

# **HOMESCHOOL COLLEGE USA**

## **COURSE CATALOG**

**High School – College Prep**



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## **ABOUT THE CURRICULUM**

Homeschool College USA courses utilize dynamic, interactive resources to create an excellent college-preparatory high school education. These courses are offered by leading organizations in the growing field of online learning. For a full description of individual courses, please see the grade level curriculum lists.

The HC USA program covers the standard core curriculum subjects, plus a variety of elective courses designed to produce a well-rounded student prepared for the rigorous standards of higher education.

### FRESHMAN YEAR:

- Freshman English
- Algebra 1
- Environmental Science with Lab
- United States History 1
- Psychology
- Computer Science

### SOPHOMORE YEAR:

- Sophomore English
- Geometry
- Biology with Lab
- United States History 2
- American Government
- Economics
- French 1

### JUNIOR YEAR:

- Junior English
- Algebra 2
- Chemistry
- World History 1
- World Geography
- French 2

### SENIOR YEAR:

- Senior English
- Probability & Statistics
- Physics
- World History 2
- Art History
- Health
- Public Speaking

## **COURSE OFFERINGS**

### ENGLISH

Students will complete four years of English studies, covering grammar and composition, and an analysis of several works of classic literature from authors such as Charles Dickens, William Shakespeare, and George Orwell. Senior English concludes with the writing of a formal senior thesis paper.

#### ***Freshman English – 1 credit***

Freshman English begins the study of grammar and writing skills necessary for students to develop thoughtful, well-written essays and documents. Additionally, students will conduct in-depth studies into four classic novels.

*Course source: Saylor.org*

Literature guides provided by *The Glencoe Literature Library*

#### ***Junior English – 1 credit***

Junior English continues the development of strong grammar and writing skills, along with dedicated focus on research concepts and techniques. Additionally, students will conduct in-depth studies into four classic novels.

*Course source: Saylor.org*

Literature guides provided by *The Glencoe Literature Library*

#### ***Sophomore English – 1 credit***

Sophomore English continues the study of grammar and writing skills, with a focus on constructing college-level essay papers. Additionally, students will conduct in-depth studies into four classic novels.

*Course source: Saylor.org*

Literature guides provided by *The Glencoe Literature Library*

#### ***Senior English – 1 credit***

Senior English is a culmination of skills and knowledge acquired throughout high school English. This course includes grammar and writing review, as well as a senior term paper assignment, designed to showcase the students' progress. Additionally, students will conduct in-depth studies into four classic novels.

*Course sources: The University of Calgary; Norton English; Bowdoin College; Mayland Community College*

Literature guides provided by *The Glencoe Literature Library*

## MATHEMATICS

Students will complete four years of mathematics studies, building a foundation of skills to prepare for college-level math courses.

*Note: Students who need remedial math practice before beginning the Algebra 1 course should first complete Saylor's Foundations of Real World Math.*

### **Algebra 1 – 1 credit**

Algebra 1 covers the standard core curriculum of introductory algebra, utilizing animations, videos, guided practice and targeted feedback, with a focus on problem solving and critical thinking skills.

*Course sources: SAS Curriculum Pathways; Kuta Software*

### **Geometry – 1 credit**

This course focuses on the main ideas of geometry that are the foundation of applications of geometry and coordinate geometry, and includes an introduction to trigonometry.

*Course source: Saylor.org; Kuta Software*

### **Algebra 2 – 1 credit**

Algebra 2 continues on from the Algebra 1 course, covering polynomials, rational expressions, quadratic equations, inequalities, graphing, functions, logarithms, basic probability, and additional algebraic topics.

*Course sources: Western Texas A & M University; Education Portal; Kuta Software*

### **Statistics & Probability – 1 credit**

This course introduces students to the basic concepts and logic of statistical reasoning and gives the students introductory-level practical ability to choose, generate, and properly interpret appropriate descriptive and inferential methods.

