

# <u>Oak Ridge HS</u> <u>Course Description Catalog</u> <u>2024-2025</u>

# **OCPS** Vision

To ensure every student has a promising and successful future.

# OCPS Mission

With the support of families and the community, we create enriching and diverse pathways that lead our students to success

Click Here for additional OCPS & ORHS Magnet Information

### **Agriculture**

### **Agriscience Foundations**

This course is designed to develop competencies in the areas of agricultural history and the global impact of agriculture; career opportunities; scientific and research concepts; biological and physical science principles; environmental principles; agriscience safety; principles of leadership; and agribusiness, employability, and human relations skills in agriscience. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment.

### Animal Science 2

This course is designed to develop competencies in the areas of safety; animal behavior; animal welfare; animal control; and employability skills.

### **Animal Science 3**

This course is designed to develop competencies in the areas of animal digestive systems; animal breeding; preventive medicine and disease control; control of parasites; animal marketing; and analyzing records.

### **Animal Science 4**

This course is designed to develop competencies in the areas of animal digestive systems; animal breeding; preventive medicine and disease control; control of parasites; animal marketing; and analyzing records.

### Air Force JROTC

### Aerospace Science 1

The purpose of this course is to enable students to develop knowledge of the historical development of flight and the role of the military in history. Students also develop knowledge of the Air Force Junior Reserve Officer Training Corps (AFJROTC), individual self-control, citizenship, wellness, health, and fitness. Students practice basic drill techniques and conduct military ceremonies.

### **Aerospace Science 2**

The purpose of this course is to enable students to develop knowledge of the aerospace environment, human requirements of flight, principles of aircraft flight, and principles of navigation. Students also develop effective communication skills, understanding of human and group behavior, and basic leadership concepts. Students practice drill movements and observe military customs and ceremonies.

### Aerospace Science 3

The purpose of this course is to enable students to develop knowledge of the space environment, space programs and technology, and manned space flight. Students develop knowledge and skills related to planning for post-secondary education or employment and career opportunities, including financial planning. Students polish skills in marching and conducting military ceremonies.

### Aerospace Science 4

The purpose of this course is to enable students to develop advanced, in-depth knowledge of aerospace topics. Students develop the foundation for receiving a private pilot license. Students develop fundamental management concepts and skills and apply them in corps activities. Drill and ceremony functions are carried out with ease and professionalism.

### **Digital Video Technology**

### Digital Video Technology 1

This course provides students with an introduction to the digital video production process; content includes safe work practices, planning a production set, designing lighting plans, camera operation, and audio/ video recording, mixing, and editing.

# **Digital Video Technology 2**

This course provides students with intermediate level instruction in the digital video production process.

### **Digital Video Technology 3**

Students will participate in the digital video pre-production, production, and post-production processes.

# **Digital Video Technology 4**

Students will demonstrate proficiency in all phases of the digital video production process (pre-production, production, post-production).

### **Digital Video Technology 5**

Students will demonstrate professionalism, develop interviewing skills, perform on camera in video productions, and complete all phases in the digital video production process.

#### **3DE - Business**



#### **Principles of Entrepreneurship**

The purpose of this program is to introduce students to the concept of entrepreneurship, present entrepreneurship as a viable career option, provide students with the skills needed to realistically evaluate their potential as business owners, and to develop the fundamental knowledge and skills necessary to start and operate a business.

#### **Business Management and Law**

The purpose of this course is to provide students with learning opportunities in a prescribed program of study within the Marketing, Sales and Service cluster that will enhance opportunities for employment in the career field chosen by the student.

### **Business Ownership**

The purpose of this program is to prepare students for careers as entrepreneurs, present entrepreneurship as a career path worthy of consideration, provide students with the skills needed to realistically evaluate their potential as business owners and to develop the fundamental knowledge and skills necessary to start and operate a business.

