

# ADVANCED PLACEMENT PROGRAM

# INFORMATION FOR PARENTS AND STUDENTS

Program overview

Course descriptions

Exam information

Strategies for success



Fostering endless opportunities for all students to achieve academic growth and success

# AP Achievement List

Lake Park High School is one of 388 school districts in the nation being honored by the College Board with a place on its AP® Achievement List for opening AP classroom doors to a significantly broader pool of students, while maintaining or improving the percentage of students earning scores of 3 or higher. From 2007 to 2017, Lake Park High School has increased the number of students participating in AP from 318 students taking 516 exams in 2007 to 954 students taking 1,890 exams in 2017.



# LAKE PARK HIGH SCHOOL

# **NOTES:**

# STRATEGIES FOR SUCCESS

- Set aside specific time each day to devote to your AP coursework and study. Make sure to discuss your schedule with parents and other family members and ask them to support your effort.
- Spend some of your daily study time reviewing class notes, and jot down questions about any material you do not understand. Make sure to ask your teacher for clarification as soon as possible.
- Form a small study group and meet regularly to review material together; keep study sessions focused on study and not socializing.
- Take notes as you read. Use active reading strategies to highlight important information and concepts as well as your questions.
- Advanced Placement courses move quickly, so keeping up-to-date with assignments is essential. Break lengthy assignments into smaller tasks.
- Focus on developing strong reading, writing, and analytical skills.
- Take an active role in class—ask questions, volunteer answers, and participate in discussion.
- Practice good test-taking skills: read instructions carefully, think about and plan answers to essay questions before writing, and pay attention to time limits.
- Take the Advanced Placement exam, even if you think you will not earn a top score. Participating in the College Board exam is an important part of the AP experience.
- Know your limits. Before enrolling in multiple Advanced Placement courses in the same semester, think carefully about your schedule, academic skills, and level of interest.
- Challenge yourself. Students who are planning to attend college after high school should take at least one Advanced Placement course before graduation. Go for it!

# Using this Booklet

The information provided in this booklet is intended to familiarize students and parents with the requirements associated with Advanced Placement courses at Lake Park High School. While this booklet contains general information, parents and students are encouraged to contact the instructor listed in connection with a course, or a guidance counselor if they have specific questions or concerns.

This booklet lists Advanced Placement courses currently offered at Lake Park High School. Students who are interested in exploring the option of taking an Advanced Placement examination in a course area not offered by District 108 should contact their guidance counselor.

Additional information about each Advanced Placement course, including sample examination questions, can be accessed at http://www.collegeboard.com/student/testing/ap/about.html.



Lake Park High School Lake Park High School Page 27

# TABLE OF CONTENTS

.1 45 61 11

Taking on the AP Challenge	1
Art	
Studio Art Portfolio	3
<b>Business Education</b>	
Computer Science Principals	4
Computer Science	5
Economics	6
English	
Language	7
Literature	8
Foreign Languages	
French Language	9
German Language	10
Spanish Language	11
Spanish Literature	12
Mathematics	
Calculus AB	13
Calculus BC	14
Statistics	15
Music	
Music Theory	16
Science	
Biology	17
Chemistry	18
Environmental Science	19
Physics C: Mechanics	20
Physics 1	21
Social Science	
European History	22
Government and Politics: U.S.	23
Human Geography	24
Psychology	25
United States History	26
World History	27

# AP WORLD HISTORY

Grade: 10, East Campus

Prerequisites: Advanced Placement Human Geography and/or teacher

recommendation

# **COURSE DESCRIPTION**

The purpose of the AP World History course is to develop greater understanding of the evolution of global processes and contacts in different types of human societies. The course highlights the nature of changes in human history and their causes and consequences, as well as comparisons among major societies. This course will follow a chronological framework in order to organize material covering approximately 10.000 years of history. It emphasizes relevant factual knowledge and the development of thinking skills and methods used by historians when they study the past. Students will integrate college-level reading with primary documents, scholarly journal articles, and other historical artifacts to conduct analyses, apply historical thinking skills, and draw conclusions. Students who enroll in this course are expected to take the Advanced Placement exam in May.

# THE AP WORLD HISTORY EXAM

The AP World History Exam is 3 hours and 15 minutes long and includes a 105 minute multiple-choice and short answer section plus a 90 minute free-response section. The multiple-choice section of the exam accounts for 40%, the short-answer section accounts 20% and the free-response section accounts for 40% of a student's score. The multiple-choice section includes 55 stimulus-based questions. The short-answer section includes 4 written responses drawn from all of the chronological periods studied. The free-response section includes one document-based question and one long-essay response based upon either continuity and change over time, comparison, causation or periodization skills.

