

Advanced Placement 2018-2019

Attached please find documentation about our 2018-2019 Advanced Placement course offerings. This package includes the following documents:

- 1) Why AP? A description of Advanced Placement
- 2) Advanced Placement at SSCPS: recommendations for enrollment and expectations of AP students
- 3) Advanced Placement course offerings for 2018-2019: includes prerequisites and homework expectations
- 4) Advanced Placement Contract (a contract is required for each course you are applying for)
- 5) Course Overviews for each course offered

Plan on reviewing these documents prior to the AP student meeting and bring your questions.

Important dates:

Wednesday, April 11: Advanced Placement meeting for students during FIT

Thursday, May 3: Advanced Placement contracts due

What is an Advanced Placement (AP) Course?

An AP course is comparable to a course taught at a college or university. AP courses are significantly more rigorous than high school college preparatory courses. In all AP courses, students learn how to think critically, read closely, and write clearly.

Committee members sponsored by the College Board put together a set of topics and objectives for each AP course. Our AP teachers use these topics and objectives as a guideline for their curriculum. The AP exams administered during the first weeks of May test student mastery of the College Board objectives. If a student passes an AP exam, then he/she may receive college credit and/or be able to place out of an introductory course. Colleges differ in what scores are required for credit and what courses they will accept.

In order to be permitted to use College Board's AP designation, all SSCPS AP teachers must submit syllabi for their courses, which are approved by the College Board. All of our AP teachers participate in AP professional development prior to teaching an AP course.

Should you take an AP course?

AP courses are more demanding than other college preparatory courses at SSCPS both in terms of content and time commitment. They move rapidly and cover a great deal of content. If you are a strong student in a particular subject area, then you will probably do well. Your current teachers can advise you. Colleges look favorably on students who succeed in AP courses, as success in these courses indicates that students can succeed doing college-level work. The presence of AP courses on a student's transcript indicates that a student took the most rigorous courses available.

The College Board has also compiled the following statistics:

- Students who take AP courses and exams are much more likely than their peers to complete a bachelor's degree in four years or less.
- Students who do well on an AP exam are academically prepared to place out of a corresponding introductory college course and move on to the next higher-level course.

- Students who take an AP course, even those who score a 1 or a 2 on the exam, outperform their peers when they take an introductory course in the subject area at the college level.

Advanced Placement® (AP®) at South Shore Charter Public School

Goals of the program:

The AP program at SSCPS provides students with exposure to rigorous, college-level academics in a high school setting. AP courses aim to improve not only a student's knowledge of the relevant subject matter, but their time management skills, study habits, and close reading skills in preparation for the demands of a college curriculum.

Recommendations for enrollment:

AP courses place a high demand on students both in and out of the classroom. Students who meet the following qualifications are best prepared to meet those demands.

- Attendance rate of 90% or higher
- Class average of at least a B+ in courses in the AP subject area
- Experience with Honors level coursework
- Recommendation of their current teacher in the AP subject area

Students who do not meet the above qualifications will be considered on a case by case basis by a committee of the student's current teachers.

Expectations of AP students:

Students in AP courses are expected to:

- Commit for the entire year. Once enrolled in a course students may not withdraw unless approved by an administrator prior to the close of the first quarter.
- Complete all summer assignments.
- Maintain an attendance rate of 90% or higher.
- Keep up with class assignments and ask for help when needed.
- Take the relevant AP exam in May.
- Complete a contract signed by both themselves and a parent committing to the above.

Students who do not meet the above expectations may be dropped from the course or not receive an AP designation on their transcript.

Advanced Placement Courses 2018-2019

Course	Grade Level	Prerequisites	Homework to Expect
AP Language and Composition	11	None	1 hour per night, 5 nights a week
AP Literature and Composition	12	None	1.5 hours per night, 5 nights a week
AP United States Government and Politics	11/12	United States History I	1 hour per night, 5 nights a week
AP Calculus AB	11/12	Precalculus	7.5 hours per week
AP Statistics	12	Algebra II	1.5 hours per night, 5 nights a week
AP Biology	11/12	Biology and Chemistry	1.5-2 hours per night, 5 nights a week
AP Computer Science Principles	11/12	None	1-1.5 hours per night, 4-5 nights a week

Keep in mind that the expectations for work outside of class listed above are guidelines. The workload will vary from week to week depending on the topics covered and will include long term assignments that require a significant time commitment.

Virtual High School (VHS)

In addition to the Advanced Placement courses that we offer at SSCPS, students in grades 10-12 have the opportunity to take a variety of courses virtually through the Virtual High School Collaborative. VHS allows us to offer rigorous and specialized courses to students who are looking for a challenge or for a chance to explore a new subject area. These courses include options at the College Prep, Honors, and AP levels. Many students have successfully completed Advanced Placement courses through VHS.