### **Digital Media**

### Digital Media/Multimedia Foundations 1 & 2

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

### On Campus Additional Financial Credit Union Branch- CFE Bank Teller (Application Only)

Like a traditional branch, the school based tellers can help guests open new accounts, process deposits and withdrawals, and assist with ordering a new debit card

# **Hospitality**

# Introduction to Hospitality and Tourism

The purpose of this course is to introduce students to the skills necessary for success in the hospitality and tourism industry. Students will also have the opportunity to learn hospitality and tourism terminology and the mathematical, economic, marketing, and sales fundamentals of the industry.

# **Technology for Hospitality & Tourism**

Prerequisite: Introduction to Hospitality & Tourism

This course is designed to provide an introduction to computer technology and to develop entry-level skills for computer-related careers in the hospitality & tourism industry.

### Hospitality & Tourism Marketing Management

Prerequisite: Introduction to Hospitality & Tourism The purpose of this course is to provide students necessary career specific instruction in hospitality and tourism marketing management. Students will learn sales and management techniques, marketing principles, and entrepreneurship skills necessary to succeed in the hospitality and tourism industry. This course incorporates marketing and management principles and procedures of the hospitality and tourism industry as well as employment qualifications and opportunities.

### Hospitality & Tourism Entrepreneurship

Prerequisite: Hospitality & Tourism Marketing Management The purpose of this course is to provide academic and technical preparation to pursue high- demand and high-skill careers in hospitality related industries. In addition, this course is designed so that performance standards meet employer expectations, enhancing the employability of students.

### **Aviation and Aerospace Engineering**

### Aerospace Technologies 1

Prerequisite – none.

Open to all grades: Model rocketry teaches students basic practical aerodynamics and physics. Group projects use simple model rocket kits to teach construction techniques, and to develop safe launch and flight practices. The rocket is later modified to meet changing mission parameters. Once a foundation has been established, students are encouraged to pursue more involved and demanding projects, including designing/flying their own rocket.

# Aerospace Technologies 2

Prerequisite – AeroTech 1 strongly recommended.

Open to all grades: Remote-controlled fixed-wing model aircraft are used to explore complex aerodynamics. Student groups build and fly models from plans. During second semester they are encouraged to design and build their own airplanes. Flight operations are modelled after corporate/airline flight departments. Multi-rotor aircraft ("drones") are also flown, and desk-top "flight simulators" allow students to compare/contrast model flying with full-scale general aviation. (Note: The instructor can assist students who would like to work toward their FAA Drone License(s).)

### Aerospace Technologies 3

Prerequisite – AeroTech 2 (AT 1 & AT 2 strongly recommended).

Open to Juniors/Seniors: Earning an FAA Private Pilot License requires a written examination and a combined oral/practical exam. This rigorous course provides students with the knowledge needed to pass the oral exam and the FAA Private Pilot Knowledge Exam (the "Written"). Students will apply for and receive their Student Pilot License. In-depth lectures are supplemented with practice test questions. The students will take the FAA Private Pilot Knowledge Exam as their end-of-course test. (Note: There is the opportunity to receive flight training at additional cost in parallel with this course.)

### **Advance Tech Application**

The purpose of this course is to serve as a capstone course to provide Engineering and Technology Education students with the opportunity to develop a project from "vision" to "reality". Working in teams to design, engineer, manufacture, construct, test, redesign, test again, and then produce a finished "project". This would involve using ALL of the knowledge previously learned, not only in technology education, but across the curriculum.

### Game/Simulation/Animation Visual Design 1/2/3/4

The Game, Simulation and Animation Visual program emphasizes the development of technical abilities as well as ethical and societal awareness necessary to function in a highly technological society. The use of cooperative learning groups is recommended. By learning and practicing group process skills, students will be prepared to work "together" in real work situations. Program graduates will develop enhanced self-esteem as well as the problem solving and teamwork skills necessary to succeed in careers and postsecondary education.