# AP UNITED STATES HISTORY

Grades: 11-12, West Campus

Prerequisites: Advanced Placement World History and/or teacher

recommendation

# **COURSE DESCRIPTION**

The Advanced Placement program in U.S. History is designed to provide students with the analytic skills and factual knowledge necessary to deal with problems and materials in American history. The program prepares students for intermediate and advanced level college courses by making demands on them equivalent to those of full-year introductory college courses. Students will learn to assess historical materials, their relevance to a given interpretive problem, their reliability, and their importance, and to weigh the evidence and interpretations presented in historical writings. This course develops the skills necessary to arrive at conclusions on the basis of an informed judgment and to present ideas clearly and persuasively in an essay format.

### THE AP UNITED STATES HISTORY EXAM

The AP U.S. History Exam is 3 hours and 15 minutes long and includes both a 105 minute multiple-choice/short-answer section and a 90 minute free-response section. Each section is divided into two parts, as shown in the table below. Student performance on these four parts will be compiled and weighted to determine an AP Exam score.

Section	Questions Type	Number of Questions	Timing	Percentage of Total Exam Score
I	Part A: Multiple-choice questions	55 questions	55 minutes	40%
	Part B. Short-answer questions	4 questions	50 minutes	20%
II	Part A: Document-based question	1 question	55 minutes	25%
	Part B: Long essay question	1 question	35 minutes	15%
		(chosen from a pair)		

# TAKING ON THE AP CHALLENGE

### WHAT ARE ADVANCED PLACEMENT COURSES?

Begun in 1957, Advanced Placement program was developed by educators in response to research indicating that many high school students were capable of doing college-level work. In the years since its inception, the AP program has grown to include a wide variety of course offerings across the academic core (English, mathematics, social science, science) as well as foreign languages, art, and music. Advanced Placement students may earn college credit by successfully completing a rigorous examination administered for each course in the spring of the academic year. All AP exams are written and scored by the College Board, the same testing agency that develops the SAT. In addition to preparing and scoring the Advanced Placement exams, the College Board also establishes requirements for each AP course and provides training for Advanced Placement teachers. Each teacher must submit a detailed course syllabus to the College Board before they are granted approval to teach an Advanced Placement course.

# HOW DO HIGH SCHOOL STUDENTS EARN COLLEGE CREDIT FOR AP COURSES?

Every May, thousands of students around the world take Advanced Placement exams. In June, teams of highly qualified, specially trained high school and college-level educators gather on college campuses across the United States for intensive evaluation sessions scoring these examinations. While each AP test is tailored to the specific characteristics of its academic discipline, generally exams include a multiple-choice section and several free response or essay questions. Exams are scored on a scale of one to five; five is the highest score. Most American colleges and universities will grant students credit for scores of four or five, and many for scores of three. As a result, a student earning a score of five on, for example, the AP U.S. History test might be granted credit for as many as two semester-length courses in American history when enrolling in college.

### IS AP WORTH THE COST?

The College Board charges a fee of \$94.00 for each Advance Placement exam. Both the College Board and District 108 will work with students.

who have financial need to assist them with the cost of these exams. Success in AP allows students to advance to higher levels of college course work faster, and even to graduate early. Taking AP courses in high school, therefore, can save a student both time and valuable tuition dollars in college. AP classes often help students fulfill general education requirements, allowing them to focus on courses directly related to their major area of study or interest. Even students enrolling at colleges that do not accept AP credit benefit from improved academic skills and depth of content knowledge as a result of their Advanced Placement coursework.

### WHAT SHOULD AN AP STUDENT AT LPHS EXPECT?

Advanced Placement students should expect to work very hard. AP students must be prepared to work at a rapid pace and to complete more homework and study than those enrolled in traditional courses. In most disciplines, students aspiring to AP course work will need to have strong reading and writing skills. As success in any Advanced Placement course demands a serious commitment to study, a student should think about where AP will fit into his or her schedule, particularly if they plan to be involved in many extra-curricular activities or sports, or if they are thinking about taking more than one AP course during a semester. Whatever the course, a student is much more likely to persevere in a challenging program if they have a high degree of interest in the area of study, and so this should be an important consideration before enrolling.

# DO COLLEGES CARE ABOUT ADVANCED PLACEMENT?

Years of educational research has shown that students who pursue rigorous coursework while still in high school are more successful in college. Colleges know this and most, particularly those that are highly selective, do pay attention to the rigor of the course work applicants have attempted while in high school as they make admissions decisions.

