

# Apopka High School

# Course Descriptions

## English Language Arts

### **ENGLISH 1**

Study of world literature with an emphasis on reading, comprehension skills, and vocabulary. Grammar skills will be incorporated with writing and organization patterns.

### **ENGLISH 2**

English 2 uses texts of high complexity to provide grade 10 students integrated instruction in reading, writing, speaking, listening, and language for college and career preparation. This course focuses on literature which includes novels, short stories, informational texts, poetry, and classic drama. Additionally, it emphasizes skills tested on the FSA such as grammar, composition, vocabulary, and evidence-based writing.

### **ENGLISH 3**

The purpose of this course is to provide grade 11 students, using texts of high complexity, an integrated language arts study in reading, writing, speaking, listening, and language for college and career preparation and readiness. English III is a chronological study of non-fiction and fiction. Students will analyze and evaluate informational and literary works in conjunction with American historical events beginning with exploration and settlement and continuing into the contemporary period. Through reading and viewing multiple mediums, students will explore major questions surrounding the American identity, literature as a reflection/shaper of society, and the relationship between literature and setting. In tandem with literary study, students will also sharpen their writing skills through the method of presenting arguments and providing appropriate evidence to support those arguments. Furthermore, students will be taught strategies to help them adequately prepare for college-entrance exams.

### **ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION: 11<sup>th</sup> GRADE**

Learn about the elements of argument and composition as you develop your critical-reading and writing skills. Students will read and analyze nonfiction works from various periods and write essays with different aims: for example, to explain an idea, argue a point, or persuade your reader of something. Skills learned: close reading, analyzing, and interpreting a piece of writing, evaluating a source of information, gathering and consolidating information from different sources, writing an evidence-based argument, and drafting and revising a piece of writing. Taking the College Board AP exam is a requirement.

### **ENGLISH 4**

The purpose of this course is to provide grade 12 students, using texts of high complexity, integrated

language arts study in reading, writing, speaking, listening, and language for college and career preparation and readiness. Aims for academic excellence in language arts through a program emphasizing literature and proficiency in composition, ACT/SAT vocabulary, and ACT/SAT reading comprehension skills. Classic works provide a chronological study of British literature and reflection of the historical development of the English language. Writing activities and two documented papers will be required. Through the application, analysis, evaluation, and creation of complex ideas that are often abstract and multi-faceted, students are challenged to think and collaborate critically on the content they are learning. This course is a deeper extension of English 4 with emphasis on literature, proficiency in composition, ACT/SAT vocabulary and reading comprehension skills.

## **ADVANCED PLACEMENT ENGLISH LITERATURE/ COMPOSITION: 12<sup>th</sup> GRADE**

The course content will follow the outline by the College Board for Advanced Placement English Literature/Composition. This course involves the study and practice of writing about literature. Students learn to use modes of discourse, rhetorical strategies, and critical standards for literary works. Relates literature to contemporary experience and/or history. Taking the College Board AP exam is a requirement.

## **ADVANCED PLACEMENT CAPSTONE SEMINAR**

AP Seminar is an interdisciplinary course that encourages students to demonstrate critical thinking, collaboration, and academic research skills on topics of the students choosing. To accommodate the wide range of student topics, typical college course equivalents include interdisciplinary or general elective courses. Students will develop and practice the skills in research, collaboration, and communication that are needed in any academic discipline and investigate topics in a variety of subject areas, write research-based essays, and design and give presentations both individually and as part of a team, as well as learn how to write proper academic research papers that equate to 55% of their AP composite score. Completion of AP Capstone Seminar and AP Capstone Research in conjunction with four passing AP exams in other disciplines earns the student an AP Capstone Diploma.

## **ADVANCED PLACEMENT RESEARCH**

AP Research is an interdisciplinary course that encourages students to demonstrate critical thinking and academic research skills on a topic of the student's choosing. To accommodate the wide range of student topics, typical college course equivalents include introductory research or general elective courses. Students will build on what they learned in AP Seminar to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, they will design, plan, and conduct a year-long research-based investigation to address a research question and defend it against a panel. This equates to 100% of their AP composite score for research. Completion of AP Capstone Seminar and AP Capstone Research in conjunction with four passing AP exams in other disciplines earns the student an AP Capstone Diploma.

## **CREATIVE WRITING 1-2**

In this course, students are involved in a community where they use writing as a tool for intellectual exploration, self- discovery, and creative expression and where they learn to give and receive useful feedback. Students examine writing across a wide spectrum of genres in order to identify the successful elements. They gain skills in expressing themselves with originality, intelligence, creativity, and clarity in fiction, non-fiction, poetry, personal essays, and various other genres. Students publish through contest submissions, anthology pieces, and children's literature.

## **CREATIVE WRITING 3 HONORS**

In this course, students build on the skills attained in Creative Writing 1 and 2. Students hone their craft as writers by examining strong mentor texts, writing longer pieces, and receiving insightful peer review. During portions of each quarter, students are free to focus on genres that interest them. Students research publication opportunities and submit work to journals, magazines, blogs, and periodicals.

## **DEBATE 1**

The course develops awareness, understanding, and application of theories of argumentation and advocacy as well as principles of public speaking. Students will develop research, writing, and speaking skills with opportunities to apply those skills through participation in debate and public speaking events throughout the state of Florida. Extracurricular participation is encouraged but not required.

## **DEBATE 2; 3-7 HONORS**

These courses build on the theories of argumentation and principles of public speaking introduced in Debate 1. Each class provides increasingly sophisticated application of research-based persuasive speech on a variety of topics. Extracurricular participation is required with opportunities for travel outside the state of Florida for National-Circuit speech and debate competitions.

## **JOURNALISM 1-4; 5-6 HONORS**

Provides foundations for effective journalism study and application. Explores careers in journalism with heavy emphasis in writing style and article development, as well as the latest technologies in desktop publishing. Taught in an IBM lab, students learn up-to-date skills, including interviewing, news and feature writing, layout, design, production, word processing, and advertising sales and design. Provides some opportunity for students to assist yearbook and newspaper staffs. Prepares students for Newspaper 2 or Yearbook 2.

## **YEARBOOK 2-4**

Provides frequent practice in gathering information and in writing feature articles. Offers practical application of layout and design. A yearbook is produced as part of class requirement. Advertising sales is a Requirement.

# **Mathematics**

## **ALGEBRA 1/ALGEBRA 1 HONORS**

Topics include properties of the real number system, rational and irrational numbers, exponents, square roots, radicals, absolute value, scientific notation, patterns, relations, functions, variables, algebraic expressions, polynomials, coordinate geometry, graphing of equations and inequalities, introductory statistics, probability, quadratic equations, and systems of equations. Students must pass the End of Course Exam (EOC).

## **GEOMETRY**

This course expands on the geometric themes taught in middle school. It includes logical reasoning and problem-solving using transformations and the relationships of Euclidean Geometry. There is a state mandated End of Course Exam which is factored as 30% of the student's final grade. Algebra 1 is a prerequisite for this course.

## **GEOMETRY HONORS**

This is the advanced version of the course required for a standard high school diploma in the state of Florida. This course is designed for students who excel in math and have a deep understanding of Algebra I. It includes reasoning and problem solving through formal proof and constructions. The relationships of Euclidean Geometry are used to increase the student's ability to reason abstractly. There is a state mandated End of Course Exam which is factored as 30% of the student's final grade. Algebra 1 is a prerequisite for this course.

## **ALGEBRA 2**

Topics covered include the review and extension of the structure and properties of the real number system; relations, functions, and graphs; polynomials and rational expressions; quadratic equations and inequalities; system of quadratic equations and inequalities; polynomial functions; rational and irrational exponents; logarithms and their use; operations with complex numbers; and problem solving.

## **ALGEBRA 2 HONORS**

Honors Algebra 2 is a fast-paced, rigorous course. This course is a pathway to higher level mathematics. It is a prerequisite for Honors Pre-Calculus, with focus on preparation for the SAT. Foundational Algebra skills (ex. factoring, graphing, simplifying & solving equations with fractions) and academic responsibility are crucial for your success in this class. You will be building on your work with linear, quadratic, and exponential functions, students extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms.

## **PRE-CALCULUS HONORS**

Topics include extension of polynomial functions, exponential functions, and logarithmic function. This course extends hyperbolic function and limits into calculus. It is a strong preparation for calculus.

## **ADVANCED PLACEMENT CALCULUS AB**

The course content will follow the outline by the College Board for Advanced Placement Calculus. Topics include derivatives of functions and inverse functions, differentially and continuity, increasing and decreasing functions, concavity, points of inflections, antiderivatives, integration and applications of integration to find area and volume, and use of graphing calculator. Taking the College Board AP exam is a requirement.