VHS NetCourses are either a semester or a year in duration and are delivered to students around the United States via the Internet. These courses are taught by faculty members at other high schools and include students from across the country. Students can access his or her NetCourse from any computer with an Internet connection. At SSCPS students taking VHS courses generally have one block of the day devoted to their VHS work. VHS NetCourses are seminar-based; students interact, exchange information, and participate in group discussions with their classmates and their teacher.

Students are supported here at SSCPS by our VHS Site Coordinator who checks in with students weekly to monitor their progress and help them access resources. The Site Coordinator is also in regular communication with the teacher of each course and with parents and guardians as needed.

For a complete list of courses available and more information please visit the VHS website at www.thevhscollaborative.org. Enrollment for these courses takes place late in May.



Advanced Placement® (AP®) Course Contract 2018-2019

Student Name: _____

AP Course
Selected: _____

A contract must be completed for each Advanced Placement course a student wishes to take. Enrollment is contingent on a student's current level of academic achievement including grades and testing. Refer to the Student Handbook for the goals of the program, recommendations for enrollment, and expectations of AP students.

AP Exam Requirement: Completion of the AP exam is an important component of each AP course. Enrollment in an AP course requires that the student take the AP exam. If the student named above does not take the AP exam for the subject class, the class credit earned for completion of the course will not be reflected on the transcript with an AP designation. If the student does not take the exam she/he is obligated to pay the exam fee. Currently the cost is \$93 per exam.

Withdrawing from an AP Course: Students may withdraw from AP courses without penalty if the withdrawal is processed within the first quarter of the school year. AP students who withdraw from an AP course later in the year will have a WP (Withdrawal Pass) or a WF (Withdrawal Failure) on recorded their transcript. Student withdrawals may result in an inability to enroll in other replacement courses of choice as the schedule is built around initial student course selections. Students may be required to make significant schedule changes to accommodate the AP course withdrawal.

Academic Credit for AP Courses: SSCPS will grant AP level credit to students who successfully complete the required coursework and take the related AP exam. Any student who passes an AP class but does not take the AP exam or violates the AP test policy will not have the AP designation for the course on their transcript.

(over)

Advanced Placement Course Commitment

Student Commitment	Parent/Guardian Commitment
<p>As a student enrolled in this course, I agree to:</p> <ul style="list-style-type: none"> ● Commit for the entire year ● Complete the summer work as assigned ● Be prepared for class each day ● Complete assignments by the due dates ● Attend class punctually and regularly ● Participate in AP review FIT and Lab FIT as required ● For Seniors, continue to attend class once Senior Project begins ● Strive for a higher level of learning at all times ● Ask for help when I need assistance in understanding assignments and successfully completing them ● Participate in extra help before school, after school, and during FIT as needed ● Take the appropriate AP exam in May (approximately \$93 per AP exam) 	<p>As the parent/guardian of a student enrolled in this course I agree to:</p> <ul style="list-style-type: none"> ● Support my child's completion of the summer work ● Encourage my child to be prepared for class each day, complete assignments by their due dates, and be on time to class ● Make sure that my child is not absent unnecessarily ● Help my child get to and from school for before school or after school help when it is necessary ● Have my child take the appropriate AP exam in May (approximately \$93 per AP exam)

The signatures below verify that the course requirements have been explained to the student, and he/she understands the expectations of a college level course.

I understand that an AP course will be challenging and that initial grades may not reflect later grades in the course. I understand that if I violate any College Board test policy, including the cell phone policy, by bringing a cell phone into the exam room or using a cell phone during the break, the phone will be confiscated and accessed, I will lose AP credit, my exam will be cancelled, and I will be obligated to pay for the exam. **I understand that if I do not adhere to the above conditions and requirements, AP credit may not be awarded for this course.**

Course Instructor Signature: _____

Student Signature: _____

I support my child's decision and I understand the ramifications of this selection.

Parent/Guardian Signature: _____

About the Advanced Placement Program[®] (AP[®])

The Advanced Placement Program[®] has enabled millions of students to take college-level courses and earn college credit, advanced placement, or both, while still in high school. AP Exams are given each year in May. Students who earn a qualifying score on an AP Exam are typically eligible to receive college credit and/or placement into advanced courses in college. Every aspect of AP course and exam development is the result of collaboration between AP teachers and college faculty. They work together to develop AP courses and exams, set scoring standards, and score the exams. College faculty review every AP teacher's course syllabus.

AP Biology Course Overview

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.

LABORATORY REQUIREMENT

This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices.