*Course source: Carnegie-Mellon University*

## SCIENCE

Students will complete four years of science studies, focusing on life and physical science subjects. Environmental Science and Biology include online lab work. Chemistry and Physics offer complete introductory courses, as well as supplementary video series demonstrating these sciences in action both in a classroom setting and in the field.

### ***Environmental Science with Lab – 1 credit***

The Environmental Science course studies the Earth's dynamic ecosystem, and the interactions of living creatures within their habitats, as well as the impact of human activity on the natural world.

*Course sources: Learner.org;  
HippoCampus*

### ***Biology with Lab– 1 credit***

This course covers the study of life, from primitive, one-celled organisms to complex plant and animal lifeforms. Topics include how living organisms grow, develop, and reproduce, as well as how they acquire and use energy and adapt to their environments.

*Course sources: Carnegie-Mellon  
University; Glencoe Virtual Labs*

### ***Chemistry – 1 credit***

This course introduces students to the basics of chemistry, with emphasis on molecular structure and stoichiometry. Additionally, students observe chemical experiments and activities including radiation processes, chemical bonding, and endothermic and exothermic reactions.

*Course sources: Carnegie-Mellon  
University; Learner.org*

### ***Physics– 1 credit***

Physics is the study of the behavior of objects and forces - how they move and interact. This course covers the basic principles of physical laws, as well as the history of scientific advancements in the physics field.

*Course sources: Saylor.org; Learner.org*

## HISTORY

Students will complete four years of history studies, covering both United States and world history from a broad perspective.

### ***US History 1 – 1 credit***

This course will introduce students to United States history from the colonial period to the Civil War. Students will learn about the major political, economic, and social changes that took place in America during this 250-year period.

*Course source: Saylor.org*

### ***US History 2 – 1 credit***

Continuing from US History 1, this course will cover United States history from the end of the Civil War in 1865 through the first decade of the twenty-first century, exploring events and changes in politics, economics, and society.

*Course source: Saylor.org*

### ***World History 1 – 1 credit***

World History 1 begins with a study of the emergence of the first, ancient civilizations and continues through the end of the medieval period, with emphasis on political, economic, and societal advancements and changes.

*Course source: Saylor.org*

### ***World History 2 – 1 credit***

Continuing from World History 1, this course moves from the start of the European Renaissance through to modern times, focusing on the changing developments in both Western and non-Western cultures.

*Course source: Saylor.org*

## ELECTIVES

Students will complete elective courses in practical skills and knowledge, academic subjects, foreign language, and fine arts as part of a solid high school curriculum in preparation for continuing on to an institute of higher education.

### **Psychology – 1 credit**

Psychology introduces students to the fundamental principles of psychology and to the major subjects of psychological inquiry and research, with a focus on emotion, development, memory, and psychopathology.

*Course source: Saylor.org*

### **Computer Science – 1 credit**

This course provides students with a comprehensive introduction to computers. Students will explore a variety of topics in computing, such as the components of a computer, common computer terminology, computer security and privacy, computer troubleshooting techniques, and the fundamentals of computer programming.

*Course source: Saylor.org*

### **American Government – ½ credit**

American Government is an introductory course into the government and politics of the United States, covering the Constitution, branches of the government, political parties, and the election process. Additionally, students will explore the rights of citizenship, policy making, and America's interactions with foreign powers.

*Course source: Saylor.org*

### **Economics – ½ credit**

The purpose of this course is to provide students with a basic understanding of the principles of microeconomics, focusing on the choices and decisions that are made in order to manage resources and wealth, especially on the individual consumer and company basis.

*Course source: Saylor.org*

### **French 1 – 1 credit**

French I is a carefully sequenced and highly interactive presentation of French language and culture in a media-rich course environment, designed to introduce students to both oral and written French communication.

*Course source: Carnegie-Mellon University*

### **French 2 – 1 credit**

Continuing from French 1, this course furthers the students' proficiency in the French language.