## **ADVANCED PLACEMENT CALCULUS BC**

The college-level course will follow the outline by the College Board for Advanced Placement Calculus. Topics include parametric, polar and vector functions; slope fields; Euler's method; improper integrals; series; and all topics included in the Advanced Placement Calculus AB course. Taking the College Board AP exam is a requirement.

## **PROBABILITY & STATISTICS HONORS**

Probability and Statistics introduces students to how data is collected, organized, and analyzed. Students will use data to make and draw conclusions. Students will do some basic statistical applications using Microsoft Excel, and/or a TI-84 calculator to test hypothesis and understand confidence intervals. A minimum of a scientific calculator is strongly recommended. This course will help to prepare students for Statistics at the post-secondary level, where it is often a General Education class.

## **ADVANCED PLACEMENT STATISTICS**

The college level course will follow the outline by the College Board for Advanced Placement Statistics equivalent to an introductory, non-calculus-based college course in statistics, which is typically required for majors such as social sciences, health sciences, and business. Topics include exploring data by observing patterns, planning a study, anticipating problems using probability theory and simulation, and confirming models to make statistical inferences. Taking the College Board AP exam is a requirement

## **MATH FOR COLLEGE READINESS**

This senior level course presents algebraic skills for college algebra. Topics include real numbers and algebraic expressions, equations and inequalities, problem solving, graphing, introduction to functions, systems of equations and inequalities, polynomials and polynomial functions, rational expressions radicals and rational exponents, complex numbers, quadratic equations and functions, applications of the above topics and the communication of mathematics.

# **Science**

## **BIOLOGY 1**

Includes lab and textbook activities relating to such topics as cells, genetics, taxonomy, botany, zoology, human anatomy, and ecology.

## **BIOLOGY 1 HONORS**

Topics include scientific methods, measurement, lab safety, biochemistry, cellular biology and reproduction, changes through time, classification/taxonomy, microorganisms and disease, botany, zoology, human anatomy, and physiology and ecological relationships.

## **ADVANCED PLACEMENT BIOLOGY**

The course content will follow the outline by the College Board for Advanced Placement Biology. Detailed study of molecules and cells, genetics and evolution, and organisms and populations. Taking Biology Honors or Pre-AP Biology is recommended. Taking the College Board AP exam is a requirement.

## **ANATOMY & PHYSIOLOGY REGULAR AND HONORS**

Topics include human anatomical terminology; cells, tissues, and organs; and thorough study of integumentary, skeletal, muscular, nervous/ sensory, endocrine, circulatory, respiratory, and digestive systems. Labs will include in-depth tissue study; skeletal, muscle, brain, and heart; and full cat dissections.

## **CHEMISTRY 1**

A college preparatory class for non-science majors. Students are required to have passed algebra 1 and geometry with a 3 or above on the corresponding EOC state assessment. Topics for this course include chemical reactions, models of the atom, four naming systems, gases, thermochemistry, bonding, kinetics, equilibrium, and electrochemistry.

## **CHEMISTRY HONORS**

A college preparatory chemistry course with a strong mathematical interpretation. Intended for students who plan to attend college majoring in math, science, medicine, engineering, or other science related professional fields. Topics for this course include chemical reactions, models of the atom, four naming systems, gases, thermochemistry, bonding, kinetics, equilibrium, and electrochemistry. Students must have successfully completed Algebra 1.

## **ADVANCED PLACEMENT CHEMISTRY**

The course content will follow the outline by the College Board for Advanced Placement Chemistry. This math intensive, college level chemistry course is designed to develop a greater depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. The course will contribute to the development of the student's abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic. Taking Chemistry Honors prior to AP Chemistry is required. Taking the College Board AP exam is a requirement.

## **ENVIRONMENTAL SCIENCE**

This is an introductory course for students who wish to study topics relating to the environment, its resources, quality and ethical issues. Environmental science is the study of the natural sciences in an interdisciplinary context that always includes consideration of people and how they have influenced various systems around us. It includes many aspects of biology, earth and atmospheric sciences, fundamental principles of chemistry and physics, human population dynamics, and an appreciation for the Earth and its natural resources.

## **ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE**

AP environmental science is a rigorous interdisciplinary course that covers earth science, chemistry, biology, and math while increasing problem solving skills. The goal of APES is to help students cultivate their understanding of the interrelationships of the natural world through inquiry-based lab investigations as they explore the concepts of energy transfer, interactions between earth systems, interactions between different species and the environment, and sustainability. Students will analyze natural and human-made environmental problems evaluate the relative risks associated with these problems and examine alternative solutions for resolving or preventing them. Taking the College Board AP exam is a requirement.

## **MARINE SCIENCE**

The purpose of this course is to provide an overview of the marine environment. Topics include: the history of oceanography; the study of the ocean floor; chemical and physical properties of the ocean; marine communities and ecology, classification of marine organisms, and a survey of the major phyla of marine plants and animals. Laboratory components will include, among other things, maintaining a salt-water aquarium and dissection of the crayfish, starfish, turtle, squid and shark.

## **PHYSICS 1 HONORS**

This course introduces the natural laws that govern the universe. Topics Include motion, forces, vectors, energy, momentum, gravity, thermodynamics waves, sound, light, electricity, and nuclear physics. Laboratory activities are included throughout the year in all topics. The student is expected to design and perform experiments, record, and display and interpret results. Algebra 2 skills are used extensively all year as an application to Physics.

## **ADVANCED PLACEMENT PHYSICS 1**

AP Physics 1 is an introductory physics course that covers the basic principles of mechanics. This course is the first part of introductory physics similar to College Physics 1. Students are required to analyze situations and apply laws of physics to determine cause and effect relationships, perform mathematical calculations, and predict future behaviors of a system. Students are also required to design, perform, and analyze experiments based on various scenarios. Topics include motion, forces and gravitation, energy, momentum, harmonic motion, rotational motion, circuits, and waves. Taking the College Board AP exam is a requirement.

## **ADVANCED PLACEMENT PHYSICS 2**

*Prerequisites: A or B in AP Physics 1*

AP Physics 2 is a second-year physics course to be taken after AP Physics 1. This course is the second part of introductory physics similar to College Physics 2. Students are required to analyze situations and apply laws of physics to determine cause and effect relationships, perform mathematical calculations, and predict future behaviors of a system. Students are also required to design, perform, and analyze experiments based on various scenarios. Topics include fluids, thermodynamics, electrical energy, circuits, magnetism, optics, and nuclear physics. Taking the College Board AP exam is a requirement.

## **ADVANCED PLACEMENT PHYSICS C: E&M**

AP Physics C: Electricity and Magnetism is a calculus-based, college-level physics course. The course explores topics such as electrostatics; conductors, capacitors, and dielectrics; electric circuits; magnetic fields; and electromagnetism.

## **ADVANCED PLACEMENT PHYSICS C: MECHANICS**

*Prerequisites: A or B in AP Physics 1 and concurrently taking AP Calculus AB or BC.*

AP Physics C: Mechanics is a rigorous calculus-based physics course. Students are required to analyze situations and apply laws of physics to determine cause and effect relationships, perform mathematical calculations, and predict future behaviors of a system. Students are also required to design, perform, and analyze experiments based on various scenarios. Students are expected to apply the concepts of calculus to the concepts of physics in terms of calculations, conceptual reasoning, and data analysis. Topics include motion, forces, energy, momentum, rotational mechanics, simple harmonic motion, and gravitation. Taking the College Board AP exam is a requirement.

## **Social Studies**

### **ADVANCED PLACEMENT HUMAN GEOGRAPHY (Elective Credit)**

AP Human Geography introduces high school students to college-level introductory human geography where students will see geography as a discipline relevant to the world in which they live. The content is presented thematically around the discipline's main subfields: economic geography, cultural geography, political geography, and urban geography. Historical information serves to enrich analysis of the impacts of phenomena such as globalization, colonialism, and human-environment relationships on places, regions, cultural landscapes, and patterns of interaction. Specific topics with which students engage include the following: problems of economic development and cultural change, consequences of population growth, changing fertility rates, and international migration, impacts of technological innovation on transportation, communication, industrialization, and other aspects of human life, struggles over political power and control of territory, conflicts over the demands of ethnic minorities, the role of women in society, and the inequalities between developed and developing economies, explanations of why location matters to agricultural land use, industrial development, and urban problems, the role of climate change and environmental abuses in shaping the human landscapes on Earth. Taking the College Board AP exam is a requirement.

### **WORLD HISTORY/WORLD HISTORY HONORS**

This course consists of the following content area strands: world history, geography, and the humanities. The study begins with the rise of the Byzantine Empire and concludes with contemporary world affairs. Topics covered include: geography, time-space relationships, religions, political and economic systems, revolutions around the world, the global phenomenon of nationalism, international relations, the influence of major historical figures, short-term and long-term effects of major events, the importance of scientific discoveries to societies, and the contributions and achievements of civilizations and nations.