### WHERE CAN I FIND OUT MORE ABOUT ADVANCED PLACEMENT?

Your student's guidance counselor can help him or her to decide if AP is right for them. After reviewing this booklet, you may also want to contact the Lake Park instructor of an AP course to discuss in greater detail the expectations they have of their students. Another excellent resource is the College Board, which provides a detailed description and sample exams for each course online at www.collegeboard.com.

# AP PSYCHOLOGY

Grades: 11-12, West Campus

Prerequisites: Motivation to learn at a collegiate level and pace

# COURSE DESCRIPTION

Advanced Placement Psychology is equivalent to college introductory psychology, a required course for many major areas of study at the university level. Psychology is the scientific study of behavior and mental processes. Topics covered include research methods, the biological bases of behavior, sensation, perception, states of consciousness, learning, memory, mental abilities, thought and language, development, personality, motivation, emotion, social processes, stress, psychological disorders, and treatment. Many hands-on demonstrations typically include experiencing the connection between taste and smell, understanding perceptual illusions, simulating the interaction of genes and the environment, becoming a human neuron, and seeing how facial expressions affect mood. The course emphasizes active learning, critical thinking, study skills, preparation for college, and successful completion of the Advanced Placement exam in psychology.

# THE AP PSYCHOLOGY EXAM

The Advanced Placement Psychology exam is 2 hours long and includes a 70 minute 100 question multiple choice section, and a 50 minute free-response section of 2 questions. The multiple choice section of the exam is weighted as two-thirds and the free-response section as one-third in determining the student's exam grade.

Lake Park High School Page 24 Lake Park High School Page 3

# AP HUMAN GEOGRAPHY

Grade: 9, East Campus

Prerequisites: 9th grade placement scores and teacher recommendation

# **COURSE DESCRIPTION**

Advanced Placement Human Geography introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of our world. Students employ geographical/spatial concepts and tools to analyze topics such as human population movement and organization, cultural patterns and processes, political organization, agricultural and rural land use, industrialization and economic development, and city and urban land use. Students will integrate college-level reading with maps, graphs, and other spatial data sets to conduct analyses, apply models, and draw conclusions. Students will begin the course by developing essential learning skills that will assist them across the curriculum. Information literacy skills will address plagiarism and web skills. Students are expected to take the Advanced Placement exam.

### THE AP HUMAN GEOGRAPHY EXAM

The Advanced Placement Human Geography exam is approximately 2 hours and 15 minutes long. It includes a 60 minute multiple-choice section, and a 75 minute free response section. Each section is weighted equally in determining a student's final exam score.

# AP STUDIO ART PORTFOLIO

Grades: 11-12, West Campus

Prerequisites: Must have at least three semesters of art classes (2 with teacher approval and recommendation). A "B" average minimum in Art. Teacher approval (judged according to work ethic, responsibility, creativity, and technical ability).

### COURSE DESCRIPTION

The AP Studio Art Portfolio course is for students like you who are seriously interested in the practical experience of art and wish to develop mastery in the concept, composition, and execution of their ideas. Through this highly advanced level course, you will construct a portfolio of work, which focuses on a variety of concepts, techniques and approaches designed to help you demonstrate your abilities as well as your versatility with techniques, problem solving, and ideation. You will develop a body of work for the Concentration section of the portfolio that investigates an idea of your own personal interest.

### THE AP STUDIO ART PORTFOLIOS

The AP Studio course offers students the choice of one of three portfolio paths: Drawing, 2-D Design and 3-D Design. Each portfolio contains three required sections; Quality: Concentration and Breadth.

LAKE PARK HIGH SCHOOL PAGE 4 LAKE PARK HIGH SCHOOL PAGE 23

# AP COMPUTER SCIENCE PRINCIPLES

Grades: 10, 11 & 12 East & West Campus

Prerequisites: Algebra

# **COURSE DESCRIPTION**

The AP Computer Science Principles course is designed to be equivalent to a first semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computations tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course is unique in its focus on fostering student creativity. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while using computer software and other technology to explore questions that interest them. They will also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society, and the world.

# THE AP COMPUTER SCIENCE PRINCIPLES EXAM

The AP Computer Science Principles exam has two components— a performance based section and a traditional exam section. In the performance based section students will analyze an important computer innovation as well as create a computer program, submitted via a digital portfolio. The traditional exam section is 2 hours long and will include 74 multiple choice questions. Both sections of the assessment will provide students with the opportunity to exhibit their achievement of the course learning objectives and their application of the computational thinking practices. The performance-based section provides 40% of the AP exam score with the traditional exam providing the remaining 60%.

