanji. Hands-on cultural experiences are integrated throughout the year and technology is a key component of the course.

### **P-Japanese 2**

Japanese 2 is the continuation of the beginning level course in Japanese. The focus of the course is on the further development of written and oral communication skills and intermediate grammatical patterns. Students are expected to acquire proficiency in reading and writing katakana and approximately 200 kanji. Communication activities, which require active participation in pairs or groups continue to be an integral part of the course, but increased emphasis is placed on applying reading and writing skills, in both the computer lab and the classroom. The study of Japanese cultural practices, products, and perspectives is integrated throughout the curriculum.

### **P-Japanese 3H**

The course is conducted primarily in Japanese and focuses on the mastery of the intermediate level skills in listening, speaking, reading and writing and further development of cultural literacy. One aim of the course is to prepare students for the AP Japanese Language and Culture course, which follows Japanese 3H. Students reinforce and expand their language skills by writing in a variety of genres and interacting with materials from a variety of sources, including print media and the Internet, and are expected to be able to recognize and use approximately 350 kanji by the end of the course.

### **P-Japanese Language AP**

AP Japanese Language supports students as they develop the productive, receptive, and cultural skills necessary to communicate with native speakers of Japanese. The content of the course is woven around the framework of the three models of communication outlined in the Standards for Foreign Language Learning in the 21st Century; interpersonal, interpretive, and presentational. A major component of the course is to prepare students for the Advanced Placement exam in Japanese language. Students will expand and reinforce their language skills by writing in a variety of genres and interacting with a variety of media, including magazine articles, selections from literature, the Internet, and films. They will explore cultural topics within the context of their language study and will be expected to function primarily in the target language.

### **P-Japanese 5**

In Japanese 5, students participate in individualized experiences based on interests recognized and developed during their work in AP Japanese Language. Students will be expected to do supplementary reading and personalized assignments conducive to such study. Students who have successfully completed AP Japanese will be eligible for enrollment in the class.

### **P-Spanish 1**

Spanish 1 is designed to prepare students for real-world language use and global citizenship. The course introduces students to the grammar, structures, and vocabulary of the Spanish language through a variety of activities designed to develop listening, speaking, reading, and writing skills. Cultural study and hands-on experiences are integrated throughout the course, and technology is also an integral part of the classroom instruction and practice. One essential component of student success in the course is oral participation.

### **P-Spanish 2**

Spanish 2 builds on the listening, speaking, reading, and writing skills developed in Spanish 1. Students learn to use and understand more complex and sophisticated grammar structures. Oral communication continues to be an integral part of the course along with an increased emphasis on reading and writing skills. Cultural study is integrated throughout the course. Students regularly use a variety of technical, collaborative, and independent methods for practice and cultural research.

### **P-Spanish 3 in the Global Community**

Spanish 3 in the Global Community is an experiential course that builds on the listening, speaking, reading, and writing skills acquired in the previous levels. Students continue their Spanish studies within the context of cultural units that integrate history, the arts, foods, customs, and the local community. The course is conducted almost exclusively in Spanish and many of the assessments are project-based.

### **P-Spanish 3**

In Spanish 3, students continue their language study within the context of cultural units that integrate history, the arts, foods, and customs while building on the skills of listening, speaking, reading, and writing skills from the previous level. It moves at a faster pace than Spanish 3 in the Global Community and includes a greater emphasis on advanced level grammar concepts. The course is conducted exclusively in Spanish and is designed to prepare students for the Spanish 4H course.

### **P-Spanish 4H**

This class will expand and strengthen skills acquired in the previous courses. Advanced level grammar concepts will be reviewed and more emphasis will be placed on oral and written communication. Students will develop an appreciation for Spanish prose and poetry, as well as a familiarity with current events from periodicals, radio, and television sources. Civilization, culture, and art will be part of the curriculum, and mini-units on special topics will explore and focus on active vocabulary building. Students will explore and discuss representative works of Spanish and Latin American literature and cinema.

### **P-Spanish 5 AP**

This is a one-year college-level course for which college credit may be received depending on the student's score on the Spanish Language Advanced Placement exam. Structures from prior study will be reviewed. Student activities include in-depth analysis of challenging literary sources, contemporary publications, and selections from radio, television, and major cinematic works. The study of civilization, culture, and art will be part of the curriculum. Critical thinking will be enhanced through active participation in discussion and demanding writing assignments, and supplementary reading will be required. Preparation for the Advanced Placement exam is incorporated throughout the class curriculum.

# Visual and Performing Arts Course Descriptions

## Visual Arts

### **P-Art 1**

*Grades 9-12*

Art 1 is a year-length studio experience for students interested in the basics of art. Students are introduced to drawing, painting, and other art forms. The history of art is addressed and skills in basic media are used to teach the principles and elements of design. Media include tempera, watercolor, pencil, pen, and ink.

### **P-Art 2**

*Grades 10-12*

This year-length course provides studio experience for students who wish to further develop skills, perception, and expressive capacities, and knowledge to explore the medium of painting, originality, personal experience, and creative awareness. Media include previously used materials plus oils, acrylics, scratchboard and mixed media.

### **P-Art 3**

*Grades 11-12*

This course is a studio situation with an emphasis on the use of previously learned methods and media with a wide range of interpretation, as well as practical applications of the studio process including understanding pricing structures, creating business/sales plans, and creating opportunities for student artists both on- and off-line. Studio projects will include still and life drawings, oil and acrylic painting, contemporary approaches to image making, mixed media works, artist research, and a Student Portfolio.

