

SCCS CURRICULUM MAP: TWELFTH GRADE

Subject	Quarter 1	Quarter 2	Quarter 3	Quarter 4
<p>Literature: Rhetoric & 20th Century Literature</p>	<p>1. research & citation</p> <p>2. diction, clarity, and cohesion in</p> <ul style="list-style-type: none"> • expository writing and speaking • persuasive writing and speaking 	<p>1. research & citation</p> <p>2. diction, clarity, and cohesion in</p> <ul style="list-style-type: none"> • expository writing and speaking • persuasive writing and speaking <p>3. novel: <i>Heart of Darkness</i>, by Joseph Conrad</p> <p>4. literary modernism</p>	<p>1. literary realism and naturalism</p> <p>2. continued study of modernism</p> <p>3. local color fiction</p> <p>4. novel: <i>1984</i>, by George Orwell</p> <p>5. poets and short story authors may include the following: Ambrose Bierce, Stephen Crane, Jack London, Kate Chopin, Charlotte Gilman, Robert Frost, T.S. Eliot, Edith Wharton</p>	<p>1. continued study of modernism and local color fiction</p> <p>2. selected short stories of Flannery O'Connor</p> <p>3. Christian response to modernism and post-modernism</p> <p>4. novel: <i>Out of the Silent Planet</i>, by C.S. Lewis</p>

<p style="text-align: center;">Senior Civics and Thesis</p> <p style="text-align: center;">(second semester only)</p>	<p style="text-align: center;">N/A</p>	<p style="text-align: center;">N/A</p>	<p>U.S. government concepts:</p> <ul style="list-style-type: none"> • structure and content of U.S. Constitution • separation of powers • electoral process • legislative process • judicial review concepts and history <p>Comparison/contrast of state and federal government & law</p> <p>Analysis of underlying worldview concepts:</p> <ul style="list-style-type: none"> • rule of law • limits of law and government in fallen world • natural law and rights • positive vs. negative rights • rights vs. responsibility • nature and parameters of citizenship • liberalism • benefits vs. limits of democracy <p>Major court decisions of 19th, 20th, 21st century</p> <p>Thesis background reading and research</p> <p>IF TIME: just war and total war concepts; U.S. international relations and worldview principles</p>	<p>Final research, writing, and presentation of senior thesis</p>
---	--	--	--	---

--	--	--	--	--

<p>Apologetics</p>	<p>-Introduction to Apologetics -Key verse – 1Peter 3:15 -Key terms -Differing methodologies and traditional arguments (natural theology vs Evidentialism) -Study the approach of F. Schaeffer providing an overview of philosophy</p>	<p>-Introduction to Presuppositionalism (chapters from Van Til’s “A Defense of the Faith”) -Read “A Shot of Faith” by Dr. Mitch Stokes with discussion</p>	<p>-Read and discuss “Apologetics; A Justification of Christian Belief” by John Frame</p>	<p>-Students writing and defending their own apologetic -Watch and discuss “The Truth Project” Apologetics</p>
<p>Math: PreCalculus <i>Pre-Calculus</i> (Glenco)</p>	<p>Preparing for Pre-Calculus; Chapter 1: Functions from a Calculus perspective; Chapter 2: Polynomial and Rational Functions; Chapter 3: Exponential and Logarithmic Functions</p>	<p>Chapter 4: Trig. Functions; Chapter 5: Trig. Identities and Equations; Chapter 6: Systems of Equations and Matrices</p>	<p>Chapter 7: Conic Sections and Parametric Equations; Chapter 8: Vectors; Chapter 9: Polar Coordinates and Complex Numbers</p>	<p>Chapter 10: Sequences and Series; Chapter 11: Inferential Statistics; Chapter 12: Limits and Derivatives</p>
<p>Math: Calculus <i>Calculus of a Single Variable</i> (9th Edition)</p>	<p>Graphs and models, linear models and rate of change, functions and their graphs, fitting models to data (linear, quadratic, and trigonometric models), finding limits graphically and numerically, evaluating limit analytically, continuity and one-sided limits, infinite limits, derivative and tangent line problems, basic differentiation rules and rate of change, sine and cosine, product quotient rules and higherorder derivatives, chain rule</p>	<p>Extrema of an interval, Rolle’s Theory and the Mean Value Theorem, increasing and decreasing functions and the first derivative test, concavity and the second derivative test, limits at infinity, curve sketching, optimization problems, Newton’s methods, differentials, antiderivatives and indefinite integration, area, Riemann sums and definite integrals, Fundamental Theorem of Calculus, integration by substitution (Trapezoidal Rule), numerical integration (Simpson’s Rule),definition</p>	<p>Slope and Euler’s method, differential equations: growth and decay, separation of variables and the logistic equation, first linear differential equations, area of a region between two curves, volume: the Disk and Shell Methods, arc length and the surfaces of revolution, work by a constant and a variable force, mass ad centroids, Theorem of Pappus, fluid pressure and fluid force, basic integration rules, trigonometric integrals, trigonometric substitution, partial fractions, L’Hopital’s Rule and improper integrals</p>	<p>Sequences, series and convergence, <i>n</i>th-term test for divergence, integral test and the <i>p</i>-series, comparison of series (direct ad limit comparison tests), alternating series, ratio and root tests, Taylor polynomials and approximations, power series, Taylor and Maclaurin series, plane curves and parametric equations, polar coordinates and polar graphs, conics and Kepler’s Laws, plane curves and parametric equations</p>