# AP GOVERNMENT AND POLITICS: U.S.

Grade: 11-12, West Campus

Prerequisites: Motivation to learn at a collegiate level and pace.

### COURSE DESCRIPTION

The Advanced Placement course in American government is designed to give students a critical perspective on politics and government in the United States. This course involves both the study of general concepts used to interpret American politics and the analysis of specific case studies. It requires familiarity with the various institutions, groups, beliefs, and ideas that make up the American political reality. Students will have the opportunity to take the Advanced Placement examination at the conclusion of the course.

# THE AP AMERICAN GOVERNMENT AND POLITICS EXAM

The Advanced Placement United States Government and Politics exam is 2 hours and 25 minutes long. It consist of a 45 minute multiple choice section of 60 questions, and a 100 minute free-response section of 4 questions.

LAKE PARK HIGH SCHOOL PAGE 22 LAKE PARK HIGH SCHOOL PAGE 5

# AP EUROPEAN HISTORY

Grades: 11-12, West Campus

Prerequisites: Motivation to learn at a collegiate level and pace

# **COURSE DESCRIPTION**

Advanced Placement European History provides an in-depth study of European history from the fall of Rome to modern times. The AP European History program is designed to provide students with the analytical skills and factual knowledge needed to deal with advanced topics and issues in European history. The program prepares students for intermediate and advanced level college courses by making demands on equivalent to those of full year introductory college courses. Students will learn to assess historical materials, their relevance, reliability and importance to a given interpretive problem, and weigh evidence and interpretations of historical writings. The AP European History course also develops the skills needed to arrive at conclusions based on informed judgments and to present ideas clearly and persuasively in essay format. One of the final activities for the course is taking the advanced placement test in May. Sufficiently high scores on the test may enable students to earn college credit in many colleges and universities. If such credit is a major concern, the student should check with his/her chosen college or university to determine if they grant credit for the test. College credit is not an automatic outcome of passing the course.

# THE AP EUROPEAN HISTORY EXAM

The AP exam for European History is approximately 3 hours long. It is composed of two sections comprised of 80 multiple-choice questions and 3 essay responses. Section I, the multiple-choice portion, is to be completed in 55 minutes. Section II, the written response portion, is to be completed in 130 minutes (including the mandated 15 minute reading period, and includes three essays, two of them thematic Free Response Questions (FRQ) and one a Document Based Question. The DBQ is provided a mandated 15-minute reading period prior to beginning the response. Each essay is graded on a scale of nine possible points.

# AP COMPUTER SCIENCE

Grades: 11-12, West Campus

Prerequisites: Advanced Algebra; recommended: Introduction to JAVA

Programming.

### COURSE DESCRIPTION

Advanced Placement Computer Science 1-2 is designed to prepare students for the AP exam in computer science. Math, problem solving, and structured programming are emphasized. Students will use the JAVA language to communicate their algorithms to a computer.

# THE AP COMPUTER SCIENCE EXAM

The AP Computer Science exam is 3 hours long and consists of two sections. Section I consists of 40 multiple-choice questions and lasts 1 hour and 30 minutes. Section II includes 4 free-response questions requiring the student to demonstrate the ability to solve problems involving extended reasoning and lasts 1 hour and 30 minutes. The multiple choice and free-response sections are given equal weight in determination of the exam score.

LAKE PARK HIGH SCHOOL PAGE 6 LAKE PARK HIGH SCHOOL PAGE 21

# AP ECONOMICS

Grades: 11-12, West Campus

Prerequisites: None

# **COURSE DESCRIPTION**

Advanced Placement Economics is a one year course that combines AP Microeconomics and AP Macroeconomics. AP Microeconomics focuses on the principles of economics that apply to individual decision makers, both consumers and producers, within the economic system. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. AP Macroeconomics focuses on the principles of economics that apply to an economic system as a whole. It places primary emphasis on the study of national income and price level determination, and develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics.

# AP MICROECONOMICS & AP MACROECONOMICS EXAM

Each exam (AP Microeconomics & Macroeconomics) is 2 hours and 10 minutes in length. Section I consists of a 70 minute multiple-choice test. Section II begins with a 10 minute reading period, during which students read each of several free-response questions, sketch graphs, make notes, and plan their answers. Students are allotted 50 minutes to write their answers. The multiple-choice section accounts for two-thirds of the final exam score, and the free-response section one-third.