### **P-Art 4 Honors**

*Grade 12*

This yearlong studio course is designed for students with a minimum of three years of LGHS art and/or are highly recommended. This studio course is structured with an emphasis on previously learned mediums, creative/interpretive problem solving, and in-depth visual exploration. Students will continue to update their work on the on-line store and also discuss continued marketing/sales of the finished pieces. Portfolio quality work and the creation and implementation of an art business based on student work are the goals, with an eye toward further education at the post-secondary level.

### **P-Ceramics 1**

*Grades 9-12*

Ceramics 1 is a year-length studio course, which introduces students to methods of clay construction. The first semester is primarily concerned with introducing students to the tools and equipment in the studio, clay preparation, and hand building techniques – pinch, coil, and slab construction. The second semester is focused on the techniques and forms on the potter's wheel – bowls, vases, mugs, and cylinders. Other topics covered throughout the course are pottery decoration, glazing methods, and firing methods.

## **P-Ceramics 2, 3, 4**

*Grades 10-12*

Ceramics 2, 3, and 4 are advanced courses designed to refine both hand building and wheel throwing techniques. Students are required to make special projects. Glaze calculations are studied and students develop their own glazes. Students also prepare and present their artwork in a gallery setting.

## **P-Digital Photography 1**

*Grades 10-12*

This Digital Photography class introduces students to the technical and creative world of photography. Students study how to make better pictures using camera settings, PhotoShop, composition, and inspiration from famous photographers. Students are encouraged to use their hobbies and personal interests as creative material for their work. Some of the projects include landscapes/nature, the "Living Los Gatos" Photo Competition, portraits, studio lighting, and a photo book students create to house their work. Students will have access to digital cameras, though most students choose to use their own.

## **Digital Photography 2**

*Grades 11-12*

Digital Photography 2 is a course designed for students who have previously taken Digital Photography 1 and who would like to continue refining their skills in real-world photography settings. Students in this course will be taking photos for the Wildcat Yearbook, and will be encouraged to continue pursuing creative photography opportunities as well. Topics covered in this course include portrait photography, sports/action photography, studio photography, and others. Students gain valuable experience using these skills while they can choose to contribute to graphic design teams, videography, photo editing and writing. Upon completion of this course students will have gained confidence in valuable life skills and will have a portfolio of their work to open doors to other opportunities.

## **P-3D Design 1**

*Grades 9-12*

This course will give students a broad range of 3D Design through the tradition of sculpture mediums ranging from stained glass and traditional stone carving to CAD applications on a Chromebook that are printed on a 3D printer. Students will use a broad range of mediums. We will make fun, beautiful art, while also learning skills that can be applied to learning future careers in engineering, manufacturing, construction, fabrication, architecture and industrial design. Some of these skills will be basic CAD, soldering, fundamental tool use, mold making, materials education, spatial thinking and much more.

## **P-3D Design 2**

*Grades 10-12*

Students in this course continue the tradition of 3D Design 1 in learning a broad range of 3D Design sculpture mediums ranging from LED signs, to sterling silver jewelry smithing, book sculpture, as well as sculpting in Virtual Reality. We will continue making fun, "maker based" art, while also learning skills that can be applied to learning future careers in engineering, manufacturing, construction, fabrication, architecture and industrial design. Some of these critical thinking and hands-on skills will be basic online virtual sculpting, understanding of LED's, basic jewelry smithing, glass slumping and fusing, and much more.

## **P-Graphic Design 1, 2, 3**

*Grades 10-12*

See course description under Applied Arts.

## Performing Arts

The Performing Arts Program offers students opportunities to further their enjoyment and understanding of music and drama and to increase their skills as performers on stage or in instrumental and/or vocal music. Whether as performers or listeners, students will develop an understanding and appreciation for their area of study. Students are required to participate in all performances and other activities of the music and drama organization of which they are members. Students also have the opportunity to participate in several competitive music festivals and stage performances. Try-outs and auditions will be held in the spring, if needed. All courses will meet the Visual/Performing Art requirement for high school graduation and college eligibility.

### **P-Concert Choir 1, 2, 3, 4**

*Grades 9-12*

This is an intermediate music class designed to acquaint students with a variety of choral music styles ranging from traditional to contemporary. Emphasis is placed on proper vocal technique, musicianship, and music reading skills. The major focus is ensemble singing. As a performance-oriented class, campus and community performances are required.

### **P-Chamber Choir 2, 3, 4**

*Grades 10-12*

This is a small, select, artist-level mixed/women's choir. The ensemble studies and performs challenging music in all styles and languages. Students are placed in the group by audition and approval of the Choir Director. Students must have advanced music literacy and vocal techniques in order to be in Chamber Choir. Students are required to be present at extra-curricular performances and concerts.

### **P-Chamber Choir Honors**

*Grades 11-12*

This course provides an opportunity for students to develop advanced and refined vocal and choral techniques. Advance knowledge and skill in theory and sight singing is expected and further study of music history will be emphasized. The study and performance of advanced literature including music from other cultures will be the focus of this course. Public performance and participating in auditions for regional, state, division, or national honors choir, solo and ensemble festivals are required.

**Students are required to be present in ALL rehearsals, performances and concerts.**

### **P-Orchestra 1, 2, 3, 4**

*Grades 9-12*

This is a course that develops musical skills and techniques by performing a variety of high quality literature ranging from traditional to contemporary. Emphasis is placed on proper instrumental technique and music reading skills. This is a performance-oriented class and campus and community performances are required.

### **P-Orchestra Honors**

*Grades 11-12*

Honors orchestra is a highly select group of musicians designed for the advanced player. Special emphasis is placed on solo and chamber performance as well as regular orchestral studies. Students accepted into this program will be expected to expand their mastery of music theory, music history, and composition, and write a research paper. Public performance and participating in auditions for regional, state, division, or national honors orchestra, solo and ensemble festivals are required. **Students are required to be present in ALL rehearsals, performances and concerts.**

## **P-Marching/Symphonic Band 1, 2, 3, 4**

*Grades 9-12*

This is a course that develops musical skills and techniques by performing a variety of high quality literature. During the fall, the band focuses on the marching show and performs at various competitions, at home football games and other community events. During the remainder of the year, the band works on concert music and participates in concerts and festivals. Enrollment in the fall semesters of Marching Band, grades 10-12, fulfills three semesters (15 units) of Physical Education, beyond Health and Fitness in the 9<sup>th</sup> grade.

