

## Secondary School Scope and Sequence

### ELECTIVES

7-8 GRADE electives include choir, drawing, general art, acting, PE, orchestra, madrigal performers

8-12 GRADE electives include political science, computer programming, orchestra, theater, yearbook, creative writing, drawing, general art, leadership, photography, choir, madrigal performers, theology and philosophy, polyhedral, history and philosophy of math, number theory, and economics.

GRADE	OMNIBUS	MATH	SCIENCE	PARADIGM CLASSES	LANGUAGE
<b>7</b>	<p>CURRICULUM Omnibus Textbook, assigned books and readings</p> <p>GOALS Students will learn to read, discuss, and engage primary and secondary materials in theology, philosophy, history, and literature during the ancient period.</p> <p>READING LIST INCLUDES Chronicles of Narnia, Epic of Gilgamesh, The Odyssey, The Holiness of God, and more</p> <p style="text-align: center;"><b>SPECIAL EVENTS</b></p> <p>Narnia Feast, Gödel Field Trip to Princeton, Omnibus Tea Party, Gödel Logic Test I, Math Unit/Chapter Study Guide, Washington DC field trip, Trip to NYC, Philadelphia, or Baltimore</p>	<p><b>ALGEBRA A</b> CURRICULUM Introductory Algebra, Elayn Martin-Gay</p> <p>GOALS Part 1 of a 3 year algebra sequence developing the algebraic language necessary for study in higher mathematics. Introduction to solving linear equations and their applications.</p> <p>ASSIGNMENTS Graded Homework, Quizzes, Tests, Semester Final Exams</p> <p style="text-align: center;">-OR-</p> <p><b>ALGEBRA AB</b> CURRICULUM Elementary Algebra, Harold R. Jacobs</p> <p>GOALS Part 1 of a 2 year algebra sequence developing the algebraic language necessary for study in higher mathematics. Introduction to solving equations up to the derivation and use of the quadratic formula.</p> <p>ASSIGNMENTS Graded Homework, Quizzes, Tests, Semester Final Exams</p>	<p><b>EARTH AND LIFE SCIENCE</b> CURRICULUM Prentice Hall Life Science, Pearson Earth Science</p> <p>GOALS Provide an overview of our earth and the life on it; core knowledge in map skills, land forms, weather, minerals and rocks.</p> <p>ASSIGNMENTS Reading, worksheets, quizzes, tests</p>	<p><b>LOGIC 1</b> CURRICULUM Logic I : Categorical. Propositional. Predicate</p> <p>GOALS Learn categorical logic, testing the validity of syllogisms using three rules of validity; learn propositional logic, testing the validity of arguments using rules of substitution and truth tables; and learn predicate logic, parsing propositions into subject and predicate and applying universal and existential quantifiers</p> <p>ASSIGNMENTS Quizzes, Tests</p>	<p><b>LATIN</b> CURRICULUM Latin Alive! Book 2</p> <p>ASSIGNMENTS Grammar worksheets, translations, reading comprehension, recitations, quizzes, unit tests.</p> <p>GOALS Learn various degrees of adjective and adverbs, new ablatives and datives, pronouns, passive voice verbs, dependent clauses, and participles. Be able to apply grammar in such a way as to translate into idiomatic English.</p>

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8	<p>CURRICULUM Omnibus Textbook, assigned books and readings</p> <p>GOALS Students will learn to read, discuss, and engage primary and secondary materials in theology, philosophy, history, and literature during the medieval period.</p> <p>READING LIST INCLUDES Lord of the Rings, Confessions, Inferno</p>	<p>Geometry: CURRICULUM Elements, Euclid</p> <p>Geometry: Seeing, Doing, Understanding, Harold R. Jacobs</p> <p>ASSIGNMENTS Graded Homework, Quizzes, Tests, Semester Final Exams</p> <p>GOALS Survey of Euclidean Geometry, beginning with book 1 of Euclid's Elements and Euclid's proof of the Pythagorean Theorem, and moving to modern geometry and introduction to trigonometric ratios.</p>	<p>Physical Science: CURRICULUM PrenticeHallPhysicalScience</p> <p>GOALS Provide a dynamic, hand-on class designed to build comprehension of basic chemistry principles and the laws of physics. Application of scientific method</p> <p>ASSIGNMENTS Reading, worksheets, problem-solving, quizzes, tests</p>	<p>Logic 2 CURRICULUM LogicII:Principia.Application</p> <p>GOALS Learn propositional logic axiomatically, following Principia Mathematica. End the year with applying informal fallacies to famous debates and translate passages of Scripture into logical form and prove the arguments as valid</p> <p>ASSIGNMENTS Quizzes, Tests</p>	<p>Greek: CURRICULUM Basics of Biblical Greek, textbook and workbook. Alpha to Omega Athanaze</p> <p>ASSIGNMENTS Quizzes on vocab and grammar, tests on vocab, grammar and translation, workbook pages, and parsing exercises</p> <p>GOALS Memorize common NT Greek vocabulary; learn basic Greek grammar; translate simple NT passages. Key for the logic stage: Greek is a very logical language that forces students to look closely and think carefully and logically about details of words and sentences.</p>
	<b>SPECIAL EVENTS</b>				
	<p>Rivendell Feast, Illuminated Manuscript Project, Beowulf, Logic, Gödel Logic Test II, Beowulf's arm project, Washington DC field trip, Trip to NYC, Philadelphia, or Baltimore, polyhedron model</p>				

