

LA JOLLA HIGH SCHOOL

2024 – 2025

STUDENT ACADEMIC HANDBOOK



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Introduction

The purpose of this catalog is to enable students and parents to make informed academic program choices when requesting courses each year. Our goal is to ensure that students meet or exceed San Diego Unified graduation requirements, have a variety of postsecondary options and are well-prepared for further education and/or training in whatever direction his/her talents and interests lead.

When selecting courses, students and parents should consider graduation requirements, college entrance requirements, and the stated recommendations found in this catalog. It is critical that both parents and students understand the demands of the course, both independently and in combination with your other course selections.

SAN DIEGO UNIFIED SCHOOL DISTRICT **HIGH SCHOOL GRADUATION REQUIREMENTS**

44 semester credits are required for graduation. Students are expected to meet the California State Standards in English, Mathematics, Science, History/Social Science, Foreign Language, Visual/Performing Arts, and Physical Education. The following chart lists specific high school graduation requirements as well as the minimum college entrance requirements for CSU and UC systems. For college purposes, all courses must be completed with a grade of C or better. These requirements will also meet the admission standards for most colleges throughout the United States.

San Diego Unified School District Graduation Requirements		UC/CSU Recommend
English	4 years - 9 th ; 10 th ; 11 th ; and 12 th	4 years
Mathematics	3 years- Integrated Math I, II, III	4+ years
Science	3 years – must include Biology, Chemistry and Physics	3 years
History/ Social Science	3 years - World History (10 th); US History (11 th); Gov/Econ (12 th)	2 years
World Language	2 years in the same course, or completion of the second year (Level 3/4)	3 years
Visual & Performing Arts	1 year in the same area of study or course	2 semesters
Physical Education	2 years AND must pass the Fitness Gram	
Credits	44 Total Credits Required for Graduation (including 11 elective credits)	
Weighted Grade Point Average	2.0 or higher weighted GPA in grades 9-12	3.0+ (UC) 2.0+ (CSU)

For additional information on CSU admission, go to www.csumentor.edu. For additional information on University of California admission, go to <http://admission.universityofcalifornia.edu/>.

Articulation

Articulation is an annual process of developing individual student course requests and utilizing those requests to inform the La Jolla High School whole site schedule of course offerings and teacher assignments. Please carefully review this information when choosing courses for the following year as they are considered FINAL choices for the entire year!

Information regarding a schedule error or other concerns requiring a schedule change is detailed on pages 4-5.

Course Selection/Request Process

Existing LJHS students: Guidance Counselors present grade level appropriate course information to current students during the articulation process each year in the December/January timeframe. Students receive grade level course selection worksheets to complete at home, in coordination with a parent or guardian. Students will enter their course requests in Power School before they meet 1:1 with a Guidance Counselor to review their course requests for the following year.

Muirlands Middle School 8th grade students: follow the same articulation process described above when transitioning from 8th to 9th grade.

New students enrolling at La Jolla High School: will select course requests at the time of enrollment.

Students select 6 courses of study each semester/academic year. We offer over 80 courses, including seminar, advanced, honors, Advanced Placement and community college options. La Jolla High School encourages students to take the strongest possible academic program available while considering overall balance and wellness.

Information regarding the selection of advanced, honors, Advanced Placement and dual enrollment college courses as well as the recommendations or prerequisites are detailed on page 7-8.

Finalized Student Schedules

Student schedules for the following year are available to students in August for review during back-to-school registration. Final schedules may also be viewed in PowerSchool on the first day of school. Scheduling errors (see page 5) should be brought to a counselor's attention during this time. All students are to collect their final printed schedule on the first day of school. For information regarding a schedule change or new request please see page 5.

Please see the LJHS website (www.lajollahigh.sandiegounified.org) section for Counseling> Course Planning and Schedule Changes for additional information.

Errors in scheduling and inappropriate level placement

Examples of errors in scheduling:

- A student is placed in Integrated Math 2 for the following year, but the student earns a D/F in Integrated Math 1 and therefore must repeat the Integrated Math 1 class.
- A student is inadvertently not placed in a Period 3 class; therefore, the student has an open period and/or missing a required class.

Student-Initiated Changes: IF there is a scheduling error that was not corrected earlier the student should request the correction *during back-to-school registration or during the first week of the semester*. During the first week of school, students should go to the counseling office during the period that contains the error. New requests are not given priority during back-to-school registration or during the first week of school and may not be accommodated.

Examples of inappropriate level placement:

- The student is placed in Advanced Biology but did not meet the recommendations for the previous coursework.
- The student is placed in higher-level Spanish without sufficient background in the Spanish language to succeed in the class, as determined by the teacher.

Teacher-Initiated Changes: Class changes due to an inappropriate level placement, based on the teacher's or counselor's professional determination that do not come from a student request.

La Jolla High School's policy concerning the changing of classes (due to inappropriate placement) requires consideration from all the stakeholders in the school community. **Beginning the first week of school until the week after the first progress report/grade period, teacher-initiated changes may occur**, if specific guidelines have been met. The change must be in the best interest of the student taking into account that the leaving and receiving teachers agree to the change, and the size of both classes doesn't violate labor agreements or district policy. The sequential procedure to facilitate an inappropriate level schedule change is:

- 1) The current teacher consults with the student's counselor and parent(s) about the student's placement.
- 2) If space is available in the receiving teacher's class, the change is made by the counselor.

LJHS COURSES and the UC/CSU A-G REQUIREMENTS

For the most current list of LJHS courses meeting the UC A-G requirements visit:

<https://hs-articulation.ucop.edu/aqcourselist/institution/1910>

Key: (P)=College Preparatory course; (HP) indicates weighted grade for course; CL = GATE Cluster; Sem = GATE Seminar)

<u>A = HISTORY</u>	<u>D= SCIENCE</u>	<u>F=VISUAL AND PERFORMING ARTS</u>
World History 1,2 (P)	Biology 1,2 (P)	Art 1,2(P)
Adv World History 1,2 (P)	Adv Biology 1,2 (P)	Drawing and Painting 1,2 (P)
AP European History 1,2 (HP)	AP Biology 1,2 (HP)	AP Art Studio 2D 1,2 (HP)
AP European History 1,2, Sem (HP)	Chemistry 1,2 (P)	AP Art History 1,2 (HP)
US History 1,2 (P)	Honors Chemistry 1,2 (HP)	Band 1, Marching Band core (P)
Honors US History 1,2 (HP)	AP Chemistry 1,2 (HP)	Ceramics 1,2 (P)
AP US History 1,2 (HP)	Physics 1,2 (P)	Green Construction Design 1,2 (P)
AP US History Sem 1,2 (HP)	AP Physics 1 A, B (HP)	Multimedia Production 1-2 (P)
Government 1 (P)	AP Physics 2 A, B (HP)	Multimedia Production 3-4 (P)
AP US Gov. and Politics 1 (HP)	Marine Science 1,2 (P)	Orchestra 1- 6 (p)
Mesa College Political Sci 102 (HP)	Honors Principles of Biomedical Science (HP)	Theatre 1,2 (P)
	Honors Human Body Systems (HP)	Theatre 3,4 (P)
	Honors Medical Interventions (HP)	Theatre 5,6 (P)
<u>B= ENGLISH</u>	Honors Sports Medicine 1 (HP)	Theatre 7,8 (P)
Identity & Relationships 1,2 (P)	Science Research Tech (P)	Tech Theater 1,2 (P)
Identity & Relationships Sem. 1,2 (P)		Tech Theater 3,4 (P)
English 3,4 (P)		Honors Tech Theater 5,6 (P)
Adv. English 3,4 (P)	<u>E=LANGUAGE OTHER THAN ENGLISH</u>	
Adv. English Sem. 3,4 (P)	Latin 1,2 (P)	
American Literature 1,2 (P)	Latin 5,6 (P)	<u>G = COLLEGE PREP ELECTIVE</u>
Honors American Lit 1,2 (HP)	AP Latin 1,2 (HP)	Computer Science Discoveries 1,2 (P)
AP English Language 1,2 (HP)	Spanish 1,2 (P)	AP Comp Science Principles 1,2 (HP)
AP English Language Sem. 1,2 (HP)	Spanish 3,4 (P)	AP Computer Science A 1,2 (HP)
Expos. Reading, Writing, Comp. 1,2 (P)	Spanish 5,6 (P)	Journalism 1,2 (P)
AP English Literature 1, 2 (HP)	Honors Spanish 7,8 (HP)	AP Psychology 1,2 (HP)
Mesa College English 101, 205 (HP)	AP Spanish Language (HP)	Principles of Econ 1 (P)
	AP Spanish Literature (HP)	AP Macroeconomics 1 (HP)
<u>C=MATHEMATICS</u>		Mesa College Political Sci 101 (HP)
Integrated Math I (P)		UCCI: Building Scaled Structures 1,2 (HP)
Integrated Math I Advanced (P)		
Integrated Math II (P)		<u>OTHER</u>
Integrated Math II Advanced (P)		Mesa College: Intro to Business (HP)
Integrated Math III (P)		Mesa College: Intro to Marketing (HP)
Integrated Math III Advanced (P)		Mesa College: Communications (HP)
Pre-Calculus 1,2 (P)		
Honors Pre-Calculus 1,2 (HP)		
AP Calculus AB 1,2 (HP)		
Statistics 1,2 (P)		
AP Statistics (HP)		
Mesa College: Statistics 119 (HP)		
Mesa College: Math 150/ Math 151 (HP)		
Mesa College: Math 254/ Math 245 (HP)		

See page 10 for course descriptions, course progressions, additional courses that do not map above, multi--semester course pairings, recommendations for prior courses and pre-requisites.