## **P-Wind Ensemble Honors**

*Grades 11-12*

## **P-Jazz Ensemble 1 2, 3, 4**

*Grades 9-12*

This course offers the student an introduction to a variety of jazz related music styles, which may include, but are not limited to swing, Latin, funk, blues and rock. Emphasis is placed on proper instrumental technique, musicianship, music reading skills and exploration of the basic techniques used for improvisation. This course is open to standard jazz instrumentation: saxophone, trombone, trumpet and rhythm. The ensemble will perform primarily as a "big band," however some small jazz combo settings may be explored. Campus and community performances as well as outside festivals are required.

## **PE – Colorguard 1-4**

*Grades 9-12*

Colorguard is a yearlong performance based course that combines dance and equipment choreography (i.e., flags, rifles, and saber) to create an ensemble visual routine. The members of this ensemble will combine with the marching band for the fall semester. During the spring semester, the ensemble will perform as a winter guard. This class will require after school time commitments throughout the year. **Members of this ensemble are required to participate in both fall and spring seasons.** Auditions may be necessary for particular equipment or specific elements of the ensemble.

## **P-Introduction to Music Theory**

*Grades 9-12*

Introduction to Music Theory is an elective course designed to develop students' visual and aural understanding of the structure of music. In this course, students will study the language and symbols of music. Not only will students learn to read various musical elements, such as scales, chords, pitch notations, and time signatures, they will also learn to construct these elements themselves. The course also teaches students to understand basic forms in music compositions, including the skill of notation. As students learn these various aspects of music theory, they will undergo ear training to teach them to recognize these elements aurally as well.

## **P-Beginning Guitar 1**

*Grades 9-12*

Beginning guitar introduces students to the fundamentals of playing guitar. Students will be introduced to techniques that are essential to playing this instrument, such as picking and playing chords. This is an introductory course designed for students who may have an interest in learning how to play an instrument.

## **P-Music Theory AP**

*Grades 10-12*

This is a college-level course that will develop students' understanding of music theory and will prepare them for the AP examination. Students will explore the inner workings of compositional techniques from the western classical style of music.

## **P-Music Production**

*Grade 9-12*

See course description under Applied Arts

# **Theater Arts**

## **P-Drama 1**

*Grades 9-12*

Drama 1 is an introductory–PERFORMANCE BASED–year-long course, designed to develop basic acting skills while providing the student with a background in theatre arts. It is NOT an acting class to create professional actors, but rather a theatre arts class to create well-rounded citizens. It is a **fun** class for students who want to develop leadership skills, build self-confidence, learn how to solve problems, and expand their creativity. Students in this class will perform memorized scenes from published plays, develop their own improvised scenes, learn about technical theatre, and research elements of the theatre. Historical perspective and analysis will also be covered and students will learn to analyze and assess the aesthetic and technical properties of their own work as well as recognized artists.

## **P-Advanced Drama 2, 3, 4, 4H**

*Grades 10-12*

Advanced Drama 2, 3, 4, 4H is a year-long course, designed to build acting skills and increase background knowledge in theatre arts. It is NOT an acting class to launch a professional acting career, but like Drama 1 it is a theatre arts class to continue to build well-rounded theatre citizens. It is a **fun** class that will continue to develop leadership skills, build self-confidence, increase problem solving skills, and expand creativity. This class will perform memorized scenes from published plays (from a variety of eras), develop improvised scenes, direct, design, write, read and research. The various acting styles will be explored. Theatre history will also be covered and students will learn to analyze and assess the aesthetic and technical properties of his/her own work, classmates work - as well as recognized artists. Students are required to audition for at least 1 show a semester and either work on stage or as part of the crew of LGHS' productions.

## **P-Stage Tech/Design**

*Grades 9-12*

See course description under Applied Arts

## **Special Project: Performing Arts**

*Grades 9-12*

The Special Projects class can be a semester or year-long course that will offer the students in the cast and crew of the mainstage shows (fall play and spring musical), an opportunity to study the play in depth, study the era in history, study theatre history and study literary contributions which will be incorporated into the process of creating the shows. Students interested in technical theatre will learn technical theatre jobs such as set building, set painting, costuming, lighting, sound, and publicity. The students cast in acting roles will build their character, block scenes, learn choreography, and music – all in addition to the above mentioned work. No matter role - cast or crew - the students will receive an educational theatre foundation and produce a live performance for an audience. This class will be offered in the 7<sup>th</sup>/8<sup>th</sup> period slot.

## Applied Arts Course Descriptions

Los Gatos – Saratoga Union High School District requires that all students complete one semester of an applied art course. Los Gatos High School offers courses in a variety of subjects. Note that while only one semester is required for graduation purposes, most of our courses are year-length and students are not allowed to leave at the semester. If the course title begins with a P, the course is viewed as a college preparatory course and meets a subject entrance requirement for the University of California (UC) and California State University (CSU) systems.

### Engineering and Computer Science

#### **P-Graphic Design 1, 2 (Approved as Visual Arts courses; can meet the VPA or AA requirement)**

*Grades 10-12*

Graphic Design is a yearlong course designed to involve techniques in graphic design, page layout through the use of Desktop publishing, and vinyl cutter/printer to produce vinyl graphics and banners. The students will gain knowledge of production and manufacturing through vinyl cutting and printing, heat transfer, sand carving, laser etching and burning, video production and editing, as well as power point presentations and the use of other media. Students will work on their own computer station following tutorials, individual and assigned projects provided by the instructor and self-chosen projects.

