

English Department Curriculum Map

Understandings Across English Courses and Units:

- Importance of analyzing how literary devices used in a text connect to each other and to “big picture” concepts of theme, author’s purpose, and central idea
- Importance of annotation to enhance close reading skills
- Importance of supporting analysis of text with specific evidence drawn from text
- Etymology based vocabulary
- Grammatical elements that are requisite for clarity of expression including parts of speech, fragments, and run-ons
- Structure and components of writing forms including constructed responses and five paragraph essays, which demonstrate the clear and accurate use of textual analysis to support ideas
- Necessity of determining and analyzing the relationship between two or more central ideas of a text, including the development and interaction of the essential ideas.
- Importance of coherence in analytical writing and speaking
- Importance of determining or clarifying the meaning of unknown and multiple meaning words and phrases in context
- Importance of writing informative, explanatory, and analytical constructed responses that clearly and accurately examine and express complex ideas, concepts, and information

Course	Marking Period 1	Marking Period 2	Marking Period 3	Marking Period 4
Concepts of English 9	- Fiction and Literary Terminology <ul style="list-style-type: none"> • Plot, Setting, Characterization, Irony, Conflict, Theme, Figurative Language, etc. 	- Point of View, Tone, Mood, and Conclusions, Inferences, and Generalizations - Elements of Nonfiction, Speeches, and Introduction to Poetry	- Point of View, Tone, Mood, and Conclusions, Inferences, and Generalizations - Elements of Short Story, Nonfiction, and Poetry - Author’s Purpose and Technique - MLA Style Research Paper	- MLA Style Research Paper - Introduction to Drama - Point of View, Tone, Mood, and Conclusions, Inferences, and Generalizations - Elements of Short Story, Nonfiction, Speeches, and Introduction to Poetry
English 9	- Short Story Analysis <ul style="list-style-type: none"> • Plot, Setting, Symbolism, Mood, Characterization, Foreshadowing, Metaphor, Simile, Personification, and Hyperbole - Elements of a Novel and Literary Devices <ul style="list-style-type: none"> • Plot, Setting, Characterization, Conflict, Point of View, Theme, Tone, Symbolism, Foreshadowing, Irony and Allusion 	- Elements of a Novel and Literary Devices <ul style="list-style-type: none"> • Plot, Setting, Characterization, Conflict, Point of View, Theme, Tone, Symbolism, Foreshadowing, Irony and Allusion - Poetry and Poetic Devices <ul style="list-style-type: none"> • Stanza, Rhyme Scheme, Sound Devices, Imagery, Metaphor, Personification, Simile and Point of View 	- Elements of a Novel and Literary Devices <ul style="list-style-type: none"> • Plot, Setting, Characterization, Conflict, Point of View, Theme, Tone, Symbolism, Foreshadowing, Irony and Allusion - Rhetorical Elements of Parallelism, Restatement, Repetition, and Analogy - MLA Style Research Paper	- Elements of Poetry <ul style="list-style-type: none"> • Figurative Language, Sound Devices, Meter, Internal and End Rhyme - Elements of Drama <ul style="list-style-type: none"> • Sonnet, Blank Verse, Meter, Stage Directions, Acts, Scenes, Dialogue, Monologue, and Soliloquy - Drama/Poetry Analysis
Honors English 9	- Elements of the Novel, Short Story, Poetry and Nonfiction - Literary Devices and Poetic Elements	- Elements of the Novel, Short Story, Poetry and Nonfiction - Literary Devices and Poetic Elements - Socratic Seminar - Creating and Delivering Effective Speeches	- Elements of the Novel, Short Story, Poetry and Nonfiction - Literary Devices and Poetic Elements - Socratic Seminar - MLA Style Research Paper	- MLA Style Research Paper - Elements of the Novel, Short Story, Poetry and Nonfiction - Literary Devices and Poetic Elements - Socratic Seminar

