



Newark Memorial High School

Course Catalog 2021-2022



Newark Unified School District

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CONTACT INFORMATION

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	Mr. Christopher Overton, World Languages	818-4426
	Ms. Amanda Yopp, Fine Arts	818-4381
	Mr. Craig Ashmore, Physical Education	818-4355
	Ms. Jeannie Cheung, ELD	818-4437

SCHOLASTIC INFORMATION

ACADEMIC/CAREER PLANNING SERVICES

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

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

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.

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.

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 the 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 ~

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**

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 courses must be at the Algebra 1 level or higher	4 years
Laboratory Science “d”	2 years Physical Lab Science: Chemistry or Physics Life Lab Science: Biology	3 years
Language other than English “e”	2 years	3 years
Visual or Performing Arts “f”	1 year	1 year
College-Preparatory Electives “g”	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 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 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 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 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 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 rigorous independent reading and writing required during the school year. The course incorporates 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
(Course #1037 for A-period)

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, and continue their acquisition of vocabulary and improve grammatical usages. 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

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 A

Grades: 9-12 1 Year

Course #4520 Credits: 10

Description: This beginner class focuses on foundational English skills in reading. This course will help students who are new to the country and are learning English for the first time. Students in this class scored a 1, or Beginning, on the ELPAC exam. Students will learn decoding skills and reading comprehension strategies to prepare them for their English-only classes.

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 A

Grades: 9-12 1 Year

Course #4530 Credits: 10

Description: This intermediate course focuses on emerging English skills in reading and course-content curriculum. 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 A and scored a 2 or 3 on the ELPAC exam. This course continues to give direct instruction in academic vocabulary and scaffolds reading-comprehension strategies with the goal of reading at grade level.

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, 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. Student needs ELD teacher signature to enroll in class.

ELD Advanced Writing

Grades: 9-12 1 Year

Course #4565 Credits: 10

Description: This grammar writing course focuses on academic English skills in grammar, and writing. Students in this class previously took ELD Intermediate A & B and scored a 3 or 4 on the ELPAC exam. This course continues instruction in challenging grammatical structures and writing formats in order to help support students in their college-preparatory English course.

Advanced ELD

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

Course #4540 Credits: 10

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 English 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. Student needs ELD teacher signature to enroll in class.

MATHEMATICS DEPARTMENT

9th Grade	10th Grade	11th Grade	12th Grade
Algebra 1	Geometry	Algebra 2	Math Analysis, or Transition to College Mathematics and Statistics
Algebra 1	Blended Geometry/Algebra 2	**Blended Algebra 2/Math Analysis	AP [®] Calculus AB, or AP [®] Statistics, or AP [®] Computer Science
Geometry or Geometry Accelerated	Algebra 2	Math Analysis	AP [®] Calculus AB, or AP [®] Statistics, or AP [®] Computer Science
Algebra 2 Accelerated	Math Analysis Honors	AP [®] Calculus AB, or AP [®] Statistics, or AP [®] Computer Science	AP [®] Calculus BC, or AP [®] Statistics, or AP [®] Computer Science

→ *Suggested Course Pathways*

**To be introduced in 2022-2023 school year, pending Board approval

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.

Geometry Accelerated

Grades: 9-11 1 Year **UC/CSU approved “c” course**
 Course #2247 Credits: 10

Recommended: Completion of Algebra 1

Description: This course is designed to prepare students for rigorous university level course work. The course will cover the same standards as Course #2251, but in a more advanced manner. Students will be expected to use critical thinking on assignments and projects.

Blended Geometry/Algebra 2

Grades: 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 generalized 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.

Algebra 2 Accelerated

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

Course #2352 Credits: 10

Recommended: Completion of Geometry

Description: This course is designed to prepare students for rigorous university level course work. The course will cover the same standards as Course #2252, but in a more advanced manner. Students will be expected to use critical thinking on assignments and projects.

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 complete 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 out of new situations and problems.

Algebra 2 Accelerated

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

Course #2352 Credits: 10

Recommended: Completion of Geometry

Description: This course is designed to prepare students for rigorous university level course work. The course will cover the same standards as Course #2252, but in a more advanced manner. Students will be expected to use critical thinking on assignments and projects.

