



Newark Memorial High School

Course Catalog 2026-2027



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CONTACT INFORMATION

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STUDENT ACTIVITIES	Ms. Sara Canales, Activities Director	818-4334
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COLLEGE & CAREER CENTER	Mr. Jonathan Nguyen	818-4332

SCHOLASTIC INFORMATION

ACADEMIC/CAREER PLANNING SERVICES

Academic counselors assist students in long-range academic planning. They ensure that students are placed in appropriate courses related to their interests, ability, and achievement. Counselors monitor students' progress toward graduation and keep parents/guardians informed of their student's progress.

Additionally, they provide parents/guardians with information on professional programs designed to help students whose problems are beyond the scope of the school counselor.

CHANGING OR WITHDRAWING FROM A CLASS

Schedule changes *may* be considered for the following reasons *only*:

- To add a graduation requirement
- To add a college entrance requirement
- To add a missing class
- To delete a class already passed
- To correct an incorrect placement
- **NO CHANGES WILL BE MADE AFTER TWO WEEKS INTO THE SEMESTER WITHOUT ADMINISTRATIVE APPROVAL**
- A year-long course is a year-long commitment
- No requests will be honored to change teachers/periods for any reason
- In order to request a schedule change, students must submit the google form at the beginning of the school year.
- Students cannot drop an AP course without Administrative approval

CONSEQUENCES OF CHANGING OR WITHDRAWING FROM A CLASS

A student is enrolled in a class until he or she has been officially changed or dropped. The change is official once the student's teachers and guardians are notified, and until this is done, the student must continue to attend that class. The current grade will carry over to the new class.

A student who stops attending a class from which he/she has not been officially dropped will be marked unexcused as specified by the attendance policy. This may result in a failing grade.

CONSEQUENCES OF POOR ATTENDANCE

Student attendance will be reviewed every grading period to determine continued enrollment in A period courses. Students who have more than 10 negative attendance infractions (unexcused, unverified, and tardies) per grading period will be removed from their A period course and be assigned an alternative course during period 1-6.

COLLEGE & CAREER CENTER SERVICES

The College/Career Center offers resources that assist students in making decisions about careers, colleges, training programs, Mission Valley ROP, and military services. Assistance is also available regarding college and career testing, youth employment, financial aid, and scholarships.

NMHS GRADUATION REQUIREMENTS

~ APPROVED BY THE NUSD BOARD OF EDUCATION ~

Students must earn a D- or higher to receive credits.

SUBJECT AREA	YEARS	CREDITS
English Language Arts	4 years	40 credits
Mathematics	3 years courses must be at the Algebra 1 level or higher	30 credits
Science	2 years 1 year of Life Science 1 year of Physical Science	20 credits
Social Science	3 years	30 credits
World Language	2 years	20 credits
Visual or Performing Arts	1 year	10 credits
Physical Education	2 years	20 credits
Electives		60 credits
		230 TOTAL CREDITS

UNIVERSITY OF CALIFORNIA & CALIFORNIA STATE UNIVERSITY REQUIREMENTS & RECOMMENDATIONS

Students must earn a C- or higher to be “a-g” eligible.

Subject Area “a-g”	UC/CSU minimum requirements must have a C- grade or higher	UC/CSU recommendations
History / Social Science “a”	2 years	2 years
English “b”	4 years	4 years
Mathematics “c”	3 years	4 years
Laboratory Science “d”	2 years Physical Lab Science and Life Lab Science	3 years
Language other than English “e”	2 years Must be the same language	3 years
Visual or Performing Arts “f”	1 year	1 year
College-Preparatory Electives “g”	1 year	1 year

** Refer to departments for approved UC/CSU “a-g” course offerings.*

ADVANCED PLACEMENT (AP[®]) PROGRAM INFORMATION

Per the Advanced Placement Policy at Newark Memorial High School students must consent to the following agreements. The following agreements apply to both students and parents/guardians:

- I understand that this is a college course with college-level expectations, and I understand that my work will be held to a college-level standard.
- I understand that I will have tutoring available to me for support during the tutorial period.
- I understand that my Advanced Placement teacher can require that I attend a tutorial period at any time for support if my AP grade drops or I have low test scores.
- Enrolling in an Advanced Placement course is a commitment. Be mindful of the number of AP courses students register for.
- Students who sign up for these courses **will not** be allowed class changes.
- The objective of the Advanced Placement course is to prepare students for college-level work. Students enrolled in AP classes are encouraged, but not required, to take AP exams.
- Advanced Placement courses have a demanding curriculum, homework, a fast-paced learning schedule, and will expose students to college-level learning opportunities.
- Advanced Placement students need to attend class regularly; missing class only in cases of personal illness, family or personal emergencies, or events that cannot be arranged outside school time.
- I understand that this class fills a graduation or elective requirement and I may be credit deficient should I fail the course.

COURSE OFFERINGS BY DEPARTMENT

ENGLISH LANGUAGE ARTS DEPARTMENT

9th Grade	10th Grade	11th Grade	12th Grade
English 1	English 2	English 3	English 4 ERWC
English 1 Accelerated	English 2 Accelerated	AP [®] English Language & Composition	AP [®] English Literature & Composition
English 1 Puente	English 2 Puente	AP [®] English Language & Composition	AP [®] English Literature & Composition

→ Suggested Course Pathways

English 1

Grade: 9 1 Year **UC/CSU approved “b” course**

Course #1004 Credits: 10

Recommended: Completion of Grade 8 Language Arts

Description: In this first year of high school English, students will continue to develop their skills in reading, writing, spelling, grammar, listening, speaking and research. Writing emphasis will be on the development of essays, emphasizing organization of ideas, and correct usage of grammar and punctuation. Students will sharpen their reading skills by studying core literature works and non-fiction articles.

English 1 Puente

Grade: 9 1 Year **UC/CSU approved “b” course**

Course #1026 Credits: 10

Recommended: Completion of Grade 8 Language Arts

Description: In this first year of Puente English, students will continue to develop their skills in reading, writing, spelling, grammar, listening, speaking and research. Writing emphasis will be on the development of essays, emphasizing purposeful word choice, organization of ideas, and correct usage of grammar and punctuation. Students will prepare for college-level reading by studying core literature works, non-fiction articles, and literature by Latino writers and other writers from a variety of backgrounds. The year ends with student presentations of writing portfolios. Students are expected to complete community service hours in and out of school.

English 1 Accelerated

Grade: 9 1 Year **UC/CSU approved “b” course**

Course #1014 Credits: 10

Recommended: Completion of Grade 8 Language Arts

Description: This course meets all standards for English 1 with more emphasis on vocabulary development. This course is designed to prepare students to enter AP English in their junior and senior years. To be successful in this course, students need to be self-motivated, willing to read from the recommended summer reading list, and capable of managing the rigorous independent reading and writing required during the school year. Students will read several whole works of literature combined with non-fiction articles, compose genre-based writing pieces, and learn the correct use of grammar and vocabulary.

English 2

Grade: 10 1 Year **UC/CSU approved “b” course**

Course #1023 Credits: 10

Recommended: Completion of English 1

Description: In this course, the student will continue to develop an understanding of the structures, motifs, and world views with attendant similarities and differences of the basic literary genres. Works will be chosen from world literature. Students will continue to develop their skills in reading, writing, spelling, grammar, listening, speaking and research. In composition, the students will write essays of different genres, emphasizing purposeful word choice, sentence structure, and correct usage of grammar and vocabulary. This course builds on the strong academic foundation and skills for effective communication addressed in English 1.

English 2 Puente

Grade: 10 1 Year **UC/CSU approved “b” course**

Course #1027 Credits: 10

Recommended: Completion of English 1 Puente

Description: In this second year of Puente English, students will begin by completing summer reading assignments. Students continue to develop their skills in reading, writing, spelling, grammar, listening, speaking, and research. Writing emphasis will be on the development of different genres, emphasizing the writer’s voice, purposeful word choice and sentence structure, and correct usage of grammar and punctuation. Students will prepare for college-level reading by studying core literature works, non-fiction articles, and literature by Latino writers and other writers from a variety of backgrounds. The year ends with student presentations of writing portfolios. Students are expected to complete community leadership projects outside of school.

English 2 Accelerated

Grade: 10 1 Year **UC/CSU approved “b” course**

Course #1024 Credits: 10

Recommended: Completion of English 1

Description: This course meets all standards for English 2, but is more rigorous and fast-paced. This course is designed to prepare students to enter AP English in their Junior and Senior years. To be successful in this course, students need to be self-motivated, willing to read from the recommended summer reading list, and capable of managing the rigorous independent reading and writing required during the school year. The course incorporates the reading of fiction and nonfiction. Writing emphasis will be on different genres. Students will continue to develop their vocabulary and correct usage of grammar and punctuation.

