



High School Course Catalogue
2021-2022

This catalogue includes titles and descriptions of courses traditionally offered in Granite Classical Tutorial's high school program. All courses are not offered every year, but courses are offered on a rotating basis such that a full spectrum of classes is available to students over the course of a four-year high school enrollment.

* Indicates an optional course offered in addition to Granite's core program.

** Indicates a course which may be taken to fulfill a core requirement, *or* which may be taken as an option.



Languages

Spanish I (145 hours)**

The purpose of this course is to give students a foundation in the Spanish language. Students will develop a basic competency in both written and spoken Spanish. Students will learn the foundational frameworks of Spanish grammar and will build a foundational vocabulary. Students also research the culture of Spanish-speaking countries, learn Bible verses in Spanish, and engage in classroom Spanish conversations as part of this course.

Spanish II (145 hours)**

The purpose of this course is to build upon the foundation of Spanish I; students continue to develop competency in speaking and writing Spanish. Students explore the structure and vocabulary of the Spanish language. Students also research the culture of Spanish-speaking countries, learn Bible verses in Spanish, and engage in classroom Spanish conversations as part of this course.

Logic

Formal Logic (145 hours)

This course involves the study of formal logic as well as the study and practice of formal federal policy debates. Students learn how to evaluate the structure of an argument for validity or invalidity by translating informal arguments into formal syllogisms. Students put these skills into practice through formal debate.



Mathematics

Algebra I (145 hours)*

Using the language of math, dialectic students will solve various kinds of algebraic problems including: probabilities, the quadratic equation, simultaneous equations, rational and radical algebraic functions, inequalities, and functions.

Algebra II (145 hours)*

Using the language of math, rhetoric level students will learn to solve various kinds of algebraic problems including: functions and relations, linear functions, systems of linear equations and inequalities, quadratic functions and complex numbers, exponential and logarithmic functions, rational algebraic functions, and irrational algebraic functions.

Geometry (145 hours)*

The purpose of this course is to apply the logic and deductive reasoning skills students gain in GCT's core curriculum to mathematics. Students thoroughly study and learn to construct mathematical proofs through class instruction, homework exercises, and quizzes.

Pre-Calculus with Trigonometry (145 hours)*

The Pre-Calculus course builds upon the Algebra II course, using advanced algebra and trigonometry to lay the foundation for calculus. Once concepts are learned, they are reinforced throughout the year with periodic warm-up exercises in the homework. Students apply their knowledge to real life scenarios, giving them confidence that the knowledge learned in this course can be used beyond the realm of the classroom and home assignments. Topics covered include quadratic relations, higher degree functions and complex numbers, sequences and series, probability, data analysis, random variables, trigonometric and circular functions and their properties, and triangle problems.



Omnibus

Omnibus III: Reformations and Revolutions (380 hours)

The purpose of this course is to better understand the American governmental system by examining the developments in western culture which led to its creation. The course examines the Renaissance, the Reformation, and the Enlightenment through a plethora of primary sources and canonical literary works such as Macbeth, The Scarlet Letter, and various essays and poetry to understand the changes in worldviews, governmental philosophy, and culture which culminated in the American Founding Fathers' creation of a democratic republic. The course incorporates a robust study of the American government system at federal, state, and local levels. Course assignments develop critical and logical thinking as well as worldview evaluation; this course includes a heavy emphasis on research, writing, and grammar skills.

High school credits included in this course:

- 1.0: English 9 (composition and literary analysis)
- 1.0: Early Modern History
- 0.5: American Government

Omnibus IV: Modern America (380 hours)

This course focuses on modern American history and literature from 1789 through the Cold War. Students will trace the development of American culture, politics, values, and worldview through primary sources and secondary texts. Students will read and analyze several great works of American literature and will consider their artistic, historical, and cultural significance as well as weigh their value in terms of truth, goodness, and beauty. A third component of this course focuses on developing a strong, scholarly writing style. Students will write historical research and literary analysis essays throughout the year with the goal of achieving a clear and graceful style and rhetorical argument.