GATE/Seminar, Honors, Advanced Placement and College Classes

Gifted and Talented [GATE] Seminar Humanities Program:

For additional information regarding GATE programs see here:

https://www.sandiegounified.org/departments/gifted_and_talented_education

LJHS offers course sections for seminar identified students in the humanities (History/Social Studies and English), see specific course descriptions for details.

Honors, Advanced Placement and Community College classes

LJHS offers many advanced courses to challenge all students in a variety of subject areas. Eligibility and placement is based on satisfaction of individual course recommendations (see course descriptions for details), demonstrated academic record and teacher recommendation(s). Research shows that succeeding academically needs to be balanced with succeeding emotionally. For this reason, and in accordance with our mission statement, we ask students and their families to seriously consider the impact on a student's emotional well-being when enrolling in multiple Honors, Advanced Placement (AP), or community college Mesa/UCSD College courses.

La Jolla High School recommends a maximum of Honors/AP/community college courses in the following grades:

9th Grade - 0
10th Grade – 2
11th Grade – 3
12th Grade – 4

Advanced Placement (AP) Program consists of courses and tests developed by The College Board. For additional information regarding AP and/or the College Board see here: (<https://apstudents.collegeboard.org/>)

Students signing up for AP courses must be prepared for a very rigorous course of study that is **EQUIVALENT TO FIRST YEAR COLLEGE WORK**.

In order to ensure that students enroll in AP courses with an adequate understanding of the academic rigor, **all students and parents must sign the AP/Honors/College Course Contract on the course selection worksheet**. It is suggested that students enrolling in an AP course read the course description in this handbook, look through teacher's website and syllabus or arrange a meeting with the teacher, who will provide information about course requirements, tests, assignments, workload and time requirements, expectations, etc. Please also view course descriptions on the College Board website, where course and exam information is detailed. Once pre-enrolled in an AP class students may be expected to complete summer reading requirement(s) prior to the opening of school in the fall.

AP exams are administered on the LJHS campus each year in May and require a fee. Note: AP exams are optional and are not a requirement of an AP course. By earning a passing score on the exam(s), students *may* earn college credit at the college they will eventually attend. Each college and university have their own advanced placement credit policy, which dictates how AP exam scores are used toward degree requirements and possible college credit and/or college placement.

For more information about the specific AP courses and exams you may go to the AP website at <https://apstudent.collegeboard.org/home>

College Courses with MESA College

Students requesting to enroll in college-level courses should take the following into consideration:

- Successful students demonstrate strong academic curiosity and the ability/willingness to complete hard work; they also attend classes regularly.
- Students should expect the pace and academic rigor of these college level classes to be more intense than regular classes at the same grade level and require at least twice as study much time outside of class.
- Typically, students who take college level courses are task-oriented students as well as being proficient readers who are able to organize their time and who have parent/guardian support.
- Students who are already overextended with academics or extracurricular activities should seriously consider the time they can devote to college level courses.

Once pre-registered for a Community College course, the student will need to apply to be an active student at the respective community college which requires parent/ guardian consent. **These classes are taught on the LHS campus by faculty of the community college and are subject to the schedule, pace and policies of the community college.**

CAREER TECHNICAL EDUCATION PATHWAYS (CTE)

CTE courses can be completed as a single course or as part of a pathway. Each pathway prepares students for successful completion of Common Core State Standards, technical standards, and more advanced postsecondary coursework related to the particular career pathway. Many of these courses also satisfy UC/CSU A-G requirements (as noted below).

Information and Communication Technologies	Building and Construction	Arts, Media and Entertainment	Arts, Media and Entertainment
Computer Science Discoveries 1-2 (G)	Elements of Green Construction and Design 1-2 (F)	Technical Theatre 1-2 (F)	Multimedia Production 1-2 (G)
AP Computer Science Principles (G)	UCCI: Building Scaled Structures 1,2 (G)	Technical Theatre 3-4 (F)	Multimedia Production 3-4 (G)
AP Computer Science A (G)		Honors Technical Theater 5-6 (F)	

For details on the BioMedical Sciences Program/Pathway please see course descriptions and progression on pages 15-16.

COLLEGE PLANNING INFORMATION

Visit the La Jolla High School Counseling web page at <http://www.sandiegounified.org/schools/la-jolla> (see the Counseling tab) for detailed information about college planning, entrance requirements, tuition, financial aid, and scholarships.

San Diego Unified School District uses Xello, a web-based college search program for all business related to the college application process. Xello connects to other commercially available college application platforms namely, The Common App.

All students learn how to use Xello during classroom presentations and/or assembly. Students must create a personal account to use for requesting their counselor and teacher letter(s) of recommendation, requesting official transcripts, and other useful tools needed for the college application process. Students experiencing difficulty with their Xello accounts should seek assistance in the counseling office.

COMMUNITY COLLEGES

Admission is open to all students who have graduated from accredited high schools, or are 18 years of age or older. Community colleges award Associate of Arts degrees and certificates, and many have programmatic links to four-year universities. SAT and ACT scores are NOT required, but English and Math placement tests are required for entering freshmen.

COLLEGE STANDARDIZED TESTING INFORMATION

College-bound students should consider taking one or more of the college entrance or pre-college entrance exams.

The Preliminary Scholastic Aptitude Test (PSAT) is designed as practice for the Scholastic Aptitude Test (SAT). The PSAT is administered on campus each year in October to 11th graders. The eleventh grade PSAT scores are used by the National Merit Scholarship Foundation to determine National Merit Scholars.

Individual Colleges and Universities provide information regarding their admission requirements related to testing on their websites. Some schools require test scores, some are test-optional, and some are test-blind.

La Jolla High School is not a testing site for the SAT or ACT tests.

For more information or to register for the PSAT or SAT go to www.collegeboard.org. For ACT information, go to www.actstudent.org.

LA JOLLA HIGH SCHOOL COURSE OFFERINGS

All courses at La Jolla High School are structured to meet district and state standards.

CORE SUBJECTS

ENGLISH

- **English 1, 2; Identity & Relationships** Grade 9 [UC] [CSU]

This course content focuses on teaching the students skills and strategies for critical, independent reading and writing of increasingly complex expository and narrative texts. Instruction in each standards-based unit of study interrelates reading, writing, oral communication, and language study. Students are provided with multiple opportunities to articulate their own ideas as well as to question, interpret, and evaluate others' ideas.

The goal of instruction is to support students in becoming independent, strategic, critical readers, writers, listeners, and speakers who communicate effectively in various forms, for genuine purposes, and to authentic audiences.

In addition, students will explore their own identity as well as the different identities of those around them in their diverse communities through the guiding principles of Ethnic Studies. They will critically examine systems of power that affect themselves and their communities. They do this while working towards mastery of the CA Common Core Standards. Every unit culminates with an opportunity for students to reflect on and then share their learning.

- **English 1, 2: Identity & Relationships SEMINAR** Grade 9 [UC][CSU]

This is the first year of the two-year GATE Seminar Humanities Program in English.
See course description above.

Recommendations: District-identified seminar status.

- **English 3-4** Grade 10 [UC] [CSU]

A world literature course with emphasis on the short story, nonfiction, drama, poetry, and the novel. Students will continue to develop the language arts skills of reading, writing, speaking, listening, and analysis.

The type of work expected in this course includes: independent self-selected reading, unit writing assignments with scaffolding to help students, group presentations, and world literature-inspired class novels.

- **English 3-4 ADVANCED** Grade 10

[UC] [CSU]

An advanced course for students with superior ability which addresses the content of English 3, 4, but in a broader, more intensive manner. Students will develop a broad understanding of world literature while developing depth of perception, critical judgment, vocabulary, and effective written and oral expression. Writing critical expository essays is emphasized. The type of work expected in this course includes: independent reading at grade level or above, including challenging classical literature, and critical and expository essay writing.

Recommendations: Teacher recommendation, based on student’s ability to read independently at grade level or above and write an essay with a thesis and support without scaffolding.

- **English 3-4 ADVANCED SEMINAR** Grade 10

[UC] [CSU]

This is the second year of the two-year GATE Seminar Humanities Program in English. Students will read a wide variety of texts from classic to contemporary world literature and study their cultural and historical contexts. Writing includes narrative, expository and argument essays related to the themes and contexts of the course reading. The course includes individual and group work components, discussions and presentations, and differentiated assignments.

Recommendations: District-identified seminar status and a grade of an “A” or “B” in both semesters of English 1, 2 .

- **American Literature 1-2** Grade 11 [UC] [CSU]

A course studied concurrently with U.S. history enabling the student to understand the interrelationship between American history and literature on social, political, and moral issues. Students continue to focus on improving skills in reading, writing, speaking, listening, and analysis. The type of work expected in this course includes reading of classical texts, contemporary literary works, and content-rich nonfiction--including foundational U.S. documents; reading, writing, and speaking grounded in evidence from text; engaging with complex texts and their academic language. Students are provided with multiple opportunities to articulate their own ideas as well as to question, interpret, analyze, extend, and evaluate others’ ideas. The goal of instruction is to support students in becoming independent, strategic, critical readers, writers, listeners, and speakers who communicate effectively in various forms, for genuine purposes, and to authentic audiences.

- **HONORS American Literature 1-2** Grade 11

[UC] [CSU]

A rigorous Honors course using college text and a summative end-of-course exam. This course is designed to emphasize independence and responsibility in critical analysis of a variety of literary texts, including poetry, essays, short stories, historical documents, drama and novels in American literature. Students will explore the ways in which these works relate to the prevalent philosophical, political, ethical and social influences of the times in which they are written. The type of work expected in this course includes: a minimum of one hour of homework, ability to read complex and varied texts independently, and higher-level writing skills, including depth of analysis.

