

UNIVERSITY HIGH SCHOOL

2011-2012 COURSE CATALOG

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CAREER & TECHNICAL EDUCATION

All Career & Technical Education courses listed here are Pima JTED enhanced courses. Community College credit may be available for these courses.

Digital Media

Students are introduced to the Audio-Visual Technology program standards designed to prepare students to produce and edit digital images and video/animation, develop interactive media and manage digital media. *Grades 9, 10, 11, 12*

Design & Merchandising 1/2

Students begin completing standards in the Design and Merchandising program designed to prepare students for employment in design production, apparel or home furnishings sales, manufacturing and custom fashion or interior design. *Grades 9, 10, 11, 12*

Design & Merchandising 3/4

Students complete standards and enhance their skills in the Design & Merchandising program preparing students for employment in design production, apparel or home furnishings sales and manufacturing, custom fashion or interior design. *Pre-requisites: Design and Merchandising 1/2. Grades 10, 11, 12*

Exploring Engineering

Fundamentals of Information Technology

Students begin to complete standards in the Information Technology program including employability, leadership and business ethics skills. The four IT program options are also explored and some of the basic standards are completed in each area. *Grades 9, 10, 11, 12*

Software Development 1/2

This course begins to prepare students to apply technical knowledge and skills to apply software theory and programming methods to business data. *Grades 10, 11, 12*

Software Development 3/4

This course prepares students to apply technical knowledge and skills to apply software theory and programming methods to business data. *Pre-requisites: Software Development 1/2. Grades 11, 12*

Web Page Development 1/2

This course begins to prepare students to apply technical knowledge and skills to design, implement and maintain web sites addressing the program standards. *Grades 9, 10, 11, 12*

CAREER & TECHNICAL EDUCATION

Web Page Development 3,4

This course prepares students to apply technical knowledge and skills to design, implement and maintain web sites addressing the program standards. *Grades 10, 11, 12*

AP Computer Science

This course prepares students to apply technical knowledge and skills to successfully pass the AP Computer Science exam. *Pre-requisites: Software Development 3/4. Grade 12*

FINE ARTS

Clay & Ceramics

This course explores ceramic design and materials. Emphasis will be on designing for various hand building techniques. Students will also learn glazing, staining and firing techniques. Composition techniques related to ceramics will also be taught. *Some supplies required. Grades 9, 10, 11, 12*

Crafts & Ceramics

This class will serve as an introduction to crafts and craft design. The craft student will explore ceramic design and materials. Emphasis will be on designing for various craft techniques. Students will also learn ceramic; glazing, staining and firing techniques. *Some supplies required. Grades 9, 10, 11, 12*

Drawing & Painting

This course explores various drawing techniques using the media of pencil, ink and pastels. Color theory is defined through painting media and techniques as well as a comparative study of painting styles. Painting media include tempera, watercolors, acrylics, and other color processes. Opportunities to explore and stimulate interest in the art media are provided through cultural and historical studies, composition, and color theory exercises. This course is designed to develop high-level skills includes complete portfolio development and preparation for career and higher education opportunities. *Pre-requisites: Prior related classes and/or teacher permission. Grades 9, 10, 11, 12*

AP Studio Art

This is a college-level, disciplined-based Studio Art course. This one-year AP Studio Art course provides a college-level curricular option for satisfying the state Fine Arts requirement. Students may earn college credit with a successful performance on the AP Studio Art Portfolio. Instead of taking a written exam, students produce a portfolio, either general or drawing, for evaluation. Portfolios contain three sections: Quality, for which actual artwork is submitted; Breadth, which is demonstrated by a wide range of experience; and concentration, which is an in-depth individual project. *Pre-Requisite: Previous high school course in Studio Art or Art classes taken outside of the secondary classroom OR admission by teacher based on evaluation of a portfolio of previously-completed artwork. Grades 10, 11, 12*

AP History of Art

This is a college-level, disciplined-based Art History course. This one-year AP History of Art course provides a college-level curricular option for satisfying the state Fine Arts requirement. Students may earn college credit with a successful performance on the Advanced Placement Art History Exam. Course content includes a survey of painting, sculpture, and architecture of Western Civilization from cave paintings through the Gothic and Renaissance to the present. This course will also analyze Ancient, Medieval, Far Eastern, pre-Colombian, and other influences upon Western art. *Grades 10, 11, 12*

Band, Intermediate

This class is for students who play a brass or woodwind instrument and are considered at the intermediate level of technical development. This may include marching and symphonic band participation. Enrollment is for the full year only and attendance at rehearsals and performances outside the school day is required. *Grades 9, 10, 11, 12*

FINE ARTS

Band, Advanced

This course will focus on both individual and ensemble instrumental techniques. This class is exclusively for students who have chosen not to participate in the marching band. Instruction is in the intermediate-level concert band literature, while improving their understanding of musical notation and expression. All students will be required to read music and to practice regularly at home. The spring semester will require attendance at weekly nighttime rehearsals and a few performances. A great attitude and positive work ethic will be expected of all Band members. *Pre-requisites: Prior related classes, audition and/or teacher permission. Grades 9, 10, 11, 12*