English 3

Grade: 11 1 Year **UC/CSU approved “b” course**

Course #1033 Credits: 10

Recommended: Completion of English 2

Description: This course offers students the opportunity to develop an awareness and understanding of the American literary tradition. Students will also receive help in the development of their reading and writing skills in this literature-centered course. They will also learn research and presentation skills, continue their acquisition of vocabulary, and improve grammatical usage. Students will read and study specific works of American literature. When possible, teachers will select materials from the historical period students are studying in U.S. History.

Advanced Placement English Language and Composition

Grade: 11 1 Year **UC/CSU approved “b” course**

Course #1036 Credits: 10

Recommended: Completion of English 2

Description: Advanced Placement English Language and Composition

Description: This course meets all standards for English 3, but it is more rigorous and fast-paced. This course is comparable to a freshman English college course on reading (fiction and nonfiction), writing (mainly argumentative and expository), and independent research. Students enrolled in this class are advised that readings and/or assignments assigned over the summer are required. It is recommended that students check with the course instructor to determine if summer work is assigned. Students enrolled in this class are encouraged to take the AP test in May.

English 4 ERWC

Grade: 12 1 Year **UC/CSU approved “b” course**

Course #1044 Credits: 10

(Course # 1047 for A-period)

Recommended: Completion of English 3

Description: This course heavily emphasizes the study of English literature, but draws on world literature as well. Units of instruction may be thematic or organized chronologically, drawing attention to recurring themes. Students will write on fiction and nonfiction readings. Students will continue to develop writing, presentation, and research skills, with the course especially emphasizing on preparing students for beginning college writing classes.

Advanced Placement English Literature and Composition

Grade: 12 1 Year **UC/CSU approved “b” course**

Course #1046 Credits: 10

Recommended: Completion of English 3

Description: This course includes all standards for English 4, but is more rigorous and fast-paced. This course is comparable to a Freshman English college course in reading (mainly fiction and some nonfiction), writing (all genres), and independent research. Students enrolled in this class are encouraged to take the AP test. Students registering for Advanced Placement courses are advised that summer readings or assignments are required. It is recommended that students check with the course instructor to determine if summer work is assigned.

Advanced Journalism (Yearbook)Grades: 9-12 1 Year **UC/CSU approved “g” course**

Course #9183 Credits: 10 - Elective

Description: This course is designed to give students a comprehensive view of the world of publication. Students will develop skills in layout, copywriting and proofreading, picture copying, advertising, and photography in relation to publishing. After school and weekend participation may be required to meet publication deadlines.

ENGLISH LANGUAGE DEVELOPMENT DEPARTMENT

English Language Development (ELD) classes, for students whose first language is one other than English, develop skills in listening, speaking, reading, and writing in a comprehensive program structured on state standards. Placement is based on the English Language Proficiency Assessments for California (ELPAC) scores as well as by recommendation of the ELD instructors. Students who are designated English learners must be enrolled in ELD courses in the state of California.

ELD Beginning B

Grades: 9-12 1 Year

Course #4521 Credits: 10

Description: This beginner course focuses on foundational English skills in grammar writing. This course will help students who are new to the country and are just learning English for the first time. Students in this class scored a 1 or Beginning, on the ELPAC exam. Students will be instructed in the rules of English grammar. They will write sentences, paragraphs, and basic essays.

ELD Intermediate B

Grades: 9-12 1 Year

Course #4531 Credits: 10

Description: This intermediate course focuses on emerging English skills in grammar and writing. This course is designed for students who have some knowledge of English but who may not be ready for the language intensity of a college preparatory level course. Students in this class previously took ELD Beginning B and scored a 2 or 3 on the ELPAC exam. This course continues the instruction started in ELD Beginning B by teaching students more complex grammatical forms. Students will also write in increasingly challenging, academic formats such as essays, and presentations, with an awareness of different writing genres, with the goal of writing at grade level. ELD Intermediate A and B must be taken together.

Advanced ELDGrades: 9-12 1 Year **UC/CSU approved “b” course**

Course #4540 Credits: 10 - Elective

Description: This advanced course focuses on academic English skills in reading, grammar, and writing. Students in this class previously took ELD Intermediate A & B, or fine arts and ELD Advanced writing, and scored a 3 or 4 on the ELPAC exam. This course continues instruction in challenging grammatical

structures, reading strategies, and writing formats in order to help support students in their college-preparatory English course. Advanced ELD must be taken along with English at the student's grade level.

MATHEMATICS DEPARTMENT

9th Grade	10th Grade	11th Grade	12th Grade
Algebra 1	Geometry	Algebra 2	AP [®] Precalculus <i>or</i> Transitions to College Mathematics <i>or</i> AP [®] Statistics
Algebra 1	Blended Geometry/Algebra 2	Blended Algebra 2/Precalculus	Transitions to College Mathematics <i>or</i> AP [®] Calculus AB <i>or</i> AP [®] Calculus BC <i>or</i> AP [®] Statistics <i>or</i> AP [®] Computer Science A
Geometry	Algebra 2	AP [®] Precalculus <i>or</i> AP [®] Statistics	
Blended Geometry/Algebra 2	Blended Algebra 2/Precalculus	AP [®] Calculus AB <i>or</i> AP [®] Calculus BC <i>or</i> AP [®] Statistics <i>or</i> AP [®] Computer Science A	

→ Suggested Course Pathways

Algebra 1

Grades: 9-10 1 Year **UC/CSU approved “c” course**

Course #2250 Credits: 10

Description: Algebra 1 is a common core-based course that focuses on four critical areas: (1) deepen and extend understanding of linear and exponential relationships; (2) contrast linear and exponential relationships with each other and engage in methods for analyzing, solving, and using quadratic functions; (3) extend the laws of exponents to square and “cube roots; and (4) apply linear models to data that exhibit a linear trend.

Geometry

Grades: 9-11 1 Year **UC/CSU approved “c” course**

Course #2251 Credits: 10

Recommended: Completion of Algebra 1

Description: Geometry is a common core-based course that focuses on six critical areas: (1) establish criteria for congruence of triangles based on rigid motions; (2) establish criteria for similarity of triangles based on dilations and proportional reasoning; (3) informally develop explanations of circumference, area, and volume formulas; (4) apply the Pythagorean Theorem to the coordinate plane; (5) prove basic geometric theorems; and (6) extend work with probability.

Blended Geometry/Algebra 2

Grades: 9-10 1 Year **UC/CSU approved “c” course**

Course #2255 Credits: 10

Recommended: Completion of Algebra 1 with a “C” or better

Description: The focus of the Blended Geometry/Algebra 2 course is to formalize and extend students’ geometric experiences from the middle grades, knowledge of solving quadratic equations to include complex roots, and knowledge of right triangle trigonometry. This is the first year of a two-year Accelerated sequence that will cover our Common Core Geometry, Algebra 2-Trigonometry, and Math Analysis. This Accelerated sequence is a recommendation in the Appendix of the new California State Math Framework.

Algebra 2

Grades: 9-12 1 Year **UC/CSU approved “c” course**

Course #2252 Credits: 10

(Course #2259 for A-period)

Recommended: Completion of Geometry

Description: The Algebra 2 course is a common core-based course that focuses on four critical areas: (1) relate arithmetic of rational expressions to arithmetic of rational numbers; (2) expand understandings of functions and graphing to include trigonometric functions; (3) synthesize and generalize functions and extend understanding of exponential functions to logarithmic functions; and (4) relate data display and summary statistics to probability and explore a variety of data collection methods.

Transition to College Mathematics

Grade: 12 1 Year **UC/CSU approved “c” course**

Course # 2246 Credits: 10

Recommended: Success completion of Algebra 1, Geometry, and Algebra 2

Description: Transition to College Mathematics and Statistics (TCMS) is a fourth-year college preparatory mathematics course developed for students whose intended college course of study does not require calculus. It is designed to help ensure college readiness for students who have successfully completed a study of Algebra 1, Geometry, and Algebra 2. Students will extend their understanding of concepts learned in these previous math courses using an inquiry-oriented and technology-rich approach to real-life applications. TCMS builds on the theme of mathematics as sense-making. Through investigations of real-life contexts and problems, students will develop a rich understanding of the important mathematics that makes sense to them and that, in turn, enables them to make sense of new situations and problems.

