

ARTS – Visual and Performing

ICA requirement: 1 year CSU/UC requirement: 1 year

Art I 601000

Two semesters 10th grade UC/CSU

The objective of this class is to enlarge and enrich the student's understanding of the beauty and techniques of art. The student will develop her visual perceptions of the physical world and her imagination. Art techniques will include: collage, charcoal and pastel drawing, painting, mask making and block printing.

Art I& II 602000

Two Semesters 12th grade UC/CSU

This class is for students who would like to take a first or second year of Art. First year students will have the same curriculum as Art 1. 2nd year students will work more independently, under the guidance of the teacher, to create their own portfolio of artwork.

Dance I 606000

Two Semesters 10th grade UC/CSU

This class is an introduction to the fundamentals of movement leading to Ballet, Contemporary, Jazz and Hip hop dance. Students will also learn basic choreographic skills. There will be an end-of-year performance.

Dance I & II 607000

Two semesters 12th grade UC/CSU

This class is for students who wish to take their first or second year of dance. The class will introduce the fundamentals of movement as well as introduce ballroom dance – tango, swing and salsa- and ethnic dance – African/Brazilian and Hawaiian. 2nd year students will choreograph contemporary and hip/hop dances that they will teach and perform.

Drama UC/CSU 604000

One Semester 11th grade

Note: Students who enroll in this course must also enroll in Language of Film

This class is an introduction to the Art of acting. Students will learn the craft of character development first hand, as well as by observation and analysis of film acting. The focus of the class is to understand both the language of the dramatic stage and the language of film

Digital Art 909500

Two Semesters 11th grade

This course is designed to teach students interested in digital photography and graphic design the basic skills to use Adobe Photoshop to scan, enhance and prepare photographs and other graphics either to be printed by themselves or incorporated into larger

Photoshop graphics and montages. Students will learn basic design concepts and use the computer as a tool to create art. Students will also learn web design and some html.

English

ICA requirement: 4 years

CSU/UC requirement: 4 years

English I 201000

Two Semesters 9 UC/CSU

Students will develop expository writing skills essential for learning in all high school classes. Mythology from many cultures around the world is a major focus of literature studied, which includes novels, plays and poems. Reading comprehension, writing proficiency and vocabulary and grammar development are among the goals of this class.

English II 202000

Two Semesters 10 UC/CSU

Literature representing multicultural perspectives is emphasized in English II. Related writing assignments are required with focus on narrative writing. In addition, an introductory study of poetry is pursued. Oral presentation skills are included with emphasis on articulation, poise and critical thinking. Study of vocabulary and grammar are emphasized.

English III 203000

Two Semesters 11 UC/CSU

English III includes a chronological study of major American writers from the Colonial Period to modern times. Students read American novels, short stories, non-fiction, poetry and drama. The course emphasizes a critical approach to literature and the writing of intermediate-length critical essays. Although literature and writing are emphasized, students work on vocabulary and review fundamentals of grammar as necessary.

Honors English III 203500

Two Semesters 11 UC/CSU

Prerequisite: Successful completion of English II and approval of English II instructor. English III Honors places equal emphasis on critical reading and writing skills. Students will be expected to read material in addition to the regular English III curriculum and to write more extensively. Students will learn to write a lengthier (1000-word) critical essay incorporating literary criticism from outside sources. Honors students are expected to contribute to class discussions and do oral presentations. Time is devoted to vocabulary development and grammar as necessary.

English IV 204000

Two Semesters 12 UC/CSU

This course continues the study of great literature and the development of strong writing skills. Frequent analytical and personal essays will be written in response to several masterpieces of poetry and prose. Students will follow the development of the English

language from the Middle Ages through the early modern period. Traditional classics of English poetry and drama will be closely read. In addition, three novels will be studied, one from the 19th-century tradition of the English novel and two by 20th-century writers from Canada and Africa.