#### **Graphic Design 3**

*Grade 12*

Students will take all that they have learned in their foundational two years of Graphic Design and apply technical and conceptual knowledge towards advanced concepts and applications within the professional Graphic Design world. In this course, students will focus on printing technologies like laser etching, screen printing, direct to garment printing, UV printing, and large format printing. Students will learn graphic application techniques like wall, window, and vehicle graphic installation. Along with learning how to use these tools and applications, students will employ their skills to help the school district and outside businesses create commercial goods like apparel and marketing material. Students will learn about business management, marketing, advertising, order fulfillment, purchasing, and apparel production. Students will also develop critical and creative thinking skills to solve working world design and production problems. Advanced use of the Adobe applications used in class will continue to be explored. Students will create a final Capstone Project, and present their work to a panel of Graphic Design professionals at the end of the year.

#### **P-Computer Science (AP)**

*Grades 11-12*

This demanding course introduces students to computer programming at an introductory college level. Students will learn how to code (program) fluidly in Java, the current industry programming standard, and will prepare for the AP Computer Science (A) exam. Successful students have an aptitude for logical problem solving and the maturity and self-discipline to complete many individual programming projects throughout the year. Previous programming experience is not required.

## **P-Introduction to Engineering Design**

*Grades 9-12*

P-Introduction to Engineering Design is a year-length course based on Project Lead the Way curriculum (<http://www.pltw.org/>). Through hands-on projects, students apply engineering standards and document their work. Students use industry standard 3D modeling software to help them design solutions to solve proposed problems, document their work using an engineer's notebook, and communicate solutions to peers and members of the professional community.

## **P-Principles of Engineering**

*Grades 10-12*

P-Principles of Engineering (POE) is a year-length course based on Project Lead the Way curriculum (<http://www.pltw.org/>). This survey course exposes students to major concepts they'll encounter in a post-secondary engineering course of study. Topics include mechanisms, energy, statics, materials, and kinematics. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work and communicate solutions. The course is available following the P-Introduction to Engineering Design course.

## **P-Robotics**

*Grades 9-12*

Robotics is a year-long course designed for students who would like to learn fundamentals of robotics as well as serve on the LGHS Robotics Team. Core concepts including programming, computer-aided design (CAD), and machining will be covered. Students will work collaboratively on projects, some small and large, and will prepare for robotics competition in the spring.

# **Journalism**

## **P-Journalism 2, 3, 4 (Newspaper)**

*Grades 10-12*

This is a course, which teaches basics in journalistic writing, interviewing, ethics, and research. Contact with professional area journalists accompanies instruction and provides career information. Students produce the LGHS newspaper using various computer applications and graphic design strategies. Students read and critique various metropolitan and high school newspapers and discuss related works e.g. All the President's Men, Springboard into Journalism.

## **P-Journalism 2, 3, 4 (Yearbook)**

*Grades 10-12*

Students will plan and produce the Wildcat Yearbook in this class. Each student will be responsible for covering part of a specific section, such as activities, sports, organizations, faculty or classes. Some students will have related jobs, such as editor, business manager, artist, photographer, copywriter, or typist. Students experience a great sense of unity and accomplishment as they produce the LGHS yearbook.

## **P-Multimedia Journalism**

*Grades 9-12*

Multimedia Journalism introduces students to a wide array of media fields including graphic design, video production, computer animation, broadcast journalism, videogame design, and web design. Emphasis is placed on teaching students the fundamental principles of artistic composition in each field and the technical knowledge necessary to effectively use a variety of multimedia software and hardware systems. These include studio lighting, visual recording and audio systems, Adobe InDesign, Page Maker, Photoshop, Final Cut Pro, Adobe Flash 8, Maya, and Dreamweaver. Class

time will primarily be spent on project development and practice. In addition to these projects, broadcasting daily announcements will be an expectation and on-going project for the class. After completing introductory units within each field, students will have the opportunity to specialize in a specific area to create a substantial final project to develop their portfolio.

## **Home Economics**

### **P-Clothing/Fashion Design 1, 2, 3, 4**

*Grades 9-12*

Clothing/Fashion Design is a yearlong course for students who want to learn how to make clothing. Students will learn how to operate a sewing machine, use a pattern, and learn basic construction skills and the care and purchase of fabrics. All levels of ability are welcome in Level 1. Levels 2, 3, 4 are designed for advanced students who want to improve their skills. The class is taught in small groups and on an individual basis. Analysis of personal image and body type will be included.

### **Introduction to Fashion Style and Merchandising**

*Grades 9-12*

Introduction to Fashion Style and Merchandising is a yearlong project-based course designed for students interested in the fashion industry. Topics include apparel and accessories terminology, body imagery, color theory, basic cosmetology, merchandise positioning, brand imagery and characteristics of fashion apparel and accessories. The course will also include a fashion illustration component and an internship component where students will gain an understanding of the retail industry.

### **International Cuisine and Hospitality 1 and 2**

*Grades 9-12*

This course is a class designed to acquaint students with fundamental and advanced information about cooking skills, equipment, ingredients, and product standards. Emphasis first semester is placed on nutrition and wise consumer practices in the selection and preparation of foods. Emphasis second semester is on developing skills in the preparation of full course meals. Foods of many cultural varieties will be prepared during the year. There will be an individual project each semester. Students will be eligible to join the Skills USA (VICA Club) and compete in local culinary competitions.