The Game, Simulation & Animation Visual Design program places a strong emphasis on workplace learning. Job shadowing and mentoring experiences with game and simulation professionals along with on-site trips to local businesses connect classroom learning to the workplace. In-class guest speakers bring the real world into the classroom.

The Foundations and Design courses should be taken in sequence prior to the 2D Graphic Development and 3D Graphic Animation courses. The 2D Graphic Development and 3D Graphic Animation courses may be taken concurrently.

# <u>Visual Art</u>

### 2D Studio Art 1/2/3

Students experiment with the media and techniques used to create a variety of two-dimensional (2-D) artworks through the development of skills in drawing, painting, printmaking, collage, and/or design. 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. 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.

# AP 2D Art

This portfolio is designated for work that focuses on the use of two-dimensional (2-D) elements and principles of art and design, including point, line, shape, plane, layer, form, space, texture, color, value, opacity, transparency, time, unity, variety, rhythm, movement, proportion, scale, balance, emphasis, contrast, repetition, figure/ ground relationship, connection, juxtaposition, and hierarchy. Students should consider how materials, processes, and ideas can be used to make work that exists on a flat surface. Students can work with any materials, processes, and ideas. Graphic design, digital imaging, photography, collage, fabric design, weaving, fashion design, fashion illustration, painting, and printmaking are among the possibilities for submission. Still images from videos or film are accepted. Composite images may be submitted

### Ceramics/Pottery 1/2/3/4

An understanding of ceramics through basic hand-building techniques. With an introduction of the history and uses of clay, tools, glazes, and kilns. Students will develop and practice maintenance skills in an open studio environment. Students will study all methods of clay construction in functional and/or nonfunctional designed projects. An emphasis on craftsmanship and creativity as well as presentation of work will be stresse

### Creative Photography 1/2/3/4

Students explore the aesthetic foundations of art making using beginning photography techniques. This course may include, but is not limited to, color and/or black and white photography via digital media and/or traditional photography. Students become familiar with the basic mechanics of a camera, including lens and shutter operation, compositional foundations, printing an image for display, and evaluating a successful print. Student photographers may use a variety of media and materials, such as 35mm black and white film, single lens reflex camera, digital camera, darkroom, computer application, filters, various papers, digital output, photogram, cyanotypes, Sabatier effect, and pinhole photography. Craftsmanship and quality are reflected in the surface of the prints and the care of the materials. Photographers use an art criticism process to evaluate, explain, and measure artistic growth in personal or group works. This course incorporates hands-on activities and consumption of art materials.

### Language Arts

# AICE English Language

Cambridge International AS and A Level English Language provides learners with the opportunity to study English language and its use in communication. Learners will be encouraged to respond critically to a wide variety of texts in a range of forms, styles and contexts, and to promote skills of communication, reading, research and analysis. Through their study, learners will develop an ability to read and analyze material, gaining further knowledge and understanding of English language features and issues. Learners will also develop the skills of writing clearly, accurately, creatively and effectively for different purposes and audiences.

### AICE General Paper

The Cambridge International AS Level English General Paper encourages learners to engage with a variety of topics, including knowledge and understanding gained from study of other subjects. They learn to become confident in analyzing knowledge and opinion from a variety of sources, to build arguments and to communicate through written English.

### Journalism 1/2/3/4

The purpose of this course is to enable students to develop fundamental skills in the production of journalism across print, multimedia, web, and broadcast/radio platforms and to develop knowledge of journalism history, ethics use, and management techniques related to the production of journalistic media.

### **AP English Language**

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

### **AP English Literature**

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.