Band, Color Guard

This is the Color Guard class for the Marching Band and winter guard shows. This group performs at all football games, marching festivals, and in a variety of other venues. Students enrolled in the class will learn the fundamentals of Color Guard involving the use of rifle, flag, props, dance, expressive creativity, and the elements involved in a performing art. Enrollment is for the full year only. Attendance at rehearsals and performances outside the school day is required. *Pre-requisites: Prior related classes, audition AND/OR teacher permission. Grades 9, 10, 11, 12*

Jazz Band, Ensemble

Jazz Band is an advanced instrumental ensemble. Students perform a variety of jazz music and learn to improvise. Enrollment is for the full year only and attendance at rehearsals and performances outside the school day is required. *Pre-requisites: Prior related classes, audition AND/OR teacher permission. Concurrent enrollment in Symphonic Band, Wind Ensemble, or Percussion class is required. Grades 9, 10, 11, 12*

Orchestra, Intermediate

This course instructs string students at the intermediate level. The class includes the study and performance of string music literature for large and small ensembles. There are four to six performances a year. *Pre-requisites: Prior related classes, audition AND/OR teacher permission. Grades 9, 10, 11, 12*

Orchestra, Advanced

This orchestra is for students who have mastered the basics of their instrument, but wish to learn advanced techniques and literature from standard orchestral literature to popular music. They will also have opportunities to perform in a full orchestra (with winds and percussion) setting. Students enrolled in this class will participate in community performances as well as festivals. After school rehearsals and performances are required. *Pre-requisites: Prior related classes, audition AND/OR teacher permission. Grades 9, 10, 11, 12*

Orchestra, Chamber

This class is for violin, viola, cello or bass players who play proficiently in first and third/fourth positions on instrument, with consistent tone, and good posture and technique. For your audition you must play: two octave major scales and at least one music selection that demonstrates good tone, intonation, rhythm, and shifting up to or above 3rd position for violins/violas, up to or above 4th position for cellos/basses. *Pre-requisites: Prior related classes, audition AND/OR teacher permission. Grades 9, 10, 11, 12*

FINE ARTS

Percussion Master Class

This is the Marching and Concert Band class for percussionists. Students in this class participate in the marching drum line or mallet percussion section. This group performs at all football games, marching festivals, and in a variety of other venues. Instruments are assigned to players based on ability and the needs of the ensemble. Attendance at rehearsals and performances outside the school day is required. *Pre-requisites: Prior related classes, audition AND/OR teacher permission. Grades 9, 10, 11, 12*

Music Appreciation

This course is designed for students who would like to know more about music. The course instructs students in basic keyboard technique, basic music theory and guitar. *Grades 9, 10, 11, 12*

AP Music Theory

This is a college-level, disciplined-based Music Theory course. This one-year AP Music Theory course provides a college-level curricular option for satisfying the state Fine Arts requirement. Students may earn college credit with a successful performance on the AP Music Theory Exam. Students learn aural and visual understanding of musical structure and compositional procedures. Students will develop compositional fluency in reading notation, listening skills, and the ability to integrate these skills in sight-singing. *Pre-requisites: Prior related classes, audition and/or teacher permission. Grades 10, 11, 12*

Dance, Beginning

This class focuses on learning the basics of ballet, jazz, and modern dance technique, composition, and improvisation. The students learn body awareness and movement concepts through dance warm-ups and floor combinations. They are encouraged to explore their own movement styles during improvisation. The students begin to explore the elements of choreography by creating short studies in small groups. *This course can be used to fulfill the Fine Arts OR Physical Education credit. Grades 9, 10, 11, 12*

Dance, Intermediate

Intermediate Dance can be taken for one or two semesters. A basic understanding and execution of ballet, jazz, and modern dance technique, improvisation, and composition is required. Students will continue to refine and develop these skills. A cultural/historical perspective of dance is introduced through a research project culminating in a multidimensional presentation. The students further explore their artistic expression through group collaboration culminating in a performance in the spring. *This course can be used to fulfill the Fine Arts or Physical Education credit. Pre-requisites: Beginning Dance OR teacher permission. Grades 9, 10, 11, 12*

Dance, Advanced - Ivesia

The Ivesia class is an advanced level class and requires commitment. The goal of the Ivesia group is to bring the art of dance into the community at large. During the first semester, students work collaboratively on pieces that are performed at various locations. The season culminates in the spring with a concert that requires partner choreography. Each student will create work with a partner and dance in at least three other student works. *This course can be used to fulfill the Fine Arts or Physical Education credit. Participation fee required. Pre-requisites: Audition required. Grades 10, 11, 12*

FINE ARTS

Dance, Advanced - Primavera

The purpose of the Primavera class is to experience dance performance and choreography from a pre-professional perspective. The students are required to create and complete a dance as a solo choreographer, dance in at least five other student works, and perform in three major dance concerts throughout the year. *This course can be used to fulfill the Fine Arts or Physical Education credit. Participation fee required. Pre-requisites: Audition required. Grades 9, 10, 11, 12*