# AP PHYSICS 1

# Grades 11-12, West Campus

Prerequisites — Chemistry — "A" or "B" in Honors Chemistry or an "A" in Chemistry with teacher recommendation. Students should be concurrently enrolled in Algebra 2 or a higher math course. It is recommended that enrolled students have earned a grade of "B" or higher in Honors Geometry, or a grade of "A" in Geometry.

### COURSE DESCRIPTION

AP Physics 1 is an algebra-based Physics course that covers the same material as a first semester introductory algebra-based college physics course. This course focuses on the "big ideas" in physics, engaging students in inquiry-based learning of physics' essential concepts. It also allows students to learn and practice the scientific reasoning and critical thinking skills necessary to successfully engage in scientific processes. Students will discover and test the laws that govern the physical world around them, including Kinematics, Circular Motion, Simple Harmonic Motion, Linear Momentum, Work, Energy, Rotational Motion, Electrostatics, DC Circuits, Mechanical Waves, and Sound. During the investigations, students will take part in inquiry-based labs and will utilize high level math skills and computers to analyze data.

### THE AP PHYSICS 1 EXAM

The Physics 1 exam is 3 hours long and consists of two sections that are equally divided between multiple-choice and free-response questions. The multiple-choice section includes 50 questions of both the one-correct answer and two-correct answer types. The free-response section contains three question types, including "experimental design" (designing and describing investigations, analysis of authentic lab data, and observations to identify patterns or explain phenomena); "qualitative/quantitative translation" (requiring the student to translate between quantitative and qualitative justification and reasoning), and "short-answer questions" (requiring a paragraph length coherent argument).

LAKE PARK HIGH SCHOOL PAGE 20 LAKE PARK HIGH SCHOOL PAGE 7

# AP PHYSICS C: MECHANICS

Grades: 11-12, West Campus

Prerequisites: Above average achievement in Advanced Physics, and completion of or concurrent enrollment in Calculus.

### COURSE DESCRIPTION

Advanced Placement Physics is a second-year physics program for students who desire a college-level course. The content emphasizes problem-solving in mechanics, and will examine six central areas of physics: kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Advanced mathematics, including Calculus, will be used. This course is designed for students interested in continuing study in fields such as engineering, astronomy, mechanical design, biophysics and physics.

### THE AP PHYSICS C: MECHANICS EXAM

The AP Physics C Exam is 1 hour and 30 minutes long, and includes a 35 question multiple-choice section and a free response section. Time is divided equally between the two sections, and the two are weighted equally in determination of the exam grade. The multiple-choice questions cover the basic principles of physics, while the free-response questions emphasize the application of these principles in greater depth to solve extended problems.

# AP ENGLISH LANGUAGE & COMPOSITION

Grade: 11, West Campus

Prerequisites: Honors World Literature & Composition or a recommendation of an Advanced World Literature & Composition instructor.

### **COURSE DESCRIPTION**

AP English Language and Composition is a college preparatory class that teaches students to read and write in a variety of rhetorical contexts through analysis and close reading, argumentation and persuasion, introduction to philosophy and ethics, and the exploration of language and thought. AP Language challenges students to become critical readers and thinkers, exposes them to the richness of non-fiction literature, and prepares students for the English Language and Composition AP Examination.

# THE AP LANGUAGE AND COMPOSITION EXAM

The AP Language and Composition Exam is 3 hours and 15 minutes in length. One hour of the exam is allotted to answer approximately 60 multiple-choice questions. This is followed by a 15 minute reading period, after which students have 120 minutes to complete essay responses to three different writing prompts: persuasive, stylistic, and synthesis. Performance on the essay portion of the exam counts for 55 percent of the total score, and performance on the multiple choice section of the exam for 45 percent.

# AP ENGLISH LITERATURE & COMPOSITION

Grade: 12, West Campus

Prerequisites: AP Language and Composition or recommendation of Advanced American Literature and Composition teacher

### COURSE DESCRIPTION

AP English Literature and Composition is a college preparatory class that engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism and tone. Such reading is accompanied by thoughtful discussion and intensive writing about the selected texts from various genres and periods.

### THE AP LITERATURE AND COMPOSITION EXAM

The AP Literature and Composition Exam is 3 hours in length. One hour of the exam is allotted to answer approximately 60 multiple-choice questions. This is followed by a 15 minute reading period, after which students have 120 minutes to complete essay responses to three different writing prompts. Two of the three prompts present excerpts from literature or a piece of poetry. The third, "open essay", provides students with a list of seminal texts ranging from ancient Greek tragedy to contemporary fiction. Students are able to choose a piece from the list or from their own personal library in order to address the prompt-at-hand. Performance on the essay portion of the exam counts for 55 percent of the total score, and performance on the multiple choice section of the exam for 45 percent.