### **ADVANCED PLACEMENT WORLD HISTORY**

The course content will follow the outline by the College Board for Advanced Placement World History. Students will acquire an in-depth understanding of the evolution of global processes and contacts in interaction with different types of human societies. The material covered extends from 8,000 B.C.E. to the present. This course satisfies the World History requirement for graduation. Taking the College Board AP exam is a requirement.

### **UNITED STATES HISTORY**

This course is a chronological study of the development of the United States from the Civil War to the present with emphasis on the twentieth century. It examines the political, economic, social, religious, cultural, military, Constitutional, and international events affecting the growth of the nation. This course has a state End-of-Course exam and is required for graduation.



## **UNITED STATES HISTORY HONORS**

This course is a comprehensive study of the development of the United States from the Civil War to the present with emphasis on the twentieth century. It examines the political, economic, social, religious, cultural, military, Constitutional, and international events affecting the growth of the nation. Historical analysis and interpretation are emphasized, and strong reading and writing skills are a necessity. This course has a mandated state End-of-Course exam and is required for graduation.

## **ADVANCED PLACEMENT UNITED STATES HISTORY**

AP United States History is designed to be the equivalent of a two-semester introductory college or university U.S. history course. In AP U.S. History, students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course also provides eight themes that students explore throughout the course in order to make connections among historical developments in different times and places. These themes include: American and national identity; politics and power; work, exchange, and technology; American and regional culture; migration and settlement; geography and the environment; America in the world; and social structures. Strong reading and writing skills are a necessity. This course satisfies the U.S. History requirement for graduation. Taking the College Board AP exam is a requirement.

## **AMERICAN GOVERNMENT HONORS**

Provides an in-depth study of political documents, analyses of 3 branches of government, changing nature of political parties and interest groups, and evaluations of citizen rights and responsibilities in a democratic state stressing critical thinking and decision-making skills.

## **ADVANCED PLACEMENT UNITED STATES GOVERNMENT AND POLITICS**

The course content will follow the outline by the College Board for Advanced Placement U.S. Government and Politics. Content provides an analytical perspective on government and politics in the United States as well as a familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. politics. This course satisfies the American Government requirement for graduation. Taking the College Board AP exam is a requirement.

## **ECONOMICS**

Topics for this course include role and impact of economic wants, productive resources, scarcity and choices, opportunity costs and trade-offs, economic incentives, specialization, comparative advantage, division of labor, interdependence, savings and investment, how markets work; the citizen as producer, consumer, and decision-maker; role and function of money, financial institutions, labor micro- and macro-economic problems, and similarities/differences of other economic systems.

## **ECONOMICS HONORS**

Provides students with a comprehensive understanding of societies, utilization of limited resources to satisfy unlimited wants, emphasizing principles of production, determination of prices, distribution of income, taxation, and monetary policy, role of government and economic problems of everyday life.

## **ADVANCED PLACEMENT MACROECONOMICS**

The course content will follow the outline by the College Board for Advanced Placement Macroeconomics. Content includes a thorough understanding of the principles of economics that apply to an economic system as a whole. It emphasizes the study of national income and price determination, the financial sector, and inflation, unemployment, and stabilization policies. It develops familiarity with economic performance measures, productivity, economic growth, and national economics. Taking the College Board AP exam is a requirement.

## **ADVANCED PLACEMENT ART HISTORY**

Prerequisite: Recommendation

The course content will follow the outline by the College Board for Advanced Placement Art History. Content includes the study of art history: its relationship to other disciplines, art criticism, and theory of art; the value of art as an important realm of human experience, the history and evolution of art forms and symbols and their relationship to historical data, and the aesthetic merits and historical significance of works of art. Taking the College Board AP exam is a requirement.

## **ADVANCED PLACEMENT EUROPEAN HISTORY**

AP European History is designed to be the equivalent of a two-semester introductory college or university European history course. In AP European History, students investigate significant events, individuals, developments, and processes in four historical periods from approximately 1400 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course also provides seven themes that students explore throughout the course in order to make connections among historical developments in different times and places. Strong reading and writing skills are a necessity. Taking the College Board AP exam is a requirement.

## **ADVANCED PLACEMENT PSYCHOLOGY**

The course content will follow the outline by the College Board for Advanced Placement Psychology. The content introduces the students to the study of the human mind and behavior by the completion of the course, the students will have a better understanding of the workings of the human mind, mental processes, personality, development and mental disorders. Taking the College Board AP exam is a requirement.

## **AFRICAN AMERICAN HISTORY HONORS**

The primary content emphasis for this course pertains to the study of the chronological development of African Americans by examining the political, economic, social, religious, military and cultural events that affected the cultural group. Content will include West African heritage, the Middle Passage and Triangular Trade, the African Diaspora, significant turning points and trends in the development of African American culture and institutions, enslavement and emancipation, the Abolition, Black Nationalist and Civil Rights movements, major historical figures and events in African-American history, and contemporary African-American affairs. This course is taken in conjunction with Women's Studies.

## **HOLOCAUST HONORS**

This course examines the events of the Holocaust and enables the student to understand their connection to the development of civilization by examining the past to prepare for their future as members of a global community.

## **PSYCHOLOGY 1 AND 2**

This course is a study of human behavior, behavioral interaction, and progressive development of individuals. It includes theories and methods of study which include human growth and development, self-concept development, adjustment motivation, desire, intelligence, conditioning and learning, memory, personality, and behavior.

## **SOCIOLOGY**

Students will acquire an understanding of group interaction and its impact on individuals in order that they may have a greater awareness of the beliefs, values and behavior patterns of others. In an increasingly interdependent world, students need to recognize how group behavior affects both the individual and society.

## **ANTHROPOLOGY**

The primary content emphasis for this course pertains to the study of the differences and similarities, both biological and cultural, in human populations. Students recognize the characteristics that define their culture and gain an appreciation for the culture of others. Content should include, but is not limited to, human biological and cultural origins, adaptation to the physical environment, the diversity of human behavior, the evolution of social and cultural institutions, patterns of language development, family and kinship relationships, and the effect of change on cultural institutions.

## **WORLD CULTURAL GEOGRAPHY**

The primary content emphasis for this course pertains to the study of world cultural regions in terms of location, physical characteristics, demographics, historical changes, land use, and economic activity. Content should include, but is not limited to, the use of geographic tools and skills to gather and interpret data and to draw conclusions about physical and human patterns, the relationships between physical geography and the economic, political, social, cultural and historical aspects of human activity, patterns of population growth and settlement in different cultures and environments, the interaction between culture and technology in the use, alteration and conservation of the physical environment, and the interrelationships and interdependence of world cultures.

# **Agriculture**

## **AGRISCIENCE FOUNDATIONS HONORS**

This course is designed to develop competencies in the areas of agricultural history, the global importance of agriculture, career opportunities, applied scientific and technological concepts, ecosystems, agricultural safety, principles of integrated pest management, principles of plant and animal growth, economic principles, agricultural marketing, and human relations skills. The laboratory activities are an integral part of this course, which includes the safe use and application of high technology equipment, telecommunications equipment, and scientific testing and observation equipment. Agriscience Foundations counts as a science credit and is a prerequisite for all upper-level courses.

## **AGRITECHNOLOGY 1-2**

This course is designed to develop competencies in the areas of Agriscience industry careers; prevention and treatment of livestock diseases; livestock anatomy; wholesale cuts of meat; animal reproduction and identification; animal safety; animal-health certification; plant growth; plant fertilization; safe use of pesticides; maintenance of tools and equipment; record keeping;

and employability skills.

### **AQUACULTURE 2-4**

Students will have an opportunity for hands on experiences with raising fish in aquariums and learning about the growing aquaculture industry.

### **ANIMAL SCIENCE 2-5**

This course is designed to develop competencies in the areas of animal safety, behavior, welfare, digestive systems, animal breeding, preventive medicine and disease control, control of parasites, animal marketing, and analyzing records. This course and the prerequisites meet the Florida Gold Seal requirements.

### **HORTICULTURE 2-4**

This course is designed to provide students with skills and knowledge related to technologies used to grow intensively produced plants for human food and non-food uses and for personal or social needs. Each successive course increases in depth and application of knowledge and skill.

## **JTROTC**

A military based class that places emphasis on leadership. Topics such as heritage and tradition, individual self-control, citizenship, effective communication, personal awareness, career opportunities, team and group dynamics, college preparation, management, planning, and decision- making are covered. All classes include Physical fitness training once a week. Cadets may participate in several co- curricular activities and field trips, which complement the class work. Drill, proper haircuts, hairstyles, wearing of the uniform, and basic leadership skills are also stressed throughout the course.