*Course source: Carnegie-Mellon University*



## ELECTIVES, CONTINUED

### **World Geography – 1 credit**

Geography is the study of the physical features of the Earth and its atmosphere – including landscape development, weather and climate, and geologic concepts – as well as the influence of human activity – including cultural, economic, and political activity – on those physical features.

*Course source: Saylor.org*

### **Art History – 1 credit**

This course covers the history of Western art, beginning with the first objects created by prehistoric humans through to the late 20th century, exploring famous works of art, architecture, and how art both influenced and was influenced by the culture of various time periods.

*Course source: Saylor.org*

### **Health – ½ credit**

In this course, students will cover a wide range of health and nutrition topics, including physical and mental health, disease prevention, safety and first aid, substance abuse, family health, and diet and nutrition needs.

*Course source: Georgia Virtual Learning*

### **Public Speaking – ½ credit**

Public Speaking introduces students to various types of oral communication, including informative and persuasive speeches, presenting speeches for business or special occasion events, dramatic interpretation, impromptu speeches, and public speaking etiquette.

*Course source: Georgia Virtual Learning*

## **CURRICULUM PROVIDERS**

Homeschool College USA courses draw from a variety of sources, using a wide range of materials to create an engaging, interactive, knowledge-based curriculum.

### **Saylor.org:**

Saylor provides peer-reviewed, college-level courses in core and elective subjects. Utilizing subject and topic readings, videos, interactive lessons, quizzes, and exams, Saylor courses are especially designed to enable students to develop and enhance a self-directed learning style.

<http://www.saylor.org/>

### **Carnegie-Mellon University:**

Through its *Open Learning Initiative*, Carnegie-Mellon University offers active learning courses that allow students to progress at their own pace as they master each module and topic. By combining high-quality courses with continuous feedback and research, OLI is a forerunner in online learning excellence.

<http://oli.cmu.edu/>

### **Learner.org:**

Annenberg Learner is a provider of professional development and classroom curriculum, with videos, interactives, and online reading materials. As part of the Annenberg Foundation, Learner.org advances the foundation's goal of developing more effective ways to share ideas and knowledge.

<http://learner.org/index.html>

### **Georgia Virtual Learning:**

As part of the Georgia Department of Education, Georgia Virtual Learning offers online courses in both academic and elective subjects. Courses are aligned to Georgia Performance Standards.

<http://www.gavirtuallearning.org/Resources/SharedLandingPage.aspx>

### **SAS Curriculum Pathways:**

SAS Curriculum Pathways offers innovative learning through the use of interactive, standards-based resources in a self-paced, online format.

<http://www.sascurriculumpathways.com/portal/>

**Western Texas A & M University:**

Western Texas A & M University's Virtual Math Lab provides tutorials and lessons for college algebra topics and concepts.

<http://www.wtamu.edu/academic/anns/mps/math/mathlab/>

**Education Portal:**

Education Portal provides online video lessons and exams, designed to prepare students for credit-approved exams such as the CLEP and AP programs.

<http://education-portal.com/academy/course/index.html>

Other resources provided by:

The Glencoe Literature Library: <http://www.glencoe.com/sec/literature/litlibrary/>

The University of Calgary: <http://www.ucalgary.ca/UofC/eduweb/grammar/>

Norton English: <http://www.wwnorton.com/college/english/write/we/essays.htm>

Bowdoin College: <http://www.bowdoin.edu/writing-guides/>

Mayland Community College: <http://www.mayland.edu/aca111/CollegePapers.pdf>

Kuta Software: <http://www.kutasoftware.com/index.html>

HippoCampus: <http://www.hippocampus.org/HippoCampus/>

Glencoe Virtual Labs: [http://glencoe.mcgraw-hill.com/sites/0003292010/student\\_view0/virtual\\_labs.html](http://glencoe.mcgraw-hill.com/sites/0003292010/student_view0/virtual_labs.html)