## **Industrial Technology**

### **P-Metals Manufacturing 1**

*Grades 9-12*

Manufacturing is a year-length introductory course in the field of metalworking. This course gives students an understanding of safety procedures, tools, equipment, materials, techniques, and consumption of metal products. Five major areas of practical experience for students include oxyacetylene welding, electric arc welding, parallel line sheet metal development, heat-treating of steel, and ornamental wrought iron. Successful completion of three years of manufacturing/metals can be used as one year of physical science to meet the high school graduation requirement, if necessary.

## **P-Metals Manufacturing 2**

*Grades 10-12*

This course offers students an in-depth study in various areas of manufacturing with a major emphasis on conventional machine tool operation (lathe and milling machine), tool sharpening (lathe tool bit and drill bit). Flame cutting, and advanced welding in oxyacetylene, arc, metallic inert gas (MIG), and tungsten inert gas (TIG) will also be covered. Work samples for student portfolios will be developed.

## **Metals Manufacturing 3**

*Grades 11-12*

In this advanced Manufacturing/Metals course, students take an active part in the mass production unit and produce a challenging project. A unit in computer numerical control manufacturing is also available. Students completing the third year of the Manufacturing/ Metals program with a **B** or better average will be considered for advanced placement at local community colleges.

## **Metals Manufacturing 4**

*Grade 12*

This is a course that is based on a yearlong independent study project, which is developed, designed, built and documented by the student. A personal portfolio will be developed and completed by the end of the class.

## **P-Woodworking Technology 1**

*Grades 9-12*

Wood Tech provides students with an in depth study of woodworking and is project based. The use of modern design, construction, and materials is stressed. Students are encouraged to use their own ingenuity and to develop independent working skills. The use of jigs, fixtures, and other devices to speed up production is taught. Students should acquire a high degree of skill in the use of hand tool and woodworking machinery, the ability to apply mathematics, science, and drawing to practical situations, and a thorough knowledge of the requirements and opportunities in the woodworking trades and industries. Students will use a variety of domestic and exotic hardwoods in their projects. They may also gain experience using a CO<sub>2</sub> laser to embellish their projects. Students may take this course up to four years. This is a hands-on participation course where students learn by doing.

## **Woodworking Technology 2**

*Grades 10-12*

This class is a second year woodworking course that offers a more in-depth study of woodworking techniques and applications. Each student will develop a broad knowledge of all tools and machinery in the shop, as well as general competence in using them. This is a "hands-on" course and students will learn through working. Projects will be of a more advanced nature than Wood Tech 1 and will again be group oriented where all members will take part in choosing the projects. Each student will then build the selected project using mass production techniques. There may be additional time for individual projects. Students may be able to use the CO<sub>2</sub> laser to engrave their projects.

## **Woodworking Technology 3**

*Grades 11-12*

This class is a third year woodworking course. Students work with the instructor to design a course of study for the year, which revolves around that student's interest. Projects are generally on a larger and more complicated scale than previous courses. Each student will be expected to be able to work independently on his or her projects. Students may be able to use our new CO<sub>2</sub> laser to engrave their projects.

## **Woodworking Technology 4**

*Grade 12*

This fourth year woodworking course is structured in much the same way as Wood Tech 3; students will be working independently on advanced projects of their choosing. These projects are meant to be extremely challenging and creative, allowing students to expand their previously acquired woodworking skills. Students may be able to use the new CO<sub>2</sub> laser to engrave their projects.

## **Leadership, Business and Work Related Electives**

### **P-Leadership**

*Grades 9 -12*

Leadership is a yearlong course for students who are currently school leaders or hope to take on leadership positions at LGHS. The curriculum will focus on such leadership skills as organization, event planning, presentation skills, etc. Guest speakers will give workshops on running meetings, marketing ideas, and motivating constituents. Ongoing projects will revolve around student body and related school activities such as talent shows, spirit weeks, fundraising, dances, campus clean-up days, and more. Priority will be given to elected student council members, but spaces will be available for leaders in other areas of the school and for those wishing to learn about leadership. This course may be repeated for credit.

### **Work Experience**

*Grades 11-12*

Work Experience is offered to students who are employed. The student must have a job where he/she is issued a paycheck with deductions taken for taxes, workers' compensation and Social Security. Jobs that pay by commission do not qualify for Work Experience. This course is designed to encourage responsibility and an awareness of what it takes to succeed on a job, whether it is temporary or permanent. Assignments are independent in nature during which time the student explores problem areas related to the world of gainful employment. Students may enroll for up to four semesters. Students can enroll for a full year or one semester.

### **P-Business Introduction**

*Grades 11-12*

This class gives an overview of the different aspects of business. Possible topics include marketing, finance, entrepreneurship, and personal finance. Students will use the case method through which they will be immersed in real life situations where they must exercise their sense of leadership, teamwork, and acquired class knowledge. No previous business experience is required.

### **P-Advanced Science Research 1-3**

*Grades 10-12*

Advanced Science Research is an advanced laboratory science course, which meets the UC requirement for an applied arts elective. Under the guidance of the instructor, students will design and implement laboratory and field research projects using standard techniques. The skills learned in this class will replicate real-world research skills used by the science community. All students are expected to present their work at the Synopsis Championship (Santa Clara Valley Science and Engineering Fair Association) in March and continue to compete in State and National Fairs as their projects warrant.

## **P-Agroecology 1, 2**

*Grades 10 - 12*

Agroecology is the University of California's scientific study of sustainable agriculture. Each student learns to cultivate a raised garden ecosystem from seed to harvest. Students also learn how to care for our garden rabbits whose droppings are used to enrich our compost. Students spend the majority of class time in the gardens applying knowledge. This class satisfies graduation requirements for both a practical arts and one of two science classes needed.