Advanced Placement Lit. & Comp. 204500

Two Semesters 12 UC/CSU

Prerequisite: Recommendation of English III Honors teacher or approval, after an interview, from AP teacher and English Department chairperson

This class offers students who love literature an opportunity to develop their exceptional skills in reading and writing beyond high school level. All students in the AP class take the College Board Examination in Literature and Composition which is administered in May. A passing score on this exam gives the student college credit which counts toward her undergraduate degree. The amount of credit granted varies among colleges. The College Board charges a fee of approximately \$82.00 for the exam. While preparation for the exam is integrated into the class, the goal is to provide students with a college level course in literature and writing. Literature from many genres is read, discussed and enjoyed. There are frequent writing projects including essays of literary analysis, explication of poems, imaginative writing and poetry writing.

The Language of Film 705002

One Semester 11 UC/CSU

Note: Students who enroll in this course must also enroll in Drama.

Students will watch and analyze notable American and foreign films. They will learn to spot and understand techniques of cinematography that contribute to the total effect of the film. They will read criticism of films in both popular and periodicals and will write their own critiques. The course will also include research on notable directors and several of their representative works. Students in this course will develop a critical eye, forming theories on matters of content and aesthetics.

Home Economics

Developmental Psychology of Children 702001

Spring Semester 12 UC/CSU

Fulfills one semester of the one year UC/CSU "g" requirement

Note: Students who enroll in this course must also enroll in Psychology; see Social Studies Department

Child Development sensitizes the student to the human development cycle from conception to age 10. The student gains a keener understanding of the physical, emotional, social and intellectual factors essential to the development of a healthy child.

Interior Design/Independent Living 905000

Two Semesters 12

Note: Interior Design fulfills half of the one-year ICA arts graduation requirement, but not the UC or CSU fine arts requirement

Interior Design prepares students to decorate the interior of a home. The student will work with colors, line, design and fabrics. She will also learn to read architectural drawings and to design and decorate her dream home by the end of the semester. No art or drawing experience is required.

Independent Living is designed to help students acquire all the skills necessary to live on their own effectively. The student will learn how to rent an apartment, read a lease, balance a checking account, do comparison shopping and undertake other survival skills.

Mathematics

ICA/UC/CSU requirement: 3 years

Algebra 1A 301000/Algebra 1B 302000

Four Semesters 9, 10 UC/CSU

Prerequisite: Teacher recommendation

This course is designed to introduce students to the concepts of algebra. The topics will be the same as Algebra I but will be covered at a slower pace with greater opportunity for practice for those who find math a challenge. This is a two-year course.

Note: A TI83 or higher Graphing Calculator is required for the course.

Algebra I 303000

Two Semesters 9 UC/CSU

Prerequisite: Qualifying test scores on entrance examination or teacher recommendation

Algebra I is a college-preparatory course that aims to develop understanding and computational skills using the real number system. A variety of functions are explored with emphasis on linear and quadratic functions. Relevant problems are solved with the use of appropriate technology.

Note: A TI83 or higher Graphing Calculator is required for the course.

Geometry 304000

Two Semesters 10 UC/CSU

Prerequisite: Passing grade 2nd Semester in Alg I with teacher recommendation.

Geometry is the study of visual patterns. The course integrates algebra with geometry. It emphasizes reading and problem-solving. In the text, real life situations are used to facilitate understanding of geometric ideas and to provide the setting for the practice of geometric skills. Proof, which requires knowledge of geometry, is developed gradually through the course.

Note: A TI83 or higher Graphing Calculator is required for the course.

Informal Geometry 304500

Two Semesters 11 UC/CSU

Prerequisite: Passing grade 2nd Semester in Algebra 1B with teacher recommendation

Informal Geometry develops concepts and provides a foundation in the essentials of plane geometry, as well as a review of basic algebra. The course consists of examples and hands-on activities that will be within the grasp of any interested student. This course will fulfill ICA's graduation requirement for geometry.

Note: A TI83 or higher Graphing Calculator is required for the course.