# Leadership (Application Only)

### **Executive Leadership**

The purpose of this course is to provide a practical introduction to the work environment through direct contact with professionals in the community. The content should include, but not be limited to, the following: discussion of professional job requirements, awareness and knowledge of career opportunities, building vocabulary appropriate to the area of professional interest, development of decision-making skills, and development of personal and educational job-related skills

### **Student Government 1**

The purpose of this course is to teach leadership skills, parliamentary procedure, problem solving, decision making, communication skills, group dynamics, time and stress management, public speaking, human relations, public relations, team building, and other group processes. The content should include, but not be limited to the following: study in self-understanding, development in such areas as goal setting, self-actualization, and assertiveness, and study of organizational theories and management

### Student Government 2

This course will provide an in-depth study of the leadership techniques of decision making, problem solving, meeting skills, communication, group conflict reduction, time and stress management, evaluation, team building, group dynamics, motivational strategy, data collection for project needs, evaluation of community organizations, purpose of local government, and the role of leadership in a democratic society. The content should include, but not be limited to the following: development in areas such as self-esteem, goal setting, and character building and enhanced leadership skills and the ability to function in both a group setting and the community

# Student Government 3 \*Portfolio-Based End of Course exam is required\*

The purpose of this course is to provide formative opportunities to build on skills acquired in the *Leadership Techniques* course, including meetings skills, communication skills, motivational strategies, character development, group dynamics, community relations, data collection for project needs, evaluation of community organizations, purpose of local government, community service and personal and civic responsibility.

The content should include, but not be limited to, the following:

effective project planning, execution and management

techniques for the successful advocacy of proposed public policy changes

mastery of organizational theories and management techniques and strategies

analysis of community organizations' impact on the community as a whole

construction of surveys to gather data for community needs

analysis of survey data

# Student Government 4 \*Portfolio-Based End of Course exam is required\*

This course facilitates summative application of leadership skills formed in Leadership Strategies, emphasizing organizational management, goal-setting, communication with varied audiences, peer mediation, citizenship, data collections and analysis, conflict resolution, healthy decision-making, assertiveness, and meeting skills, stress management and strategies for self-reflection.

The content should include, but not be limited to, the following:

study in self-reflection

continued development in such areas as goal setting, self-actualization, and assertiveness

practice of organizational theories and management

evaluating the needs of local community

supporting the connection among local governmental agencies

# **Mathematics**

### Math for College Statistics

Probability and Statistics is designed to introduce the methods used in the field of applied statistics. Emphasis is given to basic concepts and techniques for collecting and analyzing data, drawing conclusions, and making predictions. The major focus of this course is to provide students with experience in solving problems which can be set ups a mathematical models.

### Math for College Algebra

In Mathematics for College Liberal Arts, instructional time will emphasize five areas: (1) analyzing and applying linear and exponential functions within a real-world context; (2) utilizing geometric concepts to solve real-world problems; (3) extending understanding of probability theory; (4) representing and interpreting univariate and bivariate data and (5) developing understanding of logic and set theory.

### **AP Pre-Calculus**

The purpose of this course is to enable students to develop concepts and skills in advanced algebra, analytic geometry, and trigonometry

### **AP Calculus AB**

AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

### **AP Calculus BC**

AP Calculus BC is roughly equivalent to both first and second semester college calculus courses and extends the content learned in AB to different types of equations and introduces the topic of sequences and series. The AP course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

### **AP Statistics**

Course content includes but is not limited to the following; exploratory data: observing patterns and departures from patterns; planning a study: deciding what and how to measure; anticipating patterns in advance: producing models, using probability and simulation, and statistical inference.

### **AP** Computer Science Principles

AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. **AP Computer Science A** 

AP Computer Science A is an introductory college-level computer science course. Students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures.

### **Performing Arts**

# Theater 1

Through improvisation, simple scripted scenes, performance projects, and/or practical application,

students learn to identify what makes performances believable and explore the tools used to create, articulate, and execute them. Upon completion of this course, students have a strong foundation for future scene work, script analysis, and play production. 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.

# Theater 2

Students examine the various dimensions of characters through analysis, discussion, and classroom performance, working with scripts from a variety of time periods and cultures. They learn to break down a scene from a character's point of view, and also learn to sustain a character and build the relationship between actor and audience. 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.