Blended Algebra 2/Precalculus

Grades: 10-11 1 Year **UC/CSU approved “c” course**

Course #2256 Credits: 10

Recommended: Completion of Geometry

Description: This is the second year of a two-year accelerated sequence encompassing all the standards in Geometry, Algebra 2 and Math Analysis. This course will cover 7 critical focus areas: 1) the complex number system, 2) vector and matrix quantities, 3) seeing structure in expressions, 4) reasoning with equations and inequalities, 5) interpreting functions, 6) building functions, and 7) statistics and probability. This accelerated sequence is a recommendation in the Appendix of the new California State Math Framework. Students who are successful in this course will be prepared for AP Calculus AB.

AP Precalculus

Grades: 10-12 1 Year **UC/CSU approved “c” course**

Course #2354 Credits: 10

Recommended: Completion of Algebra 2

Description: This course is designed to prepare students for rigorous university level course work. The course will cover the same standards as Course #2257, but at an advanced level. Students will be expected to do original higher-level thinking on assignments, as well as on independent projects.

Advanced Placement Statistics

Grades: 10-12 1 Year **UC/CSU approved “c” course**

Course #2280 Credits: 10

Recommended: Completion of Algebra 2

Description: This course introduces students to the major concepts and tools of collecting, analyzing, and drawing conclusions from data. Four broad conceptual themes will be introduced: (1) exploring data, (2) planning a study, (3) anticipating patterns, and (4) statistical inference.

Advanced Placement Calculus AB

Grades: 11-12 1 Year **UC/CSU approved “c” course**

Course #2262 Credits: 10

Recommended: Completion of Precalculus

Description: This course teaches material traditionally covered in Calculus 1 and 2 at the university level and prepares students to take the AP Calculus (AB) exam in May. Topics include the elements of analytic geometry, limits and continuity, differentiation, and integration of algebraic, logarithmic, exponential, and trigonometric functions, and the applications of derivatives and integrals. Students are encouraged to take the AP exam.

Advanced Placement Calculus BC*

Grades: 11-12 1 Year **UC/CSU approved “c” course**

Course #2263 Credits: 10

Recommended: Completion of Advanced Placement Calculus AB

Description: This course is a rigorous, college-level calculus course. Topics covered focus on advanced techniques and applications of differentiation and integration including work with functions given in polar, parametric, and vector form, rigorous analysis of limits and integration, and study of sequences/series and

Taylor series/polynomials. This class is designed to thoroughly prepare students for the Advanced Placement Calculus (BC) exam in the spring and also covers additional topics from a traditional 1st- and 2nd- semester university calculus course. Although taking the AP exam is not mandatory, it is strongly encouraged.

****Can possibly be converted into an Ohlone College Dual Enrollment course pending placement of an Ohlone Instructor at Newark Memorial High School***

Advanced Placement Computer Science A

Grades: 10-12 1 Year **UC/CSU approved Computer Science “c” course**

Course #2266 Credits: 10

Recommended: Successful completion of Algebra 1

Description: AP Computer Science A requires the solution of problems written in the Java programming language and includes a lab component to engage students in individual and group problem-solving. AP Computer Science A addresses the main goals of an introductory, college-level computer science programming course, specifically: (1) program design and algorithm development, (2) code logic, (3) code implementation, (4) code testing, (5) documentation, and (6) ethical computing. This course is intended to be complementary to Computer Science Principles.

SCIENCE DEPARTMENT

9th Grade	10th Grade	11th Grade	12th Grade
NGSS Biology	Chemistry in the Earth System, or Pre-AP [®] Chemistry, or AP [®] Physics 1	Anatomy & Physiology, or AP [®] Physics 1, or AP [®] Biology, or AP [®] Computer Science Principles, AP Environmental Science	Anatomy & Physiology, or AP [®] Physics 1, or AP [®] Biology, or AP [®] Computer Science Principles, AP Environmental Science

→ Suggested Course Pathways

NGSS Biology

Grades: 9-12 1 Year **UC/CSU approved “d” course**

Course #3321 Credits: 10 - Life Science

Description: This course is designed for college/career readiness, as well as high school graduation. An introductory biology course designed to understand multiple topics: cell structure and function, chemistry, cell division, cell replication, molecular genetics, Mendelian genetics, evolution, plant and animal systematics, and ecology. Recommendation for successful completion: Good homework practices, study habits, and oral and written communication skills.

Chemistry in the Earth System

Grades: 10-12 1 Year **UC/CSU approved “d” course**

Course #3322 Credits: 10 - Physical Science

(Course #3358 for A-period)

Recommended: Completion of NGSS Biology

Description: This course is the college prep chemistry course and is a prerequisite for AP Biology. It is designed for students intending to major in science, technology, math or engineering at the college level.

Pre-AP Chemistry

Grade: 10-11 1 Year **UC/CSU approved “d” course**

Course #3361 Credits: 10 - Physical Science

Recommended: Completion of NGSS Biology

Description: Pre-AP Chemistry is an intensive math-based Chemistry course that covers many of the same topics as Chemistry in greater depth. Special emphasis is placed on a rigorous mathematical examination of chemical principles. Topics include atomic structure, periodicity, bonding, states of matter, chemical reactions, stoichiometry, thermodynamics, acids and bases, kinetics, equilibria, redox reaction, and electrochemistry. Both qualitative and quantitative aspects of chemical behavior are studied in depth. Critical thinking and problem-solving are addressed on a daily basis. The content and pace of the course are consistent with preparing students for AP Chemistry or any other AP science class

Anatomy and Physiology

Grade: 11-12 1 Year **UC/CSU approved “d” course**

Course #3356 Credits: 10 - Life Science

Recommended: Completion of NGSS Biology and Chemistry in the Earth System

Description: Covers the basics of human anatomy and physiology including anatomical terminology, basic biochemistry, cells and tissues, and the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic/immune, respiratory, digestive, urinary, and reproductive systems. Introduces common human disease processes. Prepares non-science majors and allied-health profession students to take advanced anatomy and physiology courses.

Advanced Placement Biology

Grade: 11-12 1 Year **UC/CSU approved “d” course**

Course #3359 Credits: 10 - Life Science

Recommended: Completion of NGSS Biology and Chemistry in the Earth System

Description: Topics cover: Molecules and Cells, Heredity and Evolution, and Organisms and Populations. The primary emphasis in this AP course should be on developing and understanding concepts rather than accumulation of facts; personal experience in scientific inquiry; recognition of unifying themes that integrate the major topics in biology; an application of biological knowledge and critical thinking to environmental and social concerns.

Advanced Placement Computer Science Principles

Grades 10-12 1 Year **UC/CSU approved Computer Science “d” course**

Course #2265 Credits: 10 - Elective

Recommended: Completion of Algebra 1. Note: no previous programming experience is required or expected).

Suggested: Completion of Algebra 2

Description: AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles will give students the opportunity to use technology to address real-world problems and build relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science. This course is appropriate for beginners in programming as well as for students with previous experience.

Advanced Placement Environmental Science

Grade: 10-12 1 Year **UC/CSU approved Interdisciplinary “d” course**

Course #3435 Credits: 10 - Elective

Recommended: Completion of NGSS Biology and Algebra 1

Description: AP Environmental Science is a year-long science course incorporating laboratory activities, virtual activities, short-term projects, long-term studies, field investigations, and the use of technology for data gathering. Lab, field, and virtual experiences are intended to provide students with opportunities to relate classroom concepts to real-world applications of environmental science. Through these experiences, students will be recording data, gathering evidence, and presenting it to their peers verbally and in writing in various formats.

Students will be able to explore specific real-world environmental issues and gain an awareness of the science behind these issues. Students will explore the impact of our growing human population and understand that they have a stake in the future of the environment.

Advanced Placement Physics 1*

Grade: 11-12 1 Year **UC/CSU approved “d” course**

Course #3362 Credits: 10 - Physical Science

Recommended: Concurrent enrollment in Algebra 2 or higher math course

Description: AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits.

***Some colleges and universities may require Chemistry as a physical science for admissions purposes**

SOCIAL SCIENCE DEPARTMENT

9th Grade	10th Grade	11th Grade	12th Grade
<i>no required course</i>	World History	US History	Govt. & Economics*
AP® Human Geography	World History or AP® World History or	US History or AP® US History	Govt. & Economics* or AP® US Govt. & Economics*

→ *Suggested Course Pathways*

*12th grade students must take one semester of Government and one semester of Economics.