Algebra II 306000

Two Semesters 11, 12 UC/CSU

Prerequisite: Passing grade 2nd Semester in Geometry with teacher recommendation.

Students who took Algebra IA,IB, and/or Informal Geometry, will be required to pass the Algebra Proficiency Exam.

Algebra II extends the content of Algebra I and centers on a study of linear, quadratic, exponential and logarithmic functions. This course includes an in-depth study of linear equations, powers and roots, complex numbers and conic sections together with their equations and graphs. Note: A TI83 or higher Graphing Calculator is required for the course.

Pre-Calculus 307000

Two Semesters 12 UC/CSU

Prerequisite: Passing grade 2nd Semester in Algebra II with teacher recommendation.

Topics from Algebra are looked at from the perspective of functional analysis with an eye toward application to the calculus. Topics include polynomials, rational equations, trigonometric concepts and functions, vectors, complex variables and the exponential and log functions.

Note: A TI83 or higher Graphing Calculator is required for the course.

Honors Pre-Calculus 307500

Two Semesters 11 UC/CSU

Prerequisite: Grade of B- or better 2nd Semester in Algebra II Honors, or B+ or higher in 2nd Semester Algebra II

This course goes into greater depth, maintains a faster pace and covers more topics than does the regular Pre-Calculus course. Performance evaluations, as well as the student workload, are typically more challenging and demanding.

Note: A TI83 or higher Graphing Calculator is required for the course.

AP Calculus 308500

Two Semesters 12 UC/CSU

Prerequisite: Grade of B- or better 2nd Semester in Honors Pre-Calculus or B+ or higher in 2nd Semester Pre-Calculus

The course teaches all topics associated with Functions, Graphs, and Limits; Derivatives; and Integrals as stated in the Calculus AB Topic Outline in the AP Calculus Course Description. Students are encouraged to investigate concepts and ideas analytically, graphically, and numerically. Topics are taught using teaching methodologies that help develop their mathematical intuition as opposed to a formulaic approach to problem solving. Although computational competence is important, a broader understanding of Calculus applications is emphasized.

Note: A TI83 or higher Graphing Calculator is required for the course.

Problem Solving Strategies 309001

Fall Semester 12 UC/CSU

Prerequisite: Passing grade 2nd Semester in Algebra II

Fulfills one semester of the UC "g." requirement

Students who enroll in this course must also enroll in Introduction to Statistics.

This course teaches the student thinking strategies people use in the real world to solve problems. Using stories, puzzles, allegories and situations from the worlds of work and play, we learn how to think logically about a problem, how to organize what is known, how to recognize patterns, how to eliminate improbable solutions, and how to arrive at solutions by multiple methods.

Note: A TI83 or higher Graphing Calculator is required for the course.

Introduction to Statistics 707002

Spring Semester 12 UC/CSU

Fulfills one semester of the UC "g" requirement

Students who enroll in this course must also enroll in Problem-Solving Strategies.

A basic understanding of statistics and statistical methods is required of most undergraduate majors in the social, natural, and physical sciences. This course paves the way by introducing the student to the basic concepts of data collection and organization, measures of central tendency, probability and prediction. The course materials emphasize examples from everyday life, with case studies showing how statistics are often used to mislead and manipulate. The software Fathom will be used extensively throughout the class.

Note: A TI83 or higher Graphing Calculator is required for the course.

Computer Programming 701000

Two Semesters 12 UC/CSU

Prerequisite: Passing grade in Algebra I 2nd Semester

Meets the University of California "g." requirement as a math elective. Students learn to program in Java creating standard business applications as well as games and special graphics. As students master basic skills, independent, creative projects are encouraged.

The main goal of the course is to develop students' skills and self-confidence in this challenging and demanding discipline so they will consider the career opportunities available to women in the highly compensated software development job market.

Physical Education

ICA requirement: 1 year

Health/Physical Education 900999

Two Semesters 9

Health/Physical Education is a two-semester course.