PREREQUISITE

Students should have successfully completed high school courses in biology and chemistry.

AP Biology Course Content

The course is based on four Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about living organisms and biological systems. The following are Big Ideas:

- The process of evolution explains the diversity and unity of life.
- Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis.
- Living systems store, retrieve, transmit, and respond to information essential to life processes.
- Biological systems interact, and these systems and their interactions possess complex properties.

Science Practices

Students establish lines of evidence and use them to develop and refine testable explanations and predictions of natural phenomena. Focusing on these disciplinary practices enables teachers to use the principles of scientific inquiry to promote a more engaging and rigorous experience for AP Biology students. Such practices require that students:

- Use representations and models to communicate scientific phenomena and solve scientific problems;
- Use mathematics appropriately;
- Engage in scientific questioning to extend thinking or to guide investigations within the context of the AP course;
- Plan and implement data collection strategies in relation to a particular scientific question;
- Perform data analysis and evaluation of evidence;
- Work with scientific explanations and theories; and
- Connect and relate knowledge across various scales, concepts, and representations in and across domains.

Inquiry-Based Investigations

Twenty-five percent of instructional time is devoted to hands-on laboratory work with an emphasis on inquiry-based investigations. Investigations require students to ask questions, make observations and predictions, design experiments, analyze data, and construct arguments in a collaborative setting, where they direct and monitor their progress.

AP Biology Exam Structure

AP BIOLOGY EXAM: 3 HOURS

Assessment Overview

Exam questions are based on learning objectives, which combine science practices with specific content. Students learn to

- Solve problems mathematically — including symbolically
- Design and describe experiments and analyze data and sources of error
- Explain, reason, or justify answers with emphasis on deeper, conceptual understanding
- Interpret and develop conceptual models

Due to the increased emphasis on quantitative skills and application of mathematical methods in the questions, students are allowed to use simple four-function calculators (with square root) on the entire exam. Students also receive a formula list as part of their testing materials.

Format of Assessment

Section I: Multiple Choice | 69 Questions | 1 Hour, 30 Minutes | 50% of Exam Score

Multiple-Choice: 63 Questions

- Discrete Questions
- Questions in sets

Grid-In: 6 Questions

- Discrete Questions
- Questions integrate biology and mathematical skills

Section II: Free Response | 8 Questions | 1 Hour, 30 Minutes (includes 10-minute reading period) | 50% of Exam Score

- Long Free Response (2 questions, one of which is lab or data-based)
- Short Free Response (6 questions, each requiring a paragraph-length argument/response)

AP BIOLOGY SAMPLE EXAM QUESTIONS

Sample Multiple-Choice Question

Two flasks with identical medium containing nutrients and glucose are inoculated with yeast cells that are capable of both anaerobic and aerobic respiration. Culture 1 is then sealed to prevent fresh air from reaching the culture; culture 2 is loosely capped to permit air to reach the culture. Both flasks are periodically shaken.

Which of the following best predicts which culture will contain more yeast cells after one week, and most accurately justifies that prediction?

- Culture 1, because fresh air is toxic to yeast cells and will inhibit their growth
- Culture 1, because fermentation is a more efficient metabolic process than cellular respiration
- Culture 2, because fresh air provides essential nitrogen nutrients to the culture
- Culture 2, because oxidative cellular respiration is a more efficient metabolic process than fermentation.

Correct Answer: D

Sample Grid-In Question

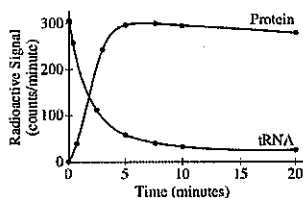
The data below demonstrate the frequency of tasters and non-tasters in an isolated population at Hardy-Weinberg equilibrium. The allele for non-tasters is recessive.

How many of the tasters in the population are heterozygous for tasting?

Tasters	Non-Tasters
8235	4328

Sample Short Free-Response Question

The role of tRNA in the process of translation was investigated by the addition of tRNA with attached radioactive leucine to an in vitro translation system that included mRNA and ribosomes. The results are shown by the graph.



In a short paragraph, describe how this figure justifies the claim that the role of tRNA is to carry amino acids that are then transferred from the tRNA to growing polypeptide chains.

Educators: apcentral.collegeboard.org/apbiology

Students: apstudent.collegeboard.org/apbiology

CollegeBoard

About the Advanced Placement Program[®] (AP[®])

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AP Calculus Program

AP Calculus AB and AP Calculus BC focus on students' understanding of calculus concepts and provide experience with methods and applications. Although computational competence is an important outcome, the main emphasis is on a multirepresentational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations are important.