Theater Arts, Beginning

This course is designed to introduce students to all aspects of drama. This includes theatre history, acting, play production, lighting, sound properties, set design and individual and group performance. *Grades 9, 10, 11, 12*

Theater Arts, Intermediate

Students will master advanced skills in acting, lighting, sound and set building. They will also produce one full-length play as well as shorter presentations. This class intends to foster a deeper appreciation of the dramatic arts and the universality of theatre. *Pre-requisites: Prior related Fine Arts classes, audition and/or teacher permission. Grades 9, 10, 11, 12*

Theater Arts, Stage Management

This course is designed to introduce students to the basic functions and use of various theatrical sound, light, and stagecraft equipment and techniques as it applies to stage management. Students are encouraged to participate as members of the stage crew for performances held at the school. It involves the use of shop tools, fabrics, paints, light and sound equipment, backdrops, curtains, props, and other technical equipment as it applies to stage production. *Grades 9, 10, 11, 12*

Vocal Music, Beginning - Mixed

This is a non-audition choral music class. Emphasis is placed on vocal production, basic fundamentals of theory, and performance of mixed chorus literature. Students will participate in several concerts during the year. Eligibility is necessary for those who wish to compete. *Grades 9, 10, 11, 12*

Vocal Music, Advanced - Mixed

This group gives six to eight performances during the school year and participates in a musical production every other year. Continued emphasis is on music reading and vocal technique. Advanced Mixed sings four part music, both accompanied and a cappella. Performance dress required. *Pre-requisites: Prior related Fine Arts classes, audition and/or teacher permission. Grades 9, 10, 11, 12*

Vocal Music, Advanced - Girls

This is a choir for girls who have completed Beginning Chorus and/or who possess demonstrated vocal ability and knowledge of basic theory fundamentals. Three-part treble music of all styles is studied and performed. Students enrolled will participate in several school and outside performances. *Pre-requisites: Prior related Fine Arts classes, audition and/or teacher permission. Grades 9, 10, 11, 12*

FINE ARTS

Vocal Music, Ensemble

This class instructs students in the advanced skills of listening, communication, singing, and performing through a wide range of choral literature ranging from serious to pop with strong emphasis on sight-reading, vocal techniques applied to ensembles, and solo work. It teaches the master of complete vocal independence in a mixed formation to include 4- to 8-part singing for male and female voices. A wide range of familiarity with vocal styles and techniques should be obtained as well as basic stage movement and development of stage presence. Many performances are a required component of this class.

Grades 9, 10, 11, 12

LANGUAGE ARTS

English 9, GATE

The content and study required is more concentrated and rigorous than that of Freshman English. The course emphasizes effective written communication. Writing skills are enhanced through a study of grammar and sentence patterns. Emphasis on literary elements, vocabulary and conventions. *Grade 9*

English 10, GATE

This course is designed to teach students about major social, religious, philosophical and cultural issues and themes in the Non-Western world with a focus on its relationship to Western thought, history and philosophy. An emphasis is placed on literature from the Middle East, Japan, China, Africa and India. Students develop skills in research, reasoning, writing and evaluation of writing using the Six Traits Rubric. Composition instruction concentrates on persuasive essay and in-class essay exam to prepare for the AIMS test. Students continue to practice literary analysis and expository writing. Creativity, multiple intelligences, and self-direction are emphasized along with AIMS preparation. *Grade 10*

AP English Language

This course engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing. *Grade 11*

AP English Literature

This course emphasizes the critical reading of literature. Writing is a regular part of the program. The course is designed for students who are capable of doing college-level work in high school and who are willing to devote the time required for a rigorous course of study. *Grade 12*

Journalism, Advanced - Yearbook

Students develop the skills necessary to design and produce a high school yearbook. Students will be introduced to the standards and technical operations necessary for successful business operations. This class uses a computer lab to record and put together the year-long events. Computer skills are helpful but not required. Students must be able to work well with others to meet ALL deadlines. Students will gain skills in communication, leadership, time management, project management, problem solving, writing, digital photography and desktop publishing to name a few. Students may take additional years with teacher permission. *Elective. Grades 9, 10, 11, 12*

MATH

FRESHMAN PLACEMENT PROCESS: As a means of placing students in the appropriate math class, incoming students will take the UHS Math Placement Test in May. This test measures the student's understanding of and technical ability with the skills that are taught in the Algebra I class. Students scoring 70% or above will be placed in Geometry. Students scoring from 40% to 68% will be placed in Intermediate Algebra. Students scoring from 0% to 38% will be placed in Algebra I. If a student is placed in Honors Algebra, he/she will receive elective high school credit for 8th grade Algebra.

Students who have completed High School Geometry in middle school that earn from 40% to 78% on the Math Placement Test will be placed in Honors Intermediate Algebra. Students who have completed High School Geometry in middle school and score 80%-100% on UHS Math Placement Test will be placed in Honors Pre-Calculus I / Honors Trigonometry. Questions concerning how the middle school Geometry credit will be handled are best discussed with your student's BOOST math teacher or with your student's 9th grade math teacher.