## **P-Art 3**

*Grades 11-12*

This course is a studio situation with an emphasis on the use of previously learned methods and media with a wide range of interpretation, as well as practical applications of the studio process including understanding pricing structures, creating business/sales plans, and creating opportunities for student artists both on- and off-line. Studio projects will include still and life drawings, oil and acrylic painting, contemporary approaches to image making, mixed media works, artist research, and a Student Portfolio.

## **P-Orchestra 4**

*Grade 12*

This is a course that develops musical skills and techniques by performing a variety of high quality literature ranging from traditional to contemporary. Emphasis is placed on proper instrumental technique and music reading skills. This is a performance-oriented class and campus and community performances are required.

## **P-Marching/Symphonic Band 4**

*Grade 12*

This is a course that develops musical skills and techniques by performing a variety of high quality literature. During the fall, the band focuses on the marching show and performs at various competitions, at home football games and other community events. During the remainder of the year, the band works on concert music and participates in concerts and festivals. Enrollment in four fall semesters of Marching Band fulfills two years (20 units) of Physical Education.

## **P-Music Production**

*Grade 9-12*

This course is for students who are interested in creating and recording original music and have some prior background in instrumental and/or vocal music. We will explore the elements of songs (music and lyrics) that make them impactful and memorable. We will use our new understanding to write our own songs. In the latter portion of the course, we will explore the use of technology in the creation of music. The culminating experience of the course will be to record and produce a musical album of original songs.

## **P-Stage Tech/Design**

*Grade 9-12*

This class is a year-long course designed to introduce students to the basics of stagecraft and theatrical production. Students will explore a variety of marketable skills and careers in the theater industry including: set design and construction, lighting design and operation, sound design and operation, stage management, prop fabrication, costuming, hair styling, stage and special effects makeup, house management, box office sales, and public relations. Students will apply these skills by preparing and executing Los Gatos' High School's productions, including Dramatic Desserts, fall play, spring musical, and student directed productions. During the year students will be required to attend

all technical rehearsals and performances for LGHS productions. Rehearsals and performances may be scheduled for after school, on school nights, and/or on weekends. Production schedules will be distributed in advance of schedule start dates.

### **Silicon Valley Career Technical Education (SVCTE)**

Sophomores (16 years old), juniors, and seniors who wish to specialize in a particular vocational elective may choose to attend SVCTE and take their three elective choices per semester in a one-block course (15 units at SVCTE). The basic purpose of each SVCTE program is to provide students with a saleable skill that will prepare them for employment after graduation. Students enrolled in SVCTE classes have school- provided transportation to and from the SVCTE campus on Hillsdale Avenue for either morning or afternoon classes. Upon graduation from both high school and SVCTE, personal assistance in seeking and gaining employment is provided by the SVCTE Administrative Staff. Students exploring or enrolling in an SVCTE program must contact a Student Advisor. Tours of the SVCTE campus are available throughout the year. Please see your counselor for additional details about the SVCTE program.

# Physical Education Course Descriptions

This program provides the opportunity for students to become involved in activities that can be enjoyed now and for most of their lives. The primary objectives of the Physical Education program are development of skills in a variety of physical activities and an appreciation of physical fitness. Two years of P.E. credit are required for graduation. All freshman students must be enrolled in Health and Fitness. The second year of P.E. credit may be fulfilled in any other school year and can be fulfilled through a variety of options.

## **Health and Fitness**

### *Grade 9 (Required for All Students)*

Health and Fitness is designed to help develop the student physically, mentally, emotionally and socially. The student is expected to participate in physical and learning activities that assist in meeting these goals. The experiences presented in the course are designed to build rapport among the students and help students develop knowledge, understanding, habits, attitudes and ideals necessary to maintain physical, mental, and emotional health. Two years (four semesters) of P.E. credit are required for graduation. All freshman students must be enrolled in Health and Fitness. The second year of P.E. credit may be fulfilled in any other school year.

Students with medical exemptions must submit a doctor's note with specific dates of exemption and information to the Health Office, Guidance Office, and PE Office.

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During 10<sup>th</sup> – 12<sup>th</sup> grade years, students can receive P.E. credit by participating on a LGHS sports team or through one of the courses listed below. Students will receive 5 credits for each completed fall/winter or spring sport. For students who complete both a fall and a winter season in a given academic year, the winter sport will be credited for five units, as that is the sport for enrollment at the end of the fall semester. For those who complete a fall sport only, the fall sport will be awarded five units.

## **PE Classes for Grades 10-12**

### **PE – Yoga and Mindfulness**

#### *Grades 10 -12*

This course is designed to safely introduce students to the basic postures, breathing techniques, anatomy and relaxation methods of yoga and mindfulness. Introduction to yoga will focus on mind body awareness. Students will practice mindfulness techniques such as visualization, meditation and breathing that help alleviate stress and anxiety. Yoga is adaptable to all fitness levels and participants concentrate on their own personal practice. The focus is on personal growth, self-awareness and individualized development. Introduction to yoga can be taken as an elective or as a second year general PE credit. The aim of this course is to promote wellness and a healthy lifestyle.

### **PE – Group Sports**

#### *Grades 10 -12*

The group sports program is designed to meet the needs and enhance the experience of every student. It will provide the knowledge, skills and confidence that students will need to maintain meaningful physical activity through their lifetime. This course will include activities such as: swimming, tennis, soccer, basketball, volleyball, badminton, team handball, Frisbee golf, softball and aerobic fitness training.

## **PE – Life Fitness**

*Grades 10 -12*

This course is designed to promote functional strength and mobility for everyday/life activities. Students will participate in challenging activities with an emphasis on functional body weight exercises. This class will involve both static and dynamic stretching through yoga movements that will emphasize flexibility and mobility. It will also include metabolic conditioning and lifetime activities to improve overall aerobic capacity, such as: running, circuit training, step-aerobics, Pilates, and much more.