Recommendations: A grade of “A” or “B” in both semesters of English 3-4. Teacher recommendation, based on student’s ability to read independently at grade level or above and write an essay with a thesis and support without scaffolding.

- **AP English Language and Composition 1-2 ADVANCED PLACEMENT** Grade 11 [UC][CSU]

This Advanced Placement English course is designed to help students become more skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts and to become skilled writers who can compose for a variety of purposes. By their writing and reading in this course, students should become aware of the interactions among a writer's purposes, audience, expectations, and subjects, as well as the way genre conventions and the resources of language contribute to effective writing. This course is intended for the proficient writer interested in the finer points of rhetoric who will compose for a variety of purposes. Students will also engage major, fictional works of the United States, as well as a variety of nonfiction. The type of work expected in this course includes: a minimum of one hour of homework per night, weekly critical reading and writing in conjunction with weekly essays using academic language, and the ability to be a self-starter and work independently.

Recommendations: A grade of "A" or "B" in both semesters of English 3,4. Teacher recommendation, based on student's ability to read independently at grade level or above and write an essay with a thesis and support without scaffolding.

- **AP English Language and Composition 1-2 ADVANCED PLACEMENT and SEMINAR** Grade 11 [UC] [CSU]

See AP English Language and Composition description above with Seminar format.

The type of work expected in this course includes: a minimum of one hour of homework per night, weekly critical reading and writing in conjunction with weekly essays and the ability to be a self-starter and work independently.

Recommendations: Prior participation in GATE Seminar Humanities Program and receiving a grade of "A" or "B" in both semesters of English 3,4.

- **AP English Literature and Composition ADVANCED PLACEMENT 1-2** Grade 12 [UC][CSU]

This Advanced Placement English course engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. Writing assignments focus on the critical analysis of literature and include expository, analytical, and argumentative essays as well as possible creative writing. The type of work expected in this course includes the expectation that reading is a natural part of the student's life and that the types of books being read are varied in their nature, their length, and their subject matter. Expect a reading load of approximately one hundred twenty-five to one hundred fifty pages a week, not including the additional reading to be done as part of the course's independent reading program. Students should also expect to be writing every day above and beyond the 12 essays that will be written in the first semester, and the 15-20 page essay to be written in the second semester.

Recommendations: A grade of "A" or "B" in both semesters of the previous English class.

- **Expository Reading, Writing and Composition 1-2** Grade 12 [UC] [CSU]

The goal of this course is to prepare college-bound seniors for the literacy demands of higher education. Students are expected to increase their awareness of rhetorical strategies employed by authors and to apply those strategies in their own writing. They will read closely to examine the relationship between an author's argument or theme and his or her audience and purpose, to analyze the impact of structural and rhetorical strategies, and to examine the social, political, and philosophical assumptions that underlie the text. By the end of the course, students will be expected to use this process independently when reading unfamiliar texts and to provide lengthy, independently written responses. The type of work expected in this course includes writing 8-15 unit essays and self-selected topics and reading two class novels. This course was developed by the California State University ERWC Advisory Committee.

HISTORY/SOCIAL SCIENCES

- **Modern World History and Geography 1-2** Grades 10 [UC] [CSU]

In this course students examine the following strands: history, geography, economics, culture, and ethics. The course emphasizes national identity, constitutional heritage, and citizenship. It exercises varied study, visual, map/globe, and critical-thinking skills. World history from the late 1700s to the present is explored. The curriculum is designed to increase students' capacity to think analytically and critically. Students will gain a greater insight into the forces that have shaped our modern world.

- **World History 1-2 ADVANCED** Grades 10 [UC] [CSU]

An accelerated course which includes an in-depth study of world history from the rise of democratic ideas to the contemporary world. Students develop advanced skills in analyzing historical, cultural, social, economic, and geographical issues in a global context. Students explore connections between local, national, and global issues. The course culminates with a critical examination of the problems of the modern world. Students enrolling in this course should have a strong interest in social sciences.

- **AP European History 1-2 ADVANCED PLACEMENT** Grade 10 [UC] [CSU]

This Advanced Placement History class is a college-level course which surveys European history from 1450 to the present. Students will engage the major political, social, economic and intellectual foundations of modern western civilization in a course structured to reflect an increasingly global perspective, emphasizing modern Europe's interactions with Asia, Latin America and Africa. Students will participate in activities that relate to the United Nations as well as current global issues such as nuclear non-proliferation, global economic development and human rights in an interdependent world. This course, despite its European History title, is closely aligned to the California History Social-Science standards for grade 10 World History. Students are expected to demonstrate a strong capacity for independent study, interpreting primary sources critically and expressing historical ideas in various written formats. AP European History is a capstone course and the AP European History exam is highly recommended for all students in the course.

Recommendations: A grade of "B" or better in the previous English and History course.

- **AP European History 1-2 ADVANCED PLACEMENT and SEMINAR**

Grade 10 [UC] [CSU]

The first year of History/Social Studies component of the GATE Seminar Humanities Program. See AP European History description above in the Seminar format. This is a capstone course and the AP European History exam is highly recommended for all students in the course.

Recommendations: District-identified seminar status. A grade of “B” in previous Seminar English and History course.

- **United States History and Geography 1-2** Grade 11

[UC] [CSU]

A course which reviews the colonial period to the Civil War, and then represents a general survey of the important events that have shaped our history from the Industrial Age to the present. Special emphasis is placed on economic development and the leadership of the United States in world affairs. The type of work expected for this course includes: Daily lecture and textbook reading notes. Reading may include one or more chapter sections per night. Chapter tests and quizzes will be administered. Additionally, unit or chapter projects may be assigned.

- **HONORS United States History and Geography 1-2** Grade 11

[UC] [CSU]

This rigorous course is designed for highly motivated history students who want an accelerated course of U.S. history from 1607 to the present. The course presents students with a rigorous and coherent narrative of the major political, economic, and social developments in U.S. history, while incorporating more recent scholarship in the fields of social and cultural history, emphasizing American’s richly diverse heritage. Students will participate in class discussions, analyze primary sources and examine essential questions in American history. The accelerated pace requires students to complete more than a chapter a week during the school year.

Recommendations: A grade of “A” or “B” in Advanced World History or AP European History.

Differences between AP and Honors US History:

- Pacing – Honors is paced more slowly as AP students must complete the content by the May national exam date.
- Writing - AP includes more rigorous writing requirements (preparation for DBQ, LEQ, SAQ.)
- AP is based on College Board requirements while Honors is based on district and state requirements (Although both courses satisfy state and district requirements.)
- In general, the level of discourse and content is more rigorous in AP.
- AP may include activities such as debates and mock trial.

- **AP United States History 1-2 ADVANCED PLACEMENT** Grade 11 [UC] [CSU]

A college-level survey of U.S. history from 1607 to the present. The course is structured to present students with a rigorous and coherent narrative of the major political, economic, and social developments in U.S. history, while incorporating more recent scholarship in the fields of social and cultural history, emphasizing America's richly diverse heritage. The goals of the course include developing college level reading and study habits, as well as strong analytic writing skills. Students will be expected to demonstrate a strong capacity for independent study, interpreting primary sources and expressing historical ideas in various written formats. Students will be expected to complete assignments covering approximately a chapter a week in a college level text. AP U.S. History is a capstone course and the AP U.S. History exam is highly recommended for all students in the course. Type of work expected: 6-8 hours a week of reading/taking notes. Daily lecture notes. Written assignments aligned with the APUSH College Board writing requirements, research and presentations, tests and quizzes every week (average).

Recommendations: A grade of "A" or "B" in Advanced World History or AP European History.

- **AP United States History 1-2 ADVANCED PLACEMENT and SEMINAR** Grade 11 [UC] [CSU]

The second year of History/Social Science in the GATE Seminar Humanities program. See AP U.S. History description above, taught in the Seminar format. This is a capstone course and the AP U.S. History exam is highly recommended for all students in the course.

Recommendations: Prior participation in the GATE Seminar Humanities Program and a grade of "A" or "B" in AP European History/Seminar.

- **Government 1** Grade 12 [UC] [CSU]

A one semester course paired with Principles of Economics 1 (see below) in which students apply knowledge gained in previous years of study to pursue a deeper understanding of the institutions of American Government. This course focuses on the U.S. Constitution and Bill of Rights, the courts and government processes, the legislative and executive branches of government, state and local government and comparative government.

- **Principles of Economics 1** Grade 12 [UC] [CSU]

A one semester course paired with Government 1 in which students understanding of the economic problems and institutions of the nation and the world. Students learn to make reasoned decisions on economic issues through the study of fundamental economic concepts, comparative economic systems, microeconomics, macroeconomics, and international economics.

Principles of Economics also includes the district-approved financial literacy curriculum, which helps students learn the connection between career and income as well as how to file taxes, budget money, and manage bank accounts, credit cards, and credit scores.

- **AP US Government and Politics ADVANCED PLACEMENT** Grade12 [UC][CSU]

A semester-long, college-level course (paired with AP Macroeconomics – see below). The course includes an in-depth study of the nature of the American political system, its development over the last 200 years, and how it works today. The course follows the standard syllabus of Advanced Placement Government and Politics: United States, as specified by the College Board. It prepares students to satisfactorily complete the Advanced Placement Examination in US Government and Politics and thus the opportunity to earn college credit. Type of Work to be expected: Daily lecture and note taking with accelerated college-level of instruction; prepare to engage in thoughtful discussions and assignments with nightly reading. Tests and quizzes make up the bulk of the overall course grade.