Math Analysis (*Pre-Calculus*)

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

Course #2257 Credits: 10

Recommended: Completion of Algebra 2

Description: This course is designed to prepare students for rigorous university level course work. Topics Include logarithmic, exponential, trigonometric and polynomial functions along with their graphs, probability, limits, sequences, series, and mathematical induction. Extensive use of graphing calculators is involved.

Math Analysis (*Pre-Calculus*) Honors

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

Course #2258 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 Math Analysis

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.

Advanced Placement Computer Science A

Grades 10-12 1 Year **UC/CSU approved “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 AP 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 NGSS Physics, or AP [®] Physics 1	Anatomy & Physiology, or Sports Anatomy, or NGSS Physics, or AP [®] Physics 1, or AP [®] Biology, or AP [®] Chemistry, or AP Environmental Science AP Computer Science Principles	Anatomy & Physiology, or Sports Anatomy, or NGSS Physics, or AP [®] Physics 1, or AP [®] Biology, or AP [®] Chemistry, or AP Environmental Science AP Computer Science Principles

→ *Suggested Course Pathways*

NGSS Biology

Grades: 9-12 1 Year **UC/CSU approved “d” course**
 Course #3352 Credits: 10

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, oral and written communication skills.

Chemistry in the Earth System

Grades: 10-12 1 Year **UC/CSU approved “d” course**
 Course #3322 Credits: 10

(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

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

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.

Sports Physiology and Anatomy

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

Course #3368 Credits: 10

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

Description: The course covers the basics of human anatomy and physiology with a sports focus and an emphasis through hands-on activities such as labs, building and using models, presentations, dissections, and case studies. The topics to be covered include anatomical terminology, basic biochemistry, health, nutrition, and the skeletal, muscular, cardiovascular, respiratory, nervous, digestive, endocrine, excretory, immune, and reproductive systems. The course will also cover sports injury and rehabilitation. In addition to academic topics students will investigate career opportunities in the medical profession by touring Ohlone College Medical Sciences labs, listening to presentations from various medical and sports training professionals, and completing a research assignment on the medical/sports career of their choice.

NGSS Physics

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

Course #3354 Credits: 10

Recommended: Completion of Algebra 1

Description: A conceptual, less mathematical course than AP Physics that covers Newtonian mechanics, sound and light waves, and electricity.

Advanced Placement Biology

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

Course #3359 Credits: 10

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

Description: Topics cover: Molecules and Cells, Heredity and Evolution, and Organisms and Populations. 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 Chemistry

Grade: 11-12 1 Year **UC/CSU approved “d” course**
Course #3357 Credits: 10

Recommended: Chemistry in the Earth System

Description: The purpose of this AP Chemistry course is to provide a freshman-level college course to ensure that the student is prepared to succeed in college chemistry. This is accomplished by teaching all the topics detailed in the AP Chemistry Course and Exam Description. The course is organized around the four big ideas and is aligned with the six science practices. Laboratory experiments are conducted to compliment the material being learned. The experiments will include at least 20 labs, of which at least 6 will be inquiry-based labs. Lab time will account for over 25% of the instructional time—some labs are completed in one class period, but many labs require multiple periods. We meet as a class for seven periods a week—at least two-and-a-half of those periods are devoted to laboratory experiments and other like activities. Emphasis in this class is placed on application of chemical concepts with real-world applications. Each of the topics within the nine units are covered in depth, and the students will be assessed after the completion of each topic unit.

Advanced Placement Computer Science Principles

Grades 10-12 1 Year **UC/CSU approved “d” course**
Course #2265 Credits: 10

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

Suggested: Completion of Algebra 2 Advanced Algebra

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 to programming as well as for students with previous experience.

Advanced Placement Environmental Science

Grade: 10-11 1 Year **UC/CSU approved “d” course**
Course #3435 Credits: 10

Recommended: Completion of NGSS Biology and recommended successful completion of 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

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.

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: 9-10

1 Year

UC/CSU approved “a” course

Course #5187

Credits: 10

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.