UPPER CLASSMEN PLACEMENT PROCESS: Due to the number of courses offered and the number of different ways a student may progress through our specialized curriculum, the math department staff have been asked to recommend the course that is most appropriate for your student to enroll in. If you have questions concerning the recommendation, please contact your student's current math teacher.

GRADUATION REQUIREMENTS: While TUSD and the state of Arizona are increasing the mathematics graduation requirement from three years to four years, UHS has required four years of mathematics in order to graduate for a number of years. The state's 4-year math requirement will be effective for class of 2013 graduates. Arizona state universities currently require four years of college preparatory math for admission. All UHS math courses fulfill the math graduation requirements for UHS, TUSD and the state as well as the entrance requirements for the three state universities.

CALCULATORS: Students must have a scientific calculator for all UHS math courses. In addition, the Pre-Calculus, Trigonometry and Calculus courses require that the student have daily access to a graphing calculator. Although the graphing calculator is not required for Algebra, Geometry and Intermediate Algebra, it is a very useful tool in these courses as well. The UHS Math Department recommends the Texas Instruments TI-83 or TI-84 models. These models have the best combination of features needed for the course work at a reasonable price. The TI-89 is an acceptable choice for the student who is interested in programming and/or is enrolling in Pre-Calculus or Calculus.

Algebra - Honors

Honors Algebra is taught at an accelerated pace with enrichment. The depth and breadth of this course prepares students for the theoretical and rigorous experiences they will eventually encounter in Pre-Calculus. *Grade 9*

Algebra, Intermediate

This course extends and applies the concepts of algebra and geometry, and prepares students for Pre-Calculus. This course serves as one of the math requirements for entrance at the college/university level. The curriculum includes lines in the plane, systems of linear equations, inequalities, polynomial, rational expressions and equations, and radical expressions and equations. Students will use analytical, numerical, graphical, and verbal approaches to solving problems. Also included are quadratic equations, literal equations, exponential, and logarithmic functions, sequences and series and optional topics. *Prerequisites: Algebra 1/2 (or equivalent) AND Geometry 1/2. Grades 9, 10, 11*

MATH

Algebra, Intermediate - Honors

A fast paced course that extends the concepts of algebra and geometry, and prepares students for enrollment in Pre-Calculus. This serves as one of the math requirements for entrance at the college/university level. The curriculum includes topics from Intermediate Algebra, but is at a higher level of rigor. Students will use analytical, numerical, graphical, and verbal approaches to solving problems. Topics include higher degree equations, functions, systems and graphs, and trigonometric functions. *Pre-requisites: Algebra 1/2 (or equivalent). Grades 9, 10*

Geometry - Honors

Honors Geometry is taught at an accelerated pace with enrichment. The content and approach to learning are more abstract and formal than in the other geometry courses. *Pre-requisites: Algebra 1/2 (or equivalent). Grades 9, 10*

Pre-Calculus 1 - Honors / Trigonometry - Honors

Honors Pre-Calculus 1 is an accelerated approach to Pre-Calculus. It is designed to rigorously strengthen and continue the study of algebra at an advanced level. It provides an in-depth study of advanced mathematics topics, which include trigonometry, equations and inequalities in one or more variable (both linear and quadratic), and an extended understanding of functions, with heavy emphasis in graphing. Honors Trigonometry is taught at an accelerated pace with enrichment. This course includes an in-depth study of circular functions and their applications to problems in physics, engineering, and other sciences. Topics also include graphing trigonometric functions, solutions of triangles, vectors, identities, trigonometric equations, inverse trig functions, complex numbers, polar coordinates, and De Moivre's Theorem and optional topics. *Pre-requisites: Algebra 1/2 (or equivalent) AND Geometry 1/2. Grades 9, 10, 11, 12*

Pre-Calculus 2 - Honors / Calculus - Honors

Honors Pre-Calculus 2 is an accelerated approach to Pre-Calculus. It is designed to rigorously strengthen and continue the study of algebra at an advanced level. It provides an in-depth study of advanced mathematics topics, which include trigonometry, equations and inequalities in one or more variable (both linear and quadratic), and an extended understanding of functions, with heavy emphasis in graphing. Honors Calculus reviews the concepts of analytic geometry and provides a rigorous, in-depth study of differential and integral calculus. Topics covered include limits, differentiation, and integration of algebraic functions of one variable, and the application of those functions to problems from science and engineering. Theory and application are integrated throughout the course. A graphing calculator is required for this class. *Pre-requisites: Pre-Calculus 1 / Trigonometry. Grades 10, 11*

AP Calculus AB

This course uses the concepts of analytic geometry and provides a rigorous in-depth study of the first two semesters of differential and integral calculus. Topics included in the course are limits, continuity, differentiation, and the integration of algebraic and basic trigonometric functions. Throughout the course, understanding is stressed over memorization. Practical problems and applications are studied to help students appreciate Calculus as a problem-solving tool. *Pre-requisites: Pre-Calculus 1 / Trigonometry. Grade 12*

MATH

AP Calculus BC

This course examines topics such as both transcendental and algebraic functions, advanced integrations techniques, polar regions, solid analytic geometry, vector functions, parametric equations, infinite series and differential equations. Theory and application are integrated throughout. The course prepares the students for the Advanced Placement Calculus BC examination. *Pre-requisites: Calculus. Grades 11, 12.*