Teachers and students should regularly use technology to reinforce relationships among functions, to confirm written work, to implement experimentation, and to assist in interpreting results. Through the use of the unifying themes of calculus (e.g., derivatives, integrals, limits, approximation, and applications and modeling) the courses become cohesive rather than a collection of unrelated topics.

AP Calculus AB Course Overview

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.

RECOMMENDED PREREQUISITES

Before studying calculus, all students should complete the equivalent of four years of secondary mathematics designed for college-bound students: courses which should prepare them with a strong foundation in reasoning with algebraic symbols and working with algebraic structures. Prospective calculus students should take courses in which they study algebra, geometry, trigonometry, analytic geometry, and elementary functions. These functions include linear, polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric, and piecewise-defined functions. In particular, before studying calculus, students must be familiar with the properties of functions, the composition of functions, the algebra of functions, and the graphs of functions. Students must also understand the language of functions (domain and range, odd and even, periodic, symmetry, zeros, intercepts, and descriptors such as increasing and decreasing). Students should also know how the sine and cosine functions are defined from the unit circle and know the values of the trigonometric functions at the numbers 0 , $\pi/6$, $\pi/4$, $\pi/3$, $\pi/2$, and their multiples. Students who take AP Calculus BC should have basic familiarity with sequences and series, as well as some exposure to polar equations.

Use of Graphing Calculators

Professional mathematics organizations have strongly endorsed the use of calculators in mathematics instruction and testing. The use of a graphing calculator in AP Calculus AB is considered an integral part of the course.

The Big Ideas of AP Calculus

The course is organized around the foundational concepts of calculus:

I. Limits:

Students must have a solid, intuitive understanding of limits and be able to compute one-sided limits, limits at infinity, the limit of a sequence, and infinite limits. They should be able to apply limits to understand the behavior of a function near a point and understand how limits are used to determine continuity.

II. Derivatives:

Students should be able to use different definitions of the derivative, estimate derivatives from tables and graphs, and apply various derivative rules and properties. Students should also be able to solve separable differential equations, understand and be able to apply the Mean Value Theorem, and be familiar with a variety of real-world applications, including related rates, optimization, and growth and decay models.

III. Integrals and the Fundamental Theorem of Calculus:

Students should be familiar with basic techniques of integration, including basic antiderivatives and substitution, and properties of integrals. Students should also understand area, volume, and motion applications of integrals, as well as the use of the definite integral as an accumulation function. It is critical that students understand the relationship between integration and differentiation as expressed in the Fundamental Theorem of Calculus.

Mathematical Practices for AP Calculus

The Mathematical Practices for AP Calculus (MPACs) capture important aspects of the work that mathematicians engage in, at the level of competence expected of AP Calculus students. These MPACs are highly interrelated tools that should be used frequently and in diverse contexts to support conceptual understanding of calculus.

1. Reasoning with definitions and theorems
2. Connecting concepts
3. Implementing algebraic/computational processes
4. Connecting multiple representations
5. Building notational fluency
6. Communicating

AP Calculus AB Exam Structure

AP CALCULUS AB EXAM: 3 HOURS 15 MINUTES

Assessment Overview

The AP Calculus AB Exam questions measure students' understanding of the concepts of calculus, their ability to apply these concepts, and their ability to make connections among graphical, numerical, analytical, and verbal representations of mathematics. Adequate preparation for the exam also includes a strong foundation in algebra, geometry, trigonometry, and elementary functions, though the course necessarily focuses on differential and integral calculus. Students may not take both the Calculus AB and Calculus BC Exams within the same year.

The free-response section tests students' ability to solve problems using an extended chain of reasoning. During the second timed portion of the free-response section (Part B), students are permitted to continue work on problems in Part A, but they are not permitted to use a calculator during this time.

Format of Assessment

Section I: Multiple Choice | 45 Questions | 1 Hour, 45 Minutes | 50% of Exam Score

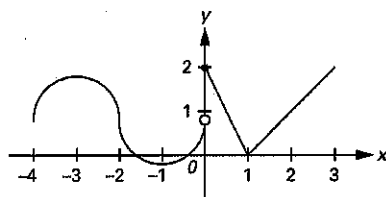
- **Part A:** 30 questions; 60 minutes (calculator not permitted)
- **Part B:** 15 questions; 45 minutes (graphing calculator required)

Section II: Free Response | 6 Questions | 1 Hour, 30 Minutes | 50% of Exam Score

- **Part A:** 2 questions; 30 minutes (graphing calculator required)
- **Part B:** 4 questions; 60 minutes (calculator not permitted)

AP CALCULUS AB SAMPLE EXAM QUESTIONS

Sample Multiple-Choice Question



Graph of f

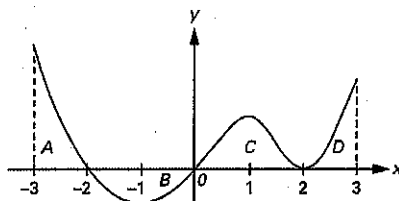
The graph of the piecewise-defined function f is shown in the figure above. The graph has a vertical tangent line at $x = -2$ and horizontal tangent lines at $x = -3$ and $x = -1$. What are all values of x , $-4 < x < 3$, at which f is continuous but not differentiable?