Ethnic Studies

Grade: 10-12

1 Year

UC/CSU approved “a” course

Course #5347

Credits: 10

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 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 a 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 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, and 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 (Semester 1)

Grades: 12

1 Semester

UC/CSU approved "a" course

Course #5162

Credits: 5 (Course #5165 for A-period)

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 of and necessity for government as they think about How much power should government have over its citizens? They consider how 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.

United States Economics (Semester 2)

Grades: 12

1 Semester

UC/CSU approved “a” course

Course #5174

Credits: 5 (Course #5173 for A-period)

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 are 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 an 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

1 Year

UC/CSU approved “a” course

Course #5164

Credits: 10

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.

Psychology 1 & 2

Grades: 11-12

1 Year

UC/CSU approved “g” course

Course #5086

Credits: 10

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

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.

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 the college-bound student, 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
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

French 2

Grades: 9-12 1 Year **UC/CSU approved “e” course**
 Course #4002 Credits: 10
 Recommended: Successful completion of French 1

French 3

Grades: 10-12 1 Year **UC/CSU approved “e” course**
 Course #4003 Credits: 10
 Recommended: Successful completion of French 2

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

SPANISH

Spanish 1

Grades: 9-12 1 Year **UC/CSU approved “e” course**
Course #4201 Credits: 10

Spanish 1 for Spanish Speakers

Grades: 9-12 1 Year **UC/CSU approved “e” course**
Course #4221 Credits: 10
Recommended: Spanish is the student’s primary language

Spanish 2

Grades: 9-12 1 Year **UC/CSU approved “e” course**
Course #4202 Credits: 10
(Course#4206 A-period)
Recommended: Successful completion of Spanish 1

Spanish 2 for Spanish Speakers

Grades: 9-12 1 Year **UC/CSU approved “e” course**
Course #4222 Credits: 10
Recommended: Spanish is the student’s primary language

Spanish 3

Grades: 10-12 1 Year **UC/CSU approved “e” course**
Course #4203 Credits: 10
Recommended: Successful completion of Spanish 2

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

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

FINE ARTS DEPARTMENT

	9th Grade	10th Grade	11th Grade	12th Grade
Traditional Media Pathway	Ceramics 1 & 2, or Art 1 & 2	<i>no required course</i>	Advanced Ceramics, or Advanced Drawing & Painting	Advanced Ceramics, or Masters Art
Digital Media Pathway	Photography 1&2 or Media Arts 1 or Video 1 & 2	<i>no required course</i>	Video 1 & 2 or Photography 1 & 2 or Advanced Photography	Advanced Video Production, or 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	Lyrical Choir, Choraliers, Guitar, Concert Band, or Symphonic Band	<i>no required course</i>	Choraliers or Symphonic Band	Choraliers or Symphonic Band

→ Suggested Course Pathways

STUDIO ARTS

Art 1 & 2

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 & 2

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

Course #6641 Credits: 10 (Course # 6643 for A-period)

Description: This class covers 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.

Photography 1

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

Course #6635 Credits: 10

Description: This course introduces the art and science of making digital photographs. It includes the use of photo software, computers, scanners, and digital cameras. The second semester refines skills and explores advanced techniques available in Photoshop.

Advanced Photography

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

Course #6634 Credits: 10

Recommended: Completion of 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.

Video Communication and Production 1 & 2

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

Course #6664 Credits: 10

Recommended: Completion of Media Arts 1 & 2 or Photography 1 & 2 recommended

Description: This course teaches students the basics of video technology. Working with cameras, recorders, editing and special effects, students will produce their own unique and creative video productions. The second semester focuses on studio production, documentary and news broadcasting.

Advanced Video and Film Production

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

Course #6667 Credits: 10

Recommended: Completion of Video 1 & 2 or MCA Media 10

Description: Students will plan and produce the Cougar Cable television show as well as create film-style documentaries and fictional segments. This class will also broadcast the daily bulletin to the entire school.

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 theatre. Students will develop their own material for a longer performance.

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, and lighting, and costuming.

Advanced Technical Theater

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

Course #6681 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

Lyrical Choir

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

Course #6656 Credits: 10

Recommended: None, but recommended prior junior high/middle school experience.

Description: For beginners and intermediate students. Students will learn and improve their singing skills, including sight reading, ear training, and vocal technique. A variety of musical styles will be performed, including popular and classical forms. Attendance at rehearsals and performances is required.