## **Accounting and Business**

### **DIGITAL INFORMATION TECHNOLOGY**

The course is designed to provide a basic overview of current business and information systems trends, and to introduce students to fundamental skills required for today's business and academic environments. Emphasis is placed on developing fundamental computer skills through word processing, spreadsheets, presentation applications and management of personal information. Students will learn to use technology effectively and will be successful both personally and professionally in an information- based society.

### **ACCOUNTING 1**

This course is designed to help students understand basic principles of the accounting cycle. Emphasis is placed on analysis and recording of business transactions, preparation and interpretation of financial statements, recording closing entries, accounting systems, banking and payroll activities, basic types of business ownership and an accounting career orientation. Mathematical skills and critical thinking are reinforced.

## **ACCOUNTING 2**

This course is designed to continue the study of accounting principles. The content includes voucher systems, cash receipts, petty cash, payroll records, internal control systems, and interpretation of financial statements. Mathematical skills and critical thinking are reinforced.

## **BUSINESS ENTREPRENEURSHIP PRINCIPLES**

The course is designed to help students learn how to start and develop their own company. They will create their own business plan and marketing concepts. Emphasis is placed on communication skills, leadership skills, and various forms of business ownership, business ethics and cultural diversity.

Students will learn to take their creative ideas, hobbies and dreams and turn them into real money, real philanthropy and real success.

# **Diesel Mechanics**

## **DIESEL MECHANICS**

Heavy Duty Diesel Mechanical Course offering Steering and Suspension and Hydraulic Training for 10th graders, Diesel Engine for 11th graders and Diesel Electrical for 12th graders with the possibilities of completing the whole course with continuation at main campus

# **Engineering Magnet**

## **INTRODUCTION TO ENGINEERING**

This is the first year Engineering Magnet course. This course will introduce you to the concepts of design, walk you through the design process and let you express your creativity as you design, sketch, build and test various different projects. You will also create working models of your ideas and sketches that will be tested and enhanced to make them even better. The class also focuses on an industry certification in Autodesk Fusion with the opportunity to also certify in Autodesk Inventor.

## **DIGITAL ELECTRONICS**

Students will explore the inner workings of computers and other electronics. The program will start with the basics of engineering and then focus on digital and electrical engineering. Students will be exposed to logic gates, integrated circuits, programmable logic devices, and circuit design tools used in industry.

## **CIVIL ENGINEERING**

This is a 3rd year Engineering Magnet course where we learn about Engineering design, structure and concepts. We have various different design projects where your creativity can be shown in a very big way. The course also offers an opportunity to certify in Autodesk Revit, a 3-d CAD modelling program. We also, normally, attend several different field trips and expos learning from multiple vendors in the construction industry.

## **PRINCIPLES OF ENGINEERING HONORS**

Pre-requisite: Introduction to Engineering Design and Civil Engineering and Architecture  
Through problems that engage and challenge, students explore a broad range of engineering

topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation. Learning opportunities include: Exploration of careers in engineering, circuit and electrical principles, kinematics, renewable energy resources, material properties, coding, thermodynamics, robot build and test, fluid power and control systems.

### **ENGINEERING DESIGN & DEVELOPMENT HONORS**

Pre-requisite: Introduction to Engineering Design, Civil Engineering and Architecture AND Principles of Engineering The knowledge and skills students acquire throughout PLTW Engineering come together in Engineering Design and Development as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing Engineering Design and Development ready to take on any post-secondary program or career.

## **Early Childhood Education**

### **EARLY CHILDHOOD 1**

Introduction to Early Childhood Education rules/regulations, learning environments, stages of child development, developmentally appropriate practices, child abuse and neglect, communication skills, principles of child nutrition and technology use.

### **EARLY CHILDHOOD 2**

Students will work with children 3-5 years of age to complete the ECPC and CDA work experience requirement. Course covers competencies on professionalism, community resources, relationship skills and communicating with preschool children and families, history of school-aged children, infant-toddler developmentally appropriate guidance activities, observing and teaching preschool children.

### **EARLY CHILDHOOD 3**

This course includes working with children ages 3-5, competencies in developing lesson plan, child development theories, factors that affect the development of a child, and developmentally appropriate practices and activities for infant/toddlers, preschoolers, and school-aged children. Also, covers components on working with students with special needs, language use & acquisition, emergent literacy, creative expression, classroom management techniques, observation data, and creating optimum environments for all children; as well as competencies from the DCF 40-hour Introductory Training coursework.

### **EARLY CHILDHOOD 4**

In this course students will create successful developmentally appropriate curriculum, mentoring, recognizing cultural differences when planning, classroom management techniques, completion of pediatric first aid, trends in education, and professionalism.

## **Fine Arts**

### **CERAMICS 1\*\*\* Prerequisite: 2D Art**

An introduction and understanding of ceramics through basic hand-building techniques. Also

introduced are the history and uses of clay, tools, glazes, and kilns. Students will develop and practice maintenance skills in an open studio environment.

### **CERAMICS 2-3 HONORS\*\*\*** *Prerequisite: Ceramics 1*

A continued study in all methods of clay construction in functional and/or nonfunctional designed projects. Students may also explore throwing, large-scale work, mural design, modular design, and furniture/accessory designs in clay. An emphasis on craftsmanship and creativity as well as presentation of work will be stressed. Students will be encouraged to explore possibilities in AP Ceramics through their work.

### **ADVANCED PLACEMENT CERAMICS/ 3-D PORTFOLIO\*\*\***

This course is a continued advanced study in the design, creation, and presentation of work. Students will create a body of work through a sustained investigation that reflects an understanding of the medium and the elements and principles of design. Students in AP Ceramics must submit a portfolio to the College Board which contains a minimum of 11 pieces of work for evaluation. Students may receive both high school and college credit for this course providing portfolio scores that meet the College Board minimum standards.

### **DRAWING 1\*\*\*** *Prerequisite: 2D Art*

Drawing 1 is a prerequisite to all other drawing and painting courses. This is a beginning level drawing class in which students experiment with the media and techniques used to create a variety of two-dimensional (2-D) artworks. Students practice, sketch, and manipulate the structural elements of art to improve mark making and/or the organizational principles of design in a composition from observation, research, and/or imagination. Students will explore a variety of art media, which may include pencil, charcoal, colored pencils, markers, and water-based media. Students will produce art for personal pleasure and/or public display. Through the critique process, students evaluate and respond to their own work and that of their peers. This course incorporates hands-on activities and consumption of art materials.

### **DRAWING 2\*\*\*** *Prerequisite: Drawing 1*

Students develop and refine technical skills and create 2-D compositions with a variety of media in drawing. Student artist's sketch, manipulate, and refine the structural elements of art to improve mark-making and/or the organizational principles of design in a composition from observation, research, and/or imagination. Students will explore advanced drawing skills and media techniques. Students will produce art for personal pleasure and/or public display. Through the critique process, students evaluate and respond to their own work and that of their peers. This course incorporates hands-on activities and consumption of art materials.

**ADVANCED PLACEMENT ART DRAWING PORTFOLIO\*\*\*** *Prerequisite: Drawing 2 or Painting 1* AP Drawing Portfolio is an advanced study in drawing and painting. This course includes the design, creation, and presentation of work. Students will create a body of work through a sustained investigation that reflects an understanding of the medium and utilizes the elements of art and principles of design.

Students in AP Drawing Portfolio must submit a portfolio to the College Board which contains a minimum of 20 pieces of work for evaluation. Students may receive both high school and college credit for this course providing portfolio scores meet the College Board minimum standards. This course incorporates hands-on activities and consumption of art materials.

**ADVANCED PLACEMENT ART 2-D DESIGN PORTFOLIO\*\*\*** *Prerequisite: Drawing 2 or Painting 1* This course is an advanced study in 2-Dimensional design. This course includes the design, creation, and presentation of work in a variety of 2-D media which may include drawing,

painting, printmaking, digital design, photography, collage and other 2- D media. Students will create a body of work through a sustained investigation that reflects an understanding of the medium and the elements of art and principles of design. Students in AP 2-D Art and Design must submit a portfolio to the College Board which contains a minimum of 20 pieces of work for evaluation. The portfolio must contain 20 works of art, and responses to prompts. Students may receive both high school and college credit for this course providing portfolio scores meet the College Board minimum standards. This course incorporates hands- on activities and consumption of art materials.