AP Human Geography

Grade: 9-12 1 Year

UC/CSU approved “a” course

Course #5187

Credits: 10 - Elective

Description: AP Human Geography is an introductory college-level human geography course. Students cultivate their understanding of human geography through data and geographic analyses as they explore topics like patterns and spatial organization, human impacts and interactions with their environment, and spatial processes and societal changes. The course focuses on topics including thinking geographically, population and migration, culture, political geography, agriculture, urban geography, and development and industrialization. Students have multiple opportunities to apply the information addresses in each unit in activities including note-taking, current events, projects, and formative and summative assessments.

World History

Grade: 10

1 Year

UC/CSU approved “a” course

Course #5141

Credits: 10

Description: The tenth-grade course covers a period of more than 250 years and highlights the intensification of truly global history as people, products, diseases, knowledge, and ideas spread around the world as never before. The course begins with a turning point: the important transition in European systems of governance from monarchy to a modern definition of a nation-state organized around the principles of the Enlightenment. The course ends with the present, providing ample opportunities for teachers to make connections to the globalized world in which students live. As students move through the years 1750 through the present, they consider how a modern system of communication and exchange drew peoples of the world into an increasingly complex network of relationships in which Europe and the United States exerted great military and economic power. They explore how people, goods, ideas, and capital traveled throughout and between Asia, Africa, the Americas, and Europe. They analyze the results of these exchanges. The ability to see connections between events and larger social, economic, and political trends

may be developed by having students consider the most fundamental changes of all time.

Advanced Placement World History

Grade: 10 1 Year **UC/CSU approved “a” course**
Course #5242 Credits: 10

Description: Students will study the history of the world using historical thinking concepts. The course will cover the five major regions of the world: The Americas, Europe, Africa, Asia, and Oceania. Students will be introduced to the Key Concepts of World History as outlined by the College Board as they relate to the five Thematic Learning Objectives: 1) Interaction Between Humans and the Environment, 2) Development and Interaction of Cultures, 3) State Building, Expansion, and Conflict, 4) Creation, Expansion, and Interaction of Economic Systems, and 5) Development and Transformation of Social Structures.

United States History

Grades: 11 1 Year **UC/CSU approved “a” course**
Course #5152 Credits: 10
(Course #5154 for A-period)

Description: In this course, students examine major developments and turning points in American history from the late nineteenth century to the present. During the year, the following themes are emphasized: the expanding role of the federal government; the emergence of a modern corporate economy and the role of organized labor; the role of the federal government and Federal Reserve System in regulating the economy; the impact of technology on American society and culture; changes in racial, ethnic, and gender dynamics in American society; the movements toward equal rights for racial, ethnic, religious, and sexual minorities and for women; and the rise of the United States as a major world power. As students survey nearly 150 years of American history, they learn how geography shaped many of these developments, especially in terms of the country’s position on the globe, its climate, and abundant natural resources. In each unit, students examine American culture, including religion, literature, art, music, drama, architecture, education, and the mass media.

Advanced Placement United States History

Grades: 11 1 Year **UC/CSU approved “a” course**
Course #5155 Credits: 10

Description: AP U.S. History is designed to be the equivalent of a two-semester introductory college or university U.S. history course. In AP U.S. History students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, continuity and change over time. The course also provides seven themes that students explore throughout the course in order to make connections among historical developments in different times and places: American and national identity; migration and settlement; politics and power; work, exchange,

and technology; America in the world; geography and the environment; and culture and society.

United States Government

Grades: 12 1 Semester **UC/CSU approved “a” course**

Course #5162 Credits: 5

Description: In this course, students apply knowledge gained in previous years of study to pursue a deeper understanding of American government. Although this course is traditionally taught for a semester, given the importance and breadth of this content area, teachers may want to expand it into a yearlong course. Students consider the role and necessity of the government as they think about How much power should the government have over its citizens? Do they consider how the government can attain goals sanctioned by the majority while protecting its citizens from the abuse of power by asking What are the trade-offs between majority rule and the protection of individual rights? They will review and expand their knowledge of the key elements of a representative form of democracy, such as the idea that the authority to govern resides in its citizens. Their study will be grounded in the understanding that all citizens have certain inalienable rights such as due process, what to believe, and where and how to live. This course is the culmination of the civic literacy strand of history–social studies that prepares students to vote and to be informed, skilled, and engaged participants in civic life.

Economics

Grades: 12 1 Semester **UC/CSU approved “g” course**

Course #5174 Credits: 5

Description: The Economics course provides an introduction to the two sides of economic theory: microeconomics and macroeconomics. Microeconomics deals with issues of production, supply, and demand, the pricing of goods and services, and factors that influence the means of production. Macroeconomics addresses nationwide economic policy, which is broken into two elements: fiscal policy (spending and saving) and monetary policy (issuance of money and setting of interest rates). Students will address current, real-world issues to understand how these economic theories affect their lives. In addition, students will learn basic life skills related to cash management, investment, and borrowing. Students will master fundamental economic concepts, applying the tools (graphs, statistics, equations) from other subject areas to the understanding of operations and institutions of economic systems. Studied in a historic context are the basic economic principles of micro- and macroeconomics, international economics, comparative economic systems, measurement, and methods.

Advanced Placement United States Government and Politics (Semester 1) & Economics (Semester 2)

Grades: 12 2 Semesters **UC/CSU approved “a” course for AP Gov’t**
UC/CSU approved “g” course for Economics

Course AP US Gov Course #5164 Economics Course #5174

Credits: 5 credits per course

Description: AP U.S. Government and Politics is a college-level year-long course that not only seeks to prepare students for success on the AP Exam in May but also provides students with the political knowledge and reasoning processes to

participate meaningfully and thoughtfully in discussions and debates that are currently shaping American politics and society. It is important to note that this course is not a history course; it is a political science course that studies the interconnectedness of the different parts of the American political system and the behaviors and attitudes that shape this system and are the byproduct of this system. AP U.S. Government and Politics accomplishes these goals by framing the acquisition of political knowledge around enduring understandings and big ideas about American government and politics that can be applied to a set of disciplinary practices through the use of a set of reasoning processes. Through the development of this set of political knowledge, disciplinary practices, and reasoning processes, by the end of the course, students will be able to analyze current and historical political events like a political scientist and develop factually accurate, well-reasoned, thoughtful arguments and opinions that acknowledge and grapple with alternative political perspectives. Students enrolled in this class are encouraged to take the AP test in May.

Psychology 1 & 2

Grades: 11-12 1 Year **UC/CSU approved “g” course**

Course #5086 Credits: 10 - Elective

Description: The student studies how personality is developed, why we behave the way we do, hypnosis, better ways of learning, and psychological testing. The course is taught using small group discussions, films, and practical experiences.

Advanced Placement Psychology

Grades: 11-12 1 Year **UC/CSU approved “g” course**

Course #5088 Credits: 10 - Elective

Description: The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. The Advanced Placement Program offers a course and exam in psychology to qualified students who wish to complete studies in secondary school equivalent to an introductory college course in psychology. The exam presumes at least one semester of college-level preparation.

Ethnic Studies

Grade: 9-12 1 Year **UC/CSU approved “g” course**

Course #5347 Credits: 10 - Elective

Description: This introductory course to Ethnic Studies will use an interdisciplinary approach to analyze the historical and contemporary issues and experiences associated with race, class, and gender in the United States. Topics include: Indigenous, African-American, Latin-American/Raza, Asian American, Filipino, Pacific-Islander, Undocu-Studies, LGBTQ+, women's studies, environmental justice studies, and movements for social justice. The course will offer a critical analysis of political, social, and economic structures to develop consciousness and personal connections to local, national, and global issues. The course will employ a critical lens to view the world and our place in it so that students will use their understanding of systems of power in the United States to become active participants in democracy.

WORLD LANGUAGES DEPARTMENT

The World Languages department seeks to promote the benefits of personal enrichment, career advancements, multicultural awareness, and international understanding enhanced through the study of a world language. The programs are demanding and require a significant amount of self-discipline. Although essential for college-bound students, world language classes are open to all students who are willing to work hard in order to learn how to communicate in a language other than English.

9th Grade	10th Grade	11th Grade	12th Grade
Spanish 1	Spanish 2	Spanish 3	AP [®] Spanish Language and Culture
Spanish 1 for Spanish Speakers	Spanish 2 for Spanish Speakers	AP [®] Spanish Language	AP [®] Spanish Literature and Culture
Spanish 2 for Spanish Speakers	AP [®] Spanish Language	AP [®] Spanish Literature and Culture	<i>No Course Required</i>
French 1	French 2	French 3	AP [®] French Language and Culture

FRENCH

French 1

Grades: 9-12 1 Year **UC/CSU approved “e” course**

Course #4001 Credits: 10

Description: This beginning course in French serves as an introduction to the French language and to the different French-speaking countries throughout the world. Students will develop skills in reading, writing, listening, and speaking, and will focus on basic grammar, the vocabulary of a variety of themes, and numerous verbs in the present tense as well as the past tense. Language topics range from adjectives and describing people and things, expressing one’s interests and hobbies, talking about the weather and places around town, cuisine, school subjects, sports, and more. This course emphasizes communication and learning about cultures and French-speaking communities by making connections and comparisons to our own.

