

# ASD iSCHOOL

## LANGUAGE ARTS

English I Online . . . . . H0120OLS1/H0120OLS2

Grade level 9. Required. One semester each.

Prerequisite: None.

This online course incorporates an integrated approach to the teaching of reading and writing. Students read a variety of fiction and non-fiction world literature with an emphasis on literary analysis, including drawing inferences and analyzing main ideas. Students are taught the writing process and write in varying



**AP Computer Science . . . . .H1201OLS1/H1201OLS2**

Grade level: 11-12. One semester each.  
Prerequisite: Algebra II

This online AP Computer Science is a year-long introductory college-level course which covers the basics of Java in two semesters and is geared specifically toward high school students who plan to take the AP Computer Science A exam. This class is open to 11th and 12th graders who have successfully completed Algebra II.

**Advanced Placement Statistics Online . . . . .H1701OLS1/H1701OLS2**

Grade level 11–12. One semester each.  
Prerequisite: First semester enrollment requires a grade of “B” or better in Algebra II. The prerequisite for the second semester of AP Statistics is the successful completion (“C” or better) of the first semester or the consent of the instructor or math department chairperson.

The purpose of this online course is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students will be expected to be able to use appropriate technology to interpret data and will be expected to be able to communicate their results in an understandable form.

**Advanced Placement Calculus AB Online. . . . .H1706OLS1/H1706OLS2**

Grade level 11–12. One semester each.  
Prerequisite: “B” or better in Pre-Calculus and Algebra II or consent of the previous mathematics instructor or math department chairperson.

This online course includes the study of functions and graphs, derivatives and their application, analytic geometry, limits and continuity and includes the use of current technology.

**AP Calculus BC Online . . . . .H1709OLS1/H1709OLS2**

Grade level 11–12. One semester each.  
Prerequisite: “B” or better in AP Calculus AB; a 3 or higher on the AP Calc AB test; or consent of the Calculus BC instructor or math department chairperson.

As with other courses designated with Advanced Placement, this online course is introductory college level material. The student is expected to meet this college level workload to be successful. This course includes the study of functions and graphs, derivatives and their application, analytical geometry, limits and continuity, integrals, parametric equations, polar functions and vector analysis. Additional techniques and applications for differentiation and integration will be developed. Polynomial approximations will be explored through the Maclaurin and Taylor Series. Convergence and divergence of sequences and series will be investigated. Appropriate technology will be incorporated throughout the course.

**SCIENCE**

**Astronomy Online . . . . .H2620OL**

Grade level 10–12. One semester. Physical science.  
Prerequisite: None.

This online course is designed to build a coherent understanding of the earth-space relationship. Emphasis will be towards the

development of astronomical concepts such as planetary motion, structure of galaxies and various theories of the formation of the universe. Course includes the use of various astronomical instruments.

**Biology I Online . . . . .H2232OLS1/H2232OLS2**

Grade level 9–12. One semester each. Life science  
Prerequisite: Grade 10-12: none. Grade 9: 3.5 GPA in 8th grade core subjects, Algebra I and teacher recommendation.

This is a basic biology course and prerequisite for all biology electives. This online course will include a study of the chemical basis of life such as the cellular processes of respiration, photosynthesis, diffusion and osmosis. Cell division, DNA and enzyme action will also be covered. This course also includes an extensive treatment of introductory botany, zoology, ecology and genetics.

**Earth Sciences Online . . . . .H2610OL**

Grade level 10–12. One semester. Physical science.  
Prerequisite: None.

This online course is a survey of the various branches of science concerning the earth. The student has the opportunity to explore a wide variety of topics such as oceanography, historical geology, rock and mineral identification, astronomy, physical geology, meteorology, composition and formation of the formations of the early and various geological processes of change. This course is not open to students who have successfully completed Geology I.

**Forensic Science I Online . . . . .H2560OL**

Grade level 10–12. One semester. Life or physical science  
Prerequisite: Biology I required, Chemistry I recommended.