### **ADVANCED PLACEMENT ART 3-D DESIGN PORTFOLIO\*\*\***

This course is an advanced study in 3-Dimensional design through clay as a medium. This course includes the design, creation, and presentation of work through clay. Students will create a body of work through a sustained investigation that reflects an understanding of the medium and the elements of art and principles of design. Students in AP 3-D Art and Design must submit a portfolio to the College Board which contains the following: *Quality*- Ten digital images, consisting of two views each of five works that demonstrate mastery of 3-D design in concept, composition and execution; *Concentration*- twelve digital images; some may be details or second views. Works describing an in-depth exploration of a particular 3- D design concern; *Breadth*- Sixteen digital images; two images each of eight different works; a variety of works demonstrating understanding of the principles of 3-D design. This course incorporates hands-on activities and consumption of art materials.

### **PAINTING 1, 2\*\*\* Prerequisite: Drawing 1**

Painting I is an intermediate level 2-D art course. Students experiment with the media and techniques used to create a variety of two-dimensional (2-D) artworks through the development of skills in painting. Students practice and manipulate the structural elements of art to improve mark making and/or the organizational principles of design in a composition from observation, research, and/or imagination.

Students will explore the use of watercolor, tempura, and acrylic paints along with other water-based media. Through the critique process, students evaluate and respond to their own work and that of their peers. This course incorporates hands-on activities and consumption of art materials.

### **DIGITAL VIDEO PRODUCTION 1-4**

Students will learn all aspects of video production, including screenwriting, pre-production, videography, and editing through hands-on experience. Students will create video projects; analyze television shows and motion pictures for production elements; and learn the equipment and crew positions necessary to produce a news program. Course meets the Practical Arts graduation requirement.

### **2D ART**

Introduction to two dimensional design concepts. Through a series of projects and assignments, students will explore the basics of 2D concepts such as line, space, perspective, symmetry, balance, texture etc.

Various mediums and tools will be used to expand their understanding of visual concepts and expand their knowledge of the design process. Projects will improve technical and creative skills and encourage creativity and artistic growth.

### **3D STUDIO ART**

Students explore how space, mass, balance, and form combine to create aesthetic forms or utilitarian products and structures. Student artists consider the relationship of scale (i.e., hand-held, human, monumental) through the use of positive and negative space or voids, volume,



visual weight, and gravity to create low/high relief or freestanding structures for personal intentions or public places.

## **Food Preparation**

### **FOOD PREPARATION 1 AND 2, 3 AND 4; COOKING METHODS 1 AND 2**

This is a 3-year CTE dual enrollment class. The focus is culinary for an entry level position in a commercial kitchen setting.

## **Leadership**

### **LEARDERSHIP (SGA) 1-4**

#### ***Application Required***

Students will learn leadership skills, techniques, strategies, and approaches through the National Student Council curriculum. Each year, students will create and implement a group service project and will have the opportunity to attend conferences to further expand their knowledge and network. Participation in this program requires an application and acceptance.

## **Medical Magnet**

### **PRINCIPLES OF BIOMEDICAL SCIENCE**

In the introductory course of the PLTW Biomedical Science program, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems

### **HUMAN BODY SYSTEMS**

Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Exploring science in action, students build organs and tissues on a skeletal Maniken®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.

### **MEDICAL INTERVENTION**

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

### **BIOMEDICAL INNOVATION**

In the final course of the PLTW Biomedical Science sequence, students build on the knowledge and skills gained from previous courses to design innovative solutions for the most pressing health challenges of the 21st century. Students address topics ranging from public health and

biomedical engineering to clinical medicine and physiology. They have the opportunity to work on an independent design project with a mentor or advisor from a university, medical facility, or research institution.

## **Performing Arts**

### **ACTING 1-2**

Further study of acting technique through in-depth knowledge and experience of differentiating performance art styles. Utilizing a working understanding of technical elements that challenge the student in using critical thinking, problem solving, creativity, improvisation, performance, and technical theatre skills. Continuance of portfolio building for college, conservatory, or university performing arts programs by honing in on individual student reflection of their own personal style. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom.

### **BAND 1-4; 5-6 HONORS**

Courses develop musicianship in band and instrumental ensembles. Content includes development of characteristic tone production, performance techniques, musical literacy, and music appreciation. As a co-curricular, performance-oriented activity, attendance is required for rehearsals and performances beyond regular school hours. Membership in marching band is integral to the course work.

### **Eurhythmics 1-4**

As a performance-oriented activity, attendance is required for rehearsals and performances beyond regular school hours as part of the grading procedure. Membership in marching band is integral to the course work.

### **GUITAR 1-2**

Elementary group guitar lessons for students on the beginning level. Emphasizes correct fingering, posture, technique, note reading, recognition of musical symbols, and musicianship. Includes basic music theory. Requires a regimen of daily practice and drills.

### **JAZZ ENSEMBLE 2-3; 4 HONORS** Audition Required

Courses develop musicianship in jazz styles and idioms. Content includes development of characteristic jazz tone and articulation, ensemble performance characteristics, music theory, improvisation, and music appreciation. As a co-curricular, performance-oriented activity, attendance is required for rehearsals and performances beyond school hours and is part of the grading procedure.

### **ORCHESTRA 1-4; 5-6 HONORS**

Courses develop musicianship in band and instrumental ensembles. Content includes development of characteristic tone production, performance techniques, musical literacy, and music appreciation. As a co-curricular, performance-oriented activity, attendance is required for rehearsals and performances beyond regular school hours. Membership in marching band is integral to the course work.

### **PIANO (KEYBOARD) 1-3; 4 HONORS**

Group piano instruction which advances to levels beyond Piano 1 and allows for more individual pacing. Emphasizes correct fingering, posture, technique, note reading, recognition of musical symbols, and musicianship. Includes basic music theory and exposure to a variety of musical styles through listening. Requires a regimen of daily practice and drills.

### **ADVANCED PLACEMENT MUSIC THEORY**

The course content will follow the outline by the College Board for Advanced Placement Music Theory. Content includes college level music skills in music theory, harmony, and composition. Students will study the fundamental structures of music, including scales, modes, chord structure and development, aural dictation, manuscript, and the use of computers in music manuscript composition and arranging. Taking the College Board AP exam is a requirement.

### **MALE CHORUS 1-4**

This men's chorus performs musical literature of various styles, cultures, and historical periods. Emphasis is placed on developing individual voices, listening concepts, and note reading. Attendance required for rehearsals and performing beyond school hours as part of the grading procedure. Some after school rehearsals with Concert Choir men.

### **CONCERT CHOIR 1-4; 5-6 HONORS (Advanced Mixed Ensemble)**

Audition Required

This advanced co-ed chorus performs musical literature of various styles, cultures, and historical periods. Emphasis is placed on proper vocal production, note-reading, and musical interpretation. Limited touring within U.S. Attendance required for rehearsals and performances beyond school hours as part of the grading procedure. Some men's after school rehearsals with male chorus. Performance/attendance at after-school functions is an integral portion of grade.

### **BEL CANTO 1-4 (Advanced Women's Ensemble)**

Audition Required

This select women's choir performs advanced choral literature of various cultures, styles, and historical periods. Requires knowledge of musical terminology, proper vocal production, note reading, and ability to demonstrate those concepts and skills. Special emphasis on developing individual and group musicianship. Limited touring within U.S. Attendance required for rehearsals and performing beyond school hours as part of the grading procedure.

### **THEATRE 1-3; 4 HONORS**

This is a hands on, participation class for students interested in learning about the Fine Art of Theatre. Through the year students will learn a basic foundation of theatre terminology, theatre history and basic acting techniques. These skills will be taught through acting exercises that include monologue, duet acting, and ensemble scene work in which there will be memorization work. Through hands on opportunities students will gain basic knowledge of design and construction of sets, props and costumes. All students will be required to paint, sew, sweep, build, etc. and these activities will be graded.

### **MUSICAL THEATRE 1-3**

Audition Required

Co-requisite: Theater 1

This is a performance-based class and students are required to sing, dance and act in front of an audience. The group will study the art and history of musical theatre. In addition, each student will be developing their book of music while learning and performing the songs in

the book as well.

### **TECHNICAL THEATRE DESIGN & PRODUCTION (Costumes) 1-3; 4 HONORS**

Prerequisite: Teacher Recommendation Co-requisite: Theater 1

Theatrical overview of the art of stagecraft. Students will study the various production jobs in the theatre such as set construction, scenic design, costume design, costume construction, publicity, lighting design, sound design, etc. Students are required to physically work on the construction of all theatrical productions.

### **TECHNICAL THEATRE DESIGN & PRODUCTION (Scenery/Props) 1-3; 4 HONORS**

Like to build? Students focus on learning the basic tools and procedures for designing and creating scenery and properties (props) with particular attention to technical knowledge of safety procedures and demonstrated safe operation of theatre equipment, tools, and raw materials. Students also learn the standard conventions of design presentation and documentation; the organizational structure of theatre production and creative work in a collaborative environment; through various self-assessment tools.