French 2

Grades: 9-12 1 Year **UC/CSU approved “e” course**

Course #4002 Credits: 10

Recommended: Successful completion of French 1

Description: This second-year course in French builds upon the skill sets learned in the beginning year, and takes students through intermediate grammar concepts, new verb tenses, and additional themes covering different aspects of daily life.

Stressing further development of reading, writing, listening, and speaking skills, students will look at themes such as chores and daily routines, health, technology, work and professions, and food. The past tense will be reviewed and students will learn a new past tense, as well as the conditional tense and a variety of new verbs. This course puts an emphasis on communication and exploring French-speaking communities through connections and comparisons to our own language and culture.

French 3

Grades: 10-12 1 Year **UC/CSU approved “e” course**

Course #4003 Credits: 10

Recommended: Successful completion of French 2

Description: The third year of study in French continues an exploration of French-speaking cultures and advances communicative abilities. Students will review important grammar and verbs learned in the beginning two years and also expand their knowledge with new details of the language. Through reading, writing, listening, and speaking, students will be exposed to a variety of themes related to French and francophone cultures and have the opportunity to discuss topics dealing with society, family, science, and leisure, among others. This course focuses on communication and cross-cultural comparisons and connections.

Advanced Placement French Language and Culture

Grades: 11-12 1 Year **UC/CSU approved “e” course**

Course #4014 Credits: 10

Recommended: Successful completion of French 3

Description: The fourth year in the French program is an advanced study of the language and culture. Students will be exposed to a variety of authentic, native-level documents such as newspaper or magazine articles, radio shows, etc. based around the themes of family and the community, science and technology, aesthetics, contemporary life, global challenges, and self-identity. Students focus on refining skills in reading, writing, listening comprehension, and speaking.

SPANISH

Spanish 1

Grades: 9-12 1 Year **UC/CSU approved “e” course**

Course #4201 Credits: 10

Description: This introductory course to world languages provides students with an opportunity to develop basic listening, speaking, reading, and writing skills in Spanish. Functional skills are taught within the cultural contexts of different Spanish-speaking countries throughout the world. Students will learn basic grammar principles and verbs, as well as how to communicate about a variety of topics including school life, family, and describing people, pastimes, sports, travel, weather, and daily routines. This course emphasizes communication and understanding of cultures through comparisons and connections between Spanish-speaking communities and our own.

Spanish for Spanish Speakers 1

Grades: 9-12 1 Year **UC/CSU approved “e” course**

Course #4221 Credits: 10

Recommended: Spanish is the student’s primary language

Description: This first year of Spanish for Spanish Speakers is intended for students who speak Spanish as their primary language. The course is designed to allow students whose primary language is Spanish to develop and enhance proficiency in the language by reinforcing skills in listening, speaking, reading, and writing. Fundamentals of Spanish grammar will be reviewed and an emphasis will be placed on communicative abilities, exploring a variety of themes related to contemporary life across different Spanish-speaking cultures.

Spanish 2

Grades: 9-12 1 Year **UC/CSU approved “e” course**

Course #4202 Credits: 10

Recommended: Successful completion of Spanish 1

Description: The second year in Spanish expands upon the communicative skills gained in the first year and introduces a variety of new themes. Through practiced listening, speaking, reading, and writing, students will learn new grammar and verbs and look at topics such as health, computers, nature, city life, and nutrition. Students continue to study Spanish-speaking cultures from throughout the world and to make comparisons and connections to their own communities.

Spanish for Spanish Speakers 2

Grades: 9-12 1 Year **UC/CSU approved “e” course**

Course #4222 Credits: 10

Recommended: Spanish is the student’s primary language

Description: The second year of Spanish for Spanish Speakers aims to further develop and refine communicative skills for students who speak Spanish as their primary language. Through practice in listening comprehension, speaking, reading, and writing, students will improve upon their grammatical knowledge of the language and study advanced verb forms, expanding on the skills gained in the first year. By studying different Spanish-speaking communities from across the world, students will make connections with their own culture, with an emphasis being placed on communication.

Spanish 3

Grades: 10-12 1 Year **UC/CSU approved “e” course**

Course #4203 Credits: 10

Recommended: Successful completion of Spanish 2

Description: For the third year of study of the Spanish language, students advance their skills in listening comprehension, speaking, reading, and writing. Important grammar concepts from the first two years will be reviewed, and additional details and verbs will be studied. Students will practice communicating about different themes including personality and emotions, music and entertainment, daily life, medicine, technology, and work. This course emphasizes communication and learning about Spanish-speaking cultures from across the globe, aiming to make connections and comparisons with our own communities.

Advanced Placement Spanish Language and Culture

Grades: 10-12 1 Year **UC/CSU approved “e” course**

Course #4244 Credits: 10

Recommended: Successful completion of Spanish 3

Description: This fourth year in Spanish takes students on an advanced study of the language and cultures that speak it. Students work to improve their communicative abilities through a study of authentic, native-level documents from various print materials, radio excerpts and other sources and focus on listening comprehension, speaking, reading, and writing. Topics of discussion cover themes of families and communities, personal and public identities, beauty and aesthetics, science and technology, contemporary life, and global challenges.

Advanced Placement Spanish Literature and Culture

Grades: 11-12 1 Year **UC/CSU approved “e” course**

Course #4205 Credits: 10

Recommended: Successful completion of Advanced Placement Spanish Language and Culture

Description: The fifth year in Spanish is an advanced study of literature in which students work to improve their critical reading and writing skills. A wide range of literature is explored with attention to its historical context, and students will learn about the different cultures represented in the readings and have the opportunity to make connections and comparisons with their own.

FINE ARTS DEPARTMENT

	9th Grade	10th Grade	11th Grade	12th Grade
Traditional Media Pathway	Ceramics 1 or Art 1	<i>no required course</i>	Advanced Ceramics, or Advanced Drawing & Painting	Advanced Ceramics, or Masters Art
Digital Media Pathway	Digital Photography or Media Arts 1	<i>no required course</i>	Digital Photography or Advanced Photography	Masters Art
Drama Pathway	Beginning Acting, Beginning Technical Theater	<i>no required course</i>	Beginning Technical Theater, or Advanced Acting	Advanced Technical Theater
Musical Pathway	Choir, Concert Band	<i>no required course</i>	Choir, Concert Band	Choir, Concert Band

→ *Suggested Course Pathways*

STUDIO ARTS

Art 1

Grades: 9-12 1 Year **UC/CSU approved “f” course**

Course #6620 Credits: 10

Description: In the first semester this course will introduce students to “Elements and Principles of Design,” and the basic and intermediate techniques of image building. In the second semester, the student will continue to refine the foundation skills while investigating new concepts in art. A portfolio will be created and developed. Additionally, students in Art 2 will be introduced to Advanced Color Theory, the practical application of various painting techniques, and skills to create their first painting.

Advanced Drawing & Painting

Grades: 10-12 1 Year **UC/CSU approved “f” course**

Course #6823 Credits: 10

Recommended: Completion of Art 1 & 2

Description: Students will be exposed to new mediums and continue to explore and develop their individual drawing and painting skills. Engraving and Repoussé in copper and/or brass and painting on canvas and/or mylar with acrylics will be additions to their portfolios. Monthly gallery visits will be a requirement for this course.

Masters Art

Grades: 11-12 1 Year **UC/CSU approved “f” course**

Course #6500 Credits: 10

Recommended: Completion of Advanced Drawing & Painting and/or teacher approval

Description: This course provides the Master Student with a one-on-one experience with their chosen Master Teacher to work independently. Students may choose to create a mural for the school or further develop their portfolio for college admissions. Monthly gallery visits are a requirement for this course.

Ceramics 1

Grades: 9-12 1 Year **UC/CSU approved “f” course**

Ceramics 1 Course #6641 Credits: 10

(Course #6643 for A-period)

Description: These classes cover the art of working with clay by teaching the various aspects of making pinch pots, building with coils, and using slab construction. The techniques of decoration, painting, and glazing will be covered as well.