# Band 1

This year-long, entry-level class, designed for students having little or no previous band experience with woodwind, brass, and/or percussion instruments, promotes the enjoyment and appreciation of music through performance of high-quality, beginning wind and percussion literature from different times and places. Rehearsals focus on the development of critical listening/aural skills; rudimentary instrumental technique and skills, music literacy, and ensemble skills; and aesthetic musical awareness culminating in periodic public performances.

# Band 2

This year-long, beginning-level class, designed for students with at least one year of woodwind, brass, and/ or percussion ensemble experience, promotes the enjoyment and appreciation of music through performance of high-quality wind and percussion literature. Rehearsals focus on the development of critical listening skills, instrumental and ensemble technique and skills, expanded music literacy, and aesthetic awareness culminating in periodic public performances.

# Band 3

This year-long, formative class, designed for students ready to build on skills and knowledge previously acquired in a middle or high school instrumental ensemble, promotes the enjoyment and appreciation of music through performance of high-quality, intermediate-level wind and percussion literature. Rehearsals focus on development of critical listening/aural skills, individual musicianship, instrumental technique, refinement of ensemble skills, and aesthetic engagement culminating in periodic public performances.

# Band 4

This year-long, intermediate-level course, designed for students who demonstrate proficiency in woodwind, brass and/or percussion techniques, music literacy, critical listening/aural skills, and ensemble performance skills, promotes greater engagement with and appreciation for music through performance and other experiences with a broad spectrum of music, as well as creativity through composition and/or arranging.. Study includes cultivation of well-developed instrumental ensemble techniques and skills, music literacy and theory, and deeper aesthetic engagement with a wide variety of high-quality repertoire.

# Band 5

This year-long, advanced course, designed for wind and percussion students with extensive experience in solo performance and larger performing ensembles, promotes significant depth of engagement and lifelong appreciation of music through performance and other experiences with sophisticated instrumental music, as well as creativity through composition and/or arranging. The course includes the development of advanced instrumental ensemble techniques and skills, extended music literacy and theory, and deep aesthetic engagement with a broad spectrum of high-quality repertoire, ranging from early music to the contemporary. Musical independence and leadership are particularly encouraged in

### this setting.

### Band 6- Hon

This year-long, highly advanced course, designed for students with substantial experience in solo performance and larger performing ensembles, promotes significant engagement with and appreciation for music through performance of sophisticated wind and percussion literature. Study focuses on mastery of highly advanced music skills, techniques, and processes, as well as creativity through composition and/or arranging and use of current technology to enhance creativity and performance effectiveness. This course also provides significant opportunities for student leadership through peer mentoring, solo work, and participation as a performer or coach in a small or large ensemble.

### Chorus 1

This year-long, entry-level class, designed for students with little or no choral experience, promotes the enjoyment and appreciation of music through performance of beginning choral repertoire from a variety of times and places. Rehearsals focus on the development of critical listening skills; foundational instrumental technique and skills, music literacy, and ensemble skills; and aesthetic musical awareness culminating in periodic public performances.

### Chorus 2

This year-long, beginning-level class, designed for students with one year of experience or less in a choral performing group, promotes the enjoyment and appreciation of music through performance of basic, high-quality choral music. Rehearsals focus on the development of critical listening/aural skills; foundational instrumental technique and skills, music literacy, and ensemble skills; and aesthetic musical awareness culminating in periodic public performances.

### Chorus 3

This year-long, formative class, designed for students with previous participation in a school chorus who have basic knowledge of note-reading and vocal technique, concentrates on providing students opportunities to strengthen existing skills in critical listening, vocal techniques, and ensemble performance using high-quality three- and four-part choral literature. Rehearsals focus on gaining independence in music literacy and aesthetic engagement through critical listening and thinking skills.

