# **AP NISWONGER COURSES**

The courses below will be offered asynchronously online for the 2023-24 school year. Any student wishing to enroll should check the pre-requisites and then select the course in one of their elective spots in ASPEN.

#### **AP BIOLOGY**

AP Biology is a first-year college level biology course, which follows the syllabus of the College Board's Advanced Placement (AP) Program. The AP Biology curriculum is designed to prepare students to take the College Board AP Biology test given in May of each year. The course has been audited and approved by the College Board. For schools on block scheduling, Biology 2 Honors is intended to be the first semester course that will lead into AP Biology in the spring. This course offers accelerated and in-depth coverage of biology topics in the areas of molecular and cellular biology, genetics and evolution, and organismal and population biology. Some schools may elect to offer AP Biology as a stand-alone, one-semester course. Students may be required to complete a summer assignment and/or attend additional classroom or laboratory sessions beyond the regularly scheduled classes. Prerequisites: Biology 1 and Chemistry and Biology 2 (Honors)-based on school requirement.

## **AP CALCULUS AB**

AP Calculus AP is devoted mainly to the topics in differential and integral calculus. Students who study this course will be prepared to take the Advanced Placement AB Calculus Exam and seek college credit. The scope of this course follows the topics listed in the College Board Advanced Placement Mathematics Course Description. Prerequisites: Honors Pre-Calculus or Departmental Recommendation.

## **AP CALCULUS BC**

AP Calculus BC is an extension of all the topics covered in AP Calculus AB with additional topics. Students who study this course will be prepared to take the Advanced Placement BC Calculus Exam and seek college credit. The scope of this course follows the topics listed in the College Board Advanced Placement Course Description. Prerequisites: AP Calculus AB or Departmental Recommendation.

## AP COMPUTER SCIENCE A

AP Computer Science emphasizes object-oriented programming methodology with an emphasis on problem solving and algorithm development and is meant to be the equivalent of a first-semester course in computer science. It also includes the study of data structures and abstraction. The scope and sequence of this course follows the topics listed in the College Board Advanced Placement course description. Students who study this course will be prepared to take the Advanced Placement Computer Science "A" AP Exam and seek college credit. This course satisfies the State's four-year math requirement for those students who have met the ACT and/or SAT college readiness benchmarks in mathematics. Prerequisite: Math Computer Applications or Departmental Recommendation.

## AP ENVIRONMENTAL SCIENCE

AP Environmental Science is a first-year college level environment science course that follows the syllabus of the College Board's Advanced Placement (AP) Program. The AP Environmental Science course is designed to prepare students to take the College Board AP Environmental Science test given in May of each year. The course has been audited and approved by the College Board. The goal of 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-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Students may be required to complete a summer assignment and/or attend additional classroom or laboratory sessions beyond the regularly scheduled classes. Prerequisites: Biology 1, Chemistry 1 and teacher recommendation.

#### AP MACROECONOMICS

The purpose of AP Macro-Economics is to give students a thorough understanding of the principles of economics that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination, and also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Prerequisite: Departmental Recommendation.

## AP MICROECONOMICS

The purpose of AP Micro-Economics is to give students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the economic system. It places primary emphasis on the nature and functions of product markets and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. Prerequisite: Departmental Recommendation.

#### AP PSYCHOLOGY

AP Psychology is a one credit, semester-long course (equivalent to 90 days of instruction) and 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. Prerequisite: Departmental Recommendation.

# **AP LITERATURE**

AP Literature and Composition is yearlong course for students who have demonstrated competency in composition, rhetorical, and literary analysis skills. The curriculum includes a critical survey of various literary genres, a study of literary style and technique, and written literary analysis. Students are expected to think critically and analytically and express themselves effectively. The course is designed to help develop the cognitive and communicative skills necessary to do well on the AP English Literature exam.

# AP ART HISTORY

AP Art History is an introductory college-level art history course. Students cultivate their understanding of art history through analyzing works of art and placing them in historical context as they explore concepts like culture and cultural interactions, theories and interpretations of art, the impact of materials, processes, and techniques on art and art making, and understanding purpose and audience in art historical analysis. There are no pre-requisites for this course.