Advanced Ceramics

Grades: 11-12 1 Year **UC/CSU approved “f” course**

Course #6616 Credits: 10

Recommended: Completion of Ceramics 1 & 2

Description: Students will develop advanced skills in 3-dimensional art as they create works for an artist's portfolio. This class is designed for students considering continued study in the arts after high school

Media Arts 1

Grades: 9-12 1 Year **UC/CSU approved “f” course**

Course #6628 Credits: 10

Description: Students will learn the elements of art and principles of design in the context of digital media and entertainment. Students will follow media professionals' steps to create unique media pieces while also learning about the history of the medium. A portfolio will be created by the end of the year.

Digital Photography

Grades: 9-12 1 Year **UC/CSU “f” credit & Mission College Credit**

Course #7630 Credits: 10

Description: ROP Course. The study of digital photography encourages conceptual thinking and creativity. Explore hands-on digital photography fundamentals including Adobe Photoshop, lighting, set design, studio configuration, camera operation, software interfaces, color management, photo editing, and compositing. CTE credits are earned for this course if you pass with a C or better. Mission College credits are earned for this course if you pass with a B or higher and enroll in Mission College.

Advanced Photography

Grades: 10-12 1 Year **UC/CSU approved “f” course**

Course #6634 Credits: 10

Recommended: Completion of Digital Photography 1

Description: Students will continue to develop their technical and conceptual skills in this advanced level course learning more advanced techniques. Students will create a portfolio for exhibitions and competitions.

THEATER ARTS

Beginning Acting

Grades: 9-12 1 Year **UC/CSU approved “f” course**
Course #6649 Credits: 10

Description: This course emphasizes stage actions, movement, improvisation and scene development. Students will develop their own material for a short performance.

Advanced Acting

Grades: 10-12 1 Year **UC/CSU approved “f” course**
Course #6647 Credits: 10

Recommended: Completion of Beginning Acting

Description: This course emphasizes stage actions, movement, scene development, and analytical approach to theater. Students will develop their own material for a longer performance.

Rehearsal and Performance

Grades: 9-12 1 Year **UC/CSU approved “f” course**
Course #6650 Credits: 10

Description: Students will have opportunities to learn many facets of play production and to use their acting and technical skills in several dramatic productions throughout the year. Students audition for specific roles. After-school and weekend participation and performances are required.

Beginning Technical Theater

Grades: 9-12 1 Year **UC/CSU approved “f” course**
Course #6680 Credits: 10

Description: Students will learn basic set design and technical skills such as sound, lighting, and costuming.

Advanced Technical Theater

Grades: 11-12 1 Year **UC/CSU approved “f” course**
Course #6512 Credits: 10

Recommended: Completion of Beginning Technical Theater

Description: Students will design and build sets for theater production. They will also set up and operate lighting, sound, and video for all events in the theater. After school and weekend work is required.

VOCAL MUSIC

Choir

Grades: 9-12 1 Year **UC/CSU approved “f” course**
Course #6661 Credits: 10

Description: An introductory course open to all students. No singing experience is needed. Performances and rehearsals outside of class time are required.

INSTRUMENTAL MUSIC

Concert Band

Grades: 9-12 1 Year **UC/CSU approved “f” course**

Course #6671 Credits: 10

Recommended: Recommended previous instrumental (wind and percussion) music experience, and/or prior junior high/middle school experience

Description: Beginning and intermediate band. This course is designed for students who play a wind band instrument and are interested in the total range of band music and activities. Students will improve instrumental skills, musicianship, and showmanship. Attendance at rehearsals and performances is required.

PHYSICAL EDUCATION DEPARTMENT

The focus in Physical Education is on the development and improvement of individual skills, strategies, and techniques. Classes in Physical Education emphasize the principles of physical fitness, exercise, movement, and body control. These activities promote lifelong use of physical fitness, skills development, and social interaction. A balance of individual and team activities is provided. Two years of Physical Education are required for graduation. All students are required to pass a swimming proficiency test.

Freshman PE

Grades: 9 1 Year

Course #5506 Credits: 10

Description: This course is an introduction to all aspects and activities of physical education.

General PE

Grades: 10-12 1 Year

Course #5511 Credits: 10

(Course #5508 for A-period)

Advanced PE

Grades: 11-12 1 Year

Course #5514 Credits: 10

Recommended: Completion of General PE

Description: This course focuses on overall fitness and weight training.

OHLONE COLLEGE DUAL ENROLLMENT

Chicano Culture / Ohlone 101

Grades: 11-12 1 Semester **UC/CSU approved “g” course & Ohlone College Credit**
Course #5351 Credits: 5

(Course #5352 for A-period)

Description: This course examines the social, cultural, political, and economic heritage of the Chicanos and their contribution to American society

Chicano History / Ohlone 102

Grades: 11-12 1 Semester **UC/CSU approved “g” course & Ohlone College Credit**
Course #5350 Credits: 5

(Course #5353 for A-Period)

Recommended: Completion of Chicano Culture / Ohlone 101

Description: This course covers the history of the Mexican-American experience from 1850 to the present day. Emphasizes the political, economic, and social experience of the Mexican American people under the influences of Mexico and the United States.

NON-DEPARTMENTAL COURSES

Leadership

Grades: See below 1 Year Credits: 10

Course #9080 ASB - Elected Officers Only (Grades: 9-12)

Prerequisite: Students must be voted into office by their peers. Elections are held in February for the following school year. Interviews will be held by the Activities Director and incoming ASB Executive Board members to fill the remaining positions.

Course #9081 Leadership (Grades: 9-12)

Prerequisite: Students who are not elected will be accepted based on an interview with the Activities Director and ASB Officers.

Course #9079 for Link Crew Leaders (Grades 11 & 12)

Prerequisite: Students must be Link Leaders and are expected to participate in the *May Day* and the summer training for 9th Grade Orientation. Interested students must go through the application process in mid-February.

Description: Students in Leadership will develop skills like teamwork, communication, critical thinking, organization as well as personal growth and confidence while planning student events. Leadership is a hands-on class where students can have a positive impact on their school and community.

MISSION VALLEY REGIONAL OCCUPATIONAL PROGRAM

Mission Valley ROP provides relevant career technical education by preparing students for employment and college through industry-standard tools, training, and experience.

Mission Valley ROP is a provider of career training for high-tech, high-pay, and high-demand fields. In existence for over forty years, MVROP has been instrumental in preparing students for successful business, medical, and technical careers. Operating under a partnership with Fremont, New Haven, and Newark Unified School Districts, approximately 4,000 students (adult and high school) participate each year in ROP's exemplary educational programs. Mission Valley ROP's dedicated staff, superior learning environment, and high-tech equipment all contribute to the high success rate of our students. Keeping current with today's standards is critical, and we continually seek input from business and industry representatives who serve on active advisory committees for each of our programs. In addition, all ROP instructors bring with them experience in their field as well as certification by the California Commission on Teacher Credentialing. At Mission Valley ROP, we believe in one common objective—helping our students develop to their full potential!

MVROP credits are earned by attendance. Grades may be affected by tardies and absences, and variable credit may be given for poor attendance.

Many ROP courses offer opportunities for credit at local community colleges for students who receive a "B" or higher grade in the course. Individual course descriptions indicate whether the course receives college credit and the grade needed.

ROP course content is approved by CDE (California Department of Education) for a specific number of hours. The curriculum is subject to change in response to industry needs. Practical hands-on experience is a critical component of ROP courses and is accomplished through classroom labs, community classrooms, or cooperative vocational education sites. Integrated throughout all ROP courses are career preparation standards that include communication skills, interpersonal skills, problem-solving, safety, technology, and job search skills.

MVROP ON-SITE COURSES- 1 class period per course

Business and Professional Development

Grades: 9-12 1 Year **UC/CSU “g” credit & Mission College Credit**

Course #7668 Credits: 10

Description: This course prepares students for the workplace by making a smooth transition from the classroom to a demanding work environment. Students learn about responsibilities while participating in a work-based program that develops critical thinking, communication, and presentation skills, in addition to establishing career goals and preparing them for the challenges of independent living while maintaining full-time employment.