<p>Concepts of English 10</p>	<p>- Short Story Analysis</p> <ul style="list-style-type: none"> • Predictions, Plot, Setting, Foreshadowing, Tone, Style, Mood, Theme, Irony, Pronouns, Internal/External Conflict, Points of View, Adjectives, Adverbs, Verb Tenses, Synonyms, and Antonyms 	<p>- Memoir Analysis</p> <ul style="list-style-type: none"> • Mood <p>- Autobiography Analysis</p> <ul style="list-style-type: none"> • Bias <p>- Essay Analysis</p> <ul style="list-style-type: none"> • Propaganda, Rhetorical Devices, Latin Root <i>mal-</i> and <i>au-</i>, and Direct and Indirect Objects <p>- MLA Style Research Paper</p>	<p>- Science Writing Analysis</p> <ul style="list-style-type: none"> • Text Organization, Diction, Central Idea <p>- Biography Analysis</p> <ul style="list-style-type: none"> • Summarization <p>- Drama Analysis</p> <ul style="list-style-type: none"> • Internal/External Conflict, Latin Root <i>-scend-</i>, Inferences, Connotation, Denotation, Character Motivation, Adverb Clauses 	<p>- Essay Analysis</p> <ul style="list-style-type: none"> • Fact, Opinion, Subject Complements <p>- Elements of Science Fiction</p> <p>- Poetry Analysis</p> <ul style="list-style-type: none"> • Sound Devices, Participles and Gerunds, Latin Suffix <i>-or</i> <p>- Novel Analysis</p> <ul style="list-style-type: none"> • Plot, Theme, Characterization
<p>English 10</p>	<p>- Origins, Traditions, and the Heroic Quest (World Literature)</p> <ul style="list-style-type: none"> • Folk Tales, Scriptures, and National Literatures <p>- Relationships Between Two or More Central Ideas</p>	<p>- The Wisdom and Insight of the World</p> <ul style="list-style-type: none"> • Folk Tales, Scriptures, and National Literatures • Tragedy and Dramatic Literature <p>- Relationships Between Two or More Central Ideas</p>	<p>- American Myths and Legends to Revolutionary Thought</p> <ul style="list-style-type: none"> • Early American Myths and Legends • Revolutionary Rhetoric <p>- Literary and Rhetorical Devices</p> <ul style="list-style-type: none"> • Tone and Meaning 	<p>- American Romanticism</p> <ul style="list-style-type: none"> • American Romantic Nonfictional, Fictional, and Poetic Texts <p>- Literary and Rhetorical Devices</p> <ul style="list-style-type: none"> • Tone and Meaning <p>- MLA Style Research Paper Analyzing Famous American Speech</p>
<p>Honors English 10</p>	<p>- Origins, Traditions, and the Heroic Quest (World Literature)</p> <ul style="list-style-type: none"> • Folk Tales, Scriptures, and National Literatures <p>- Relationships Between Two or More Central Ideas</p>	<p>- The Wisdom and Insight of the World</p> <ul style="list-style-type: none"> • Folk Tales, Scriptures, and National Literatures • Tragedy and Dramatic Literature <p>- Relationships Between Two or More Central Ideas</p>	<p>- American Myths and Legends to Revolutionary Thought</p> <ul style="list-style-type: none"> • Early American Myths and Legends • Revolutionary Rhetoric <p>- Literary and Rhetorical Devices</p> <ul style="list-style-type: none"> • Tone and Meaning 	<p>- American Romanticism</p> <ul style="list-style-type: none"> • American Romantic Nonfictional, Fictional, and Poetic Texts <p>- Literary and Rhetorical Devices</p> <ul style="list-style-type: none"> • Tone and Meaning <p>- MLA Style Research Paper Analyzing Famous American Speech</p>
<p>Concepts of English 11</p>	<p>- Nonfiction Analysis</p> <ul style="list-style-type: none"> • Connecting Author's Background to Drama, Critical Reviews, Idioms, Purpose, Audience, Persuasive Speeches <p>- Fiction Analysis</p> <ul style="list-style-type: none"> • Plot and Dramatic Exposition, Reading Strategies, Internal/External Conflict, Legal Terminology, Characterization 	<p>- Nonfiction Analysis</p> <ul style="list-style-type: none"> • Transcendentalism, Figurative Language, Challenging Text, and Latin Prefix <i>ab-</i> <p>- Fiction Analysis</p> <ul style="list-style-type: none"> • Pastorals, Contemporary Commentary, Fact vs. Fiction, Latin Root <i>-lum-</i>, <p>- Elements of a Novel and Literary Devices</p> <ul style="list-style-type: none"> • Symbolism, Bildungsroman, Allusions, Characterization, Denotation 	<p>- Elements of a Novel and Literary Devices</p> <ul style="list-style-type: none"> • Stream-of-Consciousness, Types of Conflict, Word Roots, Perspective, Word Parts, Themes, Absent Characters, Symbolism <p>- MLA Style Research Paper</p> <p>- Fiction Analysis</p> <ul style="list-style-type: none"> • Conflict, Setting, Irony, Prediction, Point of View, Chronological Order, and Latin Roots <i>-pend-</i> and <i>-dict-</i> 	<p>- Elements of a Novel and Literary Devices</p> <ul style="list-style-type: none"> • Allusions, Point of View, Characterization, Context Clues, Setting, Foreshadow and Prediction, Parts of Speech, Symbolism, Figurative Language, Word Origins, Style, Tone, Theme, Symbols <p>- Compare and Contrast Nonfiction and Fiction Text</p> <p>- Current Events</p>
<p>English 11</p>	<p>- Short Fiction and Nonfiction Analysis</p> <ul style="list-style-type: none"> • Figurative Language, Rhetorical Techniques, and Other Pertinent Literary 	<p>- Poetry Analysis</p> <ul style="list-style-type: none"> • Figurative Language, Form, Structure, and Other Pertinent Literary and Sound Devices 	<p>- Tragic Hero Analysis in Greek, Shakespearean, and Modern American Drama</p> <p>- Examine Cross-curricular/Informational Texts</p>	<p>- Tragic Hero Novel Analysis</p> <ul style="list-style-type: none"> • Figurative Language, Imagery, Symbolism, and Other Pertinent Literary Devices