# Chorus 4

This year-long, intermediate-level class is designed for students with previous participation in a high school chorus and moderate skills in critical listening, vocal techniques, music literacy, and choral performance. Rehearsals focus on enhancing these skills and students' aesthetic engagement with music through a variety of high-quality three- and four-part choral literature, providing students with the means to learn how to reflect and use a combination of analytical, assessment, and problem-solving skills consistently to improve their own and others' performance.

# Guitar 1

Students with little or no experience develop basic guitar skills and knowledge, including simple and full-strum chords, bass lines and lead sheets, barre and power chords, foundational music literacy and theory, major scales, simple finger-picking patterns, and ensemble skills for a variety of music. Beginning guitarists explore the careers and music of significant performers in a variety of styles. 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. This course may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source.

### Guitar 2

Students with previous guitar experience build on their skills and knowledge, adding chords, new strumming and finger-picking patterns, movable major and minor scales, basic music theory, more complex bass lines and lead sheets, and ensemble skills for a variety of music. Beginning guitarists explore the careers and music of significant performers. 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. This course may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source.

### Guitar 3

Students with previous experience strengthen their guitar skills and knowledge, adding a variety of chords; refining finger-picking and strumming patterns; reading notation in 1st, 2nd, and 5th position; and learning stylistic nuances, left-hand technique, and alternative fingering. Guitarists readily use tablature and standard notation, study the work of significant musicians, and develop significant self-assessment skills. 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. This course may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source.

# Jazz Band

Students with experience on an instrument suited for jazz ensemble explore the fundamentals of performance practices, improvisation, and music theory through a diverse repertoire of high-quality jazz literature. Students learn the basics of foundational jazz styles, use chord symbols, develop knowledge of musical structure, and study the history of jazz and its iconic musicians. 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. Students in this class may need to obtain (e.g., borrow, rent, purchase) an instrument from an outside source.

# Keyboard 1/2/3/4

Students build fundamental piano techniques while learning to read music, acquire and apply knowledge of basic music theory, and explore the role of keyboard music in history and culture. Beginning pianists develop skills in analytical listening and explore musical creativity in the form of basic improvisation and basic composition. 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.

### Orchestra 1/2/3/4

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.

# **AP Music Theory**

The purpose of this course is to develop the student's ability to recognize and understand the basic materials and processes in any music that is heard or read in score. A college level course that explores melody, harmony, texture, rhythm, form, analysis, composition, history, and style. Musicianship skills such as dictation and other listening skills are included. The student's ability to read and write musical notation is fundamental to this course, and it is also encouraged for students to have acquired performance skills through courses such as band, chorus, orchestra, piano, or guitar

### **Physical Education**

### Basketball

The purpose of this course is to provide students with opportunities to acquire knowledge and skills in basketball that may be used in recreational pursuits today as well as in later life and maintain and/or

improve their personal fitness. This course includes sport history, game rules, and basketball fundamentals.

### HOPE

The purpose of this course is to develop and enhance healthy behaviors that influence lifestyle choices and student health and fitness. Students will combine the learning of principles and background information in a classroom setting with physical application of the knowledge. A majority of class time should be spent in physical activity.

### **Team Sports**

The purpose of this course is to develop the physical skills necessary to be competent in many forms of movement, knowledge of team sports concepts such as offensive and defensive strategies and tactics, and appropriate social behaviors within a team or group setting. The integration of fitness concepts throughout the content is critical to the success of this course.

### Weight Training

The purpose of this course is to develop the physical skills necessary to be competent in many forms of movement as it relates to weight training. The integration of fitness concepts throughout the content is critical to the success of this course.

### 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.

### **Science**

### **Chemistry 1 Hon**

While the content focus of this course is consistent with the Chemistry I course, students will explore these concepts in greater depth. In general, the academic pace and rigor will be greatly increased for honors level course work. Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the high school level, all students should be in the science lab or field, collecting data every week. School laboratory investigations (labs) are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the high school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand measurement error; and have the skills to aggregate, interpret, and present the resulting data (National Research Council, 2006, p. 77; NSTA, 2007).