AP Statistics

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data, Sampling and Experimentation, Anticipating Patterns, and Statistical Inference. Students should view this course as an elective, not a substitute for the Pre-Calculus 2 or AP Calculus courses. *Pre-requisites: Pre-Calculus 1 / Trigonometry. Grades 11, 12.*

PHYSICAL EDUCATION & HEALTH

Physical Education

Emphasis will be placed on learning skills through drill, practice and game experience as well as rules of competition and game strategies. General physical fitness will be enhanced through participating in exercise programs. *Grades 9, 10, 11, 12*

Health

Students demonstrate the ability to advocate for personal, family and community health, to use goal setting and decision-making skills to enhance health, to use interpersonal skills to enhance health, to analyze the influence of culture, media, technology and other factors on health, to practice health-enhancing behaviors and reduce health risks, to access accurate health information and to comprehend concepts related to health promotion and disease prevention. One semester. *Grades 9, 10, 11, 12*

SCIENCE

Biology - Honors

This course offers a survey of selected topics from the discipline that includes an emphasis on the laboratory as a vehicle for experimentation and acquisition of knowledge. *Grade 9*

AP Biology

This course provides a rigorous and in-depth study of Biology equivalent to that offered at the college level. Emphasis is on concept development, knowledge acquisition, and development of critical thinking skills. *Pre-requisites: Biology AND Chemistry. Grades 11, 12*

Chemistry - Honors

This course is a survey of selected topics from the field of chemistry that includes an emphasis on the laboratory for developing problem solving skills and relating hands-on experimentation to chemical principles. Materials are of the 11th and 12th grade reading level. Critical and logical thinking skills are developed through resolution of selected problems in chemistry and other related disciplines. *Pre-requisites: Algebra. Grade 10*

AP Chemistry For Sophomores

This course is designed as a first year college level chemistry course for highly motivated sophomores who have exceptional ability in both math and science. Emphasis is on concept development and the extensive utilization of the laboratory for experimentation, knowledge acquisition, and development of critical thinking skills. A zero-period lab course (Research Methods) is required to be taken concurrently with the lecture course. *Pre-requisites: Recommendations of the Biology AND Freshman Math teachers with a minimum grade of A or B in both courses. Students may appeal to the AP Chemistry teacher to waive the prerequisites. Grade 10*

AP Chemistry

This course is identical to the course description for AP Chemistry for sophomores and thus allows those who did not take the course as sophomore a means to pursue university-level studies while still in secondary school. This course makes it possible for interested students to prepare for the AP Chemistry exam or any other exam by which the student might receive advanced placement and/or university credit. *Pre-requisites: Chemistry AND approval of AP Chemistry Instructor. Grades 11, 12*

Research Methods

This is a zero-hour lab course and is must be taken concurrently with AP Chemistry. *Grades 10, 11, 12*

Physics - Honors

This "Physics for Poets" course emphasizes the development of concepts of physics from historical, cultural and scientific viewpoints. Understanding of the principles of physics will be developed by a combination of laboratory experiences and study of philosophy, history and literature. The traditional areas of physics (mechanics, heat, sound, light, electricity and magnetism and modern physics) will be covered. For students with diverse career goals. *Pre-requisites: Algebra AND Geometry. Grades 11, 12*

SCIENCE

AP Physics B

This comprehensive, college-level physics course covers the traditional content areas of physics, (mechanics, heat, sound, light, electricity, magnetism, and modern physics) from a mathematical and experimental viewpoint. A problem-solving emphasis prepares students for the AP Physics B examination, which may earn credit for a non-calculus college physics course. *Pre-requisites: Trigonometry OR consent of Physics Instructor. Grades 11, 12*

AP Physics C

This course is the standard first college-level physics course for students who are planning careers in technical fields. The first semester is spent in developing the concepts and problem analysis of the physics study of mechanics, and the second semester is devoted to the study of electricity and magnetism. This is the Calculus-based orientation of AP Physics. *Pre-requisites: Honors Physics or AP Physics B AND concurrent enrollment in (or successful completion of) AP Calculus BC. Grades 11, 12*

AP Environmental Science

This course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-caused, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. *Pre-requisites: Biology AND Chemistry. Grades 11, 12*

Advanced Research Methods

This course provides students with the opportunity to research a topic of their choice in the sciences and present their results to the scientific community. It is designed to develop the student's ability to do experimental design. It includes the analysis of peer-reviewed science articles and weekly discussions of science current events. Students are encouraged to connect with a mentor from the research community to provide guidance and/or to provide laboratory equipment and space to conduct their own research. Students are expected to complete their research by the end of the first semester. The second semester involves preparing for competition as a means of learning how to communicate the results of their research. Students are expected to participate in one or more science competitions, such as SARSEF, which may lead to scholarships for college, summer research internships, patents, and awards. *Be advised that depending on sponsorship of the competitions and availability of grants, students may be asked to pay for part of their expenses. Grades 11, 12*