	<p>Devices</p> <ul style="list-style-type: none"> - Review of SAT Concepts 	<ul style="list-style-type: none"> - Fiction Analysis <ul style="list-style-type: none"> • Figurative Language and Other Literary Devices - Examine Cross-curricular/Informational Texts - Review of SAT Concepts 	<ul style="list-style-type: none"> - Review of SAT Concepts - MLA Style Research Paper 	<ul style="list-style-type: none"> - Examine Cross-curricular/Informational Texts - Review of SAT Concepts
AP English Language and Composition	<ul style="list-style-type: none"> - Essays With Following Rhetorical Modes: <ul style="list-style-type: none"> • Narration • Description • Illustration • Definition 	<ul style="list-style-type: none"> - Essays With Following Rhetorical Modes: <ul style="list-style-type: none"> • Process Analysis • Comparison and Contrast • Division and Classification 	<ul style="list-style-type: none"> - Essays With Following Rhetorical Modes: <ul style="list-style-type: none"> • Cause and Effect • Argumentation 	<ul style="list-style-type: none"> - Essays With Combined Rhetorical Modes - Review and preparation for the AP Exam - Academic Analytical Research Paper
	<p><i>Big Ideas/Skill Categories Across Units:</i></p> <ul style="list-style-type: none"> • Rhetorical Situation • Reasoning and Organization • Claims and Evidence • Style 			
Concepts of English 12	<ul style="list-style-type: none"> - Characteristics and Analysis of Contemporary Novels, Short Stories, and Nonfiction Pieces <ul style="list-style-type: none"> • Characterization, First Person, Narrative Style, Tone, Perspective, and Purpose 	<ul style="list-style-type: none"> - Analysis of Man's Acceptance of Fate and Circumstance <ul style="list-style-type: none"> • Tragedy, Epic Hero, Epic, Irony, Setting, Characterization, Theme 	<ul style="list-style-type: none"> - Analysis of Contemporary Literature and Nonfiction Addressing Conflict Within Society, Emotional and Mental Renewal, and Influential Voices of Progression and Change <ul style="list-style-type: none"> • Rhetorical Questions, Parallelism, Repetition, Figurative Language, Persuasion, Satire, Style, Tone, Meaning, and Purpose 	<ul style="list-style-type: none"> - Analysis of Contemporary Novels, Short Stories, and Nonfiction Pieces of Different Cultures <ul style="list-style-type: none"> • Tone and Meaning
English 12	<ul style="list-style-type: none"> - Characteristics of Contemporary Novels, Short Stories, and Nonfiction Pieces 	<ul style="list-style-type: none"> - Analysis of Contemporary Novels, Short Stories, and Nonfiction Pieces of Different Cultures - MLA Style Research Paper 	<ul style="list-style-type: none"> - Analysis of Contemporary Literature and Nonfiction Addressing Societal Conflict, Psychological and Structural Renewal, and Powerful Voices of Change 	<ul style="list-style-type: none"> - Analysis of Contemporary American Fiction and Nonfiction Defining 21st Century American Citizenship and Identity
AP English Literature and Composition	<ul style="list-style-type: none"> - Fundamental Elements of Fiction & Poetry 	<ul style="list-style-type: none"> - Shakespearean Tragedy, Sonnets, & Complex Verse 	<ul style="list-style-type: none"> - Contemporary Fiction & Poetry 	<ul style="list-style-type: none"> - Study of Classic Works of Literature - Review and preparation for the AP Exam - Academic Analytical Research Paper
	<p><i>Big Ideas Across Units:</i></p> <ul style="list-style-type: none"> • Character • Setting • Structure • Narration • Figurative Language 			

	<ul style="list-style-type: none"> Literary Argumentation 			
Journalism II/III	<ul style="list-style-type: none"> - News and First Amendment - Interviewing and Reporting - News Writing <ul style="list-style-type: none"> Headlines, Feature Story, Opinion, Captions, Current Events - Effective Photography/Design/ Layout - Copyrighting - Ethics/Accuracy - Associated Press Stylebook 	<ul style="list-style-type: none"> - News and First Amendment - Interviewing and Reporting - News Writing <ul style="list-style-type: none"> Headlines, Feature Story, Opinion, Captions, Current Events - Effective Photography/Design/ Layout - Copyrighting - Ethics/Accuracy - Associated Press Stylebook 	<ul style="list-style-type: none"> - News and First Amendment - Interviewing and Reporting - News Writing <ul style="list-style-type: none"> Headlines, Feature Story, Opinion, Captions, Current Events - Effective Photography/Design/ Layout - Copyrighting - Ethics/Accuracy - Associated Press Stylebook 	<ul style="list-style-type: none"> - News and First Amendment - Interviewing and Reporting - News Writing <ul style="list-style-type: none"> Headlines, Feature Story, Opinion, Captions, Current Events - Effective Photography/Design/ Layout - Copyrighting - Ethics/Accuracy - Associated Press Stylebook
Semester Electives				
Course	Marking Period 1/3		Marking Period 2/4	
Effective Writing	<ul style="list-style-type: none"> - Language and Linguistics - Memoirs - Short Story and Fiction (Narrative) - Essay Writing - Blog Writing 		<ul style="list-style-type: none"> - Language and Linguistics - Blog Writing - Rhetorical Devices (Social Issues) - Nonfiction (Journalistic Literature) 	
Journalism I	<ul style="list-style-type: none"> - News and First Amendment - Ethics/Accuracy - News Writing <ul style="list-style-type: none"> Headlines, Feature Story, Current Events - Text Annotation - Associated Press Stylebook 		<ul style="list-style-type: none"> - News Writing <ul style="list-style-type: none"> Sports, Opinion, Visual Storytelling - Editing and Layout/Design - Ethics/Accuracy - Student Press Law - Associated Press Stylebook 	
Marking Period Elective				
SAT Prep	<ul style="list-style-type: none"> - Knowing and Applying a Comprehension of the SAT Reading and Writing & Language Exams <ul style="list-style-type: none"> Evidence-Based Reading and Writing Writing and Language Format/Strategies and Approaches Contextual Vocabulary/Grammatical Structure 			