Public performances may serve as a culmination of specific instructional goals. Students may be required to attend or participate in technical work, rehearsals, and/or performances beyond the school day to support, extend, and assess learning in the classroom.

### **THEATRE DIRECTION & STAGE MANAGEMENT 1**

Prerequisite: Teacher Recommendation Co-requisite: Completion of Theatre 4

Students learn how to select, organize, and mount formal and informal staged productions by means of exploring the leadership roles of director and stage manager. Students focus on the nature and responsibilities of the director and stage manager in relation to the entire production team; the effect of the director's concept on the overall production; vocabulary and principles of the various elements of play production; techniques used to create an effective theatre work; and basic knowledge and application of staging. Public performances may serve as a culmination of specific instructional goals.

Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom.

### **THEATRE/CINEMA & FILM PRODUCTION**

In Theatre, Cinema, and Film Production, a one-credit course, students explore the elements of film and cinematic techniques used by those who create movies. Students study the techniques in film that serve the story and articulate the theme. Students also prepare a comparative for theatre, film, and literature. Public performances may serve as a resource for specific instructional goals. Students may be required to attend or participate in technical work, rehearsals, and/or film production beyond the school day to support, extend, and assess learning in the classroom.

## **PE and Health**

### **BASKETBALL 1 and 2**

The focus of this course will be on skill development. Content will include knowledge of skills, strategies, rules, and safety practices necessary to participate regularly in physical activity.

Basketball 2 goes into diagramming, explaining, and justifying the use of advanced offensive and defensive transitional strategies.

### **FIRST AID AND SAFETY\*\*\***

Provides students with opportunities to acquire advanced skills in first aid; emergency care; and personal, community, and environmental safety. Content includes advanced first aid, two-person and infant CPR; and relief of obstructed airway and safety. This course is taken in conjunction with Care/Prevention of Athletic Injuries.

### **CARE/PREVENTION OF ATHLETIC INJURIES\*\*\*** Co-requisite: First Aid and Safety

This course provides students with the opportunities to acquire knowledge and skills related to the nature, prevention, care, and rehabilitation of athletic injuries that may be used in recreational pursuits today as well as in later life.

### **COMPREHENSIVE AND OUTDOOR EDUCATION –**

### **COMING SOON! DANCE 1-3**

Students in this program have proficient ballet technique and continue their training in ballet, jazz and other styles of dance. Students develop choreography, study dance repertory, and will participate in after-school rehearsals and performances including county performance assessments and competitions.

### **H.O.P.E. (Health Opportunities through Physical Education) – GRADUATION REQUIREMENT**

The purpose of the course is to enable students to develop an understanding of fitness concepts, human sexuality, design a personal fitness program, and be introduced to various life management skills. This course is a graduation requirement.

### **INDIVIDUAL SPORTS 1 AND 2**

This course includes knowledge and application of techniques, scoring, strategies, and rules involved in traditional activities such as tennis.

### **TEAM SPORTS 1 AND 2**

Basketball, Flag Football, Floor Hockey, and Volleyball will be introduced. The focus will be on skill development. Content will include knowledge of skills, strategies, rules, and safety practices necessary to participate in these sports at a recreational level. Team sports 2: Soccer, Softball, Speedball, and Ultimate Frisbee will be introduced.

### **VOLLEYBALL**

The focus of this course will be on skill development. Content will include knowledge of skills, strategies, rules, and safety practices necessary to participate regularly in physical activity.

### **WEIGHT TRAINING**

Provides students with opportunities to acquire knowledge and skills in weight training including an assessment of muscular strength and endurance as well as a knowledge of health problems associated with inadequate levels of muscular strength, skeletal muscles, sound nutritional practices, and consumer issues related to weight training.

\*\*\*Courses with this designation have a fee associated with it - financial hardship should not limit a student from signing up for a course; if you need assistance, please discuss with your teacher once you are in the class.

# **Robotics**

## **FOUNDATION OF ROBOTICS**

Preferred elective for 9th and 10th graders in the Engineering magnet.

## **ROBOTICS DESIGN 2**

Advanced robotics and competition class.

## **ROBOTIC DESIGN 3**

Advanced robotics and competition class.

## **ERAU Dual Enrollment UAS Photography**

Using drones to create high quality photos and videos.

## **ERAU Dual Enrollment Unmanned Systems**

Drone piloting and certification.

# **Technology**

## **ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES**

Advanced Placement Computer Science Principles AP Computer Science Principles (AP CSP) introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. With a unique focus on creative problem solving and real-world applications, AP CSP prepares students for college and career opportunities. This course is one of the few AP courses that allows 9th graders to enroll. However, since some aspects require an understanding of mathematical concepts such as functions and logic, all students must be taking honors level mathematics regardless of their grade level.

## **ADVANCED PLACEMENT COMPUTER SCIENCE A**

AP Computer Science A is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing

# **World Languages**

## **FRENCH 1**

French 1 introduces students to the target language and its culture. The student will develop communicative skills in all 3 modes of communication and cross-cultural

understanding. Emphasis is placed on proficient communication in the language. An introduction to reading and writing is also included as well as culture, connections, comparisons, and communities.

## **FRENCH 2**

French 2 reinforces the fundamental skills acquired by the students in French 1. The course develops increased listening, speaking, reading, and writing skills as well as cultural awareness. Specific content to be covered is a continuation of listening and oral skills acquired in French 1. Reading and writing receive more emphasis, while oral communication remains the primary objective. The cultural survey of the target language-speaking people is continued.

## **FRENCH 3 HONORS**

French 3 provides mastery and expansion of skills acquired by the students in French 2. Specific content includes, but is not limited to, expansions of vocabulary and conversational skills through discussions of selected readings. Contemporary vocabulary stresses activities, which are important to the everyday life of the target language-speaking people.

**AP FRENCH** Prerequisite: French 3 or native proficiency

Prepares student to demonstrate level of French proficiency through interpersonal, interpretive, and presentational modes. Course follows the outline set forth by the College Board.

## **LATIN 1**

In this class students will learn the rudiments of Latin grammar, as well as the beginnings of Roman history, and Roman culture. We will study the Roman gods and goddesses, learn about Romulus and the other kings of Rome, and daily life in the ancient world. We will also learn how to use Latin root words, prefixes and suffixes to learn unfamiliar words in English, and will be able to make connections among the other Romance languages.

## **LATIN 2**

In this class students will extend their learning of Latin grammar. Culture study in Latin 2 enables students to learn about the legendary heroes, monsters, and major stories of ancient mythology. We will also continue learning how to use Latin root words, prefixes and suffixes to learn unfamiliar words in English, and will be able to make connections among the other Romance languages.

## **LATIN 3 HONORS**

In this course the focus begins shifting from learning new grammar and vocabulary to using the language to read authentic Latin such as Julius Caesar and Cicero. We will make the leap from "textbook" Latin to actual Roman authors and transition through Latin to studying Roman literature, literary and poetic devices.

## **LATIN 4 HONORS**

In this course the focus begins shifting from learning new grammar and vocabulary to using the language to read authentic Latin such as Julius Caesar and Cicero. We will make the leap from "textbook" Latin to actual Roman authors and transition through Latin to studying Roman literature, literary and poetic devices.

## **SPANISH 1 AND 2**

Enables students to acquire proficiency in Spanish through a linguistic, communicative, and cultural approach to language learning. Developing listening, speaking, reading, and

writing skills and on acquisition of applied grammar.

### **SPANISH 3 HONORS**

The primary purpose of the Spanish 3 Honors course is to help students master and expand the skills acquired in their Spanish 2 course through discussions of selected readings and writing activities. Also help students to attain the proficiency equivalent to a third year of college level of Spanish regarding their listening, speaking, reading and writing skills. The students therefore at the end of the course should be able to demonstrate: oral and written fluency in the language, proper use of grammar and syntax of the language, the ability to read and interpret written texts, the ability to express one's opinion on cultural and or contemporary issues, the ability to interpret aural selections, the ability to present information on a researched topic in Spanish, knowledge of the Spanish speaking culture and its people.

### **ADVANCED PLACEMENT SPANISH LANGUAGE**

The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish. The AP Spanish Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). Taking the College Board AP exam is a requirement.

### **ADVANCED PLACEMENT SPANISH LITERATURE**

The course, taught almost exclusively in Spanish, focuses on introducing students to representative texts from Peninsular Spanish, Latin American, and United States Hispanic literature. Students learn to analyze works of literature written in Spanish through historical, artistic, sociocultural, and geopolitical contexts. They also develop their interpersonal, presentational, and interpretive communication skills. Taking the College Board AP exam is a requirement.