- (A) $x = 1$
- (B) $x = -2$ and $x = 0$
- (C) $x = -2$ and $x = 1$
- (D) $x = 0$ and $x = 1$

Sample Free-Response Question

Free Response: Section II, Part B

No calculator is allowed on this part of the exam.



Graph of f

The graph of a differentiable function f is shown above for $-3 \leq x \leq 3$. The graph of f has horizontal tangent lines at $x = -1$, $x = 1$, and $x = 2$. The areas of regions A , B , C , and D are 5, 4, 5, and 3, respectively. Let g be the antiderivative of f such that $g(3) = 7$.

- (a) Find all values of x on the open interval $-3 < x < 3$ for which the function g has a relative maximum. Justify your answer.
- (b) On what open intervals contained in $-3 < x < 3$ is the graph of g concave up? Give a reason for your answer.
- (c) Find the value of $\lim_{x \rightarrow 0} \frac{g(x)+1}{2x}$, or state that it does not exist. Show the work that leads to your answer.
- (d) Let h be the function defined by $h(x) = 3f(2x + 1) + 4$. Find the value of $\int_{-2}^1 h(x) dx$.

Educators: apcentral.collegeboard.org/apcalcab

Students: apstudent.collegeboard.org/apcalcab

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AP English Program

The AP Program offers two courses in English studies, each designed to provide high school students the opportunity to engage with a typical introductory-level college English curriculum.

The AP English Language and Composition course focuses on the development and revision of evidence-based analytic and argumentative writing and the rhetorical analysis of nonfiction texts.

The AP English Literature and Composition course focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, drama) from various periods.

There is no prescribed sequence of study, and a school may offer one or both courses.

AP English Language and Composition Course Overview

The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods.

PREREQUISITE

There are no prerequisite courses for AP English Language and Composition.

Students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.

AP English Language and Composition Course Content

The AP English Language and Composition course is designed to help students become skilled readers and writers through engagement with the following course requirements:

- Composing in several forms (e.g., narrative, expository, analytical, and argumentative essays) about a variety of subjects
- Writing that proceeds through several stages or drafts, with revision aided by teacher and peers
- Writing informally (e.g., imitation exercises, journal keeping, collaborative writing), which helps students become aware of themselves as writers and the techniques employed by other writers
- Writing expository, analytical, and argumentative compositions based on readings representing a variety of prose styles and genres
- Reading nonfiction (e.g., essays, journalism, science writing, autobiographies, criticism) selected to give students opportunities to identify and explain an author's use of rhetorical strategies and techniques¹
- Analyzing graphics and visual images both in relation to written texts and as alternative forms of text themselves
- Developing research skills and the ability to evaluate, use, and cite primary and secondary sources
- Conducting research and writing argument papers in which students present an argument of their own that includes the analysis and synthesis of ideas from an array of sources
- Citing sources using a recognized editorial style (e.g., Modern Language Association, The Chicago Manual of Style)
- Revising their work to develop
 - o A wide-ranging vocabulary used appropriately and effectively;
 - o A variety of sentence structures, including appropriate use of subordination and coordination;
 - o Logical organization, enhanced by techniques such as repetition, transitions, and emphasis;
 - o A balance of generalization and specific, illustrative detail; and
 - o An effective use of rhetoric, including tone, voice, diction, and sentence structure.

1. The College Board does not mandate any particular authors or reading list, but representative authors are cited in the AP English Course Description.

AP English Language and Composition Exam Structure

AP ENGLISH LANGUAGE AND COMPOSITION EXAM:
3 HOURS 15 MINUTES

Assessment Overview

The AP English Language and Composition Exam employs multiple-choice questions to test students' skills in rhetorical analysis of prose passages. Students are also required to write three essays that demonstrate their skill in rhetorical analysis, argumentation, and synthesis of information from multiple sources to support the student's own argument. Although the skills tested on the exam remain essentially the same from year to year, there may be some variation in format of the free-response (essay) questions.