The course is designed to promote the student's understanding of theories, terms and concepts related to physical, social and mental health. The course provides health information in such a way that it influences the student to change her attitudes, take personal responsibility, and make wise decisions and choices regarding her own health. In addition, the course enables each student to learn the skills and rules necessary to allow full participation in all components of health-related fitness.

Religious Studies

ICA requirement: 4 years

Christian Faith/Sacraments 801000/802050

One Semester Each 9

This course is designed to introduce students to a more mature exploration of their faith. As they study areas of basic Christian faith, life, worship and Christian sexuality, they will be given the opportunity to reflect upon how these relate to their developing personality and to their journey in religious faith. The course is intended to assist students in their growth toward human and Christian personal identity.

Sacraments is designed to introduce students to a theological, historical and experiential study of the seven sacraments with an examination of their rites and symbols. This course on sacraments exposes students to the concept of "sacramental awareness" which refers to the ability to recognize God's presence in daily living. Other areas of study are grace, symbol, ritual, prayer, Jesus as the perfect sacrament and the church in her role as servant.

Scripture: Old and New Testaments 803000

Two Semesters 10 & 11

This full year course is designed to acquaint the student with the history, major stories, principal characters, themes and symbols of the Old and New Testaments. Because the Scriptures are the foundation of our Judeo-Christian faith, a strong background in them will significantly contribute to each student's understanding of the spiritual roots of the Church, her teachings, her liturgy, and the sacraments.

Pursuit of Character 804001

Two Semesters 12

The framework of this course is based on a study of moral ecology, the belief that God created human beings to have a relationship with Him as the source of life and intends that human beings have relationships with one another in their journey through life.

Together as a class, students will have the opportunity to examine issues of conscience, the relationship between law and truth, issues of human rights, questions of self-worth, and the responsibilities of sexuality, family and community.

Science

ICA requirement: 2 years (3 years recommended) for 2009-2010; 3 years required for 2011 and beyond

CSU/UC requirement: 2 years (*CSU accepts Integrated Science as one of the two years; UC requires 2 years [must be Biology and Chemistry or Physics] and recommends 3 years in addition to Conceptual Physics*)

Conceptual Physics 404001

Two Semesters 9 UC/CSU awaiting approval

Prerequisite: Concurrent enrollment in Algebra I or Algebra 1A/1B

How do your headphones make music? At what velocity should you kick a soccer ball if you want to score a goal? We will find answers to these and many other physics questions in this course. Topics include how and why things move, electricity and magnetism, and waves like sound and light. Students will use their newfound algebra skills as they discover basic principles of physics by experimentation. This is a college-preparatory laboratory class.

Biology 402000

Two Semesters 10 UC/CSU

Prerequisite: Credit in Integrated Science

This college-preparatory laboratory course includes a general survey of biology. Cell biology, genetics, evolution, ecology/diversity and physiology are emphasized. Students will learn microscopy and dissection techniques.

Honors Biology 402500

Two Semesters 10 UC/CSU

Prerequisite: Credit in Integrated Science **and** recommendation of Integrated Science teacher

This college-preparatory laboratory course focuses on cell biology, genetics, evolution, ecology/diversity and physiology. Students will learn microscopy and dissection techniques. Honors Biology necessarily moves at a faster pace than Biology so that students can go into greater detail and depth.

Chemistry 403000

Two Semesters 11 UC/CSU

Prerequisite: B- or better in Biology, or C- or better in Honors Biology **and** 80% or better on the CPME Test, **and** teacher recommendation.

Topics in Chemistry include atomic and molecular structure, the periodic table, stoichiometry, chemical bonding, gas laws, acid-base chemistry and oxidation/reduction reactions. Emphasis is placed on problem-solving and making sense of experimental

patterns. Note: Students who would like to take both Human Physiology and Chemistry must take both classes during their junior year. Both classes are college preparatory laboratory science classes.