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9	<p>CURRICULUM Omnibus Textbook, assigned books and readings</p> <p>GOALS Students will learn to read, discuss, and engage primary and secondary materials in theology, philosophy, history, and literature during the modern period.</p> <p>READING LIST INCLUDES Great Gatsby, Pride and Prejudice, Murder on the Orient Express, Nine Tailors</p>	<p><b>ALGEBRA BC</b> CURRICULUM Algebra &amp; Trigonometry, Paul A. Foerster</p> <p>ASSIGNMENTS Graded Homework, Quizzes, Tests, Semester Final Exams</p> <p>GOALS Part 2 of a 2 year algebra sequence developing the algebraic language necessary for study in higher mathematics. Exploration of all non-trigonometric elementary functions.</p> <p>-OR-</p> <p><b>ALGEBRA B</b> CURRICULUM Intermediate Algebra, Charles P. McKeague</p> <p>ASSIGNMENTS Graded Homework, Quizzes, Tests, Semester Final Exams</p> <p>GOALS Part 2 of a 3 year algebra sequence developing the algebraic language necessary for study in higher mathematics. Introduction to various functions including rational functions and the derivation and use of the quadratic formula.</p>	<p><b>BIOLOGY</b> CURRICULUM The Study of Life</p> <p>ASSIGNMENTS Reading, discussion, worksheets, quizzes, tests, build a cell model</p> <p>GOALS Study life at the cellular level; cell structure, cellular respiration, photosynthesis, and cell division as well as human anatomy, plants and microorganisms are explored.</p>	<p><b>ENGLISH COMPOSITION</b> CURRICULUM Elegant Essays, Elements of Style, Sentence Composing for High Schoolers, The Lively Art of Writing, The Art of Poetry</p> <p>ASSIGNMENTS Write clear and concise sentences and paragraphs</p> <p>Write solid, thoughtful 5-paragraph essays</p> <p>Attend to and learn from well-written sentences, paragraphs, essays, poetry, and speeches</p> <p>GOALS Come to appreciate and enjoy an assortment of writing techniques and styles; develop skill and understanding in the basics of grammar and writing.</p>	<p><b>LATIN 1</b> CURRICULUM Latin Alive! Book 3</p> <p>ASSIGNMENTS Translations, reading comprehension, grammar worksheets, unit tests.</p> <p>GOALS Review old grammar, and learn the subjunctive mood, various clauses, infinitives, and sequence of tenses. Be able to read unadapted Latin, and scan poetry for meter.</p> <p><b>SPANISH 1</b> CURRICULUM Navegando I (chs. 1-8)</p> <p>ASSIGNMENTS homework, independent vocabulary study, quizzes (two per chapter), chapter tests, scripture recitation, semester final exam, Hispanic geography quizzes</p> <p>GOALS Become proficient in the grammatical concepts and vocabulary covered over the course of the two semesters, building a firm foundation for Spanish II.</p>
	<p><b>SPECIAL EVENTS</b></p> <p>Murder mystery dinner, Pride and Prejudice tea party, chocolate party, British-American trading treaty event, Washington DC field trip, Trip to NYC, Philadelphia, or Baltimore, math unit/chapter study guide</p>				