Mathematics Department Curriculum Map

Course	Marking Period 1	Marking Period 2	Marking Period 3	Marking Period 4
Pre-Algebra	<ul style="list-style-type: none"> - Numerical Expressions - Order of Operations - Algebraic expressions - Real Numbers - Least Common Multiple - Greatest Common Factor 	<ul style="list-style-type: none"> - Ratios and Proportions - Percentages - Linear Equations <ul style="list-style-type: none"> • One-step, Two-step, and Multi-step - Real World Applications 	<ul style="list-style-type: none"> - Absolute Value Equations - Linear Inequalities - Compound Linear Inequalities - Relations and Functions - Keystone Constructed Response Questions 	<ul style="list-style-type: none"> - Linear Functions <ul style="list-style-type: none"> • Graphically and Algebraically - Data Analysis <ul style="list-style-type: none"> • Measures of Central Tendency and Variability - Probability <ul style="list-style-type: none"> • Theoretical and Experimental Probabilities
Algebra 1	<ul style="list-style-type: none"> - Numerical Expressions - Order of Operations - Algebraic expressions - Real Numbers - Simplifying Radicals - Linear Equations, Inequalities, and Absolute Value Equations <ul style="list-style-type: none"> • One-step, Two-step, and Multi-step 	<ul style="list-style-type: none"> - Data Analysis <ul style="list-style-type: none"> • Measures of Central Tendency and Variability - Probability <ul style="list-style-type: none"> • Theoretical and Experimental Probabilities - Relations and Functions - Linear Functions <ul style="list-style-type: none"> • Graphically and Algebraically 	<ul style="list-style-type: none"> - Systems of Linear Equations and Inequalities - Real World Applications - Properties of Exponents - Polynomials <ul style="list-style-type: none"> • Classifying • Add/Subtract • Multiply 	<ul style="list-style-type: none"> - Factoring Polynomials - Rational Expressions - Factoring Quadratic Equations - Radical Equations - Rational Equations
Concepts of Geometry	<ul style="list-style-type: none"> - Basic Geometric Terms and Concepts <ul style="list-style-type: none"> • Points, Lines and Planes - Congruence (Segments and Angles) - Analytic Geometry <ul style="list-style-type: none"> • Distance, Midpoints, Parallel and Perpendicular Lines - Measuring and Classifying Angles - Inductive vs. Deductive Reasoning - Logically Equivalent Statements <ul style="list-style-type: none"> • Conditional, Converse, Inverse, Contrapositive - Postulates vs. Theorems 	<ul style="list-style-type: none"> - Congruent Triangles - Isosceles and Equilateral Triangles - Triangle Special Segments - Triangle Inequality Theorem - Similarity (Triangles) - Similarity Applications 	<ul style="list-style-type: none"> - Right Triangles <ul style="list-style-type: none"> • The Pythagorean Theorem. Special Right Triangles, Ratios - Trigonometric Ratios - Trigonometry Applications - Properties of Polygons, Parallelograms, Rectangles, Rhombuses, Squares, and Trapezoids - Coordinate Geometry Applications 	<ul style="list-style-type: none"> - Circles <ul style="list-style-type: none"> • Basics, Arc Measure, Arc Length, Area and Circumference, Sectors - Solid Geometry <ul style="list-style-type: none"> • Volume and Surface Area of Solids
Geometry	<ul style="list-style-type: none"> - Probability and Simulating Data - Using Venn Diagrams, Two-way Tables, and Tree Diagrams for Probability - Basic Geometric Terms and Concepts <ul style="list-style-type: none"> • Points, Lines and Planes - Congruence (Segments and Angles) 	<ul style="list-style-type: none"> - Congruent Triangles - Congruent Triangle Proofs - Isosceles and Equilateral Triangles - Parallel Lines and Angles - Proving Parallel Lines - Theorems involving Perpendicular Lines 	<ul style="list-style-type: none"> - Properties of Polygons, Parallelograms, Rectangles, Rhombuses, Squares, Trapezoids, and Kites - Proofs involving Parallelograms - Right Triangles <ul style="list-style-type: none"> • The Pythagorean Theorem. Special Right Triangles, 	<ul style="list-style-type: none"> - Circles <ul style="list-style-type: none"> • Basics, Arc Measure, Arc Length, Area and Circumference, Sectors - Solid Geometry <ul style="list-style-type: none"> • Volume and Surface Area of Solids

	<ul style="list-style-type: none"> - Analytic Geometry <ul style="list-style-type: none"> • Distance and Midpoints - Measuring and Classifying Angles - Inductive vs. Deductive Reasoning - Logically Equivalent Statements - Postulates vs. Theorems - Proofs of General Theorems 		<p style="text-align: center;">Ratios</p> <ul style="list-style-type: none"> - Proofs involving Similar Triangles - Trigonometric Ratios and Applications 	
Honors Geometry	<ul style="list-style-type: none"> - Probability, Distribution, and Simulating Data - Using Venn Diagrams and Two-way Tables for Conditional Probability - Basic Geometric Terms and Concepts - Inductive vs. Deductive Reasoning - Logic/Basics of Boolean Algebra - Deductive Structure <ul style="list-style-type: none"> • Postulates, Theorems, Basis of Euclidean Geometry - Points, Lines, and Planes 	<ul style="list-style-type: none"> - Triangle Classification, Congruence and Proof - Applications of Congruent Triangles - Triangle Sides and Angles - Triangles and Centers <ul style="list-style-type: none"> • Points of Concurrence - Parallel Lines and Angles <ul style="list-style-type: none"> • Indirect and Direct Proof 	<ul style="list-style-type: none"> - Transformations and Symmetries - Polygons, Diagonals, Interior/Exterior Angles, and Measurement - Quadrilaterals - Polygon Area Formulas - Proportion - Similarity of Polygons - Fibonacci and the Golden Ratio 	<ul style="list-style-type: none"> - Right Triangles and Similarity <ul style="list-style-type: none"> • The Pythagorean Theorem. Special Right Triangles, Ratios, Pythagorean Triples - Proofs - Trigonometric Ratios and Applications - Circles <ul style="list-style-type: none"> • Chords, Radii, Circumference, Arcs, Angles, Tangents and Secants, Common Tangents, Sectors, Arc Length and Area - Geometric Solids <ul style="list-style-type: none"> • Vertices, Edges, Faces, Classification • Volume and Surface Area - Similar Figures
Algebra 2	<ul style="list-style-type: none"> - Data Analysis <ul style="list-style-type: none"> • Probability, simulations, theoretical, experimental - Real Numbers - Linear Equations - Absolute Value Equations - Systems of Linear Equations - Systems of Linear Inequalities 	<ul style="list-style-type: none"> - Relations and Functions - Linear Functions - Application of Linear Models - Quadratic Equations and Functions - Real and Complex Roots of Quadratics 	<ul style="list-style-type: none"> - Polynomial Functions and Applications - Roots and Radical Expressions - Roots and Radicals Equations 	<ul style="list-style-type: none"> - Exponential Functions and Equations - Logarithmic Functions and Equations - Rational expressions
Algebra 2 and Trigonometry	<ul style="list-style-type: none"> - Data Analysis - Linear Functions - Systems of Linear Equations 	<ul style="list-style-type: none"> - Relations and Functions - Transformations - Quadratic Functions <ul style="list-style-type: none"> • Factoring, Graphing, Completing the Square, and/or Quadratic Formula - Real and Complex Roots - Quadratic Applications - Polynomial Operations 	<ul style="list-style-type: none"> - Polynomial Functions - Inverse Functions - Radical Functions - Exponential Functions - Logarithmic Functions 	<ul style="list-style-type: none"> - Rational Functions - Trigonometric functions - Unit Circle
Honors Algebra 2 and Trigonometry	<ul style="list-style-type: none"> - Fundamentals of Algebra 1 - Linear Functions - Systems of Linear Equations 	<ul style="list-style-type: none"> - Introduction to Matrices - Quadratic Functions <ul style="list-style-type: none"> • Factoring, Graphing, Completing the Square, 	<ul style="list-style-type: none"> - Radical Functions - Exponential Functions - Logarithmic Functions - Polynomial Functions 	<ul style="list-style-type: none"> - Rational Functions - Trigonometric Functions - Unit Circle - Application of Trigonometry