Human Physiology 704001

Two Semesters 11 UC/CSU

Prerequisite: Credit in Biology or Honors Biology

Human Physiology focuses on the structures of the human body and their functions. The survey of body systems will be supplemented with laboratory experiments and observations to demonstrate basic principles of anatomy and physiology. Note: Students who would like to take both Human Physiology and Chemistry must take both classes during their junior year. Both classes are college preparatory laboratory science classes.

Physics 404000

Two Semesters 12 UC/CSU

Prerequisite: C- or better in Chemistry, **and** C- or better in Geometry **and** 80% or better on CPMET **and** teacher recommendation.

This is a college-preparatory laboratory course whose topics include acceleration, force, momentum and energy, light, sound, magnetism and electricity. Emphasis is placed on both mathematical and experimental problem-solving. Students will engineer and build a miniature bumper car that competes in a competition during the spring semester.

Conceptual Chemistry 403001

Two Semesters 12 UC/CSU awaiting approval

Prerequisite: Credit in Biology or Honors Biology

This class builds students' understanding of chemistry by direct experiment and teaches them how to make sense of patterns of behavior. The curriculum, developed at UC Berkeley, "organizes lessons around the big ideas of chemistry, framing the core concepts within everyday, real-world contexts." The topics include alchemy, smell, weather, toxins and fire.

Social Studies

ICA requirement: 4 years

UC/CSU requirement: 3 years

Ancient World History 104000

Two Semesters 9 UC/CSU

Ancient History is a year-long course that examines the basic building blocks of selected ancient civilizations from Asia, the Middle East, Mesoamerica, Europe and Africa. It explores how representative civilizations organized their societies, earned and distributed their wealth, developed their belief systems, and contributed unique discoveries in the arts and sciences. While focusing on what made each of these civilizations unique, this course also recognizes the common threads that weave all of humanity together. Additionally, this course examines how the ideas of the past are still influencing the

world of today. Students will also master the fundamentals of political and physical geography.

Modern World History 101000

Two Semesters 10 UC/CSU

Prerequisite: Credit in Ancient World History

The Modern World History curriculum investigates more recent worldwide changes in political and economic thought. Beginning with the Enlightenment and ending with the post-Cold War world, students will explore membership and identity in society, moral responsibility, and the connection of the individual to the world through politics and economics.

Modern World History Honors 101500

Two Semesters 10 UC/CSU

Prerequisite: Recommendation of Ancient World History teacher

The Modern World History curriculum investigates more recent worldwide changes in political and economic thought. Beginning with the Enlightenment and ending with the post-Cold War world, students will explore membership and identity in society, moral responsibility, and the connection of the individual to the world through politics and economics. This course covers in greater depth material surveyed in the Modern World History course. Supplementary study of relevant literature, music, art and other primary and secondary sources augments student understanding of various civilizations studied. Particular emphasis is placed on developing students' critical thinking, discussion and writing skills.

United States History 102000

Two Semesters 11 UC/CSU

Prerequisite: Credit in Modern World History or Modern World History Honors

The United States History course presents various themes, concepts and perspectives that run throughout the country's history with particular emphasis on social justice and civic responsibility. Students will not only learn about the history of America through a variety of teaching strategies and practices but also come to appreciate how they can become productive, informed citizens of the United States.

United States History Advanced Placement/Honors 102500

Two Semesters 11 UC/CSU

Prerequisite: Recommendation of Modern World History or Honors Modern World History teacher

Designed as an equivalent to a college-level survey course, the AP/Honors United States History curriculum challenges students not only to investigate critically and comprehensively the major developments in American history but also to develop the analytical skills necessary to deal with those developments authoritatively. Students will learn to assess historical materials, weigh competing scholarly interpretations of those materials, and offer independent conclusions informed by concrete evidence to prepare the College Board's AP United States History Exam in early May. The exam is optional.