SOCIAL STUDIES

FOUR-YEAR SOCIAL STUDIES REQUIREMENTS:

Freshman - Western Civilization/Economics (*satisfies state economics requirement*)

Sophomore - AP European OR AP World History (*either course satisfies state world history requirement*)

Junior - AP United States History (*satisfies state American history requirement*)

Senior - AP United States Government and Politics (*satisfies state government requirement*)

Western Civilization - Honors / Economics - Honors

This honors western civilization course provides a survey of the political, economic, cultural, and social history of the West from antiquity to the Renaissance. Emphasis is on the development of institutions and ideas which shape Western society today. This one semester economics course combines the major elements of microeconomics, macroeconomics, and international economics. This course satisfies the state economics requirement and covers the following basic principles: production possibilities, opportunity cost, comparative advantage, marginal analysis, cost analysis, competition, impact of government policies, real GDP, full employment, price stability, fiscal and monetary policy, aggregate supply and demand, international trade and globalization, and personal finance. *Grade 9*

AP European History

This is a college-level, disciplined-based history course. This one-year AP European History course provides a college-level curricular option for enrichment and acceleration of academic skill development. Students may earn college credit with a successful performance on the Advanced Placement European History Exam. The time span of the course is from 1300 to the present. This course offers three thematic areas of European History: 1) political and diplomatic; 2) intellectual and cultural; and 3) social and economic. Since this course is a sophomore option to fulfill the state world history requirement, sophomores will be given enrollment priority. *Option for sophomore's World History Requirement; Elective for juniors and seniors. Grades 10, 11, 12*

AP World History

This is a college-level, disciplined-based history course. This one-year AP World History course provides a college-level curricular option for enrichment and acceleration of academic skill development. Students may earn college credit with a successful performance on the Advanced Placement World History Exam. This course offers an integrated approach to global history with intellectual, cultural, political, diplomatic, economic, and social themes. Since this course is a sophomore option to fulfill the state world history requirement, sophomores will be given enrollment priority. *Pre-requisites: Option for sophomore's World History Requirement; Elective for juniors and seniors. Grades 10, 11, 12*

AP United States History

This is a college-level, disciplined-based history course. This one-year AP United States History course provides a college-level curriculum that satisfies the state United States History requirement. Students may earn college credit with a successful performance on the Advanced Placement United States History Exam. Course content includes a survey and historiography of the political, economic, and social history of the American people from the founding of colonial Jamestown in 1607 to world leadership in the 21st century. Since this course is a required junior class, juniors will be given enrollment priority. *Grade 11*

SOCIAL STUDIES

AP United States Government & Politics

This is a college-level, disciplined-based political science course. This one-year AP United States Government & Politics course provides a college-level curriculum that satisfies the state US Government requirement. Students may earn college credit with a successful performance on the Advanced Placement United States Government and Politics Exam. Course content includes an analysis of constitutional development, federalism, political beliefs and behaviors, parties and interest groups, processes and powers of government, and civil rights and civil liberties. The annual senior debate and mock election also is part of the curriculum of this course. *Grade 12*

AP Microeconomics / AP Macroeconomics

This is a college-level, disciplined-based Economics course. This one-year AP Economics course provides a college-level curricular option that satisfies the state Economics requirement. Students may earn college credit with a successful performance on the AP Economics exams. During the fall semester, Microeconomics examines the principles of economics that apply to the function of individual decision-makers. Primary emphasis is on the nature and function of goods/services markets, factors markets, and role of government in promoting efficiency and equity. During the spring semester, Macroeconomics examines the economic system as a whole. Primary emphasis is on national income and price determination, performance measures, growth, and international market systems. *Elective. Grades 10, 11, 12*

AP Psychology

This is a college-level, discipline-based Psychology course. This one-year AP Psychology course provides a college-level curriculum where students may earn college credit with a successful performance on the AP Psychology exam. Course content includes a 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 of Psychology. Students are also exposed to the research methods and ethics of practicing psychologists. *Elective. Grades 10, 11, 12*

Senior Instructors

Seniors, who, as juniors, have distinguished themselves in the AP United States History course, may enroll as a Senior Instructor upon the approval of the AP US History teachers. Senior Instructors will assume limited teaching roles under the supervision of the AP US History teachers. The responsibilities of a Senior Instructor may include grading, individualized in-class tutoring, constructing homework problems, facilitating small group discussion and test reviews. *Elective. Pre-requisites: Teacher permission is required. Grade 12*

WORLD LANGUAGES

Chinese 1/2

Students are introduced to basic grammar, sentence patterns and conversational vocabulary of Mandarin Chinese, using the Pinyin system of writing adapted from the Roman alphabet. The goal of first year Chinese is mastery of basic sentence patterns sufficient to permit students to engage in meaningful direct conversation, and expand their basic conversational skills through the acquisition of new vocabulary. Students will be introduced to 100 simplified Chinese characters as they begin to learn the traditional writing system. *Grades 9, 10, 11, 12*