Recommendations: A 3.5 GPA or better and teacher/counselor recommendation and maintain a B average throughout the semester.

- **AP Macroeconomics 1 ADVANCED PLACEMENT** Grade 12 [UC] [CSU]

A semester-long, college-level course paired with AP US Government and Politics. The course follows the standard syllabus as specified by the College Board; covering the components of gross national product, the interrelationship between inflation and unemployment, the functions and characteristics of money, the banking system, the Federal Reserve System, the circular flow of goods, and the concepts of aggregate demand and supply. Building on these concepts, students will examine monetary and fiscal policies, budget deficits, and the international payments system. AP Economics is a capstone course and prepares students to satisfactorily complete the Advanced Placement Examination in Macroeconomics and thus the opportunity to earn college credit. Type of Work to be expected: Daily lecture and note taking with accelerated college-level of instruction; prepare to engage in thoughtful discussions and assignments with nightly reading. Tests and quizzes make up the bulk of the overall course grade.

Recommendations: A 3.5 GPA or better and teacher/counselor recommendation and maintain a B average throughout the semester.

SCIENCE

- **Biology Living Earth 1, 2** Grades 9 – 12 [UC] [CSU]

This course integrates Life Science with Earth and Space Science, following the three-course model for the Next Generation Science Standards (NGSS). Units are based on the six instructional segments outlined in the California Framework and include: Ecosystem Interactions and Energy, History of Earth’s Atmosphere: Photosynthesis and Respiration, Evidence of Evolution, Inheritance of Traits, Structure, Function, and Growth (from cells to organisms), Ecosystem Stability & the Response to Climate Change. Students will engage in the Science and Engineering Practices (SEP) as well as the Crosscutting Concepts (CCC) to explore phenomena demonstrating the Disciplinary Core Ideas (DCI) of each instructional segment.

- **Biology Living Earth 1, 2 ADVANCED** Grades 9 – 12

[UC] [CSU]

This is a first-year course intended for students with the interest and ability to extend their study of biology beyond the basic course, and/or who are contemplating a science-related career but are not prepared to take Advanced Placement Biology as their first biology course. It covers all the elements of the regular Biology Living Earth course, including the same inquiry and cooperative strategies, but its pace will be faster, it will go into greater depth in selected areas, and it will be more quantitative. The course is aligned to NGSS, integrating Disciplinary Core Ideas from Life Science and Earth and Space Science, Crosscutting Concepts and Science and Engineering Practices.

- **AP Biology 1, 2 ADVANCED PLACEMENT** Grades 10 – 12

[UC] [CSU]

The AP Biology course is equivalent to a two-semester college introductory biology course. Students successful in this course attain a deep grasp of fundamental biological concepts that focuses on enduring, conceptual understanding and the content that supports it. This approach enables students to spend less time on factual recall and more time on inquiry-based learning of essential concepts and helps them develop the reasoning skills necessary to engage in the science practices used throughout their study of AP Biology. Materials used for this course differ qualitatively from those used in other biology courses in both rigor and content and in the complexity of laboratory experiences. Laboratory activities have clearly labeled safety precautions and hazardous waste disposal procedures. AP Biology is a capstone course, and the AP Biology exam is highly recommended for all students in the course. The course requires text reading and or laboratory activities daily. Students are expected to read the entire text in order to prepare for the AP exam in May. See instructor's website to view the program.

Recommendations: High achievement in previous science course(s) and/or teacher/counselor recommendation. One year of Chemistry or Honors Chemistry, and Advanced Biology are highly recommended.

- **HONORS Principles of Biomedical Science 1, 2** Grade 9 Elective in Biomedical Pathway [UC][CSU]

This is the first course in the four-year sequence of courses comprising the Project Lead the Way Biomedical Sciences Program. Students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems. Students will complete a culminating project to receive honors distinction.

- **HONORS Human Body Systems 1, 2** Grade 10 Elective in Biomedical Pathway [UC] [CSU]

Students examine the interactions of human body systems as they explore identity, power, movement, protection and homeostasis. Exploring science in action, students build organs and tissues on MANIKEN skeletal models; use data acquisition software to monitor body functions, such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases. Students will complete a culminating project upon completion of the course in order to receive the honors distinction. Students will take the Mesa College Fundamentals of Human Anatomy and Physiology (MEDA 55) articulating final exam. Community College credit may be earned by application with a grade of A or B on the exam and a grade of A or B in the LJHS course.

Recommendations: Principles of Biomedical Science 1, 2 and Teacher recommendation.

- **HONORS Medical Interventions 1, 2** **Grade 11 Elective in Biomedical Pathway** [UC] [CSU]

Medical Interventions is the third course in a four-year sequence of courses comprising the Project Lead the Way Biomedical Sciences Program. Students in this course are introduced to a wide range of medical interventions related to immunology, genetics, pharmacology, surgery, medical devices and diagnostics. Interventions range from simple diagnostic tests to the treatment of complex diseases and disorders; all are aimed at extending and improving quality of life. Lifestyle choices and preventive measures are emphasized throughout the course. Students will complete a culminating project to receive honors distinction. Students will take the Miramar College Biology 131 course exam. Community College credit may be earned by application with a grade of A or B on the exam and grade of A or B in the LJHS course.

Recommendations: Principles of Biomedical Science 1,2 and Human Body Systems 1, 2.

- **HONORS Biomedical Innovations 1,2** **Grade 12 in Biomedical Pathway** [UC] [CSU]

Biomedical Innovations is the capstone course in the four-year sequence of courses comprising the Project Lead the Way Biomedical Sciences Program. In this course, students are asked to apply what they have learned in the previous three courses to solve unique problems in science, medicine, and healthcare. Students work through required problems systematically before completing optional directed problems or independent work. Each problem is staged as a mission—a unique set of tasks the students must work through to achieve their desired objectives. Each problem is presented in a "Mission File"—a document that includes a case brief, a list of completion tasks, links to available resources, as well as a reflection section. Working through the missions not only exposes students to current issues in biomedical science, but it also provides skills-based instruction in research and experimentation—tools students will use to design innovative solutions to real-world problems. Students will complete independent research projects for Honors credit.

****This is a highly competitive course only open to students upon teacher recommendation and completion of an application process.**

Recommendations: Principles of Biomedical Science 1,2, Human Body Systems 1,2, Medical Interventions 1,2 and teacher recommendation.

- **HONORS Sports Medicine 1,2** **Grade 12 in Biomedical Pathway** [UC] [CSU]

Honors Sports Medicine 1,2 is for students who are interested in the practical and theoretical aspects of prevention, assessment, treatment, and rehabilitation of sports related injuries. Students will have an opportunity to study: anatomy and physiology of the human body, begin to learn universal precautions, CPR First Aid, mechanisms of a sport injury, basic injury evaluation, taping, wrapping, principles of fitness and conditioning, nutrition and how sports medicine is part of an integrated health care delivery system. Integrated throughout the course are career preparation standards, which include communication, ethics, interpersonal and team skills, critical thinking and problem solving, safety, technology, and other employment skills. Multiple labs are offered throughout the course.

Recommendations: Principles of Biomedical Science 1,2, Human Body Systems 1,2, Medical Interventions 1,2 and teacher recommendation.

- **Chemistry in the Earth System 1, 2** Grades 9 – 12

[UC] [CSU]

This course integrates Physical Science with Earth and Space Science, following the three-course model for the Next Generation Science Standards (NGSS). Units are based on the six instructional segments outlined in the California Framework and include: Combustion, Heat and energy in the earth System, Atoms, Elements, and Molecules, Chemical Reactions, Chemistry of Climate Change, Dynamics of Chemical reactions and Ocean Acidification. Students will engage in the Science and Engineering Practices (SEP) as well as the Crosscutting Concepts (CCC) to explore phenomena demonstrating the Disciplinary Core Ideas (DCI) of each instructional segment.

Recommendations: Should have a C or better in Algebra I or Integrated Math I. A good understanding of the metric system of measurement and scientific notation is key.

- **HONORS Chemistry in the Earth System 1, 2** Grades 9 – 12

[UC] [CSU]

As a rigorous Honors level course, students will engage with the Chemistry course content at a deeper level using a college text and a summative end-of-course exam. Students selecting this course should have a strong math/science orientation, as well as the mature attitude necessary for reading, discussing, investigating, analyzing, and reporting difficult concepts.

Recommendations: Integrated Math 2: An in depth understanding of the fundamentals of operational math (PEMDAS), including exponential notation. Students must have the ability to read a textbook for content using standard textbook format as a key to the most important details.

- **AP Chemistry 1, 2 ADVANCED PLACEMENT** Grades 10 – 12

[UC] [CSU]

A college-level class for students who want to attain deep understanding of chemical concepts, conduct significant laboratory experiences, and gain expansive knowledge of current research. Students selecting this course should have a strong math/science orientation, as well as the mature attitude necessary for reading, discussing, investigating, analyzing, and reporting difficult concepts. Students should understand that the College Board considers AP Chemistry a second-year course and it will be taught at a pace that assumes prior knowledge of many concepts. AP Chemistry is a capstone course, and the AP Chemistry exam is highly recommended for all students in the course.

Recommendations: Chemistry or Physics; and a grade of B or better in Int. Math 3 or concurrent enrollment. Integrated Math III courses have covered all necessary mathematical concepts, but students will need to have an in depth understanding of computational facts including estimation of quotient and product answers from various problems as a calculator is not allowed for half of the AP Chemistry test. Students should expect to memorize many facts that will not be made available in any source material during testing.