		of e , natural logarithmic function: Differential and Function integration, inverse functions, exponential functions, bases other than e , inverse trigonometric functions, hyperbolic functions		
Spanish	Memorize vocabulary related to food, movies; commands, pronoun placement, affirmative and negative words, double object pronouns, present/subjunctive w/ojala.	Memorize vocabulary related to the school newspaper, family, environment, careers; impersonal expressions with subjunctive, por/para, comparatives, superlatives, and future tense	Memorize vocabulary related to talking about yourself and friends, camping, family relationships; verbs like gustar, present tense, saber or conocer, ser or estar, reflexive verbs, preterit/vs. imperfect tense.	Memorize vocabulary related to volunteer activities/projects, requests, media, environmental concerns, social awareness; command forms, pronouns with commands, impersonal expressions +infinitive, future tense, por/para, present subjunctive

<p>History: World History Great Ideas II</p>	<p>Review of Enlightenment thought and Romanticism</p> <p>Review of biblical worldview concepts regarding government, family, culture, free will/ liberty</p> <p>Through research, lecture, essays/ excerpts, and discussion, students will analyze the ideas and influence of some or all of the following: materialism, natural moral law, liberalism, humanism, rationalism, utilitarianism, Hegel, capitalism and laissez-faire capitalism, social Darwinism, Muckrakers and the Gilded Age, as well as historical documents (Magna Carta, Mayflower Compact, John Locke's Second Treatise, Declaration of Independence, US Constitution, and portions of Federalist Papers).</p>	<p>Through research, lecture, essays, excerpts, & discussion, students will analyze the ideas & influence of some or all of the following: The Modern Age/modernity; progressivism; eugenics movement, sanctity of life ethic. Marx(<i>Communist Manifesto</i>), Freud, Friedrich Nietzsche, G.K.Chesterton (<i>Orthodoxy</i>) W.E.B. Dubois, C.S. Lewis (<i>Abolition of Man</i>)</p> <p>IF TIME: Jean Paul Sartre Soren Kierkegaard Albert Camus Martin Heidegger</p>	<p>Through research, lecture, essays, excerpts, & discussion, students will analyze the ideas & influence of some or all of the following: Marxism-Leninism Socialism Communism Labor Movement totalitarianism Adolf Hitler Joseph Stalin Whitaker Chambers</p>	<p>Through lecture, essays, excerpts, & discussion, students will analyze the ideas & influence of some or all of the following: structuralism and post-structuralism post-modernism C.S. Lewis J.R.R. Tolkien Francis Schaeffer Nancy Pearcey</p> <p>IF TIME: Bertrand Russell Michel Foucault Jacques Derrida Ayn Rand</p>
---	---	---	---	--