Chinese 3/4

Students expand their conversational skills through the acquisition of enrichment sentence patterns and the continued acquisition of new vocabulary. In addition, they are introduced to an additional 500 simplified characters. The goals of the second year are mastery sufficient to permit the student to participate comfortably in social conversation; and the acquisition of a firm beginning foundation in the traditional Chinese writing system, generally considered to be 600 characters. Semi-independent study opportunities will be provided for students who wish to expand their knowledge of written Chinese beyond the 600-character level. *Pre-requisites: Chinese 1/2 OR equivalent competency. Grades 9, 10, 11, 12*

Chinese 5/6

This third year Chinese course helps students improve upon their lower-intermediate skills of listening, speaking, reading, and writing. The course will focus on comprehending more advanced materials than in Chinese II. The objective and scope of the third year focus is on increasing listening comprehension, improving conversational ability, composition skills, and extensive character recognition. This course emphasizes reading skill and translation ability while coordinating audio-lingual activities with reading development. Understanding cultural differences and similarities are continuously highlighted through art, music, film, history, current events, field trips to the local community, and study programs in different regions in China. *Pre-requisites: Chinese 3/4 OR equivalent competency. Grades 10, 11, 12*

Chinese 7/8

This course enables students to further refine their competency in Chinese language, increase their ability in understanding formal and informal spoken Chinese, and express their ideas and thinking through improved accuracy and fluency. The main components of the course are communicative refinement, consistent study of complex grammar, vocabulary expansion, literary reading comprehension, and continued cultural studies to further their knowledge of the history, culture, civilization, and contemporary life of China and the Chinese-speaking world; to continue to relate the study of the Chinese language to personal opportunities which may arise. Students will also use China's news agencies for news broadcasts and political developments on a global scale. *Pre-requisites: Chinese 5/6 OR equivalent competency. Grades 10, 11, 12*

AP Chinese Language

This course is designed to cover the equivalent of a second-year or the fourth semester college Chinese course. It is a specialized course designed for those students seeking college credit via the AP exam in Mandarin Chinese Language and Culture. Emphasis will be on conversation, writing composition, and reading the books required by the AP Program. *Pre-requisites: Chinese 7/8 OR teacher recommendation. Grades 9, 10, 11, 12*

WORLD LANGUAGES

French 1/2 - Honors

This course emphasizes: (a) the use of language for active communication; (b) the reading of basic dialogues, articles, and stories; (c) the practice of writing compositions and dialogues; (d) the use of correct verb forms and other grammatical structures; (e) recitation of dialogues and speeches and (f) basic understanding of French history, geography, and current events through exposure to illustrated readings, films and speakers. *Grades 9, 10, 11, 12*

French 3/4 - Honors

This course emphasizes: (a) the use of language for active communication; (b) the reading of short stories, short essays, dialogues, and special adaptations of literary works; (c) the writing of paragraphs using learned grammatical concepts and vocabulary; and (d) French culture through exposure to readings, films, and speakers. *Pre-requisites: French 1/2 OR equivalent competency. Grades 9, 10, 11, 12*

French 5/6 - Honors

This course emphasizes: (a) the use of language for active communication; (b) the reading of literary works (both poetry and prose) to prepare the students for the AP Literature exam which they may take at the end of their fourth year French class (the required and suggested reading list of French AP is lengthy and prescribes at least two years of studies); (c) the writing of short, one-page essays on various topics dealing with French culture, art, and literature; (d) French history, geography, and current events through exposure to illustrated readings, films, and speakers. *Pre-requisites: French 3/4 OR equivalent competency. Grades 9, 10, 11, 12*

French 7/8 - Honors

This course enables students to further refine their command of the four basic communications skills; to expose students to non-edited literary works and reading selections; to continue to provide an opportunity for students to further their knowledge of the history, culture, civilization, and contemporary life of French-speaking countries; and to continue to relate the study of the French language to personal opportunities which may arise. *Pre-requisites: French 5/6 OR equivalent competency. Grades 9, 10, 11, 12*

AP French Language

AP French is a specialized course designed for those students seeking college credit via the Advanced Placement test in Language and Literature. Emphasis will be on conversation, writing compositions and reading the books required by the AP Program. However, not all students are interested in taking these exams; therefore, the class is a mixture of AP students and those who participate in the preparations but prefer not to take the exams. *Pre-requisites: French 7/8 OR equivalent competency. Grade 12*

WORLD LANGUAGES

Students in German 5/6, 7/8 or AP German Language have the opportunity to spend four weeks in Germany through the German American Partnership Program, earning one Humanities credit.