## **PE – Optimum Fitness**

*Grades 10 -12*

This course is for students who want to get fit and stay fit for life. This course will concentrate on exercise and weight training that can be applied for a lifetime of good health. The course include work in the areas of flexibility, core (ab and lower back) training, aerobic training, circuit training, nutrition, running and jogging technique, and may include cross fit training. Students will be pre-tested and post-tested in flexibility, strength and aerobic conditioning. Once the students have learned the basics of the workouts, they will be tested periodically during the course to best decide what their workouts should include. They will focus on those areas where gains need to be made. Students will also learn how to develop or create their own workouts to best suit their needs in the future in order to maintain good health for a lifetime of fitness.

## **Sports and Other PE Options**

<b>First Semester Sports</b>		<b>Second Semester Sports</b>	
<b>Fall Season</b>	<b>Winters Season</b>	<b>Spring Season</b>	
Boys/Girls Cross Country	Boys/Girls Basketball	Badminton	Boys/Girls Swimming
Girls Field Hockey	Boys/Girls Soccer	Boys Baseball	Boys Tennis
Boys Football	Wrestling	Boys Golf	Boys/Girls Track
Girls Golf		Boys/Girls Lacrosse	Boys Volleyball
Girls Tennis		Girls Softball	
Girls Volleyball			
Boys/Girls Water Polo			

## **PE – Spirit Squad**

This squad meets during period 7, and participation is determined by try-outs. Students who make Spirit Squad will be required to spend many hours outside of their regular class in practice and performance at games. Expenses include uniforms and other essentials necessary for public performances. Participation in spirit related activities (Football Program sells, Phone-A-Thon campaign, Father/Daughter Dance, etc.) is required. Auditions requiring workshop participation will be held in the spring.

## **PE – Dance Team**

Dance Team meets during Period 7, and participation is determined by audition. Students who join the LGHS Dance Team will spend many hours outside of the regular class in practice and performance. Dancers' backgrounds range from having past experience in ballet, ballet folkloric, competitive dance, Bay Area performing companies, to theater. Sometimes relatively new dancers who have a sincere desire to learn and improve their art will be added to the team. Dancers support their school with dance performances at different venues throughout the school year. Auditions will be held in the spring.

**PE – Colorguard 1-4**

See course description under Performing Arts.

**P – Marching/Symphonic Band (Fall)**

See course description under Performing Arts.

# LEAD@LG Course Descriptions

LEAD@LG is an interdisciplinary 4-year pathway for students who want to Learn, Explore, Act, and Design. The emphasis of the LEAD pathway is student-driven inquiry and guided exploration. Students demonstrate their knowledge through project-based learning and professional presentations, with benchmarks and assessments throughout the process. Students will graduate LEAD with real world applicable 21st century skills in order to become the future LEADers the world needs.

Due to the interdisciplinary nature of the pathway, courses within the LEAD@LG are intended to be taken together at each grade level. The courses within the pathway represent the typical courses taken by students at each grade level.

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<ul style="list-style-type: none"> <li>• English 9/English 9 H</li> <li>• Biology/Biology H</li> </ul>	<ul style="list-style-type: none"> <li>• English 10/English 10 H</li> <li>• World History/World History H</li> <li>• Chemistry</li> </ul>	<ul style="list-style-type: none"> <li>• English 11/English 11 H</li> <li>• US History/US History H</li> <li>• Physics</li> </ul>	<ul style="list-style-type: none"> <li>• English 12/English 12 H: Ethics</li> <li>• US Gov/Econ/Econ H</li> <li>• Film Production</li> </ul>

## English

### **P-English 9/English 9 Honors**

Students in 9th grade English will grow as leaders through a variety of projects including Travel Blogs, Person of Inspiration Story Corps Unit, Service Learning Unit, and the Dream Job Unit. All projects focus on growing students as leaders, communicators, writers, researchers, and thinkers. Students will explore core novels, non-fiction as well as contemporary pieces of literature combined with current research. The 9th grade collaborative unit connecting English and Biology is focuses on Food Sustainability.

Students pursuing English 9 Honors in this pathway deepen their understanding of each project with additional reading, research, writing, and project expectation. They must maintain an A/B in the regular classwork to be eligible. Students are expected to score on the advanced level of the assessment. Additionally, they must complete two projects that help them in community building and oral communication, growing them as LEADers in the pathway.

### **P-English 10/English 10 Honors**

Within this unique section of English 10, students use the craft of documentary filmmaking to explore an English 10 Honors level curriculum and gain the necessary abilities for digital media production while participating in a rigorous, integrated English and multimedia course. Primarily using their phones as a filmmaking tool, students analyze, connect and engage with the various texts by producing thematically linked mini-documentaries. Previous film projects have included profiles in mentorship, studies of the various neighborhoods of San Francisco, and creative self-reflection of the student's own identity, among other works.

Throughout the year, students explore the universal themes of identity, power, and freedom, with extensive focus on the novel, poetry, informational text, and film while they acquire important technical skills needed for filming and editing. In addition to learning the necessary skills of a more traditional Honors program and the technical skills for producing multimedia content, embedded

within the filmmaking process are additional critical skills such as collaboration, communication, time management, resource management, scheduling, budget and creativity, among others. Combine these filmmaking skills with the skills of a more traditional Honors program, and you have a truly 21st Century class which more than meets all curriculum standards and CCSS. Plus, it's fun.

### **P-English 11/English 11 Honors**

As the third year in LEAD, students are already familiar with project expectations and tools, allowing this course to be even more connected to personal paths and the world around them. In LEAD English 11 students begin to put what they have learned into action. Along with reading, writing, listening, and speaking, students participate in interest based internships and reflect on experiences, poetry and storytelling, community service opportunities, and college readiness writing. Reading connects to an American Experience but depending on topics can make larger connections.