# Appendix A – Dual Enrollment

## APOPKA HIGH SCHOOL DUAL ENROLLMENT OFFERINGS

	SEMINOLE STATE	VALENCIA	UCF	UF
<b>Unweighted GPA</b>	2.5-2.9	3.0	3.8 (Recalc by UC)	3.6
<b>Test Scores Accepted</b>	PERT, SAT, OR ACT	PERT, SAT, OR ACT	SAT OR ACT	PSAT, SAT, OR ACT
<b>Grade Levels Eligible</b>	9-12	9-12	9-12	11-12
<b>Max Courses per Semester</b>	3	4	2	2
<b>On Campus at College</b>	Yes	Yes	Yes	No
<b>Online Classes</b>	Yes	Yes	Yes	Yes

DE classes through Embry Riddle are offered on the AHS campus and are a part of the engineering magnet course progression. Students will have the option to register as part of course selection.

\*Semnole State students may only apply to the Career Cluster programs or if they do not have the GPA to attend Valencia.

# Appendix B – CTE Pathways



## CTE COURSE PATHWAYS APOPKA HIGH SCHOOL 2023-2024



### CAREER CLUSTER: AGRICULTURE, FOOD, AND NATURAL RESOURCES

	YEAR 1	YEAR 2	YEAR 3	YEAR 4
Agritechnology	Agriscience Foundations	Agritech-nology 1	Agritech-nology 2	Directed Study
Animal Science	Agriscience Foundations	Animal Sciences 2	Animal Sciences 3	Animal Sciences 4*
Aquaculture	Agriscience Foundations	Aquaculture 2	Aquaculture 3	Aquaculture 4*
Horticulture Science	Agriscience Foundations	Horticulture 2	Horticulture 3	Directed Study

### CAREER CLUSTER: ARTS, A/V TECHNOLOGY, AND COMMUNICATION

	YEAR 1	YEAR 2	YEAR 3	YEAR 4
Digital Photography	Digital Photo 1	Digital Photo 2	Digital Photo 3	Digital Photo 4
Digital Video Technology	Digital Video Technology 1	Digital Video Technology 2	Digital Video Technology 3	Digital Video Technology 4



## CTE COURSE PATHWAYS APOPKA HIGH SCHOOL 2023-2024



### CAREER CLUSTER: BUSINESS MANAGEMENT AND ADMINISTRATION

	YEAR 1	YEAR 2	YEAR 3	YEAR 4
Business Management	Digital Info Technology	Business & Entrepreneurial Principles	Accounting 1	Legal Aspects of Business
Accounting Applications	Digital Info Technology	Accounting 1	Accounting 2	Accounting 3

### CAREER CLUSTER: DIESEL SYSTEMS TECHNICIAN - OTC POSTSECONDARY PROGRAM

	9TH GRADE	10TH GRADE	11TH GRADE	12TH GRADE
Diesel Systems Technician	Diesel Hydraulics Tech	Diesel Steering and Suspension	Diesel Engine Technician*	Diesel Electrical and Electronic Technician 1 & 2*

### CAREER CLUSTER: ENGINEERING AND TECHNOLOGY EDUCATION

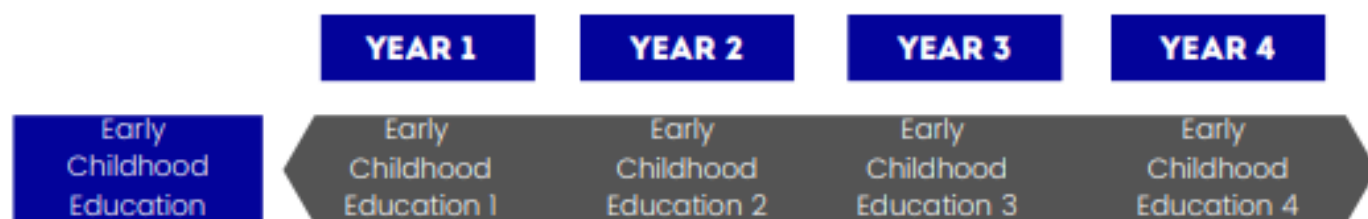
	YEAR 1	YEAR 2	YEAR 3	YEAR 4
Applied Robotics	Foundation of Robotics	Robotic Design	Robotic Systems	Robotic Applications
Engineering	Introduction to Engineering	Principles of Engineering	Civil Engineering~	Engineering Design & Dev



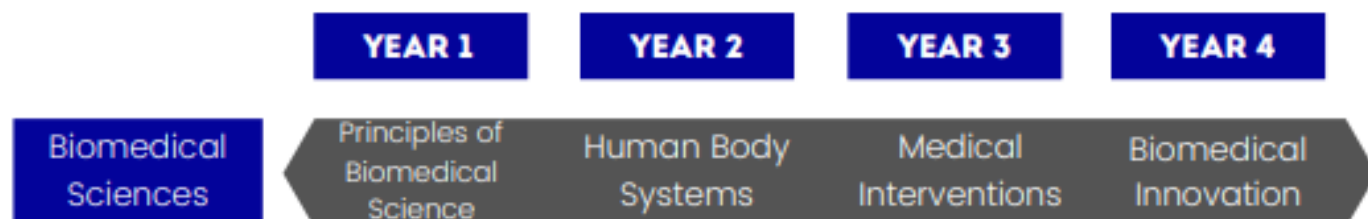
**CTE COURSE PATHWAYS  
APOPKA HIGH SCHOOL  
2023-2024**



**CAREER CLUSTER: EARLY CHILDHOOD EDUCATION**



**CAREER CLUSTER: HEALTH SCIENCE**



**CAREER CLUSTER: HOSPITALITY AND TOURISM - OTC POSTSECONDARY PROGRAM**



**FOR QUESTIONS ABOUT CTE COURSE  
OFFERINGS AND/OR PATHWAYS PLEASE  
EMAIL [VICTORIA.HUTCHINSON@OCPS.NET](mailto:victoria.hutchinson@ocps.net)  
FOR MORE INFORMATION**

# Appendix C – Magnet Pathways



## ENGINEERING MAGNET PROGRESSION APOPKA HIGH SCHOOL 2023-2024



	9TH GRADE	10TH GRADE	11TH GRADE	12TH GRADE
English	English 1 or AICE English General Paper	English 2 or AICE English Language	English 3* or AP Lang	English 4* or AP Lit
Math	Geometry Hon or Alg. 2. Hon	Algebra 2*, Prob & Stat Honors, or AP Pre-Calc	Prob & Stat Honors, MCA, AP Pre-Calc, AP Calc, or AP Stats	Data and Finance, AP Pre-Calc, AP Calc, AP Stats, or DE
Science	Physics 1 Honors	Biology* or AP Bio	Chem*, AP Biology, AP Chem, AP Physics 1, E&M, or Mechanics, or DE	AP Physics 1 or 2, E & M, Mechanics or DE
Social Studies	AP Human Geo or AP Computer Science Prin.	World History, AICE Euro, or AP World History	U.S. History* or AP U.S. History	Government*, AP Gov, Economics*, AP Macro
Project Lead the Way Class	Introduction to Engineering	Principles of Engineering	Digital Electronics or Civil Engineering	Engineering Design and Development
Required	Foreign Language 1	Foreign Language 2	Foreign Language 3 or Elective	AP Language or AP Elective
Optional Elective	Elective or Robotics 1	Elective or Robotics 1 or 2	Elective, Robotics 2 or 3 or AS 120/220 (ERAU)	Elective, Robotics 3 or 4, or AS 235/237 (ERAU)

**\* OFFERED IN BOTH HONORS AND STANDARD LEVELS.**

Students beginning the program in 10th grade will follow the PLTW courses starting with IED.

**\*\*STUDENTS MUST PASS ALGEBRA 1 PRIOR TO ENTERING THE MAGNET PROGRAM.\*\***





**MEDICAL MAGNET PROGRESSION  
APOPKA HIGH SCHOOL  
2023-2024**



	9TH GRADE	10TH GRADE	11TH GRADE	12TH GRADE
English	English 1 or AICE English General Paper	English 2 or AICE English Language	English 3* or AP Lang	English 4* or AP Lit
Math	Geometry* or Algebra 2*	Algebra 2*, Prob & Stat Honors, or AP Pre-Calc	Prob & Stat Honors, MCA, AP Pre-Calc, AP Calc, or AP Stats	Data and Finance, AP Pre-Calc, AP Calc, AP Stats, or DE
Science	Biology*	Chemistry*, AICE Marine, or AP Biology	Anatomy & Phys*, AP Biology, AP Physics, or AP Chemistry	AP Physics or Dual Enrollment
Social Studies	NA	World History AICE Euro, or AP World History	U.S. History* or AP U.S. History	Government*, AP Gov, Economics*, AP Macro
Medical Magnet Class	Principles of Biomedical Sciences	Human Body Systems	Medical Interventions	Biomedical Innovation
Required	Foreign Language 1	Foreign Language 2	Foreign Language 3 or Elective	Language or Elective
Elective	AP Human Geo, World Cultural Geography, or AICE Thinking Skills	Elective	Elective	Elective

**\* OFFERED IN BOTH HONORS AND STANDARD LEVELS.**

Students beginning the program in 10th grade will follow the Medical Magnet courses starting with Principles of Biomedical Sciences.