Format of Assessment

Section I: Multiple Choice: 52–55 Questions | 1 Hour | 45% of Exam Score

- Includes excerpts from several non-fiction texts
- Each excerpt is accompanied by several multiple-choice questions

Section II: Free Response: 3 Prompts | 2 Hours, 15 Minutes | 55% of Exam Score

- 15 minutes for reading source materials for the synthesis prompt (in the free-response section)
- 2 hours to write essay responses to the three free-response prompts

Prompt Types

Synthesis: Students read several texts about a topic and create an argument that synthesizes at least three of the sources to support their thesis.

Rhetorical Analysis: Students read a non-fiction text and analyze how the writer's language choices contribute to his or her purpose and intended meaning for the text.

Argument: Students create an evidence-based argument that responds to a given topic.

AP ENGLISH LANGUAGE AND COMPOSITION SAMPLE EXAM QUESTIONS

Sample Multiple-Choice Question

Students are given a passage of writing and asked to respond to a set of prompts and questions based on the passage. Below is one example.

The primary rhetorical function of lines 14–22 is to

- (A) provide support for a thesis supplied in lines 1–2
- (B) provide evidence to contrast with that supplied in the first paragraph
- (C) present a thesis that will be challenged in paragraph three
- (D) introduce a series of generalizations that are supported in the last two paragraphs
- (E) anticipate objections raised by the ideas presented in lines 12–14

Sample Free-Response Question

The following passage is from *Rights of Man*, a book written by the pamphleteer Thomas Paine in 1791. Born in England, Paine was an intellectual, a revolutionary, and a supporter of American independence from England. Read the passage carefully. Then write an essay that examines the extent to which Paine's characterization of America holds true today. Use appropriate evidence to support your argument.

If there is a country in the world, where concord, according to common calculation, would be least expected, it is America. Made up, as it is, of people from different nations, accustomed to different forms and habits of government, speaking different languages, and more different in their modes of worship, it would appear that the union of such a people was impracticable; but by the simple operation of constructing government on the principles of society and the rights of man, every difficulty retires, and all the parts are brought into cordial unison. There, the poor are not oppressed, the rich are not privileged.... Their taxes are few, because their government is just; and as there is nothing to render them wretched, there is nothing to engender riots and tumults.

AP[®] ENGLISH LITERATURE AND COMPOSITION



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There is no prescribed sequence of study, and a school may offer one or both courses.

AP English Literature and Composition Course Overview

The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works.

PREREQUISITE

There are no prerequisite courses for AP English Literature and Composition.

Students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.

AP English Literature and Composition Course Content

The course is designed to help students become skilled readers and writers through engagement with the following course requirements:

- Reading complex imaginative literature (fiction, drama, and poetry) appropriate for college-level study¹
- Writing an interpretation of a piece of literature that is based on a careful observation of textual details, considering the work's structure, style, and themes; the social and historical values it reflects and embodies; and such elements as the use of figurative language, imagery, symbolism, and tone
- Composing in several forms (e.g., narrative, expository, analytical, and argumentative essays) based on students' analyses of literary texts
- Writing that proceeds through several stages or drafts, with revision aided by teacher and peers
- Writing informally (e.g., response journals, textual annotations, collaborative writing), which helps students better understand the texts they are reading
- Revising their work to develop
 - A wide-ranging vocabulary used appropriately and effectively;
 - A variety of sentence structures, including appropriate use of subordination and coordination;
 - Logical organization, enhanced by techniques such as repetition, transitions, and emphasis;
 - A balance of generalization and specific, illustrative detail; and
 - An effective use of rhetoric, including tone, voice, diction, and sentence structure.

1. The selection of literature for the course should consider texts used in students' previous high school ELA courses, so that by the time students finish the AP course, they will have read texts from 16th- to 21st-century American and British literature, along with other literature written in or translated to English. The College Board does not mandate the use of any particular authors or reading list, but representative authors are cited in the AP English Course Description.

AP English Literature and Composition Exam Structure

AP ENGLISH LITERATURE AND COMPOSITION EXAM: 3 HOURS

Assessment Overview

The AP English Literature and Composition Exam employs multiple-choice questions and free-response prompts to test students' skills in literary analysis of passages from prose and poetry texts.

Format of Assessment

Section I: Multiple Choice | 1 Hour | 55 Questions | 45% of Exam Score

- Includes excerpts from several published works of drama, poetry, or prose fiction
- Each excerpt is accompanied by several multiple-choice questions or prompts

Section II: Free Response | 2 Hours | 3 Questions | 55% of Exam Score

- Students have 2 hours to write essay responses to three free-response prompts from the following categories:
 - A literary analysis of a given poem
 - A literary analysis of a given passage of prose fiction (this may include drama)
 - An analysis that examines a specific concept, issue, or element in a work of literary merit selected by the student

AP ENGLISH LITERATURE AND COMPOSITION SAMPLE EXAM QUESTIONS

Sample Multiple-Choice Question

Students are given a passage of writing and asked to respond to a set of prompts and questions based on the passage. Below is one example.