Choraliers

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

Course #6658 Credits: 10

Recommended: Successful completion of Lyrical Choir with teacher approval, prior vocal experience with an audition, and/or prior junior high/ middle school experience.

Description: An advanced vocal music class with emphasis on performing and individual vocal production. Repertoire ranges from advanced choral works to pop and musicals. Many 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.

Symphonic Band

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

Course #6681 Credits: 10

Recommended: Previous instrumental (wind and percussion) music experience, and/or successful participation in Concert Band

Description: This course is designed for students who play a 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.

Guitar

Grades: 9-12

1 Year

UC/CSU approved “f” course

Course #6689

Credits: 10

Description: This course offers beginning-through-intermediate instruction on the guitar. Students learn music fundamentals, chords, music notation, theory, secondary chords, movable (barre) chords, substitute chords, and extensions and alterations. Students will develop fingerstyle and plectrum techniques and participate in solo and ensemble performance. Students will be exposed to a wide range of music, including, but not limited to folk, country, pop, jazz, and rock. It is recommended that students provide their own acoustic guitar to maximize their ability to practice any time. A limited number of guitars will be available.

PHYSICAL EDUCATION DEPARTMENT

The focus in Physical Education is on 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.

SPECIAL ACADEMIC PROGRAMS

MEDIA COMMUNICATIONS ACADEMY (MCA)

MCA is a career-focused academy that prepares students with the skills necessary for work in the fields of multimedia and communications. The program is a unique opportunity for students to explore and prepare for a future career in graphic design, animation, video production, and audio engineering. MCA is one of 300+ funded California Partnership Academies in the state, structured as a school-within-a-school, and designed to create a close community of students and dedicated educators that meet regularly to monitor student achievement. Academy coursework integrates academic and career technical education (CTE), with project-based learning that often bridges multiple classes. For example: Students in the Junior MCA English course make a video commercial demonstrating their understanding of ethos, pathos, and logos as their mid-term project requiring the students to use their video production skills as well as their understanding of the means of persuasion. The Sophomore year functions as a trial year, allowing students to decide if MCA is a good fit for their educational needs. The Junior year is augmented by a mentorship and many opportunities for job shadowing. By Senior year, students will select a career specialty and work to develop a portfolio of their work to present to prospective employers and colleges. Seniors are also required to complete an internship, often with one of the industry partners that lends its support to MCA.

	10th Grade	11th Grade	12th Grade
Social Science	MCA World History #9202	MCA US History #9212	MCA Govt. & Econ. #9241
CTE Multimedia	MCA Media 10 #9204	MCA Advanced Media 11 #9214 Students who earn a B or Higher in this Course will earn Ohlone College Credit also.	MCA Advanced Media 12 #9224
English	MCA English 2 #9201	MCA English 3 #9211	<i>English 4, or AP®English Literature.</i>
Science	MCA Chemistry #9208	<i>additional science or elective course</i>	<i>additional science or elective course</i>
Math	<i>Geometry, or Algebra 2</i>	<i>Algebra 2, or Math Analysis</i>	<i>additional math or elective course</i>
Elective	<i>General PE, or World Language</i>	MCA Commercial Art #9218	<i>General PE, or World Language</i>

→ *Suggested Course Pathways*

OHLONE COLLEGE CONNECTION

A year-long program exclusively for seniors at Ohlone College, Newark Campus.

This year-long program is designed to provide a new and personalized educational experience for motivated seniors who would benefit from an alternative environment. Selected high school seniors spend their school day on the Ohlone Newark campus, fulfilling their senior graduation requirements with high school classes in the morning, and then taking college classes of students' choice in the afternoon. The program allows the student a flexible environment, a rich course selection, and the opportunity to get a head start into his/her college program, earning UC and CSU transferable units from Ohlone before graduating from high school. Other than parking, there are no student fees for this program. All juniors who are in good credit standing, and have fulfilled state PE requirements are eligible to apply. UC/CSU "a-g" approved courses in this program include Humanities CP, Mythology CP, U.S. Government, and Economics, along with a Leadership elective. Students must also enroll in one Ohlone College class per semester. Enrollment in additional Ohlone classes requires the program director's approval.