- **Physics of the Universe 1-2** Grades 9 – 12

[UC] [CSU]

Students will study the underlying causes and effects of forces on Earth and in the Universe, including gravitational, contact, magnetic, nuclear, and electrostatic forces. Students will investigate the nature of energy and matter and their conservation. They will have the opportunity to study the formation of the geophysical features of Earth and cosmic evolution. They will examine the collection of evidence supporting physical models. Students will also examine the principles of waves and how we use waves in information technology, including information storage and transfer. Students will work on projects which demonstrate their mastery of the course, regularly conduct experimental investigations, and participation in engineering practices.

Recommendations: Algebra/Integrated Math I.

- **AP Physics I A, B ADVANCED PLACEMENT** Grades 11 – 12

[UC] [CSU]

AP Physics I is equivalent to one semester of an introductory, algebra-based college physics course. The course gives teachers the time to foster greater depth of conceptual understanding through the use of student-centered, inquiry-based instruction. Twenty-five percent of instructional time is spent on laboratory work. The course explores such topics as Newtonian mechanics; work; energy and power; mechanical waves and sound; and introductory simple circuits.

Recommendations: Completion of Integrated Math II with a grade of a B or higher or equivalent; concurrent enrollment in Integrated Math III; no prior coursework in physics is required.

- **AP Physics II A, B ADVANCED PLACEMENT** Grades 11-12

[UC] [CSU]

AP Physics II is equivalent to one semester of an introductory, algebra-based college-level physics course. The course explores such topics as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics.

Recommendations: AP Physics I A, B

- **Marine Science 1, 2** Grades 11 – 12

[UC] [CSU]

A lab science course designed to give students a diverse background in the marine sciences. The course includes wet labs with live organisms, dissections, intertidal fieldwork, and class projects. The first semester covers various aspects of oceanography: chemistry, plate tectonics, sediments, ocean and atmospheric circulation, waves, tides, and coastal processes. The second semester will focus on marine biology, inclusive of such topics as the biology of plankton, algae, plants, animals, marine ecosystems, and ecology. Students will also address issues such as global climate change and pollution.

Recommendations: One year of Biology; Chemistry and/or Physics recommended.

- **Science Research Techniques 1-2** Grades 11 – 12

[UC] [CSU]

A course designed to allow students to work on a one-to-one or small group basis with a science teacher to explore and gain the knowledge, skills and attitudes necessary for various careers in science. Students will prepare equipment and materials for laboratory investigations.

Recommendations: Satisfactory completion of a one-year course in the subject area involved, and teacher and/or counselor recommendation.

MATHEMATICS

COMMON CORE MATHEMATICS PATHWAYS:

Integrated Math I	Integrated Math II	Integrated Math III	Statistics or Pre-calculus
Advanced Integrated Math I	Advanced Integrated Math II	Advanced Integrated Math III	Honors Pre-Calculus or AP Statistics
Honors Pre-Calculus	AP Calculus AB or Math 150 and 151	AP Statistics or Math 254 and 245	

- **Integrated Math I A, B** Grades 9 – 10

[UC] [CSU]

Integrated Math I is the first of three high school–level courses that integrate the content of algebra and geometry as defined by the Mathematics Framework for California Public Schools, under the Common Core State Standards. This course formalizes and extends the mathematics that students learned in middle school.

- **Integrated Math I A,B ADVANCED** Grades 9 – 10

[UC] [CSU]

Integrated Math I Advanced is the first course in the accelerated pathway. The course is designed for advanced grade 8 students. It includes the content of the standard Integrated Math I course plus an additional two units so students may begin working with the advanced + Common Core State Standards.

Recommendations: A grade of B or higher in Accelerated Math 7, or a B or higher in Math 8.

- **Integrated Math II A, B** Grades 9 – 11

[UC] [CSU]

Integrated Math II is the second of three high school–level courses that integrate the content of algebra and geometry as defined by the Mathematics Framework for California Public Schools, under the Common Core State Standards. This course focuses on quadratic expressions, equations, and functions while comparing their characteristics and behavior to those of linear and exponential relationships as encountered in Integrated Math I.

- **Integrated Math II A, B ADVANCED** Grades 9 – 11

[UC] [CSU]

Integrated Math II Advanced is the second course in the accelerated pathway. The course integrates the Common Core State Standards as outlined in the Mathematics Framework for California Public Schools with additional higher-level standards. The intent of the course is to prepare students for Integrated Math III. Students will be exposed to the content of the standard Integrated Math II course with the expectation that they will explore that content more deeply, including studying and analyzing conic sections and vectors and their relationships to complex numbers.

Recommendations: A grade of B or higher in Advanced Integrated Math I.

- **Integrated Math III A, B** Grades 9 – 12

[UC] [CSU]

Integrated Math III is the third of three high school-level courses that integrate algebra, geometry, trigonometry, and statistics under the Common Core State Standards. The course extends the mathematics students learned in Integrated Math II A-B. Students expand their repertoire of functions to include polynomial, rational, and radical functions. They expand study of right-triangle trigonometry to include general triangles. They bring together data, functions, and geometry to create models and solve contextual problems.

- **Integrated Math III A, B ADVANCED** Grades 9 – 12

[UC] [CSU]

Integrated Math III Advanced is the third course in the accelerated pathway. The course integrates the Common Core State Standards as outlined in the mathematics framework with additional higher-level standards. Students will be exposed to the content of the standard Integrated Math III course with the expectation that they will explore that content more deeply. They will bring together all their experiences with data, functions, and geometry to create models and solve contextual problems. They relate combinations and permutations to the binomial theorem.

Recommendations: Grade of B or higher in Advanced Integrated Math II.

- **Pre-Calculus 1, 2** Grade 10 – 12

[UC] [CSU]

A standard college preparatory course which provides the background needed to succeed with calculus, including a thorough familiarity with functions (linear, quadratic, power, exponential, rational, logarithmic, etc.) and their graphs, trigonometric concepts, polar coordinates and complex numbers, vectors, sequences and series. Students will also address other topics, such as statistics and probability, combinatorics, and matrices, as preparation for courses other than calculus.

Recommendations: A grade of C or higher in Integrated Math III.

- **HONORS Pre-Calculus 1, 2** Grade 10 – 12

[UC] [CSU]

A rigorous college preparatory course with a summative end-of-course exam. This course is designed for students who have successfully finished Advanced Integrated Math III. This course provides the background needed to succeed with calculus, including a thorough familiarity with functions (linear, quadratic, power, exponential, rational, logarithmic, etc.) and their graphs, trigonometric concepts, polar coordinates and complex numbers, vectors, sequences and series. Other topics, such as statistics and probability, combinatory, and matrices, are presented as preparation for courses other than calculus. Graphing calculators are integral to the instruction.

Recommendations: A grade of B or higher in Advanced Integrated Math III.

- **Statistics 1, 2** Grades 11 – 12

[UC] [CSU]

A course which introduces students to the major concepts of probability, combinatory, data interpretation, and statistical problem solving. Students will engage in hands-on experimentation and investigation, and learn to analyze existing data as well as new data collected by conducting surveys, observational studies, simulations and/or experiments. Students will learn to display data, analyze data, and draw conclusions based on data. Computers and graphing calculators are integral to the instruction.

Recommendations: A grade of C or higher in Integrated Math III.

- **AP Statistics 1, 2 ADVANCED PLACEMENT** Grades 11 – 12

[UC] [CSU]

A college-level introductory course in statistics which introduces students to the major concepts of, and tools used for, collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, planning a study, anticipating patterns, and statistical inference. AP Statistics is a capstone course and the AP Statistics exam is highly recommended for all students in the course.

Recommendations: A grade of B or higher in Pre-Calculus, or Advanced Integrated Math III, or Statistics 1-2 with teacher recommendation.

- **AP Calculus AB 1, 2 ADVANCED PLACEMENT** Grade 11 – 12

[UC] [CSU]

A college-level class equivalent to a one-semester college calculus course, designed to prepare students for more advanced and necessary professional courses required by engineering, science, and math careers. Topics include limits of functions, techniques and applications of differentiation and integration. AP Calculus is a capstone course and the AP Calculus exam is highly recommended for all students in the course. Graphing calculators are integral to the instruction.

Recommendations: A grade of B or higher in Pre-Calculus, or a C or higher in Honors Pre-Calculus.

PHYSICAL EDUCATION

- **Physical Education 1, 2, 3, 4** Grades 9 – 12

Classes which promote fitness through active participation in a variety of activity blocks like badminton, basketball, flag football, jogging, swimming, racquetball, softball, soccer, tennis, track, volleyball and weight training. Students will improve motor skills, strategy techniques, and understanding of individual, dual, and team sports. Students will develop skills in leisure activities and lifetime sports, and all students will receive training in nutrition, CPR and first aid.

- **Physical Education Dance 1, 2** Grades 9-12

This is a first-year level physical education course for students who wish to increase their knowledge of dance using the Physical Education Model Content Standards for California public schools. Students will demonstrate knowledge and competency in motor skills, movement patterns and strategies needed to perform a variety of physical activities with an emphasis in dance. Additionally, students will achieve a level of physical fitness for health and performance while demonstrating knowledge of fitness concepts, principles and strategies focused on dance related topics.