# **Environmental Science/Environmental Science Honors**

This course is designed as an interdisciplinary course to provide students with scientific principles, concepts, and methodologies required to identify and analyze environmental problems and to evaluate risks and alternative solutions for resolving and/or preventing them. Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the high school level, all students should be in the science lab or field, collecting data every week. School laboratory investigations (labs) are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p.3). Laboratory investigations in the high school classroom should help all students develop a growing

understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand measurement error; and have skills to aggregate, interpret, and present the resulting data (NRC, 2006, p.77; NSTA, 2007).

### Anatomy & Physiology- Hon

While the content focus of this course is consistent with the Anatomy and Physiology course, students will explore these concepts in greater depth. In general, the academic pace and rigor will be greatly increased for honors level course work. Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the high school level, all students should be in the science lab or field, collecting data every week. School laboratory investigations (labs) are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the high school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand measurement error; and have the skills to aggregate, interpret, and present the resulting data (National Research Council, 2006, p. 77; NSTA, 2007)

# AP Biology

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions.

# 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**

Prerequisites: Concurrently taking Precalculus or AP Calculus AB

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.

# AICE Environmental Management

This AS Level syllabus develops scientific knowledge and understanding of global environmental issues and theories, and of the policies and strategies for managing the environment. The course covers the sustainable use and management of resources, and strategies that aim to protect environments. Learners will interpret and analyze data and do investigative work. Case studies allow teachers to choose their own examples to investigate, which may be local, regional or global.

### **AICE Marine Science**

Cambridge International AS and A Level Marine Science provides a coherent and stimulating introduction to the science of the marine environment. We recommend that learners starting this course should have completed a course in Cambridge O Level or Cambridge IGCSE in Biology or Marine

Science or the equivalent. The emphasis throughout is on the understanding of concepts and the application of ideas to new contexts. It is expected that practical activities will underpin the teaching of the whole course. Science is a practical subject and research suggests that success in future scientific study, or a scientific career, requires good practical skills. Cambridge International AS and A Level Marine Science can form part of an ideal subject combination for learners who want to study Marine Biology or Environmental Science at university or to follow a career in shipping, fisheries, tourism or aquaculture.

# Social Studies

# ADVANCED PLACEMENT HUMAN GEOGRAPHY

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 (2109310/2109320)

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.

### Psychology 1/2

Through the study of psychology, students acquire an understanding of and an appreciation for human behavior, behavior interaction and the progressive development of individuals. The content examined in this first introductory course includes major theories and orientations of psychology, psychological methodology, memory and cognition, human growth and development, personality, abnormal behavior, psychological therapies, stress/coping strategies, and mental health.

### **AP Macroeconomics (12)**

AP Macroeconomics is an introductory college-level course that focuses on the principles of economics that apply to the functions of individual economic decision-makers. This course also develops students' familiarity with the operation of product and factor markets, distributions of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts.

# AP US Government (12)

Students acquire a critical perspective of politics and government in the United states. They learn general concepts used to interpret American politics and analyze specific case studies. Students also become

familiar with the various institutions, groups, beliefs and ideas that constitute the American political perspective.

# **AP 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 (.5 Credit)**

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 Financial Literacy.

### **Financial Literacy (.5 Credit)**

This grade 9-12 course consists of the following content area and literacy strands: Economics, Financial Literacy, Mathematics, Languages Arts for Literacy in History/Social Studies and Speaking and Listening. Basic economic concepts of scarcity, choice, opportunity cost, and cost/benefit analysis are interwoven throughout the standards and objectives. Emphasis will be placed on economic decision-making and real-life applications using real data. The primary content for the course pertains to the study of learning the ideas, concepts, knowledge and skills that will enable students to implement beneficial personal decision-making choices; to become wise, successful, and knowledgeable consumers, savers, investors, users of credit and money managers; and to be participating members of a global workforce and

### Law Studies (.5 Credit)

In this course, you will examine aspects of the foundations of the U.S. legal system as well as different types of law including civil, criminal, family, and consumer law. You will analyze key principles underlying law such as justice and how the state and federal court systems work to fulfill these principles.