Ohlone College Connections Courses		
Humanities #1017	Mythology #1041	Leadership/Advisory #9047
US Government #5162	Economics #5174	

OHLONE COLLEGE DUAL ENROLLMENT

Chicano Culture / Ohlone 101

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

Course #5351 Credits: 5 **Ohlone College Credit**

Recommended: Ohlone English Placement Exam

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**

Course #5350 Credits: 5 **Ohlone College Credit**

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.

PROJECT LEAD THE WAY (PLTW)

PLTW Engineering students engage in open-ended problem solving, learn and apply the engineering design process, and use the same industry-leading technology and software as are used in the world's top companies. Students investigate topics such as aerodynamics and astronautics, biological engineering and sustainability, and digital electronics and circuit design, giving them an opportunity to learn about different engineering disciplines before beginning postsecondary education or careers.

Introduction to Engineering Design

Grades: 9-10 1 Year **UC/CSU approved "f" course**

Course #6800 Credits: 10

Description: This course is an introductory course, which develops students' problem skills, emphasizes the concept of developing 3D models or solid rendering of an object. Engineering careers and educational preparation will be researched. This course is the first in a sequence of three engineering courses.

Principles of Engineering

Grades: 10-11 1 Year **UC/CSU approved "g" course**

Course #6801 Credits: 10

Recommended: Completion of Introduction to Engineering Design

Description: Students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.

NON-DEPARTMENTAL COURSES

Leadership

Grades: 9-12 1 Year

Course #9080 ASB Credits: 10

Course #9079 for Link Crew Leaders

Recommended: Leadership for Elected Officers requires that students be elected by their peers to ASB or class office. Students who are not elected will be accepted based on an interview with the Activities Director and ASB Officers.

Leadership for Link Leaders is for students that are Link Leaders who have participated in the summer training and 9th grade Orientation.

Description: Students will plan, organize, and implement student activities on campus.

Freshman Studies

Grades: 9 1 Year

Course #9072 Credits: 10

Recommended: None

Description: The goal of this year-long freshman seminar course is to provide 9th graders with knowledge and skills essential to academic success and making the right choices along their path as they confront varied influences and obstacles. Students will learn and practice valuable skills to be academically driven, socially responsible, as well as college- and career-ready. Students will demonstrate their understanding of career paths and community leadership through a variety of assessments, projects, job simulations, speeches, research assignments, online portfolios, and presentations. The knowledge and skills gained from this course are applicable across disciplines and beyond this year; they will help guide our students in leading a happy and satisfied life in high school, college, career, and beyond. This course includes sexuality education, using the FLASH curriculum developed by the Public Health Department of Seattle–King County, consistent with the requirements of the California Healthy Youth Act.

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'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 advanced placement and/or credit at local community colleges for students who receive an "A" or "B" grade in the course. Individual course descriptions indicate whether the course receives college credit or advanced placement.

ROP course content is approved by CDE (California Department of Education) for a specific number of hours. 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

Business Professional Development

Grades: 10-12 1 Year UC/CSU approved "g" course

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 which 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.

Computer Tech / Operations

Grades: 9-12 1 Year UC/CSU "g" credit & Chabot College Credit

Course #7671 Credits: 10

Description: Learn Microsoft Office suite, develop business skills, file management, and improve keyboarding skills. Write and edit letters, file lists, format business forms, create PowerPoint presentations and Excel spreadsheets.

Culinary Arts 1 and 2

Grades: 11-12 1 Year

Course #7753 Credits: 10 (Year 1)

Diablo or Mission College Credit

Course #7754 Credits: 10 (Year 2)

Description: Study California Restaurant Association and American Culinary Federation standards to prepare students for entry level positions; Serve-Safe, basic culinary, knife skills, basic cooking techniques, meat classification, grilling, soups, appetizers, and Hors d'oeuvres, Garde-Manager skills, pantry skills, and plate presentation.

Law Enforcement/ Homeland Security

Grades: 11-12 1 Year

Course #7908 Credits: 10 **Ohlone, or Diablo College Credit**

Description: Students learn legal vocabulary, search and seizure, laws of arrest, judicial systems, specialized police practices and improved written and oral communication. Explore careers within the criminal justice system and job search procedures; field trips to local courts, law enforcement agencies.