		<p>and/or Quadratic Formula</p> <ul style="list-style-type: none"> - Real and Complex Roots - Quadratic Applications 		<ul style="list-style-type: none"> - Data Analysis <ul style="list-style-type: none"> • Probability and Measures of Center and Spread
Pre-Calculus	<ul style="list-style-type: none"> - Data Analysis and Percentages - Introduction to Graphs <ul style="list-style-type: none"> • Distance Formula, Midpoint Formula, Intercepts, and Symmetry - Introduction and Analysis of Functions <ul style="list-style-type: none"> • Linear, Quadratic, Absolute Value, Square Root, Piecewise, Constant, Identity, Cubic, Cube Root, and Reciprocal 	<ul style="list-style-type: none"> - Linear Functions - Quadratic Functions - Polynomial Functions - Rational Functions - Exponential Functions 	<ul style="list-style-type: none"> - Exponential Functions - Logarithmic Functions - Trigonometric Terminology <ul style="list-style-type: none"> • Angles, Unit Circle, Radians, Degrees, Properties and Graphs - Trigonometric Functions 	<ul style="list-style-type: none"> - Inverse Trigonometric Functions <ul style="list-style-type: none"> • Inverse Sine and Cosine - Trigonometric Identities <ul style="list-style-type: none"> • Reciprocal, Even-odd, Pythagorean, Quotient, Sum and Difference - Trigonometric Equations - Applications of Trigonometric Functions - Four Conic Sections <ul style="list-style-type: none"> • Circle, Parabola, Ellipse, Hyperbola
Honors Pre-Calculus	<ul style="list-style-type: none"> - Data Analysis and Percentages - Introduction to Graphs <ul style="list-style-type: none"> • Distance Formula, Midpoint Formula, Intercepts, and Symmetry - Introduction and Analysis of Functions <ul style="list-style-type: none"> • Linear, Quadratic, Absolute Value, Square Root, Piecewise, Constant, Identity, Cubic, Cube Root, and Reciprocal - Review for SAT Reasoning Test 	<ul style="list-style-type: none"> - Linear Functions - Quadratic Functions - Polynomial Functions - Rational Functions - Exponential Functions - Logarithmic Functions - Review for SAT Reasoning Test 	<ul style="list-style-type: none"> - Trigonometric Terminology <ul style="list-style-type: none"> • Angles, Unit Circle, Radians, Degrees, Properties and Graphs - Trigonometric Functions <ul style="list-style-type: none"> • Sine, Cosine, Tangent, Cotangent, Cosecant, and Secant) - Inverse trigonometric functions <ul style="list-style-type: none"> • Inverse Sine and Cosine - Trigonometric Identities <ul style="list-style-type: none"> • Reciprocal, Even-odd, Pythagorean, Quotient, Sum and Difference, and Double Angle Identities - Trigonometric Identities Proofs - Trigonometric Equations - Review for SAT Reasoning Test and SAT Math Levels 1 and 2 Subject Tests 	<ul style="list-style-type: none"> - Applications of Trigonometric Functions - Circle Properties - Four Conic Sections <ul style="list-style-type: none"> • Circle, Parabola, Ellipse, Hyperbola - Systems of Equations, Inequalities, Non-Linear Equations - Sequences and Series - Sigma Notation - Multiplication Principle of Counting, Permutations, and Combinations - Review for SAT Reasoning Test and SAT Math Levels 1 and 2 Subject Tests
Intro to Statistics	<ul style="list-style-type: none"> - Measures of Central Tendency and Interquartile Range - Standard Deviation, Z-scores, and the Normal Curve - Scatter Plots, Correlations, and Least-Squares Regression Line - Residual Plots and Interpreting r-squared - Reasons for Relationships <ul style="list-style-type: none"> • Causation, Confounding, and Common Response 	<ul style="list-style-type: none"> - Bias and Simple Random Sample - Parameters and Test Statistics of samples - Margin of Error and Confidence Statements - Sampling Errors and Non-Sampling Errors - Placebo and Control Groups - Sampling Surveys - Logic of Experimental Design - Blind and Double-Blind Experiments - Randomized Experimental Design 	<ul style="list-style-type: none"> - Probability and Simulating Data - Independent Events - Probability Models and Sample Space - Venn Diagrams for Probability - Mutually Exclusive Events and Conditional Probability - Random Variables and Probability Distributions - Sampling Distribution - Factorials, Permutations, and Combinations 	<ul style="list-style-type: none"> - Confidence Intervals and Sample Proportions - Hypothesis Testing, One-sided or Two-sided - Misuses of Inference - Chi-square Tests <ul style="list-style-type: none"> • Goodness of Fit and Two-Way Tables - T-scores and p-values - Inference about a Population Mean