# **Court Procedure (.5 Credit)**

The grade 9-12 Court Procedures course consists of the following content area strands: American History, World History, Geography, Humanities, Civics and Government. The primary content for the course pertains to the study of the structure, processes and procedures of the judicial systems of the United States and Florida. Content should include, but not be limited to, the structure, processes and procedures of county, circuit and federal courts, civil and criminal procedures, juvenile law, the rights of the accused, evolution of court procedures, comparative legal systems, and career choices in the judicial system.

# **AICE European History**

This is a college-level course in which students will study European history beginning with the French Revolution through World War I. This includes a thorough understanding of the interactions and interdependence of European nations throughout the late 18th and early 20th centuries. We will explore the different impacts of the industrial revolution on 19th century Europe, the rise and influences of liberalism and nationalism, and unification of Europe. Because the history of Europe centers upon the intertwining of many nations' relations, the content is chunked into different focus areas. In doing so, students can thoroughly understand the intermixing content by creating a base knowledge from the focus area prior. The complexity of European history of the late 18th and early 20th centuries emboldens students to develop and sharpen critical thinking, interpretation, analysis, and evaluation abilities. In turn, these skills will enable students to deconstruct, evaluate, and interpret the social, political, and economic

effects of international and domestic relations within Europe. Therefore, with a profound understanding of this content, students will be able to make real-world connections to deconstruct, process, and evaluate current events.

# AICE Psychology (11-12)

Cambridge International AS and A Level Psychology learners develop their appreciation of the subject by exploring the ways in which psychology is conducted. As part of their studies, learners also review important research; this provides an insight into the ways in which psychology has been applied, thereby leading to a better understanding of key approaches, research methods and issues and debates. The syllabus reflects four core areas of psychology, namely biological, cognitive, learning and social; it also relates psychology to abnormality, consumer behavior, health and organizations.

# **AICE Global Perspectives**

Cambridge International AS & A Level Global Perspectives and Research is a skills-based course that prepares learners for positive engagement with our rapidly changing world. Learners broaden their outlook through the critical analysis of – and reflection on – issues of global significance. They will develop unique, transferable skills including research, critical thinking and communication by following an approach to analyzing and evaluating arguments and perspectives called the 'Critical Path'. Collaborative skills are enhanced through participation in a team project. The skills gained through study of this course help students to meet the demands of Twenty-First century learning, preparing the transition to higher education and the world of work. As part of the course learners write a research report on a research question of their choice.

### **World Languages**

### Spanish 1

Spanish 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.

# Spanish 2

Spanish 2 reinforces the fundamental skills acquired by the students in Spanish 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 Spanish 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.

### Spanish 3 Hon

Spanish 3 provides mastery and expansion of skills acquired by the students in Spanish 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 Spanish Language

Develop your Spanish language skills and learn about the cultures in Spanish-speaking parts of the world. You'll practice communicating in Spanish and study real-life materials such as newspaper articles, films, music, and books.

# AP Spanish Literature (0708410)

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.

# 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- Hon

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**

Develop your French language skills and learn about the cultures in French-speaking parts of the world. You'll practice communicating in French and study real-life materials such as newspaper articles, films, music, and books.

### AICE SPAN LANG AS

The Cambridge International AS Level Spanish syllabus enables learners to achieve greater fluency, accuracy and confidence in the language as it is spoken and written, and improve their communication skills. You will learn how to improve their use of Spanish in a variety of situations, understanding how to read texts and other source materials, extract information, initiate conversations and respond to questions both orally and in writing.