Sports & Entertainment Marketing

Grades: 11-12 1 Year

College Credit & A-G Approval

Course # 7891 Credits: 10

(Course #7874 for A-period)

Description: This course 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 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.

MVROP OFF-SITE COURSES

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. All classes meet every day, Monday through Friday.

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

Auto Body Painting and Refinishing 1 & 2

Grades: 11-12 1 Year Credits: 20

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

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

Description: Introduction to Auto Body and Refinishing. Students 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 Credits: 20

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

Second Year: AM Course #7901, PM Course #7905 **Chabot College Credit-Year 1**

Description: Hands-on experience in auto shop operations, tool usage, safety procedures, equipment operation and customer service; general auto repair, brakes, steering and suspension, electrical systems, and engine performance. Certifications available. *Must earn a B- or better in Auto Tech 1 to take Auto Tech 2*

Careers in Education 1 & 2

Grades: 11-12 1 Year Credits: 20

First Year: AM Course #7939 **Ohlone or Chabot College Credit**

Second Year: AM Course #7940 **Ohlone or Chabot College Credit**

Description: Proof of current TB test required. Develop skills in leadership, supervision of children, equipment operations, and curriculum development. Internship required (Student provides their own transportation).

Civil Engineering and Architecture

Grades: 11-12 1 Year Credits: 20

PM Course #7879

UC/CSU approved “g” course

Description: In this PLTW capstone course, students learn about various aspects of civil engineering and architecture and apply their knowledge to the design and development of residential and commercial properties and structures. Students use 3D design software to design and document solutions for major course projects, will communicate and present

solutions to their peers and members of a professional community of engineering and architects.

Computer Animation 1 & 2

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

Description: Create animation in 2D and 3D for web, TV and film. Create visual effects for video, movies, and TV. Collaborate with animators, videographers and sound designers and learn how real productions come together. Adobe Flash, Photoshop, and 3DS Max.

Construction Technology 1 & 2

Grades: 11-12 1 Year Credits: 20
First Year: AM Course #7892, PM Course #7893 **Chabot College Credit**
Second Year: AM Course #7894, PM Course #7895

Description: Train for entry-level employment in residential and commercial construction; training and hands on projects in carpentry, electrical, plumbing; power tool use and safety. Introduction to “green” construction including roofing /solar systems installation, and energy efficient building materials.

Computer Science Principles/Digital Electronics

Grades: 11-12 1 Year Credits: 20
AM Course #7663, PM Course #7664 **UC/CSU approved “g” course**

Description: The two-hour combination course combines one semester of the PLTW digital Electronics curriculum and one semester of Computer Science Principles curriculum. Students investigate aerodynamics and astronautics, biological engineering and sustainability, and digital electronics and circuit design, giving students the opportunity to learn about different engineering disciplines before beginning postsecondary education or careers.

Digital Video Arts Production 1 & 2

Grades: 11-12 1 Year Credits: 20
First Year: PM Course #7620 **UC/CSU approved “f” course**
Second Year: PM Course #7621 **UC/CSU approved “f” course**

Description: Video production including camera work, editing, DVD authoring and the production process of short fiction, documentary, commercial and “live TV”: analyze film scenes and sequences, develop production management skills.

Emergency Medical Responder

Grades: 11-12 1 Year Credits: 20

AM Course #7622 **Las Positas or Mission College Credit**

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, special patient considerations, and managing multi-casualty incidents. Students who complete the EMR program will receive an American Heart Association CPR card and ASHI (American Health & Safety Institute) certificate.

Fire Technology

Grades: 11-12 1 Year Credits: 20

AM Course #7650 (1) **Las Positas or Mission College Credit**

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.

Game Design/Interactive Media Arts

Grades: 11-12 1 Year Credits: 20 **Ohlone College Credit (1st year only)**

First Year: PM Course #7872 **UC/CSU approved “f” course**

Second Year: PM Course #7867 **UC/CSU approved “f” course**

Description: Learn to create 3D interactive games, simulations using 3DS Max, Unreal 4, and 2D game engines. Students will develop skills in level design, modeling, character design, animation and scripting.