Culinary Arts 1

Grades: 11-12 1 Year **UC/CSU “g” credit & Mission College Credit**

Course #7753 Credits: 10 - Elective

Description: This competency-based course introduces the Hospitality and Food Service Industry. Included in the course are food safety and sanitation, basic culinary terms, hospitality standards, knife skills, fundamentals of cooking techniques, pantry, soups, and basic pastry. Throughout the course are career preparation standards, including basic academic skills, communication, interpersonal skills, problem-solving, workplace safety, technology, and employment literacy. Students earn Food Handlers Certification. **Must earn a B grade or higher to earn college credit for this course.**

Culinary Arts 2

Grades: 11-12 1 Year **UC/CSU “g” credit & Mission College Credit**

Course #7754 Credits: 10 - Elective

Description: Students continue to focus on sanitation, safety, and knife skills. Students gain advanced skills in preparing stocks, soups, sauces, main entrees courses, nutrition, costing out of recipes, menu and other culinary math skills, menu design, and regional cooking. **Must earn a B grade or higher to earn college credit for this course.**

Digital Photography 1

Grades: 9-12 1 Year **UC/CSU “f” credit | Mission-College Credit for Year 1**

First Year Course # 7630 | Second Year Course: #6634 Credits: 10

Description: The study of digital photography encourages conceptual thinking and creativity. Explore hands-on digital photography fundamentals including Adobe Photoshop, lighting, set design, studio configuration, camera operation, software interfaces, color management, photo editing, and compositing. **Must earn a B grade or higher to earn college credit for this course.**

Entrepreneurship

Grades: 11-12 1 Year **UC/CSU “g” credit & Mission College Credit**

Course # 7665 Credits: 10

Description: Students will learn what it takes to be an entrepreneur, including recognizing and evaluating a business opportunity. Students will expand their critical thinking, problem-solving, communication, and business skills through practice. Team and individual projects incorporate accounting, finance,

marketing, operations, management, and understanding legal and economic environments. Students will develop and present a business plan, the capital required, the return on investment desired, and the potential for profit. The curriculum is designed to help students explore entrepreneurship as a career pathway and provide a realistic framework for starting a new business. This course is available to 11th/12th-grade students. **Must earn a B grade or higher to earn college credit for this course.**

Sports & Entertainment Marketing

Grades: 11-12 1 Year **UC/CSU “g” credit & Chabot College Credit**

Course # 7891 Credits: 10

Description: Provides students with competencies necessary for entry-level employment and career opportunities within the sports and/or entertainment marketing industries. Students will learn the fundamental concepts of marketing and business principles in the scope of amateur, college, and professional sports. Students will develop critical thinking skills and recognize which personal qualities will make them the most capable person and most valuable to the employer. In addition, core principles of sports marketing and entertainment will be covered: marketing/sales, management, finance, economics, and entrepreneurship. **Must earn a B- grade or higher to earn college credit for this course.**

MVROP OFF-SITE COURSES - 2 class periods per course

The MVROP Career Technical Training Center is located at 5019 Stevenson Blvd. Fremont, CA

Classes are offered either: (1st and 2nd Periods) or (5th and 6th Periods). Students receive up to 20 units per year. All off-campus ROP classes receive Elective Credit and some are approved for college credit and others by UC/CSU for college A-G admissions requirements. All classes meet every day, Monday- Friday. The MVROP Career Technical Training Center is located at 5019 Stevenson Blvd. Fremont, CA

AP Cybersecurity

Grades: 11-12 1 Year Credits: 20 **UC/CSU “g” credit**

Course #7828

Description: Learn principles, tools, and practices used to protect information systems from cyber threats. Understand network defense, cryptography, digital forensics, secure coding, and incident response through hands-on labs and real-world case studies. Students prepare for certifications such as CCNA CyberOps and (ISC)²

Auto Body Painting and Refinishing 1 & 2

Grades: 11-12 1 Year Credits: 20 **UC/CSU “g” credit for Year 1**

First Year: AM Course #7944, PM Course #7943

Second Year: AM Course #7941, PM Course #7942

Description: This course offers an introduction to Auto Body and Refinishing. Students will learn from a certified instructor and use industry-standard techniques, materials, and tools including a state-of-the-art, heated downdraft paint booth.

Automotive Technology 1 & 2

Grades: 11-12 1 Year **UC/CSU “g” credit for Year 1 & Chabot College Credit-Year 1**

First Year: AM Course #7898, PM Course #7899 Credits: 20

Second Year: AM Course #7901, PM Course #7905

Prerequisite for Auto Tech 2: B- or better in Auto Tech 1

Description: This course offers hands-on experience in auto shop operations, tool usage, safety procedures, equipment operation, and customer service; skills learned include general auto repair, brakes, steering and suspension, electrical systems, and engine performance. Year two focuses on advanced skills including various Advanced Drivers Assistance Systems (ADAS), exploring system operation, diagnosis, service, and calibration skills. Students will earn industry-level certifications. **Must earn a B- grade or higher to earn college credit for this course.**

Careers in Education 1 & 2

Grades: 11-12 1 Year Credits: 20

First Year: AM Course #7939 **UC/CSU “g” credit for Year 1 & Ohlone College Credit**

Second Year: AM Course #7940

Description: Proof of current TB test required. Discover opportunities available in the Early Childhood profession. Explore principles of integrated academic and technical skills, communicate and collaborate with diverse audiences, demonstrate creativity and innovation, and develop personal, educational, and career goals. Internship required (Student provides their own transportation). **Must earn a B- grade or higher to earn college credit for this course.**

Cisco CCNA: Introduction to Networks

Grades: 11-12 1 Year **UC/CSU “g” credit & Ohlone College Credit**
PM Course #7829 Credits: 20

Description: Students learn foundational networking skills: how networks and devices operate, how data moves through a network. Learn to configure routers, switches, implement basic security, and troubleshoot network. In this PLTW capstone course, students learn civil engineering and architecture including design and development of residential and commercial properties and structures. Students learn hand drafting, build architectural models, and use 3D design software.

Civil Engineering and Architecture - PLTW

Grades: 11-12 1 Year **UC/CSU “d” credit**
PM Course #7879 Credits: 20

Description: In this PLTW capstone course, students learn civil engineering and architecture including design and development of residential and commercial properties and structures. Students learn hand drafting, build architectural models, and use 3D design software.

Computer Animation 1, 2

Grades: 11-12 1 Year **UC/CSU “f” credit & Ohlone College Credit for Year 1**
First Year AM Course #7967 Second Year AM Course# 7986 Credits: 20

Description: Learn to create 2D and 3D animation using industry-standard software. Students will develop skills in storyboarding, 3D modeling, character design and concept art.

Computer Science Principles/Digital Electronics - PLTW

Grades: 11-12 1 Year **UC/CSU “d” credit & Ohlone College Credit**
AM Course #7663 Credits: 20
PM Course #7664

Description: This unique course combines one semester of Computer Science Principles and one semester of Digital Electronics using the Project Lead the Way (PLTW) curriculum. Students study topics such as Web Development, Python® programming, drone programming, Ohm’s Law, combinational/sequential logic, programmable logic devices, and more. This course will allow students to survey different engineering disciplines before beginning post-secondary education or starting a career.

Construction Technology 1 & 2

Grades: 11-12 1 Year **UC/CSU “g” credit for Year 1 & Chabot College Credit for Year 1**

First Year: AM Course #7892, PM Course #7893 Credits: 20

Second Year: AM Course #7894, PM Course #7895

Description: Prepares students for entry-level employment in residential and commercial construction. Students receive hands-on training in carpentry, electrical, and plumbing; including roofing, kitchen and bath remodeling, and using energy-efficient building materials. Qualified students are connected to local unions. **Must earn a B- grade or higher in year 1 to earn college credit for this course.**

Digital Video Arts Production 1 & 2

Grades: 11-12 1 Year **UC/CSU “f” credit & Ohlone College Credit for Year 1**

First Year: PM Course #7620

Second Year: PM Course #7621 Credits: 20

Description: Video production including camera work, editing, and the production process of short fiction, documentary, commercial, and “live TV”; analyze film scenes and sequences, develop production management skills. Produce videos from scriptwriting to final editing. (Recommend prior class in fine arts, computer applications, or digital graphics.) **Must earn a B- grade or higher to earn college credit for this course.**

Emergency Medical Responder

Grades: 11-12 1 Year **UC/CSU “g” credit & Chabot or Las Positas College Credit**

PM Course #7628 Credits: 20

Description: Students in this course will learn EMR skills such as first responder well-being, legal and ethical issues, lifting and moving patients, patient assessment, medical emergencies, EMS system and operations, and managing multi-casualty incidents. Students who complete the EMR program earn an American Heart Association CPR card. **Must earn a B grade or higher to earn college credit for this course.**

Fire Technology

Grades: 11-12 1 Year **UC/CSU “g” credit & Chabot or Las Positas College Credit for Year 1**

AM Course #7650 Credits: 20

Description: Introductory course for careers in fire service; firefighting tactics/strategies, physical agility, fire safety, ladder, hose and nozzle operations, tools, equipment, and fire prevention. American Heart Association CPR Certification. **Must earn a B grade or higher to earn college credit for this course.**

Game Design/Interactive Media Arts 1 & 2

Grades: 11-12 1 Year Credits: 20 **UC/CSU “f” credit & Ohlone College Credit for Year 1**

First Year: PM Course #7872

Second Year: PM Course #7867

Description: Learn to create 2D and 3D interactive games, game art and simulations using 3DS Max, Unreal, and 2D game engines. Students will develop skills in game design documents, level design, 2D sprites, 3D modeling, character design, and animation. **Must earn a B- grade or higher to earn college credit for this course.**

Honors PLTW Medical Interventions/ Honors PLTW Biomedical Innovation

Grades: 11-12 1 Year **UC/CSU approved “d” Credit for each semester course | Ohlone College Credit**

PM Course #7823 Semester 1 & #7824 Semester 2 Credits: 20

Prerequisites: Completed PBS/HBS course or three years of high school science. Priority placement for PBS/HBS completers.