		<ul style="list-style-type: none"> - Block Designing Experiments - Experiments in the Real World - Ethics in Conducting Experiments 	<ul style="list-style-type: none"> - Binomial Distribution and the Binomial Theorem 	
Mathematical Modeling	<ul style="list-style-type: none"> - Polya's Four-Step Process for Solving Problems - Basic Principles of Algebra to Solve Real-World Problems - Proportional Reasoning - Functional Relationships Graphically and Algebraically - Mathematical Models to Solve Problems - Linear Functions (Graphically and Algebraically) 	<ul style="list-style-type: none"> - Linear Functions (Graphically and Algebraically) Continued - Applications of Linear Models - Systems of Linear Equations and Inequalities as Mathematical Models - Graphs of Quadratic and Exponential Functions - Maximum and Minimum values of a Function - Methods to Solve Quadratic Equations - Exponential Growth and Decay - Applications of Quadratic and Exponential Models 	<ul style="list-style-type: none"> - Using Geometric Models to Solve Problems <ul style="list-style-type: none"> • Polygons, Circles, 3-D Figures - Applications of Pythagorean Theorem - Trigonometric Ratios - Applications Involving Trigonometry - Scale factors and proportional relationships - Problem Solving with Statistical and Probability Models - Measures of Central Tendencies and Variability 	<ul style="list-style-type: none"> - Measures of Central Tendencies and Variability Continued - Normal Distributions and Properties of the Normal Curve - Random Sampling and Bias - Theoretical vs. Experimental Probability - Probability of Simple and Compound Events - Applications of Probability - Personal Finances - Simple vs. Compound Interest - Financing a Mortgage
Calculus	<ul style="list-style-type: none"> - Review of Pre-Calculus Topics - Limits and Continuous Functions 	<ul style="list-style-type: none"> - Differentiation <ul style="list-style-type: none"> • Definition and Basic Derivative Rules • Composite, Implicit, and Inverse Functions - Contextual Applications of Differentiation <ul style="list-style-type: none"> • Related rates problems, L'Hospital's Rule, and Linear Motion 	<ul style="list-style-type: none"> - Analytical Applications of Differentiation <ul style="list-style-type: none"> • Function Analysis, Optimization, and The Mean Value Theorem 	<ul style="list-style-type: none"> - Integration and Accumulation of Change <ul style="list-style-type: none"> • Riemann Sums, The Fundamental Theorem of Calculus, Using Substitution, Parts, Long Division, Completing the Square, and Antidifferentiation - Applications of Integration <ul style="list-style-type: none"> • Including Area Between Two Curves
AP Calculus AB	<ul style="list-style-type: none"> - Review of Pre-Calculus Topics - Limits and Continuous Functions - Differentiation <ul style="list-style-type: none"> • Definition and Basic Derivative Rules • Composite, Implicit, and Inverse Functions 	<ul style="list-style-type: none"> - Contextual Applications of Differentiation <ul style="list-style-type: none"> • Related rates problems, L'Hospital's Rule, and Linear Motion - Analytical Applications of Differentiation <ul style="list-style-type: none"> • Function Analysis, Optimization, and The Mean Value Theorem 	<ul style="list-style-type: none"> - Integration and Accumulation of Change <ul style="list-style-type: none"> • Riemann Sums, The Fundamental Theorem of Calculus, Using Substitution, Parts, Long Division, Completing the Square, and Antidifferentiation - Applications of Integration <ul style="list-style-type: none"> • Including Area Between Two Curves 	<ul style="list-style-type: none"> - Applications of Integration <ul style="list-style-type: none"> • Including Area Between Two Curves - Differential Equations <ul style="list-style-type: none"> • Exponential Growth and Decay - Review and preparation for the AP Exam - Extension and enrichment topics
AP Calculus BC	<ul style="list-style-type: none"> - Review of Pre-Calculus Topics - Limits and Continuous Functions - Differentiation <ul style="list-style-type: none"> • Definition and Basic Derivative Rules • Composite, Implicit, and 	<ul style="list-style-type: none"> - Contextual Applications of Differentiation <ul style="list-style-type: none"> • Related rates problems, L'Hospital's Rule, and Linear Motion - Analytical Applications of 	<ul style="list-style-type: none"> - Integration and Accumulation of Change <ul style="list-style-type: none"> • Riemann Sums, The Fundamental Theorem of Calculus, Using Substitution, Parts, Long 	<ul style="list-style-type: none"> - Applications of Integration <ul style="list-style-type: none"> • Including Area Between Two Curves - Review and preparation for the AP Exam - Extension and enrichment topics