- **P.E. Marching Band Core** Grades 9-12

This course includes instruction in performing marching activities as well as instruction and assessment in the following eight content areas: (1) effects of physical activity upon dynamic health; (2) mechanics of body movement; (3) aquatics, (4) gymnastics and tumbling; (5) individual and dual sports; (6) rhythms and dance; (7) team sports; and (8) combative/self-defense. This course will also prepare students for the state-mandated physical fitness test. All students enrolled in the course must be concurrently enrolled in a band course and must demonstrate progress toward mastering the high school physical education content standards. This course must be taught by a credentialed physical education teacher.

Recommendations: Students must enroll in Band (see description under Music Department) 2nd semester.

- **P.E. Interscholastic Athletics** Grades 9-12

The interscholastic athletic program offers competitive sports for the student who wishes to pursue a specific sport in competition against other high schools, culminating in league championships, C.I.F. playoffs and state playoffs. Practices may be held during 6th period athletics and games/contests will be held after school. Students will receive Physical Education credit or elective credit for the class. See <https://ljvikings.com/> for additional information regarding sports.

Prerequisite: Passing marks in at least four subjects with a GPA of 2.0 or higher in all subjects and in citizenship during the academic quarter immediately preceding the season of sport, physician's approval, insurance coverage, and adherence to C.I.F. residence rules. Students may be required to participate in two CIF sports to remain in 6th period athletics throughout the school year. Try-outs may be required for team membership if the size of a team must be limited to a specific number.

WORLD LANGUAGES

- **Latin 1, 2** Grades 9-12

[UC] [CSU]

This introductory course, open to all students, is intended to develop limited proficiency in comprehending and translating selected readings in Latin. Latin 1,2 and 3,4 are offered in alternating years.

- **Latin 5, 6** Grades 9 – 12

[UC] [CSU]

A third-year course which offers a review of and exposure to nearly all of Latin grammar. This course is designed to provide students with the grammatical skills and cultural knowledge which they will need in order to succeed in Advanced Placement Latin and will include reading excerpts from Julius Caesar's Gallic War and Vergil's Aeneid. In addition to preparing students for AP Latin next year, this course is an academic elective under the A-G requirements.

Recommendations: A grade of "C" or better in Latin 3 – 4.

- **AP Latin 1, 2 ADVANCED PLACEMENT** Grades 9 – 12

[UC] [CSU]

A college-level course offering advanced studies of Latin. Students will read and analyze lengthy selections from Julius Caesar's Gallic War and Vergil's Aeneid. AP Latin is a capstone course and the AP Latin exam is highly recommended for all students in the course. This course is an academic elective under the A-G requirements.

Recommendations: A grade of "C" or better in Latin 5 – 6.

- **Spanish 1, 2** Grades 9 – 12

[UC] [CSU]

This is a novice course that utilizes the communicative approach to learning, as a means to further develop the student's acquisition of Spanish. According to the California State Framework and the National Standards for Foreign Language Learning, this course uses a communicative approach to learning and emphasizes all four basic language skills: listening, speaking, reading, and writing. This course is based on the American Council on the Teaching of Foreign Languages (ACTFL) national standards: communication, connections, communities, comparisons and cultures.

- **Spanish 3, 4** Grades 9 – 12

[UC] [CSU]

Spanish 3-4 is for students who have reached proficiency in Spanish 1-2. This course is intended to extend the communicative approach to learning as a means to further develop the student's acquisition of Spanish. This course follows The California State Framework and the National Standards for Foreign Language Learning, the course uses a communicative approach to learning and emphasizes the mastery of all four basic language skills: listening, speaking, reading, and writing. The course is based on the ACTFL National Standards, which stress: Communication, Connections, Communities, Comparisons, and Cultures.

Recommendations: Spanish 1, 2.

- **Spanish 5, 6** Grades 9 – 12

[UC] [CSU]

This is a third-year course stressing proficiency in listening comprehension, speaking, reading, and writing. This is a rigorous course that is not required for graduation. Spanish 5-6 is intended to extend the communicative approach to learning as a means to further develop the student's acquisition of Spanish. This course focuses on history, culture and grammar. Students will be exposed to a variety of challenging reading material through historical, literary and journal texts. Students are expected to comprehend and primarily speak Spanish in this course. In adherence to the California State Framework and the National Standards for Foreign Language Learning, the course uses a communicative approach to learning and emphasizes the mastery of all four basic language skills: listening, speaking, reading, and writing. The course is based on the ACTFL National Standards, which stress: Communication, Connections, Communities, Comparisons, and Cultures.

Recommendations: A grade of "C" or better in Spanish 3 – 4. Students should pass the proficiency entrance exam to be recommended to take this course.

- **HONORS Spanish 7, 8** Grades 9 – 12

[UC] [CSU]

This is a rigorous college preparatory course using a college text and a summative end-of course exam. Designed for students who have successfully completed Spanish 5, 6 and wish to continue their studies of the Spanish language and literature at an advanced level. This class, conducted primarily in Spanish, offers a literature-based, accelerated program that is both contextually rich and cognitively demanding. This course uses a communicative approach that provides opportunities for students to use the second language appropriately in a range of setting and situations and for a variety of purposes.

Recommendations: A grade of "B" or better in Spanish 5 – 6.

- **AP Spanish Language and Culture 1, 2** **ADVANCED PLACEMENT** Grades 9-12 [UC] [CSU]

The AP Spanish Language and Culture course provides students with opportunities to develop language proficiency across the three modes of communication: Interpretive, Interpersonal, and Presentational. Students learn about culture through the use of authentic materials that are representative of the Spanish-speaking world. Materials include a variety of different media, e.g., journalistic and literary works, podcasts, interview, movies, charts and graphs. AP Spanish Language and Culture is a language acquisition course designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where Spanish is spoken and as such is an immersion experience requiring almost exclusive use of Spanish, a requirement which class participation grades reflect.

Recommendations: A grade of "B" or better in Spanish 5 – 6 or Spanish for Spanish Speakers; or native Spanish speaker with previous academic experience; or a grade of "C" or better in Honors Spanish 7 – 8.

- **AP Spanish Literature 1, 2 ADVANCED PLACEMENT** Grades 10 – 12

[UC] [CSU]

The AP Spanish Literature and Culture course is designed to introduce students to the formal study of a representative body of literature, written in Spanish, from Spain, Latin America and the United States. The course provides students with ongoing and varied opportunities to develop proficiency in Spanish across a full range of skills, with emphasis on critical reading and analytical writing. The course stresses proficiency in language skills and the analysis of selected literary works from the countries where the language is spoken. Students read several representative works, including one or more full-length works from each author designated on the Required Authors List published annually in the Advanced Placement Course Description Guide. It also encourages students to reflect on the many voices and cultures included in a rich and diverse body of literature written in Spanish.

Recommendations: A grade of "B" or better in AP Spanish Language; or native Spanish speaker with previous academic experience.

ELECTIVES

VISUAL & PERFORMING ARTS

ART

- **Art 1, 2** Grades 9 – 12

[UC] [CSU]

A course which serves as a basis for general visual art education, providing a foundation for advanced art courses. It integrates production, aesthetics, criticism, and art history through the exploration of visual art elements and principles. A variety of materials will be used in the creation of artworks. Some of the techniques, ideas and materials that may be included are color theory, rendering, perspective drawing, design, composition, acrylic paint, and calligraphy.

- **AP 2D Art and Design 1, 2 ADVANCED PLACEMENT** Grades 10 – 12

[UC] [CSU]

The AP Art and Design program consists of three different courses and AP Portfolio Exams—AP 2-D Art and Design, AP 3-D Art and Design, and AP Drawing—corresponding to college and university foundations courses. Students may choose to submit any or all of the AP Portfolio Exams. Students create a portfolio of work to demonstrate inquiry through art and design and development of materials, processes, and ideas over the course of a year. Portfolios include works of art and design, process documentation, and written information about the work presented. In May, students submit portfolios for evaluation based on specific criteria, which include skillful synthesis of materials, processes, and ideas and sustained investigation through practice, experimentation, and revision, guided by questions. Students may choose to submit any or all of the AP Portfolio Exams.

Recommendations: Grade of B or better in two full-year art courses and recommendation of art teacher.

- **AP Art History 1, 2 ADVANCED PLACEMENT** Grade 11-12

[UC] [CSU]

This course is designed to prepare students for the AP examination for college credit. Through slide-illustrated lectures, field trips, discussions, and participation in special projects, students will explore the themes that have impelled artists to be creative. The course will present a historical as well as an analytical approach to visual art and its place in Western and non-Western civilizations through an in-depth, discipline-based approach. AP Art History exam is highly recommended for all students in the course. Type of work included in this course: Students analyze artworks as a group each day and will be assigned a selection of works in each chapter to research and present to the class; reading and note taking with a college-level textbook and outside sources; tests and quizzes make up the bulk of the overall course grade.

Recommendations: Teacher and/or counselor recommendation.

- **Ceramics 1, 2, 3, 4** Grades 11 – 12

[UC] [CSU]

A studio course that provides students with basic skills, language and various processes used in ceramics. Students will work with hand-building techniques and the potter's wheel. Students will study historical and contemporary trends and applications. Students will learn glazing application techniques and assist with the firing process. The course is taught sequentially and the second semester builds on the first.

Recommendations: Students must demonstrate the level of maturity needed to operate the potter's wheel and/or use other ceramic materials safely.

- **Drawing and Painting 1, 2** Grades 10 – 12

[UC] [CSU]

This standards-based course is designed for students who have demonstrated aptitude in prerequisite courses and a desire to pursue a sequence of studies in visual art. Primary emphasis is placed on drawing and painting techniques in a variety of media. Students will develop their own personal styles of creative expression as they create individual works based on the elements and principles of art. They will be introduced to a variety of cultural and historical styles and motifs. Through critiques, students will display the ability to appreciate and value the aesthetics of a wide spectrum of artworks, as well as understand the relationship between art, culture, and history.