<p>Physics <i>Conceptual Physics</i> (Prentice Hall)</p>	<p>Lab Safety, Scientific Method Review, -Mechanical Equilibrium: Force & Vectors - Newton's 1st Law of Motion – Inertia - Linear Motion: Speed, Velocity & Acceleration - Projectile Motion: Velocity Vectors, Projectiles - Newton's 2nd Law of Motion – Force & Acceleration - Newton's 3rd Law of Motion – Action & Reaction</p>	<p>-Momentum - Energy: Mechanical, Potential, & Kinetic, Work Energy Theorem - Circular Motion: Rotational Speed, Centripetal Force -Rotational Equilibrium: Torque, Center of Mass & Gravity - Rotational Motion: Rotational Inertia & Angular Momentum -Universal Gravitation: Falling Apple, Moon & Earth; Gravitational Fields -Satellite Motion: Earth Satellites, Orbits</p>	<p>-Special Relativity- Space & Time -Relativity-Momentum, Mass, Energy, & Gravity -The Atomic Nature of Matter: Atoms, Molecules, Compounds -Solids: Density, Elasticity -Liquids: Buoyancy, Flotation -Gases: Atmosphere, Boyle's Law, Bernoulli's Principle - Temperature, Heat, & Expansion: Specific Heat Capacity - Heat Transfer: Conduction, Convection, Radiation, Newton's Law of Cooling - Change of Phase: Evaporation, Condensation, Boiling, Freezing -Thermodynamics: 1st -3rd Law of Thermodynamics</p>	<p>Some or all of the following units: -Vibrations & Waves: waves & Doppler effect - Sound: origin & speed - Light: Concepts, speed, polarization - Color: Spectrum, Reflection, Atomic Color Code - Reflection & refraction: Laws of Reflection & relationships with sound, light - Lenses: converging & diverging; the eye Diffraction & Interference: Huygens' Principle; Young's Interference Experiment -Electrostatics: Coulomb's Law; Induction; Polarization -Electric Fields & Potential - Electric Current: Voltage, Ohm's Law, -Electric Circuits -Magnetism: Poles & Fields & Forces -Electromagnetic Induction: Faraday's Law, Transformers; -The Atom & the Quantum -The Atomic Nucleus & Radioactivity -Nuclear Fission & Fusion</p>
			<p>Newton's laws), surface gravity, escape velocity</p>	<p>Einstein's Theory of Relativity, Twin Paradox, Telescopes, Cosmology, Looking back toward the beginning of the Universe</p>

P.E.	Cross Fit	Cross Fit	Cotillion	Cross Fit
Music Classical & Folk Guitar	Training Your Ears & Playing Basics	More Majors & More minors	Pentatonic Scales	Keep On Keeping On
Choral Music	Choral/Singing - Music Mechanics - Music Reading Methods - Score Analysis - Meter Application - Form Analysis - Sing and Identify Harmony - Tempo Marks - Assembly Participation	Choral/Singing - Music Reading Skills - Score Analysis - Conducting Patterns - Form Analysis - Sing and Identify Harmony - Varied Tempos in Conducting - Harvest Gathering - Solo/Ensemble Festival - Christmas Programs	Choral/Singing - Music Reading Enhanced - Score Analysis - Metric Index - Form in Melodic Direction - Sing and Identify Harmony - Metronome Marks - Community Programs	Choral/Singing - Music Reading Assessed - Score Analysis - Form in Rhythmic Direction - Sing and Identify Harmony - Tempo Marks - Spring Concert
Art II	Elements of Art, Art Production, Principles of Art Design; Problem Solving in Art Processes; Art Criticism	Elements of Art, Art Production, Principles of Art Design; Problem Solving in Art Processes; Art Criticism	No Class – Semester Class Only	No Class – Semester Class Only
Psychology	What is Psychology, Psychology and the Christian Worldview, Psychology's History and Worldview, The Brain and Nervous System	Sensation and Perception, Motivation and Emotion, Learning and Memory, Development	Consciousness, Thinking, Language, and Intelligence, Personality, Abnormal Psychology	Treatment, Social Psychology, Research Methods