### **P-English 12/English 12 Honors: Ethics**

Society puts numerous constraints upon the individual, often resulting in ethical dilemmas that challenge the individual's self-worth and place within society. From Socrates to Shakespeare to Tom Wolfe to Francis Ford Coppola, this class will examine how one lives a good life. We will also explore how one incorporates a responsible ethical code of living, as well as how one responds to the pressures and judgments of social institutions. Here are some of the key questions we will be asking:

- What is "the Good Life" and at what cost?
- How does one live "the Good Life"?
- Is "the Good Life" accessible to everyone?
- Are we concerned more with "the Good Life" or basic survival?

## **Social Studies**

### **P- World History/World History Honors**

The LEAD World History course will take students on a 13.8 billion year journey, traveling from before the Big Bang, all the way to the modern day and beyond. Our approach to the study of World History will encourage students to think across multiple academic disciplines and expose them to many different subject areas and professions. Ultimately we will help students build a foundation of interdisciplinary study that can help them advance both academically and professionally.

This course is intended to engage all students actively through the integration of social science disciplines, an increased understanding of democratic values, a global multicultural perspective, the use of enriching literature and art, and the development of geographic literacy. Throughout the class we will keep in mind our own communities, how they relate to history and how knowledge of the community we live in will help us discover more about the past, present, and future of our world.

Students will share their knowledge of history with their peers through various research projects, class presentations, debates, creative products and original documentary films. All of these experiences will incorporate the use of technology in the creative process and challenge students to innovate in new ways.

### **P- US History/AP US History**

While the US History class does involve many directed lessons that track a chronology of defining eras of American history, the ultimate purpose is not rote memorization of facts. We study select

historical events because understanding them is necessary for understanding the world in which we live today. Politics, economics, and current events are central to the course.

As a LEAD class, independent projects are emphasized. Early in the course, students are assigned several presentation topics and styles. For example, students do a slide presentation about Native American history, a video commercial about an election issue, and a conventional persuasive essay about the 19th-century labor movement. Once students demonstrate ability in these formats, they are encouraged to explore further with their presentation and production skills. As the class progresses, students are given more and more choice as to what to study and how to present what they have learned. Throughout the second semester, students will conduct an independent, group project about a local issue that will involve service or research time in the community, interviews with community members, and some form of local advocacy.

Students in the class are given the option of earning AP credit by completing a comprehensive set of reading guides using an AP textbook and then taking a series of eight exams on these guides. Students must score at least a 70% on these exams to receive AP credit.

### **P- Government and Economics/Economics Honors**

This course combines the essentials of Government and Economics, and emphasizes participation in the political and economic spheres of life. At its core the course is about ***politics and economics in action***. What is our role in our community, and how can we help others to improve our world. The course is designed to deepen students' awareness of how each of us can participate in a meaningful way to improve the quality of life of individuals and communities, and shape public discourse. It also seeks to broaden students' awareness of the complexity of governing within a vast territory, encompassing a diverse population with competing priorities; the dilemmas that lawmakers face; and communicating our ideas with deliberation and integrity. The course uses a combination of lecture, case study, projects and simulations to enhance student understanding of essential political and economic issues in contemporary society.

## **Science**

### **P-Biology/Biology Honors**

LEAD Biology is aimed to develop science-literate citizens through the application of laboratory techniques, data collection and analysis, vocabulary, modeling, and inquiry problem-solving activities. LEAD Biology emphasizes group interactions and collaborative learning through hands-on laboratory experiences. Development of chemistry-specific concepts and skills are integrated with other branches of science while applying these concepts and skills to ourselves, our community, and beyond. Throughout the year students partake in shorter content-based units intermixed with larger collaborative projects, applying what they learn to real-world applications. Units include: Ecosystems, Cells, Biochemistry, Genetics, Diversity of Life and BioTech Lab unit.

### **P-Chemistry**

Physical and chemical processes are introduced with an emphasis on theory, problem solving, and hands-on laboratory work. Students will learn chemistry topics such as chemical reactions, structure and trends of the periodic table, and properties and interactions of matter. Emphasis placed on problem solving, group and independent inquiry based learning, and modeling to engage learners in the chemistry curriculum. Past projects include the creation and development of a puzzle box that highlights topics covered in class.

## **P-Physics**

Students will learn traditional physics topics such as mechanics, energy, light and sound while applying their knowledge to four main projects. Recent projects have included teaching 5th graders astronomy at a local elementary school in preparation for science camp, building musical instruments, designing energy efficient homes or alternative energy devices and examining the physics of a sport. Emphasis is placed on the construction and development of models for representing and understanding scientific ideas as well as planning and conducting investigations.

## **Electives**

### **P- Film Production**

*Grade 12*

Throughout LEAD's English 12/Ethics, students explore and examine what it means to live a "good life" and the philosophical and ethical challenges embedded within this concept. From that class, students then enter this class where they take their thoughts and drop them into a creative space. Using their smartphones and multimedia as the primary tools and learning modalities, students learn and then choose which platform works best to communicate their ideas to a larger audience. Does a mini-documentary film or narrative film tell their story? Is it a podcast or vlog (video journal) which best captures the students' vision and message? Or will it be some other form of multimedia that has not yet been invented or brought to the mainstream? Regardless, the aim of Film Production is to create a multimedia workspace in which students can realize their visions and bring them into reality, virtual or otherwise. While this class is fueled by student choice, it is contained within a structured "real-world" production workflow: *pre-production, production, post production, exhibition*. Each phase of production teaches new skills and builds upon the learning students have acquired throughout their previous high school years: communication, cooperation, collaboration, leadership, time management, budgeting and engagement with the world well past the walls of campus.