Recommendations: Art 1, 2 or teacher recommendation.

DRAMA

- **Theatre 1, 2** Grades 9 – 12

[UC] [CSU]

A course focused on basic acting techniques, play and character analysis, theatre history, and the elements of theatrical production. Students will practice and polish physical and vocal techniques, mime, improvisation, and scene work. They will also study monologue and audition techniques using a wide variety of styles and texts. Students may audition for school productions.

- **Theatre 3, 4** Grades 10 – 12

[UC] [CSU]

Students in this course focus on vocal production, character development, play reading and analysis, monologue invention, and One-Acts production. Students will learn skills of Oral Interpretation, Comedic and Dramatic Duos, etc. for competition, and explore theatre history and acting styles. Students may audition for school productions.

Recommendations: Completion of Theatre 1, 2 with a grade of “C” or better, or audition required.

- **Theatre 5, 6, 7, 8** Grades 11 – 12

[UC] [CSU]

Courses requiring previous theatre training. No freshman students permitted. Students must be ready to audition for and perform in a variety of plays, and must be familiar with theatrical terms, acting requirements, and acting techniques. This class focuses on monologues, character creation, audition techniques, scene work, rehearsal, and performance. Students should know that theatrical productions conflict with many extracurricular activities. During play production, rehearsals are held after school and on weekends, and students must be available for performances on Thursday through Sunday.

Recommendations: Completion of Theatre 1 – 4 with a “C” or better, or audition. New students to LJHS must audition before approval is given.

- **Technical Theatre 1, 2** Grades 9 – 12

[UC] [CSU]

Students will create designs for sets, lights, costumes, and sound for school productions, including sketches, ground plans, renderings, color charts/swatches, and models. Students will work as crew chiefs and will supervise the Tech I students during construction and production. Stage management responsibilities, with full prompt books, will also be required for each production. Students will investigate the history of theatre architecture and stage design. Problem solving and working under pressure will be stressed. College credit by application to Mesa College and weighted class/GPA.

- **Technical Theatre 3, 4** Grades 10 – 12

[UC] [CSU]

A second-year course designed to provide advanced knowledge and skills in the techniques and management of staging for drama and other similar school productions. The course provides advanced instruction in set design and construction, the use of stage equipment, recording, lighting, sound effects, and video production. Students will develop their own designs for school productions and execute them for performance. They will create designs for the sets, lighting, costumes, and sound of these productions—including sketches, ground plans, renderings, color charts/swatches, and models—and work with other designers and the director to develop a unified design scheme for each one. Students also will serve as crew chiefs during construction, supervising the work 1, 2 students. Stage-management responsibilities with full prompt books also will be required for all productions. College credit by application (if not awarded in Tech 1-2) and weighted class/GPA.

Recommendation: Tech Theatre 1, 2

- **HONORS Technical Theatre 5-6** Grades 11 – 12

Advanced-level course within the Arts, Media, and Entertainment Production and Managerial Arts pathway. Students will provide leadership in theatrical productions from design to execution.

Note: Participation in extracurricular theater productions is required as part of the course curriculum.

Prerequisites: Tech Theatre 3, 4

MUSIC

- **Orchestra 1, 2, 3, 4, 5, 6** Grades 9-12 [UC] [CSU]

Orchestra teaches the musical concepts and technique of performing at a beginning level. In this course, students will learn how to produce controlled and accurate pitch and create a mature string tone, as well as learn the basics of music notation and musical vocabulary. Students will be exposed to the major scale and diverse repertoire and will be asked to think deeply about the discipline of music from a number of perspectives, including style, genre, mood, and historical and cultural context. Additional topics of study include demonstrating appropriate performance etiquette, identifying musical contrasts, evaluating performances, and creating new music through compositions and improvisations. Orchestra 7-8 is an Honors level class offered by audition.

- **Marching Band/Physical Education** – See description under “Physical Education” course listings

- **Band 1, 2, 3, 4, 5, 6** Grades 9-12 [UC] [CSU]

Band teaches the musical concepts and technique of performing at a beginning level. In this course, students will learn how to produce controlled and accurate pitch and create a mature wind/percussion tone, as well as learn the basics of music notation and musical vocabulary. Students will be exposed to the major scale and diverse repertoire and will be asked to think deeply about the discipline of music from a number of perspectives, including style, genre, mood, and historical and cultural context. Additional topics of study include demonstrating appropriate performance etiquette, identifying musical contrasts, evaluating performances, and creating new music through compositions and improvisations. Band 7-8 is an Honors level class offered by audition.

Recommendations This is a second semester only course which follows Marching Band/PE in the first semester.

MULTIMEDIA PRODUCTION

- **Multimedia Production 1, 2, 3, 4** Grades 9 – 12 [UC] [CSU]

These courses provide instruction in media technology and production. Instruction covers audio and video production, computer graphics and animation, and multimedia presentations, as well as the use of video recorders, cameras, projectors, special-effects generators, audio mixers, electronic keyboards, computers, scanners, digitizers, and printers. The media-production skills learned in this course also enhance the qualifications of students intending to work as graphic artists, photographers, programmers, and musicians. Employment possibilities include Web designer, animator, sound technician and video- production assistant. Self-employment in the areas of video production, music, and graphic design also is possible.

WOODWORKING

- **Elements of Green Construction and Design 1, 2** Grades 9 – 12 [UC] [CSU]

A year-long course in which students plan, design, shape and construct projects from wood. Areas of emphasis involve safety, planning and layout, wood technology and care, use and maintenance of hand and machine tools, joinery, hardware and wood finishing. Students practice: math skills; the physics involved with different materials, their strength and shapes; the engineering of proper fit and function; the chemistry of finishes, solvents and glues; the artistry used in design, shape, and personal expression. Studies include a career assessment, S/P2 Safety Certificate, research, and subject-related vocabulary.

- **UCCI: Building Scaled Structures 1, 2** Grades 11 -12 UC] [CSU]

This course integrates skills and concepts from the building and construction trades with applied mathematics and English. As part of a natural progression, students apply the craft skills required to design and build a variety of scaled structures that meet current building code requirements. In addition, students learn how to create and use project construction documents, including blueprints and project packets. This course provides students with opportunities to apply academic knowledge and technical skills through a hands-on curriculum that meets pre-apprenticeship requirements for the National Building Trades Council.

Recommendation: Elements of Green Construction Design 1, 2

NON-DEPARTMENTAL ELECTIVES

- **Advancement VIA Individual Determination (AVID)** Grades 9 – 12 [UC] [CSU]

A college preparatory class which provides motivation and support for college bound students. Activities will include guest speakers, field trips, writing and vocabulary units, test preparation, and individual tutoring twice a week. The AVID system incorporates the strategies of writing, inquiry, collaboration, organization, and reading to support students. The three main components of the AVID elective are academic instruction (AVID curriculum), tutorial support, and motivational activities. AVID's mission is to close the achievement gap by preparing all students for college readiness and success in a global society.

Recommendations: Minimum GPA of a 2.0 for students in 9th-10th grades; minimum GPA of 2.5 for students in 11th-12th grades and desire to enter a four-year university.

- **Computer Science Discoveries 1, 2** Grades 9 – 12 [UC] [CSU]

Computer Science Discoveries is a survey course that takes a wide lens on computer science by covering topics such as programming, physical computing, HTML/CSS, user interface design and data. Students create authentic artifacts and engage with computer science as a medium for creativity, communication, problem solving and fun. By the end of the course, students will have used the software development process and fundamental programming constructs to design apps, create web pages, develop games, use data to solve problems, and program interactions with the physical world through a variety of sensors and hardware. Throughout the course, students are encouraged to reflect on what they have learned about computer science and how it affects their world through journal prompts, classroom presentations, and written descriptions of digital and physical artifacts that they create.

Recommendations: Integrated Math I is a co-requisite

- **AP Computer Science Principles 1, 2 ADVANCED PLACEMENT** Grades 10 – 12 [UC] [CSU]

This course is designed to provide a broad overview of computer science that will develop computational thinking practices and creativity. Students will examine the practical and ethical impact of advances in computing on people and society. They will also learn how to analyze a problem and create a digital artifact in environments such as Alice, Python, and AppInventor. By the end of this course, students will be able to critically analyze computing innovations, as well as create applications that express their interests.

Recommendations: Computer Science Discoveries 1, 2

- **AP Computer Science A 1, 2 ADVANCED PLACEMENT** Grades 10 – 12

[UC] [CSU]

This course covers the writing of structured code in a procedural language using data types and algorithms. Designing and implementing computer-based solutions as well as learning well known algorithms and data structures will be included. Another component of the class will incorporate reading and understanding of a large program in addition to understanding the description of the design and development process of such a program. Students will be able to identify the major hardware and software components of a computer system, their relationship to one another, and their roles within the system. In addition, students will develop and select appropriate algorithms and data structures to solve problems and to code fluently in a well-structured fashion. The ethical and social impacts of computer use will be addressed.

Recommendations: AP Computer Science Principles 1,2 and Integrated Math 1 and Integrated Math II with a grade of "C" or better.

- **AP Psychology 1-2 ADVANCED PLACEMENT** Grades 11 – 12

[UC] [CSU]

A college-level course which introduces students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students will focus on the history of psychology as a science, the different theoretical approaches that underlie explanations of behavior, and the contemporary research methods used by psychologists. Topics covered will include brain structure/function, neuroanatomy, social psychology, development, and abnormal disorders/treatment. AP Psychology is a capstone course and the AP Psychology exam is highly recommended for all students in the course. Type of work included in this course: Daily lecture notes and nightly reading expected. Tests and quizzes make up the bulk of the overall course grade. Students will be expected to maintain a fast paced schedule to cover the course material in preparation for the AP Exam in May.