The chief effect of the first paragraph is to

- (A) foreshadow the outcome of Papa's meeting
- (B) signal that change in the family's life is overdue
- (C) convey the women's attachment to the house
- (D) emphasize the deteriorating condition of the house
- (E) echo the fragmented conversation of the three women

Sample Free-Response Prompt

Read carefully the following poem by the colonial American poet, Anne Bradstreet. Then write a well-organized essay in which you discuss how the poem's controlling metaphor expresses the complex attitude of the speaker.

"The Author to Her Book"

Thou ill-formed offspring of my feeble brain,
Who after birth did'st by my side remain,
Til snatched from thence by friends, less wise than true,
Who thee abroad exposed to public view;
Who thee abroad exposed to public view;
Made thee in rags, halting, to the press to trudge,
Where errors were not lessened, all may judge.
At thy return my blushing was not small,
My rambling brat (in print) should mother call,
I cast thee by as one unfit for light,
Thy visage was so irksome in my sight;
Yet being mine own, at length affection would
Thy blemishes amend, if so I could.

I washed thy face, but more defects I saw,
And rubbing off a spot, still made a flaw.
I stretched thy joints to make thee even feet,
Yet still thou run'st more hobbling than is meet;
In better dress to trim thee was my mind,
But nought save homespun cloth in the house I find.
In this array, 'mongst vulgars may'st thou roam;
In critics' hands beware thou dost not come;
And take thy way where yet thou are not known.
If for thy Father asked, say thou had'st none;
And for thy Mother, she alas is poor,
Which caused her thus to send thee out of door.
(1678)

About the Advanced Placement Program[®] (AP[®])

The Advanced Placement Program[®] has enabled millions of students to take college-level courses and earn college credit, advanced placement, or both, while still in high school. AP Exams are given each year in May. Students who earn a qualifying score on an AP Exam are typically eligible to receive college credit and/or placement into advanced courses in college. Every aspect of AP course and exam development is the result of collaboration between AP teachers and college faculty. They work together to develop AP courses and exams, set scoring standards, and score the exams. College faculty review every AP teacher's course syllabus.

AP Statistics Course Overview

The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding.

PREREQUISITE

Students must have taken second-year algebra before enrolling in AP Statistics.

Use of Graphing Calculators and Computers

Professional mathematics organizations have strongly endorsed the use of calculators in mathematics instruction and testing. The use of a graphing calculator in AP Statistics is considered an integral part of the course. In addition, schools should make every effort to provide students and teachers easy access to computers to facilitate the teaching and learning of statistics.

Goals of AP Statistics

Students who are enrolled in AP Statistics are expected to

- Describe patterns and departures from patterns;
- Plan and conduct a study;
- Explore random phenomena using probability and simulation; and
- Estimate population parameters and test hypotheses.

Topic Outline for AP Statistics**I. Exploring Data**

- Constructing and interpreting graphical displays of distributions of univariate data
- Summarizing and comparing distributions of univariate data
- Exploring bivariate and categorical data

II. Sampling and Experimentation

- Planning and conducting surveys and experiments using appropriate methods of data collection
- Generalizability of results and types of conclusions that can be drawn from observational studies, experiments, and surveys

III. Anticipating Patterns

- Exploring random phenomena using probability and simulation
- Combining independent random variables
- The normal distribution
- Sampling distributions

IV. Statistical Inference

- Estimating population parameters and testing hypotheses
- Tests of significance

AP Statistics Exam Structure

AP STATISTICS EXAM: 3 HOURS

Assessment Overview

Exam questions are based on the topics and skills addressed in the AP Statistics course. Formulas and tables needed to complete exam questions are provided to students taking the exam. Students are expected to use a graphing calculator with statistical capabilities on the entire exam.

Format of Assessment

Section I: Multiple Choice | 40 Questions | 1 Hour, 30 Minutes |
50% of Exam Score

- Individual Questions

Section II: Free Response | 6 Questions | 1 Hour, 30 Minutes |
50% of Exam Score

- 5 Short-Answer Questions
- 1 Investigative Task

AP STATISTICS SAMPLE EXAM QUESTIONS

Sample Multiple-Choice Question

DESCRIPTIVE STATISTICS

Variable	N	Mean	Median	trMean	StDev	Se Mean
score	50	1045.7	1024.7	1041.9	221.9	31.4

Variable	Minimum	Maximum	Q1	Q3
score	628.9	1577.1	877.7	1219.5

Some descriptive statistics for a set of test scores are shown above. For this test, a certain student has a standardized score of $z = -1.2$. What score did this student receive on the test?