High school credits included in this course:

- 1.0: English 10
- 1.0: Modern American History
- 0.5: Literary Analysis



Omnibus V: The Early West

This course surveys the history, literature, and art of western culture, from the ancient world through the Reformation. Students will read selections from the western canon of Great Books and engage in the Great Conversation. Students will ask and answer questions like, “What is the best way for us to live in a fallen world?” “What are our obligations to our fellow man?” “What are our obligations to God?” They will determine how some of the greatest thinkers of the ancient and medieval western world have answered these questions and will seek truth, goodness, and beauty as they engage in conversation with these texts and with each other. Students will write historical research and literary analysis essays throughout the year, with the goal of achieving a clear and graceful style as well as depth and nuance of thought. As part of this course, students have the opportunity to dual-enroll in Freshman English 101 and Survey of World Literature 1.

High school credits included in this course:

- 1.0: English 11 / Freshman English I
- 1.0: Survey of World Literature I
- 1.0: History – Civilization I

Omnibus VI: The Modern West

This course surveys the history, literature, and art of western culture, from the Age of Exploration through the contemporary world. Students will continue to engage in the Great Conversation, with a particular focus on discernment and critical analysis as they examine the changing worldviews presented in early and late modern texts. The focus of this course is primarily western, however the course will acknowledge and examine the influence of globalization on the development of western thought, continuing to seek truth, goodness, and beauty in the broader examination of world cultures. Students will continue to hone their scholarly research and writing capacities. As part of this course, students have the opportunity to dual-enroll in Freshman English 102 and Survey of World Literature 2.

High school credits included in this course:

- 1.0: English 12 / Freshman English II
- 1.0: Survey of World Literature II
- 1.0: History – Civilization II



Rhetoric

Rhetoric I: Rhetorical Theory (145 hours)

In this course, students get an introduction to the principles of persuasion developed by the ancient Greeks and Romans such as Plato, Aristotle, Quintilian, and Cicero. Students consider the role of rhetoric in the Christian life and acknowledge the Christian calling to convey God's truth clearly and persuasively, with a high regard for the true, the good, and the beautiful. Students begin their practice of rhetorical skills with imitation of the great orators of the rhetorical canon. This course includes formal debate.

Rhetoric II: Deliberative and Ceremonial Rhetoric (145 hours)

The primary text for this course is Aristotle's *Rhetoric*, which students read and discuss in depth. Students continue to work on their rhetorical skills focusing on the principles forwarded by Aristotle. The course includes an overview of philosophical frameworks which may be used as the foundation for values-based debates. The course culminates in a keynote address which students research, write, and present.

Rhetoric III: Forensic Rhetoric (145 hours)

The purpose of Rhetoric III is to provide a set of culminating events which require students to hone the rhetorical skills developed in Rhetoric I and II and which ultimately provide the opportunity to display a mastery of rhetorical techniques and theory. Students learn and practice formal courtroom argumentation and decorum in a mock trial; they put argumentation and oratory skills to work towards a particular aspect of their own worldview in a formal defense of their senior thesis; and they put their rhetorical skills to work in a ceremonial setting as they prepare graduation speeches which reflect on their entire classical education.

This course also includes a senior thesis component. Students will pursue an individual research project which will be used to defend a persuasive thesis. Students will work with a tutor as well as a mentor outside of Granite on this project. Students will ultimately defend their thesis before a panel of judges.

High school credits included in this course:

- 1.0: Rhetoric III
- 0.5: Senior Thesis



Science

Advanced Biology: Anatomy and Physiology (170 hours)*

Building upon the foundations of knowledge and understanding students gained in Biology, Advanced Biology focuses on the biology of the human body. Through readings, response exercises, class lectures, and labs students learn about each of the body's 11 organ systems. In this college-prep course students will marvel at God's design and appreciate the complexity of the human body made in the image of God.

Biology (145 hours)**

The purpose of this course is to give students an understanding of the biological structures of the natural world. Course material includes the cell, DNA and genetics, and a Christian perspective on evolution vs. creation, among other topics. Through readings, response exercises, class lectures, and labs students develop an appreciation for and understanding of the biological world.

Chemistry (170 hours)*

The purpose of this course is to help students discover God's purposeful order in the elements and compounds that make up the universe. Course material includes significant figures, units, classification, the mole concept, stoichiometry, thermochemistry, thermodynamics, kinetics, acids and bases, redox reactions, solutions, atomic structure, Lewis structures, molecular geometry, gas laws, and equilibrium. Through readings, response exercises, class lectures, and labs students develop an appreciation for and understanding of the chemical world.

Physics (170 hours)*

Course description forthcoming.