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<b>10</b>	<p>CURRICULUM Omnibus Textbook, assigned books and readings</p> <p>GOALS Students will learn to read, discuss, and engage primary and secondary materials in theology, philosophy, history, and literature during the ancient period.</p> <p>READING LIST INCLUDES Aeneid, Plato's Republic, Thucydides</p>	<p><b>TRIGONOMETRY</b> CURRICULUM Algebra &amp; Trigonometry, Paul A. Foerster</p> <p>GOALS Exploration of the properties of trigonometric ratios and functions as well as other pre-calculus topics.</p> <p>ASSIGNMENTS Graded Homework, Quizzes, Tests, Semester Final Exams</p> <p>-OR-</p> <p><b>ALGEBRA C</b> CURRICULUM Advanced Algebra, UCSMP</p> <p>ASSIGNMENTS Graded Homework, Quizzes, Tests, Semester Final Exams</p> <p>GOALS Part 3 of a 3 year algebra sequence developing the algebraic language necessary for study in higher mathematics.</p> <p>Exploration of elementary functions including an introduction to trigonometric functions.</p>	<p><b>CHEMISTRY</b> CURRICULUM Prentice Hall Chemistry</p> <p>GOALS Build competency in understanding of matter including the elements, periodic table, reactions, scientific measurement, and stoichiometry.</p> <p>ASSIGNMENTS Reading, problem-solving, memorization, worksheets, quizzes, tests</p>	<p><b>RHETORIC AND SYSTEMATIC THEOLOGY</b> Students learn the art of public speaking through progymnasmata in Rhetoric as well as the fundamentals of Christian theology in systematic theology</p>	<p><b>LATIN 2/3</b> CURRICULUM Latin Alive! Reader</p> <p>ASSIGNMENTS Translation, composition, respond in Latin questions, tests.</p> <p>GOALS Read and discuss unabridged Latin from various authors for a better understanding of Latin and Roman culture. Learn to scan lyrics as well as epic poetry, and do literary analyses.</p> <p><b>SPANISH II</b> CURRICULUM Navegando I (ch. 9), Navegando II (chs. 1-6)</p> <p>ASSIGNMENTS review Spanish I (grammar and vocabulary), homework, independent vocabulary study, quizzes (two per chapter), chapter tests, Scripture recitation, semester final exam, Hispanic geography quizzes, writing assignments</p> <p>GOALS Become proficient in the grammatical concepts and vocabulary covered over the course of the two semesters, growing in reading and writing skills</p>
	<p><b>SPECIAL EVENTS</b></p> <p>Greek Olympics, Trigonometry Scavenger Hunt, Washington DC field trip, Trip to NYC, Philadelphia, or Baltimore, Trigonometric Ratio Scavenger Hunt, Vector Addition Treasure Hunt, read Flatland by Edwin A. Abbott</p>				

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II	<p>CURRICULUM Omnibus Textbook, assigned books and readings</p> <p>GOALS Students will learn to read, discuss, and engage primary and secondary materials in theology, philosophy, history, and literature during the medieval period.</p> <p>READING LIST INCLUDES City of God, Divine Comedy, Sir Gawain and the Green Knight</p>	<p><b>CALCULUS I</b> CURRICULUM Calculus: Early Transcendental Functions, Larson, Hostetler, Edwards</p> <p>GOALS Introduction to limits, derivatives, integrals, and their applications, including the Disk Method. Proof of the Fundamental Theorem of Calculus.</p> <p>ASSIGNMENTS Graded Homework, Quizzes, Tests, Semester Final Exams</p> <p>-OR-</p> <p><b>TRIGONOMETRY</b> CURRICULUM Algebra &amp; Trigonometry, Paul A. Foerster</p> <p>GOALS Exploration of the properties of trigonometric ratios and functions as well as other pre-calculus topics.</p> <p>ASSIGNMENTS Graded Homework, Quizzes, Tests, Semester Final Exams</p> <p>-OR-</p> <p><b>STATISTICS</b> CURRICULUM Stats: Modeling the World</p> <p>GOALS Intro to probability, measure of central tendency and dispersion, normal distribution and inference, stats in media,</p> <p>ASSIGNMENTS Poster presentation, textbook exercises, quizzes, exams, investigative tasks</p>	<p><b>PHYSICS</b> CURRICULUM Exploring Creation with Physics, Dr. Jay L. Wile, Apologia</p> <p>GOALS Students will be introduced to the study of the workings of the universe, specifically including vector operations, kinematics and motion, Newton's laws, work and energy, periodic motion, optics, electricity, and magnetism.</p> <p>ASSIGNMENTS Homework Sets, In-Class Problems, Labs, Quizzes and Tests</p> <p>-OR-</p> <p><b>HUMAN ANATOMY AND PHYSIOLOGY</b> CURRICULUM Human Anatomy and Physiology</p> <p>ASSIGNMENTS Reading, assessment, questions from the text, quizzes, tests</p> <p>GOALS This college level course is designed to build appreciation for the complexity of the human body as well as an understanding of body parts and processes.</p>	<p><b>APOLOGETICS</b> CURRICULUM Materials that cover systematic theology, epistemology, logic, and evangelism</p> <p>GOALS Learn how to defend the Christian faith</p> <p>ASSIGNMENTS Quizzes, Tests.</p> <p>-AND-</p> <p><b>JR. THESIS</b> GOALS Use scholarly research and professional writing skills to develop a paper that expresses one's position on a topic in a manner that is grammatically correct, logically sound, rhetorically persuasive, academically formatted, and biblically accurate.</p> <p>ASSIGNMENTS Grammar quizzes, Topic ideas, Research notes, Thesis statement, Argument outline, Rough draft, Editing exercises, Final draft, Oral presentation</p>	<p><b>LATIN 2/3</b> CURRICULUM Latin Alive! Reader</p> <p>ASSIGNMENTS Translation, composition, respond in Latin questions, tests.</p> <p>GOALS Read and discuss unabridged Latin from various authors for a better understanding of Latin and Roman culture. Learn to scan lyric as well as epic poetry, and do literary analyses.</p> <p><b>SPANISH III</b> CURRICULUM Navegando II (chs. 7-9), Navegando III (chs. 1-3)</p> <p>ASSIGNMENTS review Spanish II (grammar and vocab), homework, independent vocab study, quizzes (two per chapter), chapter tests, Scripture recitation, semester final exam, Hispanic geography quizzes, writing</p> <p>GOALS Become proficient in grammatical concepts and vocab covered over the course of the two semesters, growing in reading, writing and verbal proficiency skills</p>
	<b>SPECIAL EVENTS</b>	<p>Jousting event, Jewish Passover dinner, Hershey Park physics trip, statistics field trip, Washington DC field trip, Trip to NYC, Philadelphia, or Baltimore, Euler line linear algebra review</p>			