German 1/2 - Honors

This course emphasizes: (a) the use of language for active communication through basic dialogue; (b) the reading of simple stories; (c) the practice of writing sentences and short paragraphs; (d) the use of correct verb forms and other grammatical structures; and (e) basic understanding of German history, geography, and current events through exposure to illustrated readings, from supplemental reading materials, songs, films, and cultural activities. *Grades 9, 10, 11, 12*

German 3/4 - Honors

This course emphasizes: (a) the use of language for active communication; (b) the reading of short stories, short essays, dialogues, and special adaptations of literary works; (c) the writing of paragraphs using learned grammatical concepts and vocabulary; and, (d) German culture through exposure to readings from supplemental reading materials, songs, and films. *Pre-requisites: German 1/2 OR equivalent competency. Grades 9, 10, 11, 12*

German 5/6 - Honors

This course emphasizes: (a) the use of language for active communications; (b) the reading of literacy works (both poetry and prose); (c) the writing of short essays on various topics; (d) review of specific grammatical concepts; and, (e) German history, geography, and current events through exposure to illustrated readings from supplemental reading materials, songs, films, and speakers. Students see live presentations and special interest topics via Deutsche Welle, a German language television program. *Pre-requisites: German 3/4 OR equivalent competency. Grades 9, 10, 11, 12*

German 7/8 - Honors

This course emphasizes: (a) the use of the German language for active communication; (b) the reading with comprehension of literary works (both drama and prose) of appropriate difficulty and mature content; (c) the formulation of critical opinions and judgments in correct oral and written German; (d) German literary developments as they relate to history and current events; and (e) advanced structures in German grammar. Students will also use Deutsche Welle for news broadcasts and political developments on a global scale. Special interest programs from Deutsche Welle are the basis for topics of discussion. *Pre-requisites: German 5/6 OR equivalent competency. Grades 9, 10, 11, 12.*

AP German Language

AP German is a specialized course designed for those student seeking college credit via the Advance Placement exam in German language. Emphasis will be on conversation, writing composition, and reading German literary works. Not all students may be interested in taking the AP exam; therefore, the class is a mixture of AP students and those who participate in the preparations but prefer not to take the exam. *Pre-requisites: German 7/8 OR equivalent competency. Grade 12*

WORLD LANGUAGES

Spanish 1/2 - Honors

Students will be introduced to the wonderful, challenging world of communication in Spanish. This first year of basic language instruction, which is a textbook-based proficiency course, focuses on the core skills of listening, speaking, reading and writing of Spanish. Classroom activities are augmented through a comprehensive cultural approach to the Spanish-speaking world, with activities ranging from music, art, film, theater, food, and community service. Active participation in class, daily preparation, and memorization is essential to acquire basic communication skills to express needs and wants. As with all other courses in this program, this course seeks to bring student achievement into alignment with the standards of the American Council on the Teaching of Foreign Languages. *Grades 9, 10, 11, 12*

Spanish 3/4 - Honors

During the second year of study, students will be able to further develop their listening, speaking, reading, and writing skills through a variety of activities. They will continue to study grammar and vocabulary; increase the use of Spanish for active communication; read short stories, articles, dialogues, and literary works; write stories, compositions, and longer dialogues which employ learned grammatical concepts and vocabulary; recite dialogues, speeches, stories, and poetry; and study Hispanic geography and culture through lectures, readings and films. Students who take this course will be prepared for the upper division courses because of the breadth and depth of the material covered. *Pre-requisites: Spanish 1/2. Grades 9, 10, 11, 12*

Spanish 5/6 - Honors

This course serves as a bridge between the first two years of basic language instruction and the more advanced courses offered in the program. It is a multi-text course designed to integrate the four skill areas (reading, writing, listening, and speaking) and focus on the use of the target language as both the principal means of communications as well as the object of study. Students practice these skills through the exploration of non-edited literary works and reading selections, film, theater, and direct language exchange with native speakers in order to become more deeply aware of the historic and contemporary culture of Spanish-speaking countries. In this course, use of the Internet is made as students acquire grammar, vocabulary and writing skills through interactive and individual activities. Some readings from the AP Spanish Literature course will also be introduced. *Pre-requisites: Spanish 3/4 OR equivalent competency. Grades 9, 10, 11, 12*

Spanish 7/8 - Honors

This multi-text pre-AP course is designed to enable students to further refine their competence in Spanish, increase their ability in understanding formal and informal spoken Spanish, and express their ideas and beliefs through improved accuracy and fluency. Students continue to improve their writing ability through frequent compositions based on readings and class discussions. The main components of the course are communicative refinement, consistent study of complex grammar, vocabulary expansion, literary reading comprehension, and continued cultural studies. Short stories, poetry and drama from the modern period from Spain and the Americas are explored and discussed in the target language. Literary readings, including selections from the Spanish Literature AP reading list, lead to longer and more sophisticated writing. Upon request, students may receive an AP Spanish Literature summer reading list. *Pre-requisites: Spanish 5/6 OR equivalent competency. Grades 9, 10, 11, 12*

WORLD LANGUAGES

AP Spanish Language

The AP Spanish Language course is a specialized class designed for those students seeking college credit via the AP exam in the Spanish language. The advanced student has previously demonstrated competence in listening, speaking, reading, and writing, and has a fundamental knowledge of the culture of Spanish-speaking peoples. Students will continue to explore the literature and culture of the Hispanic world through film, drama, poetry, and group projects, with explicit and implicit emphasis on grammar, conversation, writing, and selected readings from the modern period of Spain and the Americas. By year's end, students should be accurate and fluent as they compose expository essays and express ideas orally. Students are expected to take the AP exam, and will use the Internet consistently in order to improve their aural and oral skills in preparation for this exam. *Pre-requisites: Spanish 7/8 OR equivalent competency. Grades 11, 12*