# **Appendix D – Senior Privilege Form**

**Apopka HighSchool**  
**Senior Privilege - Early Release/Late Arrival**  
**Application and Contract for 2023-2024**

**Application is due to your Guidance Counselor no later than July 31<sup>st</sup>, 2023!!**  
**Students will be reconsidered for one period off in January if not eligible for 1<sup>st</sup> semester.**

Name: \_\_\_\_\_ Student ID: \_\_\_\_\_

Students who qualify for senior privilege may have up to three periods off campus.

Check up to three (3) periods requested to be off campus (consecutive if more than one period):

_____ Period 1	_____ Period 5
_____ Period 2	_____ Period 6
_____ Period 3	_____ Period 7

**Eligibility for Senior Privilege:**

- ✓ Minimum unweighted 2.5 GPA.
- ✓ No missing test scores required for graduation (must have passed FSA ELA and Algebra 1 EOC or earned concordant scores for both).
- ✓ College and Career Readiness earned (3+ on an AP exam, passed industry certification exam(s), or earned a C+ in a Dual Enrollment course prior to 12<sup>th</sup> grade).
- ✓ No discipline issues (Level 3 offenses and no more than three (3) Level 1 or 2 offenses).
- ✓ No more than 12 unexcused absences the school year prior.
- ✓ Reliable transportation on a daily basis.
- ✓ Parent/guardian, guidance counselor, and administrator permission.

**Rules:**

- ✓ Late arrival students cannot enter campus more than 10 minutes prior to the start of their first scheduled class of the day.
- ✓ Early release students must leave campus immediately after their last scheduled class.
- ✓ Students **must** exit the school campus by the tardy bell of the next class period.
- ✓ Students cannot wait in a teacher's classroom or media center for their class to start or school to end.
- ✓ Senior Privilege is separate than applying for online classes through OCVS or FLVS and students will need to submit a different application to have classes approved.

**Transportation Plan (check one):**

- \_\_\_\_\_ Student will purchase a parking permit and drive to/from school daily.
- \_\_\_\_\_ Parent will provide transportation and drop off/pick up student promptly before first class/after last class daily.
- \_\_\_\_\_ Other: \_\_\_\_\_



**Loss of Privilege:**

Student parking privileges are subject to suspension and revocation:

- ✓ Taking a student who does not have early release off campus or bringing a student who does not have late arrival to campus.
- ✓ Failure to abide by the student motor vehicle policy.
- ✓ Loitering on school grounds before your first class or after your last class.
- ✓ Being dropped from an online class.

**Acknowledgement and Contract:**

I, \_\_\_\_\_, (student name) wish to participate in early release/late arrival. I have read and understand the rules and responsibilities regarding early release/late arrival and agree to abide by them. I understand these privileges may be suspended or revoked for any infraction of this agreement, Apopka High School, or OCPS rules, policies, and procedures.

I, \_\_\_\_\_, (parent name) request that my student, \_\_\_\_\_, (student name) participate in early release/late arrival. I have communicated with his/her counselor. The counselor has informed me of my student's remaining graduation requirements, their impact on early release/late arrival participation, and graduating on time.

The school staff, administration, Apopka High School, and Orange County Public Schools shall not in any way be responsible for their supervision, for any injury or mishap that occurs to them during their transition to/from school or any activity they participates in while off campus during the school day.

**Student Signature:** \_\_\_\_\_

**Parent/Guardian Signature:** \_\_\_\_\_

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**Guidance Counselor Signature:** \_\_\_\_\_

Student GPA: \_\_\_\_\_ Passed Both Assessments: Yes or No How CCA was Earned: \_\_\_\_\_

**Assistant Principal Signature and Date:** \_\_\_\_\_

Updated 11/23/2022



# **Appendix E – Online Course Request**

**Apopka High School  
Online Course Request Form via OCVS or FLVS  
Application and Contract for 2023-2024**

**Application is due to your Guidance Counselor no later than July 31<sup>st</sup>, 2023!!**

**Name:** \_\_\_\_\_ **Student ID:** \_\_\_\_\_

**Grade (2022-2023):** \_\_\_\_\_ **Online Courses with (circle one): FLVS or OCVS**

**Online Course Requested:** \_\_\_\_\_

**Period Off Requested (Circle One):** Period 1 or Period 7

**Rules and Acknowledgements:**

- Students must submit this form to their Guidance Counselor and request classes online for approval by July 31<sup>st</sup>, 2023 should they not want to take the class in person during the 2023-2024 school year.
- Students must have a high school unweighted GPA of a 2.5 or better and no missing and/or failed credits to participate in off-campus FLVS or OCVS classes during the school year.
- 9<sup>th</sup> and 10<sup>th</sup> grade students will only be able to take one period of FLVS or OCVS off campus.
- 11<sup>th</sup> and 12<sup>th</sup> grade students will only be able to take one period of FLVS or OCVS off campus, unless the year prior took off additional periods.
  - These students may be grandfathered into how many periods they took the year before and worked out with your Guidance Counselor individually. Periods off must be consecutive and equal the number of online classes registered at the time.
- Students may take additional courses but will need to be completed outside of the school day.
- Students who are off-track for graduation will be scheduled into the on-campus FLVS/OCVS lab to ensure proper monitoring and success of the student. They will not be permitted to take classes off campus.
  - On-campus lab space will be provided to students in 12<sup>th</sup> grade first and then 11<sup>th</sup> grade. Seats will be provided to 9<sup>th</sup> and 10<sup>th</sup> graders if space is available.
- Students who elect for a period off campus to complete the online work through FLVS or OCVS cannot enter campus more than 10 minutes prior to the start of their first scheduled class of the day and must leave campus immediately after their last scheduled class. Students cannot wait in a teacher's room or media center for their class to start or school to end.
- Students may not take graduation required classes online during the school year they are scheduled. Classes must be completed prior to the start of the school year.
  - Example: Seniors must take Government or Economics prior to the start of 12<sup>th</sup> grade.
- Senior Privilege is separate than applying for online classes through OCVS or FLVS and students will need to submit the "Senior Privilege – Early Release/Late Arrival" contract if seeking more than one period off campus.

### Acknowledgement and Contract:

I, \_\_\_\_\_, (student name) wish to participate in online classes through FLVS or OCVS and have read and understand the rules and responsibilities and agree to abide by them. I understand these privileges may be suspended or revoked for any infraction of this agreement, Apopka High School, or OCVS rules, policies, and procedures.

I, \_\_\_\_\_, (parent name) request that my student, \_\_\_\_\_, (student name) participate in online classes through FLVS or OCVS and have communicated with his/her counselor. The counselor has informed me of my student's remaining graduation requirements, the impact on graduation, and graduating on time.

The school staff, administration, Apopka High School, and Orange County Public Schools shall not in any way be responsible for their supervision, for any injury or mishap that occurs to the above student during their transition to/from school or any activity they participate in while off campus during the school day.

Apopka High School administration has the right to reject students request for online classes at any point throughout the school year. Students who are not on track and/or do not complete their online class may be placed in a face-to-face class on campus. Students must remain enrolled in online classes throughout the year if scheduled for periods off campus. Should a student drop an online class at any point they may be placed in a face-to-face course on campus.

#### Transportation Plan (check one):

\_\_\_\_\_ Student will purchase a parking permit and drive to/from school daily.

\_\_\_\_\_ Parent will provide transportation and drop off/pick up student promptly before first class/after last class daily.

\_\_\_\_\_ Student will walk or ride their bike to school.

\_\_\_\_\_ No transportation plan is needed as student is requesting to utilize the on-campus lab during the day.

\_\_\_\_\_ Other: \_\_\_\_\_

I have read and thoroughly understand the rules, responsibilities, and procedures set forth in this contract. Therefore, I authorize my son/daughter to participate in online classes through FLVS or OCVS. I assume responsibility for him/her if/when he/she is not on campus during the school day.

Student Signature: \_\_\_\_\_

Parent/Guardian Signature: \_\_\_\_\_

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Guidance Counselor Signature: \_\_\_\_\_

Assistant Principal Signature: \_\_\_\_\_