	Inverse Functions	Differentiation <ul style="list-style-type: none"> Function Analysis, Optimization, and The Mean Value Theorem - Integration and Accumulation of Change <ul style="list-style-type: none"> Riemann Sums, The Fundamental Theorem of Calculus, Using Substitution, Parts, Long Division, Completing the Square, and Antidifferentiation 	Division, Completing the Square, and Antidifferentiation <ul style="list-style-type: none"> Applications of Integration <ul style="list-style-type: none"> Including Area Between Two Curves Differential Equations <ul style="list-style-type: none"> Exponential Growth and Decay Infinite Sequences and Series <ul style="list-style-type: none"> Geometric Series, Divergence/Convergences, Harmonic Series, p-Series, Ratio Test, and Taylor or Maclaurin Series 	
AP Statistics	<ul style="list-style-type: none"> Exploring One-Variable Data <ul style="list-style-type: none"> Tables, Graphs, Distribution, The Normal Distribution Exploring Two-Variable Data <ul style="list-style-type: none"> Correlation and Linear Regression Models, Collecting Data 	<ul style="list-style-type: none"> Collecting Data Probability, Random Variables, and Probability Distributions Sampling Distributions 	<ul style="list-style-type: none"> Probability, Random Variables, and Probability Distributions Sampling Distributions Probability, Random Variables, and Probability Distributions Inference for Quantitative Data: Proportions, Means, Chi-Square, and Slopes 	<ul style="list-style-type: none"> Inference for Quantitative Data: Proportions, Means, Chi-Square, and Slopes Review and preparation for the AP Exam Extension and enrichment activities
AP Computer Science A	<ul style="list-style-type: none"> Review of Programming II Concepts MagPie Lab Enhanced for Loop Basic Inheritance <ul style="list-style-type: none"> Superclasses and Subclasses 	<ul style="list-style-type: none"> Inheritance <ul style="list-style-type: none"> Overriding Methods, Abstract Methods/Classes, Polymorphism, Creating References Recursion Sorting and Searching Picture Lab 	<ul style="list-style-type: none"> Consumer Lab Celebrity Lab Topic Presentations Creative Program 	<ul style="list-style-type: none"> Review and preparation for the AP Exam Graphical User Interfaces <ul style="list-style-type: none"> Windows, Checkboxes, Radio Buttons, Colors/Layouts, Images
AP Computer Science Principles	<ul style="list-style-type: none"> Number Systems Introduction to Programming <ul style="list-style-type: none"> Variables, Conditionals, Functions, and Lists 	<ul style="list-style-type: none"> Introduction to Programming <ul style="list-style-type: none"> Lists, Loops, Traversals, Parameters, and Returns AP Create Performance Task 	<ul style="list-style-type: none"> Digital Information <ul style="list-style-type: none"> Encoding Text and Images and Compression The Internet <ul style="list-style-type: none"> Networks, Routers, Redundancy, and Protocols The Digital Divide Data/Big Data Machine Learning 	<ul style="list-style-type: none"> Cybersecurity Global Impacts Simulations Heuristics / Undecidable Problems Computing Innovations Review and preparation for the AP Exam Extension and enrichment project
Semester Electives				
Course	Marking Period 1/3		Marking Period 2/4	
Computer Programming I	<ul style="list-style-type: none"> Basic Components on AppLab <ul style="list-style-type: none"> Events, Labels, Buttons, Variables, and Radio Buttons 		<ul style="list-style-type: none"> Control Structures Functions 	

	- Decision Structures	- String Functions - Final Application and Poster
Computer Programming II	- Java Basics <ul style="list-style-type: none"> ● Primitive Types, Method, and Boolean Expressions - Program Flow/Decision Structures - Control Structures - Methods	- Classes and Object-Oriented Programming - Arrays (1D and 2D) - ArrayLists - Final Program
Marking Period Elective		
SAT Prep	- Review for the four content areas on the math part of the College Board SAT: Heart of Algebra, Passport to Advanced Mathematics, Problem Solving with Data Analysis, and Additional Topics in Mathematics <ul style="list-style-type: none"> ● Linear Expressions, Equations, and Inequalities ● Systems of Linear Equations/Inequalities ● Measures of Central Tendency and Variability ● Probability ● Ratios, Proportions, Percentages and Unit ● Scatterplots, Graphs, Tables, and Equations ● Function Notation ● Operations with Polynomials and Complex Numbers ● Quadratic Equations (Factoring, Graphing, Completing the Square, and/or Quadratic Formula) ● Rational and Radical Expressions/Equations ● Exponential/Trigonometric Functions ● Congruence and Similarity (Lines, Angles, and Triangles) 	

Social Studies Department Curriculum Map

Course	Marking Period 1	Marking Period 2	Marking Period 3	Marking Period 4
Concepts of American Studies	-Aftermath of the Civil War and Reconstruction - The Civil Rights Movement	- Immigration - Industrial Age - The Great Depression	- American Foreign Policy - Imperialism - Spanish-American War - US involvement in the World Wars <ul style="list-style-type: none"> ● World War I ● World War II 	- The Cold War, Social Changes, and Vietnam - US involvement in the Middle East - War on Terror - Current issues dealing with foreign policy
American Studies	- Aftermath of the Civil War and Reconstruction - The Civil Rights Movement	- Immigration - Industrial Age - The Great Depression - Modern American Economy	- American Foreign Policy - Imperialism - Spanish-American War - US involvement in the World Wars <ul style="list-style-type: none"> ● World War I ● American foreign policy between the World Wars ● World War II 	- The Cold War, Social Changes, and Vietnam - US involvement in the Middle East - War on Terror - Current issues dealing with foreign policy
Honors American Studies	- Foundation of American Studies - Aftermath of the Civil War and Reconstruction - The Civil Rights Movement	- Immigration - Industrial Age - The Great Depression - Modern American Economy	- American Foreign Policy - Imperialism - Spanish-American War - US involvement in the World Wars <ul style="list-style-type: none"> ● World War I ● American foreign policy between the World Wars ● World War II 	- The Cold War, Social Changes, and Vietnam - US involvement in the Middle East - War on Terror - Current issues dealing with foreign policy
Concepts of World Studies	- Pre-Modern Europe, 2000 BC-1600 AD <ul style="list-style-type: none"> ● Geography, Government and Economic Systems ● Impacts of Ancient Greeks and Romans ● Renaissance ● Enlightenment ● Age of Reason ● Age of Exploration 	- Modern Europe <ul style="list-style-type: none"> ● Geography, Government and Economic Systems ● Significant and influential individuals ● Industrial Revolution ● World War I, World War II, Cold War - Middle East, 600 – Present <ul style="list-style-type: none"> ● Geography, Government, Culture, and Economic Systems ● Effects of religious and cultural differences ● Significant and influential individuals of the Middle East 	- China, Japan, Korea, and Vietnam, 2000 BC – Present <ul style="list-style-type: none"> ● Geography, Government, Culture, and Economic Systems ● Significant and influential individuals of Asia ● European Influence ● 20th Century Wars - India, 2000 BC – Present <ul style="list-style-type: none"> ● Geography, Government, Culture, and Economic Systems ● Significant and influential individuals of Indian Subcontinent ● European Imperialism 	- Africa, 2000 BC – Present <ul style="list-style-type: none"> ● Geography, Government, Culture, and Economic Systems ● Significant and influential individuals of Africa ● European Imperialism - Latin America, 2000 BC – Present <ul style="list-style-type: none"> ● Geography, Government, Culture, and Economic Systems ● Significant and influential individuals of Latin America ● European Imperialism