Law Enforcement/Homeland Security 2

Grades: 12 1 Year Credits: 20

Second Year: AM Course #7896

Recommended: Completion of Law Enforcement course on the NMHS campus

Description: Students will expand on first year of Law Enforcement. Leadership skill is emphasized. Improve written and oral communication. Explore careers within the criminal justice system and job search procedures.

Medical Assisting

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

AM Course #7917,

PM Course #7918

Description: Career preparation for Medical Assistant positions. Students will receive heavy academic instruction in human anatomy, medical law and ethics. Internships are required during 2nd semester. Students must

meet requirements for internships or will not be able to continue 2nd semester.

Music Production

Grades: 11-12 1 Year Credits: 20 **UC/CSU approved “f” course**
AM Course #7825

Description: Learn about synthesizers and making music with MIDI in Digital Audio Workstations including Pro Tools, Cubase, and Adobe Audition. Recording, editing and mixing techniques are developed, Introduction to acoustics.

Nursing Assistant

Grades: 11-12 1 Year Credits: 20
AM Course #7922,
PM Course #7921 **UC/CSU approved “g” course**

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 and vital signs. Internships are required during 2nd semester. Students must meet requirements for internships or will not be able to continue 2nd semester.

Pharmacy Technician

Grades: 11-12 1 Year Credits: 20
PM Course #7722 **UC/CSU approved “g” course**

Description: Career prep for pharmacy technician in pharmaceutical field; process prescriptions, inventory, compounding, making intravenous medications, and other duties under the direction of pharmacist. Students must meet requirements for internships or will not be able to continue 2nd semester.

Principles of BioMedical Science/Human Body Systems

Grades: 11-12 1 Year Credits: 20
AM Course #7816 **UC/CSU “d” Credit (both semesters), Ohlone College Credit**

Description: This PLTW course allows students to investigate the roles of biomedical professionals as they study the concepts of human medicine, physiology, genetics, microbiology, and public health and solve real-world medical cases.

Honors Medical Interventions/ Honors/Biomedical Innovation- PLTW

Grades: 11-12 1 Year Credits: 20 UC “d” Credit for Med. Int. | UC “g” Credit for Biomed. Innovation | Cal State East Bay Credit (When Coupled with a Passing Score on the CLEP Biology Exam)

7823 Semester 1 & 7824 Semester 2

Prerequisites: Three years of high school science or completed the PBS/HBS course. First semester, students learn about immunology, cancer biology, surgery, genetics, pharmacology, medical devices, and diagnostics. Second semester, students learn about public health, biomedical engineering, clinical medicine and physiology. Students can earn CPR certification and have work related opportunities.

Sound Design for Film and Video Games

Grades: 11-12 1 Year Credits: 20

PM Course #7856 **UC/CSU approved “f” course**

Description: Students will learn to create sound effects for film and video games using Pro Tools, Adobe Audition, and Cubase. 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.

Sports Therapy 1 & 2

Grades: 11-12 1 Year Credits: 20 **Chabot College Credit (First Year only)**

First Year: AM Course #7635, PM Course #7923 **UC/CSU approved “g” course**

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

Description: Fitness, physical therapy, athletic training; anatomy, physiology, musculoskeletal system, prevention, assessment, treatment, rehabilitation, first aid, CPR, nutrition. Internship required.

General MVROP Information

Bus Transportation: Students must have their own transportation to the ROP Center for morning class that begins at 7:30 am. Bus transportation will be provided after the morning ROP class is over bring students back to NMHS. Bus transportation is provided to the ROP Center in the afternoon at 12:40 p.m. and if students want to come back to NMHS after the afternoon class is over a bus will bring them back to our campus. All bus transportation is free.

College Credit: Many ROP courses offer opportunities for advanced placement and/or credit at local community colleges for students who receive an “A” or “B” grade in the course. Individual course descriptions indicate whether the course receives college credit or advanced placement.

Course Structure: ROP course content is approved by CDE (California Department of Education) for a specific number of hours. 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 to 10 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 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, counselor, call the ROP Center (510) 657-1865, or visit our web site 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 on ROP facilities is prohibited.