# AP ENVIRONMENTAL SCIENCE

Grades: 11-12, West Campus

Prerequisites: The APES course is designed to be taken by students after the successful completion of courses in high school Biology, Chemistry and Algebra.

### COURSE DESCRIPTION

Advanced Placement Environmental Science is a rigorous course designed to be the equivalent of an introductory college course in environmental science. AP Environmental Science will provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. AP Environmental Science has a strong laboratory and field component to ensure that students learn about the environment through firsthand observation.

# THE AP ENVIRONMENTAL SCIENCE EXAM

The AP Environmental Science exam is 3 hours long and is divided equally between multiple-choice and free-response sections. The multiple-choice section includes 100 questions on environmental science. The free -response section emphasizes application of principles of environmental science, and includes 1 data-set question, 1 document-based question, and 2 synthesis and evaluation questions. The multiple choice section constitutes 60 percent of the exam grade, and the free response section 40 percent.

LAKE PARK HIGH SCHOOL PAGE 18 LAKE PARK HIGH SCHOOL PAGE 9

# AP CHEMISTRY

Grades: 11-12, West Campus

Prerequisites: Advanced Chemistry and Advanced Algebra; completion or concurrent enrollment in Physics. It is recommended that students who enroll in AP Chemistry have earned a grade of "B" or higher in Honors Chemistry or an "A" in Chemistry.

# COURSE DESCRIPTION

The Advanced Placement Chemistry course is designed to be the equivalent of the general chemistry course taken during the first year of college. This course is equivalent to two semesters of college. The emphasis is on chemical calculations and the mathematical formulation of principles, and the kind of laboratory work done by students in college.

### THE AP CHEMISTRY EXAM

The AP Chemistry Exam is 3 hours and 15 minutes in length and has 2 main parts, Section I and Section II, each weighted equally in the final exam grade. Section I includes 60 multiple-choice questions over a broad range of topics in chemistry. Section II consists of 7 free-response questions: three multipart quantitative questions, one question on writing balanced chemical equations and answering a short question for 3 different sets of reactants, and two quantitative multipart questions. A calculator may be used on all parts of Section II, but none of Section I.

# AP FRENCH LANGUAGE & CULTURE

Grades: 11-12, West Campus

Prerequisites: French III or approval of the instructor

# **COURSE DESCRIPTION**

Students in AP French complete the French IV units of study in addition to activities specifically designed as preparation for the Advanced Placement examination. Articles from current French periodicals, audio material, the Internet, and film are studied for cultural content as well as structural analysis and active/passive vocabulary expansion. Previous AP examinations are given as practice for the French AP exam in the spring.

# THE AP FRENCH LANGUAGE EXAM

The AP French Language exam is approximately 3 hours long. It attempts to evaluate the student's level of performance in the use of the language, both in understanding written and spoken French and in responding to correct and idiomatic French. Listening and reading are tested in the multiple-choice section; writing and speaking are tested in the free response section. Each of the skill portions of the exam counts for one-fourth of the final grade.

# AP GERMAN LANGUAGE & CULTURE

Grades: 12, West Campus

Prerequisites: German III or approval of the instructor

### **COURSE DESCRIPTION**

Students in AP German complete the German IV units of study in addition to activities specifically designed as preparation for the Advanced Placement examination. Articles from current German periodicals, audio material, the Internet, and film are studied for cultural content as well as structural analysis and active/passive vocabulary expansion. Previous AP examinations are given as practice for the German AP exam in the spring.

# THE AP GERMAN LANGUAGE EXAM

The AP German Language exam is approximately 3 hours long. It attempts to evaluate the student's level of performance in the use of the language, both in understanding written and spoken German and in responding to correct and idiomatic German. Listening and reading are tested in the multiple-choice section; writing and speaking are tested in the free response section. The writing and speaking portions of the exam account for 50 percent of the exam score. The reading and listening portions account for the remaining 50 percent.

# AP BIOLOGY

Grades: 11-12, West Campus

Prerequisites: AP Biology is designed to be taken by students after successful completion of high school biology and chemistry. It is recommended that students who enroll in AP Biology have earned grades of "B" or higher in Honors Biology and Honors Chemistry or an "A" in Advanced Biology and Advanced Chemistry. To be successful in AP Biology, students should also have successfully completed a minimum of Algebra I, Geometry and have taken or be concurrently enrolled in Algebra II. For a student who took Biology, Chemistry or Physics, it is highly recommended that the student enroll in the Summer AP Biology Boot Camp.