Description: This is a year-long combined course. First semester, in Honors Medical Interventions, students learn immunology, cancer biology, surgery, genetics, pharmacology, medical devices, and diagnostics. Second semester, in Honors Biomedical Innovation, students learn about public health, biomedical engineering, clinical medicine, and physiology. Work-related experience may be available.

Law Enforcement/Homeland Security 1 & 2

Grades: 11-12 1 Year Credits: 20 **UC/CSU “g” credit & Ohlone College Credit for Year 1**

First Year: AM Course #7985

Second Year: AM Course #7896

Description: Students learn legal vocabulary, general knowledge of the law, search and seizure procedures, laws of arrest, judicial systems, specialized police practices, and improvement in written/oral communication. Students engage in physical agility training, defensive tactics, activity, including running and tactical training. Explore careers within the criminal justice system and job search procedures. Year two focuses on leadership and management theory, reinforced through practical application assignments.

Medical Assisting

Grades: 12 1 Year **UC/CSU “g” credit**

AM Course #7917 Credits: 20

PM Course #7918

Description: This course provides career preparation for Medical Assistant positions in the healthcare industry. Students will receive heavy academic instruction in human anatomy. This course will provide students with a fundamental understanding of the MA and its role in health-related fields. **Internships are**

required in the second semester. Students not meeting all requirements for internships will not continue in the course.

Music Production 1, 2

Grades: 11-12 1 Year **UC/CSU “f” credit & Chabot College Credit for Year 1**

First Year AM Course #7825 Credits: 20

Second Year AM Course #7827

Description: Learn about virtual instruments and making music in Digital Audio Workstations including Pro Tools, and Logic Pro X. Students develop recording, editing, and mixing techniques, as well as learn music theory and introduction to live sound. Students explore career and college pathways in the music and live sound industry.

Nursing Assistant

Grades: 12 1 Year **UC/CSU “g” credit**

AM Course #7922 Credits: 20

PM Course #7921

Recommended: Legal photo identification.

Description: Career prep for Nursing/Health Care with personal patient care, systems review, safety principles, infection control, HIPAA, restorative care, body mechanics, nutrition, vital signs, Home and Acute Care. **Internships at skilled nursing, Assisted Living, Home Care (medical/non-medical), dementia, or Acute Care facilities are required in the second semester.** Students not meeting all requirements for internships will not continue in the course.

Pharmacy Technician

Grades: 11-12 1 Year **UC/CSU “g” credit**

PM Course #7722 Credits: 20

Description: Students will gain valuable skills in processing prescriptions, managing inventory, compounding pharmaceuticals, and preparing intravenous medications, under supervision of licensed pharmacists. Students must meet all requirements, including drug testing and background checks, to participate in internships. Successful completion of this program qualifies students for the PTCE (Pharmacy Technician Certification Exam).

Principles of BioMedical Science/HumanBodySystems-PLTW

Grades: 11-12 1 Year **UC/CSU “d” credit for each semester**

AM Course #7816 Credits: 20

Description: This is a year-long combined course. During the first semester, in Principles of Biomedical Science, students explore concepts in biology and medicine such as genetics, microbiology, epidemiology, and clinical care. During the second semester, in Human Body Systems, students learn the interactions of human body systems and apply them to solve real-world medical cases.

Sound Design for Film and Video Games 1, 2

Grades: 11-12 1 Year **UC/CSU “f” credit**

PM Course #7856 Credits: 20

Description: Students will learn to create sound effects for film and video games using Pro Tools and Logic Pro X. Record and edit sound effects with Foley recording and ADR techniques. Learn to integrate sounds into gaming projects using programs such as Unreal Engine and Wwise. Students develop an online career portfolio that will highlight their creative work.

Sports Therapy 1, 2

Grades: 11-12 **UC/CSU approved “g” Chabot College Credit for Year 1**

First Year: AM Course #7635, PM Course #7923

Credits: 20

Second Year: AM Course #7636, PM Course #7935

Description: This course is for students interested in the areas of athletic training, physical therapy, occupational therapy and strength, and conditioning. Areas covered include anatomy/physiology, emergency procedures, injury recognition, evaluation and treatment, taping, and wrapping. Students earn CPR certification. **Internships required.** Students must meet all requirements to participate in internships. Must earn a B- grade or higher to earn college credit for this course.

Welding & Metal Joinery 1, 2

Grades 11-12 1 Year **UC/CSU approved “g” for Year 1 & Chabot Credit for Year 1**

First Year: AM Course # 7854, PM Course # 7971

Credits: 20

Description: This course is an introduction to welding and metalworking. Students learn the use of hand tools, cutting, and preparation techniques as they relate to welding and fabrication, and will take part in group and individual projects throughout the year. Students will be able to earn industry certifications. nonferrous metals.

Second Year: AM Course #7855 , PM Course #7853

Description: This course will build upon the foundational skills from year 1, focusing on advanced techniques and industry standards. Students will gain in-depth knowledge of welding symbols, codes, and certification processes. The course includes training in OSHA certifications, blueprint reading, and operating advanced welding and heavy industrial equipment.

General MVROP Information

Bus Transportation: Bus transportation will be provided for both morning and afternoon ROP class sections and will bring students back to NMHS afterward. Bus transportation is provided to the ROP Center in the morning at and in the afternoon. Bus times are released at the beginning of each school year. All bus transportation is free.

College Credit: Many ROP courses offer opportunities for credit at local community colleges for students who receive a “B” grade or higher in the course or pass an end-of-course exam. Individual course descriptions indicate whether the course receives college credit and how a student earns it.

Course Structure: ROP course content is approved by CDE (California Department of Education) for a specific number of hours. The curriculum is subject to change in response to industry needs. Practical hands-on experience is a critical component of ROP courses and is accomplished through classroom labs, community classrooms or cooperative vocational education sites. Integrated throughout all ROP courses are career preparation standards that include communication skills, interpersonal skills, problem-solving, safety, technology, and job search skills.

High School Units: Students can earn 5 (courses at NMHS) to 10 (courses at ROP Center) high school units per semester. ROP courses count as part of the GPA for college admission at UC and CSU campuses.

Internships: Community Classroom (CC) and Cooperative Vocational Education (CVE) internships are an important component of many ROP courses. Community Classroom is a non-paid internship and Cooperative Vocational Education is paid. Each of these two strategies is an extension of the classroom and provides excellent opportunities for hands-on learning. Some programs may require participation in an internship to successfully complete the program.

Locations: ROP classes are offered on the Newark Memorial High School campus and the Mission Valley ROP Center Campus in Fremont.

Notice of Non-Discrimination: Mission Valley ROP does not discriminate on the basis of race, color, national origin, religion, sex, age, or handicap in its educational programs, activities, or employment practices.

Registration Process: Students register for ROP classes at the same time they register for classes on their high school campus. For questions or information on registration or particular courses of interest see your Career Center Specialist, or counselor, call the ROP Center at (510) 657-1865, or visit our website at www.mvrop.org.

Parking: Student parking is available for all students attending classes at the ROP Center.

Sexual Harassment Statement: Mission Valley ROP is committed to maintaining an employment, educational, and business environment free from harassment, intimidation, or insult on the basis of an individual’s sex. Positive action will be taken if necessary to eliminate or correct such practices. Sexual harassment is a violation of Federal law, State of California law, and MVROP policy.

Smoke-Free Facilities: All Mission Valley ROP facilities are designated as smoke-free; therefore, smoking at any time in ROP facilities is prohibited.