This online course focuses on various aspects of forensic science and modern criminal investigation analysis. It integrates biology, geology, physics, chemistry, anatomy, medical science and critical thinking skills. Topics include structures and functions of the human body, processing a crime scene, physical evidence, questioned documents, serology and pathology. In addition, the course may cover selected topics in toxicology, drug and alcohol abuse, odontology, entomology, forensic art, terrorist and disaster response and emergency medical procedures.

**Forensic Science II Online . . . . .H2570OL**

Grade level 10–12. One semester. Life or physical science  
Prerequisite: Biology I required, Chemistry I recommended.

This online course follows Forensic Science I. It focuses on various aspects of forensic science and modern criminal investigation analysis. It integrates biology, geology, physics, chemistry, anatomy, medical sciences and critical thinking skills. Topics include DNA analysis, textiles, trace evidence, firearms, tool marks and arson investigation. In addition, the course may cover selected topics in toxicology, drug and alcohol abuse, odontology, entomology, forensic art, terrorist and disaster response and emergency medical procedures.

**Marine Science, Biology Online . . . . .H2305OL**

Grade level 10–12. One semester. Life science  
Prerequisite: Biology I.

This online course is a study of marine life found on shores, bays, estuaries, intertidal zones and in ocean depths. This

commercial and environmental importance of various forms of marine life will also be examined.

Advanced Placement US Government Online  
Grade level 12. One semester.  
Prerequisite: None.

### Physical Sciences Online . . . . .H2615OL

Grade level 10–12. One semester. Physical science.  
Prerequisite: None.

This online course is a very basic introduction to physical science that will stress the general principles of chemistry and physics. The basic physics section will include emphasis in simple machines, basic electricity and the various forms of energy. The chemistry section will cover matter, mixtures and compounds. The student will be presented with the practical side of physical science that emphasizes the everyday uses of physics and chemistry.

## SOCIAL STUDIES

### World History Online

(Circa 500 BC-AD 1800) . . .H3315OLS1/H3315OLS2

Grade level 10. Required. One semester each.  
Prerequisite: None.

This online course provides a study of world history. Included in the first semester are the geographic regions of Greece, Rome, India, the Far East, China, Japan, Korea, and Africa. Geography, humanities, religions, government, economy, society, science, and technology are some of the themes/perspectives by which these areas of the world will be explored. Included in the second semester are the geographic regions of the Middle East, ancient Americas, Byzantium, and Europe. Geography, humanities, religions, government, economy, society, science, and technology are some of the themes/perspectives by which these areas of the world will be explored.

### US History Online . . . . .H3317OLS1/H3317OLS2

Grade level 11. Required. One semester each.  
Prerequisite: None.

This online course provides the study of United States history with some integration of world history. Historiography, geography, economics, government, humanities, sociology, religions, philosophy, science, and technology are some of the themes/perspectives by which US history will be examined. The first semester will investigate/explore the American experience through the post WWI era (roaring twenties) and the beginning of the Great Depression. The second semester will investigate/explore the American experience from the Great Depression through contemporary America.

### United States Government Online . . . . .H3075OL

Grade level 12. Required. One semester.  
Prerequisite: None.

This online course is founded on the belief that to become an informed and active citizen, an understanding of government is essential. This course will feature both the structure of government and the function of politics. It will include both theory and practical application of the following: 1) foundations of United States government, 2) institutions and policy making, 3) principles of the United States constitution, 4) roles and responsibilities of the citizen, and 5) political behavior.



about themselves, their school and community in this online class. They expand their vocabulary and learn increasingly complex grammatical structures needed for more sophisticated communication. Students use technology and media to gather cultural information and learn about current events. This course is tailored to the low intermediate level of proficiency in French.

Advanced Placement French Language (page advanced)  
Online . . . . . H4471OLS1/H4471OLS2  
Grade level 11–12. Two semesters.