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<b>12</b>	<p>CURRICULUM Omnibus Textbook, assigned books and readings</p> <p>GOALS Students will learn to read, discuss, and engage primary and secondary materials in theology, philosophy, history, and literature during the modern period.</p> <p>READING LIST INCLUDES Anna Karenina, Moby Dick, Paradise Lost, Brave New World</p>	<p><b>CALCULUS I</b> CURRICULUM Calculus: Early Transcendental Functions, Larson, Hostetler, Edwards</p> <p>GOALS Introduction to limits, derivatives, integrals, and their applications, including the Disk Method. Proof of the Fundamental Theorem of Calculus.</p> <p>ASSIGNMENTS Graded Homework, Quizzes, Tests, Semester Final Exams</p> <p>-OR-</p> <p><b>CALCULUS 2</b> CURRICULUM Calculus: Early Transcendental Functions, Larson, Hostetler, Edwards</p> <p>GOALS Exploration of advanced integration techniques, applications of integration, and infinite series.</p> <p>ASSIGNMENTS Graded Homework, Quizzes, Tests, Semester Final Exams, AP Calculus BC Exam</p>	<p><b>PHYSICS:</b> CURRICULUM Exploring Creation with Physics, Dr. Jay L. Wile, Apologia</p> <p>GOALS Students will be introduced to the study of the workings of the universe, specifically including vector operations, kinematics and motion, Newton's laws, work and energy, periodic motion, optics, electricity, and magnetism.</p> <p>ASSIGNMENTS Homework Sets, In-Class Problems, Labs, Quizzes and Tests</p> <p>-OR-</p> <p><b>HUMAN ANATOMY AND PHYSIOLOGY</b> CURRICULUM Human Anatomy and Physiology</p> <p>ASSIGNMENTS Reading, assessment, questions from the text, quizzes, tests</p> <p>GOALS This college level course is designed to build appreciation for the complexity of the human body as well as an understanding of body parts and processes.</p>	<p><b>SR. THESIS</b> CURRICULUM Grammar Workbook, A Manual for Writers, The Elements of Style</p> <p>GOALS Learn how to write and defend a scholarly paper</p> <p>ASSIGNMENTS Writing, Editing, Presenting.</p>	<p><b>LATIN 2/3</b> CURRICULUM Latin Alive! Reader</p> <p>ASSIGNMENTS Translation, composition, respond in Latin questions, tests.</p> <p>GOALS Read and discuss unabridged Latin from various authors for a better understanding of Latin and Roman culture. Learn to scan lyric as well as epic poetry, and do literary analyses.</p> <p><b>SPANISH IV</b> CURRICULUM Navegando III (chs. 4-10), Leyendas Latinoamericanas</p> <p>ASSIGNMENTS review Spanish III (grammar and vocab), homework, independent vocab study, quizzes (two per chapter), chapter tests, Scripture recitation, semester final exam, Hispanic geography quizzes, writing assignments</p> <p>GOALS Become proficient in the grammatical concepts and vocab covered over the course of the two semesters, growing in reading fluency and comprehension, writing and verbal skills</p>
	<p><b>SPECIAL EVENTS</b></p> <p>Senior class trip with headmaster, Sr. Roast, Hershey Park physics trip, statistics field trip, Washington DC field trip, Trip to NYC, Philadelphia, or Baltimore, proof of Euler's identity, calculus summary creative project, presentation: deceptive use of statistics in media, poster presentation: statistical study</p>				