### **COURSE DESCRIPTION**

AP Biology is designed to be the equivalent of a two-semester college biology course taken by biology majors during their first year. Students who take an AP Biology course will develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. The result will be readiness for the study of advanced topics in subsequent college courses.

### THE AP BIOLOGY EXAM

The AP Biology Exam is three hours in length and includes a 90 minute multiple-choice section and a 90 minute free-response Section. Part A of the multiple-choice section consists of 63 multiple-choice questions that represent the knowledge and science practices outlined in the AP Biology Curriculum Framework that students should understand and be able to apply. Part B of the multiple-choice section includes 6 grid-in questions that require the integration of science and mathematical skills. For the grid-in responses, students will need to calculate the correct answer for each question and enter it in a grid on that section of the answer sheet. This section contains two types of free-response questions (6 short and 2 long), and the student will have a total of 80 minutes to complete all of the questions.

LAKE PARK HIGH SCHOOL PAGE 16 LAKE PARK HIGH SCHOOL PAGE 11

# AP MUSIC THEORY

Grades: 11-12, West Campus

Prerequisites: Teacher recommendation or successful completion of the Introduction to Music Theory course is required for enrollment. Students should be highly motivated and interested in pursuing a major or minor in music, music education, music therapy, or musical theatre.

### COURSE DESCRIPTION

AP Music Theory course is a one-year course designed to develop a student's ability to recognize, understand, and describe the advanced materials and processes of music that are heard or seen in a musical score. The achievement of this goal may be best promoted by integrated approaches to the student's development of: (1) aural skills, (2) sight-singing skills, (3) written skills (4) compositional skills, and (5) analytical skills. These skills are developed through: (1) listening exercises, (2) performance exercises, (3) written exercises, (4) creative exercises, and (5) analytical exercises.

### THE AP MUSIC EXAM

The AP Examination in Music Theory is 2 hours and 39 minutes long. It tests the student's understanding of musical structure and compositional procedures through recorded and notated examples. The exam includes multiple choice questions, free response questions and sight singing. Strong emphasis is given to listening skills, particularly those involving recognition and comprehension of melodic and rhythmic patterns, harmonic functions, small forms, and compositional techniques. Most of the musical examples are taken from standard repertoire, although some examples of contemporary, jazz, or vernacular music, or music beyond the Western tradition are included for testing basic concepts. The examination assumes fluency in reading musical notation and a strong grounding in music fundamentals, terminology, and analysis.

# AP SPANISH LANGUAGE & CULTURE

Grades: 11-12, West Campus

Prerequisites: Spanish IV or approval of the instructor

### COURSE DESCRIPTION

This course presents Hispanic cultures through the study of literature and authentic multimedia. Students will review Spanish grammar previously studied with emphasis placed on the "fine points" in order to prepare for the AP Language exam. Listening comprehension, speaking, writing and reading are stressed. Articles from current Spanish periodicals and short stories are studied for cultural context as well as structural analysis and active/passive vocabulary expansion. Students are encouraged to speak only Spanish in the class. In addition, students are required to read and listen to authentic periodicals outside of class as part of their homework assignment.

### THE AP SPANISH LANGUAGE EXAM

The AP Spanish Language exam is approximately 3 hours long. It attempts to evaluate the student's performance and understanding in both spoken and written Spanish. It measures the student's ability to write and speak with ease in correct and idiomatic Spanish in Interpersonal and Presentational modes. In Section I of the exam, multiple-choice questions are used to test students' listening and reading comprehension skills. In Section II, students complete 2 writing tasks: one in response to a short prompt, and an extended essay in which they respond to sources they both listen to and read. The last portion of Section II requires students to listen and respond to a recorded conversation. The writing and reading portions of the exam each account for 30 percent of the exam score, and the listening and speaking portions 20 percent each.

LAKE PARK HIGH SCHOOL PAGE 12 LAKE PARK HIGH SCHOOL PAGE 15

# AP SPANISH LITERATURE & CULTURE

Grades: 11-12, West Campus

Prerequisites: Spanish IV or approval of the instructor

### **COURSE DESCRIPTION**

AP Spanish Literature is a rigorous course in which students read, analyze and interpret literature written in Spanish beginning with poetic "romances" of the 12th Century through the Quijote and Epoca Dorada, to the contemporary short stories of the Nobel Prize winners of the Spanish-speaking Americas. Emphasis is placed on the study of literary movements and world history in order to develop a rich background for the works studied. Students will organize and develop critical and analytical essays on topics required by the College Board for the AP Spanish Literature exam.