United States Government and Economics 103001

Two Semesters 12 UC/CSU

Prerequisite: Credit in United States History or AP United States History

In this course, students spend one semester studying the institutions and principles of American governance and investigating the roles they play in the news and in our everyday lives. In the second semester, students study foundations of micro- and macroeconomics and investigate how these foundations affect people at home and around the world. At the same time, students will prepare and practice skills they will need to be successful after high school.

Advanced Placement United States Government and Politics 103500

Two Semesters 12 UC/CSU

Prerequisite: Recommendation of US History teacher

The AP United States Government and Politics course will challenge students to develop an analytical perspective on the various institutions, groups, beliefs and ideas that constitute government and politics in the United States. Topics for study include, but are not limited to, the constitutional underpinnings of United States government, institutions of national government, political beliefs and behaviors, political parties and interest groups, mass media, public policy and civil rights. Coursework is geared towards preparing students for the College Board's AP United States Government and Politics Exam -- for which each student enrolled in this class must sit -- in May.

Psychology 702002

Fall Semester 12 UC/CSU

(Note: This course has been approved as a "g." elective on the UC/CSU a. – g. course list.)

Psychology is a one-semester course focusing on the study of human behavior. Behavior includes physical characteristics, cognitive activity, and emotional states, as well as social and environmental factors during the complete life cycle. Emphasis is on the emotional and physical well-being of the person as a whole. The student will discuss stress reduction, motivation and emotion, memory and thought and personality theories.

World Language

ICA requirement: 2 years

CSU/UC requirement: 2 years minimum, preferably 3 years

French I 501000

Two Semesters 9 UC/CSU

The course emphasizes achieving elementary proficiency in the four basic skills of listening, speaking, reading and writing. There is strong emphasis on speaking, listening and writing centered around present, everyday and personal circumstances.

French II 502000

Two Semesters 10 UC/CSU

Prerequisite: Passing grade in French I

This course emphasizes intermediate study of the language in the four skills of listening, speaking, reading and writing. Strong emphasis is placed on speaking and writing centered around real, possible, speculative, personal and relational circumstances.

French III 503000

Two Semesters 11 UC/CSU

Prerequisite: Passing grade in French II

This course emphasizes advanced study of the language in the four skills of listening, speaking, reading and writing. Strong emphasis is placed on speaking and writing centered around real, possible, speculative, personal, relational and global circumstances.

Spanish I 511000

Two Semesters 9 UC/CSU

This course emphasizes achieving elementary proficiency in the four basic skills of listening, speaking, reading and writing. Strong emphasis is placed on speaking and writing centered around present, everyday and personal circumstances.

Spanish II 512000

Two Semesters 10 UC/CSU

Prerequisite: Passing grade in Spanish I

This course is a continuation of the study of the language in the four skills of listening, speaking, reading and writing. Strong emphasis is placed on speaking and writing centered around real, possible, speculative, personal and relational circumstances.

Spanish III 513000

Two Semesters 11 UC/CSU

Prerequisite: Passing grade in Spanish II

Advanced proficiency in the four basic skills of listening, speaking, reading and writing is stressed. Strong emphasis is placed on speaking and writing centered around real, possible, speculative, personal, relational and global circumstances.

Spanish I for Bilingual Students 521000

Two Semesters 9 UC/CSU

Prerequisite: Student must exhibit a satisfactory degree of fluency in the language.

Elements of pronunciation are stressed and grammar, conversation, reading, dictation and writing are used to improve mastery of the students' native language.

Spanish II for Bilingual Students 522000

Two Semesters 10 UC/CSU

Prerequisite: Passing grade in Spanish I for Bilingual students

Accuracy in the spoken and written language is emphasized. Vocabulary building, grammar, conversation, reading and writing are continued.

AP Spanish Language 514500

Two Semesters 11 UC/CSU

Prerequisite: Grade of B- or higher in Spanish III and teacher approval or passing grade in Bilingual Speaking II and teacher approval.

This course emphasizes advanced study of the language in order to prepare for the California College Board Advanced Placement Language Test.