- (A) 266.28
- (B) 779.42
- (C) 1008.02
- (D) 1083.38
- (E) 1311.98

Correct Answer: B

Sample Free-Response Question: Experimental Design

As dogs age, diminished joint and hip health may lead to joint pain and thus reduce a dog's activity level. Such a reduction in activity can lead to other health concerns such as weight gain and lethargy due to lack of exercise. A study is to be conducted to see which of two dietary supplements, glucosamine or chondroitin, is more effective in promoting joint and hip health and reducing the onset of canine osteoarthritis. Researchers will randomly select a total of 300 dogs from ten different large veterinary practices around the country. All of the dogs are more than 6 years old, and their owners have given consent to participate in the study. Changes in joint and hip health will be evaluated after 6 months of treatment.

- (a) What would be the advantage to adding a control group in the design of this study?
- (b) Assuming a control group is added to the other two groups in the study, explain how you would assign the 300 dogs to these three groups using a completely randomized design.
- (c) Rather than using a completely randomized design, one group of researchers proposes blocking on clinics, and another group of researchers proposes blocking on breed of dog. How would you decide which one of these two variables to use as a blocking variable?

AP[®] UNITED STATES GOVERNMENT AND POLITICS



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AP Government Program

The AP Program offers two government courses: AP United States (U.S.) Government and Politics and AP Comparative Government and Politics. Each course is designed to be equivalent to a one-semester introductory college course. There is no prescribed sequence of study. A school may offer one or both courses.

AP United States Government and Politics Course Overview

AP United States Government and Politics introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning assess causes and consequences of political events, and interpret data to develop evidence-based arguments.

RECOMMENDED PREREQUISITES

There are no prerequisite courses for AP United States Government and Politics. Students should be able to read a college level textbook and write grammatically correct, complete sentences.

AP United States Government and Politics Course Content

Students study general concepts used to interpret U.S. government and politics and analyze specific topics, including:

- Constitutional Underpinnings;
- Political Beliefs and Behaviors;
- Political Parties, Interest Groups, and Mass Media;
- Institutions of National Government;
- Public Policy; and
- Civil Rights and Civil Liberties.

An integral part of the course includes analysis and interpretation of basic data relevant to U.S. government and politics, and the development of connections and application of relevant theories and concepts.

Course Goals and Objectives

Students successfully completing this course will:

- Describe and compare important facts, concepts, and theories pertaining to U.S. government and politics.
- Explain typical patterns of political processes and behavior and their consequences (including the components of political behavior, the principles used to explain or justify various government structures and procedures, and the political effects of these structures and procedures).
- Interpret basic data relevant to U.S. government and politics (including data presented in charts, tables, and other formats).
- Critically analyze relevant theories and concepts, apply them appropriately, and develop their connections across the curriculum.

AP United States Government and Politics Exam Structure

AP UNITED STATES GOVERNMENT AND POLITICS EXAM:
2 HOURS 25 MINUTES

Assessment Overview

The AP United States Government and Politics Exam asks students to explain and apply key and supporting concepts. The exam measures students' understanding of American political culture and the interactions of governing and linkage institutions. Questions are based on the six major topics in the course, and students must be able to define, compare, explain, and interpret political concepts, policies, processes, perspectives, and behaviors that characterize the U.S. political system.

Format of Assessment

Section I: Multiple Choice | 60 Questions | 45 Minutes | 50% of Exam Score

- Demonstrate understanding of major course concepts, policies and institutions
- Apply skills of comparison and interpretation in addition to factual recall

Section II: Free Response | 4 Questions | 1 Hour, 40 Minutes | 50% of Exam Score

- Define concepts and explain or interpret content across all course topics
- Analyze political relationships and evaluate policy changes using examples from the course to support the argument or response

AP UNITED STATES GOVERNMENT AND POLITICS SAMPLE EXAM QUESTIONS

Sample Multiple-Choice Question:

1. The Constitution and its amendments expressly prohibit all of the following except
 - (a) slavery
 - (b) double jeopardy
 - (c) cruel and unusual punishment
 - (d) unreasonable searches and seizures
 - (e) sex discrimination in employment

Correct Answer: E

Sample Free-Response Question:

1. While interest groups and political parties each play a significant role in the United States political system, they differ in their fundamental goals.
 - (a) Identify the fundamental goal of interest groups in the political process.
 - (b) Identify the fundamental goal of major political parties in the political process.
 - (c) Describe two different ways by which interest groups support the fundamental goal of political parties in the political process.
 - (d) For one of the forms of support you described in (c), explain two different ways in which that form of support helps interest groups to achieve their fundamental goal in the political process.