# THE AP SPANISH LITERATURE EXAM

The AP Spanish Literature exam is approximately 3 hours long. In Section I, students have 80 minutes to respond to 65 multiple-choice questions based on their analysis of a reading. In Section II, students have 110 minutes to complete three free response essays; 30 minutes are allotted for a poetry analysis, 40 for a thematic analysis of a text from the required reading list, and 40 for a textual analysis of a reading from the required list. Section I of the exam accounts for 40 percent of the overall exam score, and each of the three essays in Section II accounts for 20 percent.

# AP STATISTICS

Grades: 11-12, West Campus

Prerequisites: Grade of "A" or higher in Algebra 2, "B" or higher in Algebra 2 Advanced, or "C" or higher in Algebra 2 Honors

# COURSE DESCRIPTION

This class is an introduction to probability and statistics. It is equivalent to a one-semester, 3-4 hour college course. Students will learn how to summarize statistical data graphically and numerically. They will learn how data is collected and will plan and carry out a survey or experiment of their own. Students will learn how to calculate probabilities and will learn about the importance of the normal distribution in probabilities and statistics. Students will also learn about confidence intervals, significance testing and how they are used in practice for both large and small data sets. A TI-84 (recommended), TI-89, or TI-NSpire (CAS or non-CAS) calculator is required. This class is especially valuable for any student interested in education, psychology, or business careers.

### THE AP STATISTICS EXAM

The Advanced Placement Statistics exam is 3 hours long, and includes a 90 minute multiple choice section and a 90 minute free response section. In the free response section, students are asked to answer openended questions and to complete an investigative task involving extended reasoning. Each of the two sections will be given equal weight when determining the final exam score. Students will be expected to bring a graphing calculator with statistical capabilities to the exam.

LAKE PARK HIGH SCHOOL PAGE 14 LAKE PARK HIGH SCHOOL PAGE 13

# AP CALCULUS BC

Grades: 11-12, West Campus

Prerequisites: Grade of "C" or higher in Pre-Calculus Advanced or

Pre-Calculus Honors

# **COURSE DESCRIPTION**

Students review topics from Pre-Calculus before initiating a thorough study of limits. The two basic types of limits that are central to calculus, namely the derivative and integral, are studied. Though the emphasis is not on a rigorous proof of theorems, students will develop an understanding of the theorems and applications. The normal calculus sequence at colleges and universities is three semesters. AP Calculus BC is equivalent to the first two (2) semesters of college calculus. Students are expected to take the Advanced Placement exam. A TI-84, TI-89, or TI-NSpire (CAS or non-CAS) calculator is required.

# THE AP CALCULUS BC EXAM

The Calculus BC exam is 3 hours and 15 minutes long. Section 1 consists of 45 multiple-choice completed in 105 minutes. Part A of the multiple-choice section does not allow the use of a calculator. Part B contains some questions for which a graphing calculator is required. Section II consists of 6 problems to be completed in 90 minutes. The free-response section of the exam has two parts, one requiring use of a graphing calculator, and a second that does not allow use of a graphing calculator. The scores for each of the two sections of the exam are given equal weight in determining the exam score.

# AP CALCULUS AB

Grades: 11-12, West Campus

Prerequisites: Grade of "C" or higher in Pre-Calculus Advanced or

Pre-Calculus Honors

### COURSE DESCRIPTION

Students study the two basic types of limits that are central to single variable calculus, namely the derivative and integral. Though the emphasis is not on a rigorous proof of theorems, students will develop an understanding of the theorems and applications. There is a heavy focus on analysis and justification of mathematical computations in order for students to properly convey their comprehension. The normal calculus sequence at colleges and universities is three semesters. AP Calculus AB is equivalent to the first semester of college calculus. A TI-84 (preferred), TI-89, or TI-NSpire (CAS or non-CAS) calculator is required.

### THE AP CALCULUS AB EXAM

The Calculus AB exam is 3 hours and 15 minutes long. Section 1 consists of 45 multiple-choice completed in 105 minutes. Part A of the multiple-choice section does not allow the use of a calculator. Part B contains some questions for which a graphing calculator is required. Section II consists of 6 problems to be completed in 90 minutes. The free-response section of the exam has two parts, one requiring use of a graphing calculator, and a second that does not allow use of a graphing calculator. The scores for each of the two sections of the exam are given equal weight in determining the exam score.