Recommendations: A 3.5 GPA or better, and teacher and/or counselor recommendation.

- **Journalism 1, 2, 3, 4, 5, 6 (NEWSPAPER)** Grades 9 – 12

[UC] [CSU] for years 1-2 only

A course in which students learn the basic techniques and skills of journalistic writing, investigate the source and meaning of ‘freedom of the press,’ and explore the dependency of other freedoms upon an informed citizenry. Higher level courses (3-8); students learn and practice newspaper writing, editing, production, and business management. Students also work as staff writers for the school newspaper, Hi-Tide.

Recommendations: “A” or “B” in both semesters of previous English class; approval of the journalism advisor.

We look to build a diverse staff of talented and motivated students, from any grade level- with and without experience, who are willing to learn how to produce quality news in a dynamic, collaborative, and fun environment. We will train and there are always opportunities for advancement in the staff throughout the year.

- **Student Government (ASB)** Grades 9 – 12

This course affords student body members experience as student leaders. Through guidance, training, experience planning, organizing, and executing a variety of school activities, community service projects, and practical experiences in student government and democratic leadership, these students will grow as leaders of their school and community.

Recommendations: Elected as an Associated Student Body officer, a class officer, or selected by the ASB Executive Council as an appointed officer.

- **Yearbook** Grades 9 – 12

A class dedicated to planning and producing the La Jolla High School yearbook. Students will learn all facets of publication, including layout, timelines, finances, and the like.

Recommendations: A 3.0 GPA or better, and teacher and/or counselor recommendation.

SAN DIEGO MESA COLLEGE COURSES

The following courses are offered by the San Diego Community College District made available to select students. These are university-level courses and receive college credit. [See catalog: www.sdmesa.edu/academics/courses for course descriptions.] Students not meeting the one-year residency requirement will have to pay out-of-state fees to the community college. No exceptions!

A grade of C or better required to meet SDUSD graduation requirement.

Each semester of coursework awards two high school graduation credits, unless otherwise indicated.

- **MESA COLLEGE INTRODUCTION to BUSINESS 100 (Fall)** Grade 11-12 **3 units** [UC] [CSU]

This one semester introductory course for both business and non-business majors provides a broad understanding of the business community, including how culture; society; economic systems; legal, international, political, and financial institutions; and human behavior interact to affect a business organization's policies and practices within the U.S. and a global society. Topics include business functions and terminology; organizational structure and design; leadership; human resource management; organized labor practices; marketing; organizational communication; technology; entrepreneurship; legal, accounting, and financial practices; the stock and securities market; and occupational choices. This course is intended for students majoring in Business or anyone interested in the function and role of the business community. This course is paired with Mesa Math 119/ Statistics for semester 2.

Recommendations: Counselor Approval.

- **MESA COLLEGE STATISTICS MATH 119 (Spring)** Grade 11-12 **3 units** [UC] [CSU]

This one semester course covers descriptive and inferential statistics. The descriptive portion analyzes data through graphs, measures of central tendency and dispersion. The inferential statistics portion covers statistical rules to compute basic probability, including binomial, normal, Chi-squares, and T-distributions. This course also covers estimation of population parameters, hypothesis testing, linear regression, correlation and ANOVA. Emphasis is placed on applications of technology, using software packages, for statistical analysis and interpretation of statistical values based on data from disciplines including business, social sciences, psychology, life science, health science and education. This course is paired with Mesa Introduction to Business 100.

Recommendations: Counselor Approval

- **MESA COLLEGE INTRODUCTION to MARKETING 100 (Fall)** Grade 11-12 **3 units** [UC] [CSU]

This course is an overview of the foundations, principles, processes, and goals of marketing. Topics include ethics and social responsibility; global marketing and world trade; corporate marketing strategies; and emerging technologies. Marketing strategies include product planning, development, pricing, distribution, and promotion. This course is intended for students majoring in business or others working in a business environment such as managers and supervisors. This course is paired with Mesa Oral Communications 103.

Recommendations: Counselor Approval.

- **MESA COLLEGE ORAL COMMUNICATIONS 103 (Spring)** Grade 11-12 **3 units** [UC] [CSU]

This course is an introduction to speechmaking. Emphasis is placed on the skills required to organize and deliver a variety of speeches. Students give several speeches with and without visual aids. This course is paired with Mesa Introduction to Marketing 100.

Recommendations: Counselor Approval

- **MESA COLLEGE ENGLISH 101 (Fall)** Grade 12 **3 units** [UC] [CSU]

This one semester course is designed for transfer-level students or for those who want to develop competence in college level reading and composition. Students read, analyze, discuss and think critically using a variety of works and sources. Based on these activities, students write essays, fully documented research projects, and other types of texts for various purposes and audiences. This written work, which demonstrates effective, logical, and precise expression of ideas, totals at least 6,000 graded words. Designated sections of this course may be taught from a specific cultural perspective.

English 101 fulfills the senior-year high school English requirement. Paired with Mesa English 205.

Recommendations: Counselor Approval.

- **MESA COLLEGE ENGLISH 205 (Spring)** Grade 11-12 **4 units** [NON TRANSFERABLE]

This one semester intermediate-level college reading and writing course uses the principles of rhetoric to build research and critical thinking skills required for success at four-year institutions. Emphasis is placed on reading, evaluating and writing argumentative prose. Students locate, evaluate and integrate outside sources into their writing assignments, which total at least 8,000 words for the semester. This course is intended for students majoring in English and all students interested in improving critical thinking and writing skills. Paired with Mesa English 101.

Recommendations: Counselor Approval.

- **MESA COLLEGE MATH 150 CALCULUS WITH ANALYTIC GEOMETRY I (Fall)**

Grades 11-12 **5 units** [UC][CSU]

This course is an introduction to university-level calculus requiring a strong background in algebra and trigonometry. The topics of study include analytic geometry, limits, differentiation and integration of algebraic and transcendental functions, and applications of derivatives and integrals. Emphasis is placed on calculus applications involving motion, optimization, graphing, and applications in the physical and life sciences. This course incorporates the use of technology. Analytical reading and problem solving are strongly emphasized in this course. This course is intended for students majoring in mathematics, computer science, physics, chemistry, engineering, or economics.

Recommendations: A passing grade in Pre-Calculus or Honors Pre-Calculus. Must also qualify by examination.

- **MESA COLLEGE MATH 151 CALCULUS WITH ANALYTIC GEOMETRY II (Spring)**

Grades 11-12 **4 units** [UC][CSU]

This is the second course in the calculus and analytic geometry sequence. This course covers more advanced topics in analytic geometry, differentiation and integration of algebraic and transcendental functions, infinite series, Taylor series, and parametric equations. This course also covers a general introduction to the theory and applications of power series, techniques of integration, and functions in polar coordinates, as it serves as a basis for multivariable calculus and differential equations, as well as most upper division courses in mathematics and engineering. This course is intended for the transfer student planning to major in mathematics, computer science, physics, chemistry, engineering or economics.

Recommendations: Successful completion of Math 150.

- **MESA COLLEGE MATH 254 (INTRO TO LINEAR ALGEBRA) (Fall)** Grades 11-12

3 units [UC][CSU]

This course serves as an introduction to the theory and applications of elementary linear algebra, and is the basis for most upper division courses in mathematics. The topics covered in this course include matrix algebra, Gaussian Elimination, systems of equations, determinants, Euclidean and general vector spaces, linear transformations, orthogonality and inner product spaces, bases of vector spaces, the Change of Basis Theorem, eigenvalues, eigenvectors, the rank and nullity of matrices and introduction to linear transformations. This course is intended for the transfer student planning to major in mathematics, physics, engineering, computer science, operational research, economics, or other sciences.

Recommendations: Successful completion of Math 150-151. Students must also qualify by examination.

- **MESA COLLEGE MATH 245 (DISCRETE MATH) (Spring)** Grades 11-12

3 units [UC][CSU]

This course is an introduction to the theory of discrete mathematics and introduces elementary concepts in logic, set theory, and number theory. The topics covered include propositional and predicate logic, methods of proof, set theory, Boolean algebra, number theory, equivalence and order relations, and functions. This forms a basis for upper division courses in mathematics and computer science, and is intended for the transfer student planning to major in these disciplines.

Recommendations: Successful completion of Math 254.

- **MESA COLLEGE POLITICAL SCIENCE 101 (Fall)** Grade 12 **3 units** **[UC][CSU]**

This course is an introduction to the field of Political Science. Emphasis is placed on the concepts and methodologies used in the study of political institutions, political participation, public opinion, and the international political system. Topics include a survey of political theory and the history of American political ideology and culture. Paired with Mesa Poli 102.

- **MESA COLLEGE POLITICAL SCIENCE 102 (Spring)** Grade 12 **3 units** **[UC][CSU]**

This comprehensive survey course provides an in-depth study of the American political system. National and California systems of government are studied from the perspective of constitutional frameworks and political institutions, processes, issues, and policies. Other topics include political participation; political parties and interest groups; social movements and minorities; civil liberties; and the role of political ideology, culture, and the mass media in shaping public opinion and policymaking. This course is intended for transfer students, political science majors, or students interested in the American political system.

Recommendations: A grade of A in advanced social studies classes and advanced English, and/or teacher/counselor recommendation.