World Studies	- From Village Community to City-State, 10,000 BCE-750 BCE - Dawn of Empires to Classical Empires, 2000 BCE-600 CE - The Rise of World Religions, 2500 BCE-1500 CE	- World Trade and Global Connections, 1000-1650 - Social Change through Philosophy and the Industrial Revolution, 1650-1914	- Exploding Technology and Contested Visions of a New International Order, 1914-1991	- Evolving Identities, 1945-Present
AP U.S. History	- Period 1: 1491-1607 - Period 2: 1607-1754 - Period 3: 1754-1800	- Period 4: 1800-1848 - Period 5: 1844–1877 - Period 6: 1865–1898	- Period 6: 1865–1898 - Period 7: 1890–1945	- Period 8: 1945–1980 - Period 9: 1980–Present - Review and preparation for the AP Exam - Extension and enrichment activities
	<p>- <i>Major Themes Across Units:</i></p> <ul style="list-style-type: none"> ● American and National Identity ● Politics and Power ● Work, Exchange, and Technology ● America in the World ● Geography and the Environment ● American and Regional Culture ● Migration and Settlement ● Social Structures 			
AP World History	- The Global Tapestry (1200-1450) - Networks of Exchange (1200-1450)	- Land Based Empires (1450-1750) - Transoceanic Interconnections (1450-1750)	- Revolutions (1750-1900) - Consequences of Industrialization (1750-1900)	- Global Conflict (1900-Present) - Cold War and Decolonization (1900-Present) - Globalization (1900-Present) - Review and preparation for the AP Exam - Extension and enrichment activities
AP European History	- Renaissance and Exploration (1450-1648) - Age of Reformation (1450-1648) - Absolutism and Constitutionalism (1648-1815)	- Scientific, Philosophical and Political Developments (1648-1815) - Conflict, Crisis, and Reaction in the Late 18th Century (1648-1815) - Industrialization and Its Effects (1815-1914)	- 19th-Century Perspectives and Political Developments (1815-1914) - 20th-Century Global Conflicts (1914-present)	- Cold War and Contemporary Europe (1914-present) - Review and preparation for the AP Exam - Extension and enrichment activities/project
Concepts of American Government	- Foundations of American Democracy <ul style="list-style-type: none"> ● Declaration of Independence ● Articles of Confederation ● The Constitution/ Amendments - Public Policy	- Political Behavior: Government by the People - Political Parties - Rights, Responsibilities, and Duties of Citizenship	- Branches of the Government - Civil Rights and Liberties	- Comparative and Local Government

American Government	<ul style="list-style-type: none"> - Foundations of American Democracy <ul style="list-style-type: none"> • Declaration of Independence • Articles of Confederation • The Constitution/ Amendments - Public Policy 	<ul style="list-style-type: none"> - Political Behavior: Government by the People - Political Parties - Rights, Responsibilities, and Duties of Citizenship 	<ul style="list-style-type: none"> - Branches of the Government - Civil Rights and Liberties 	<ul style="list-style-type: none"> - Comparative and Local Government
AP U.S. Government & Politics	<ul style="list-style-type: none"> - Foundations of American Democracy - American Political Ideologies and Beliefs 	<ul style="list-style-type: none"> - American Political Ideologies and Beliefs - Political Participation - Interactions Among Branches of Government 	<ul style="list-style-type: none"> - Interactions Among Branches of Government - Civil Liberties and Civil Rights 	<ul style="list-style-type: none"> - Civil Liberties and Civil Rights - Review and preparation for the AP Exam - Government and Politics Research Project
AP Comparative Government and Politics	<ul style="list-style-type: none"> - Political Systems, Regimes, and Governments - Political Institutions - Political Culture and Participation 	<ul style="list-style-type: none"> - Party and Electoral Systems and Citizens Organizations - Political and Economic Changes and Development - United Kingdom's Political System, Regime, and Government 	<ul style="list-style-type: none"> - Russia's Political System, Regime, and Government - China's Political System, Regime, and Government - Mexico's Political System, Regime, and Government - Nigeria's Political System, Regime, and Government 	<ul style="list-style-type: none"> - Iran's Political System, Regime, and Government - Review and preparation for the AP Exam - Comparative Analysis Summative Project
Concepts of Geography	<ul style="list-style-type: none"> - Geographical Tools and Concepts - Physical, Cultural, and Economic Geography of: <ul style="list-style-type: none"> • United States and Canada 	<ul style="list-style-type: none"> - Physical, Cultural, and Economic Geography of: <ul style="list-style-type: none"> • Latin America • Europe and Russia 	<ul style="list-style-type: none"> - Physical, Cultural, and Economic Geography of: <ul style="list-style-type: none"> • Africa 	<ul style="list-style-type: none"> - Physical, Cultural, and Economic Geography of: <ul style="list-style-type: none"> • Asia • Pacific Realm
AP Human Geography	<ul style="list-style-type: none"> - Geography: Its Nature and Perspectives - Population and Migration Patterns and Processes 	<ul style="list-style-type: none"> - Cultural Patterns and Processes - Political Patterns and Processes 	<ul style="list-style-type: none"> - Cultural Patterns and Processes (continued) - Agriculture and Rural Land-Use Patterns and Processes - Industrial and Economic Development Patterns and Processes 	<ul style="list-style-type: none"> - Cities and Urban Land-Use Patterns and Processes - Review and preparation for the AP Exam - Service Learning Project
AP Psychology	<ul style="list-style-type: none"> - The Science of Psychology - The Biological Perspective - Sensation and Perception - Consciousness: Sleep, Dreams, Hypnosis, and Drugs - Learning 	<ul style="list-style-type: none"> - Memory - Cognition: Thinking, Intelligence, and Language - Motivation and Emotion - Stress and Health 	<ul style="list-style-type: none"> - Development Across the Lifespan - Theories of Personality - Psychological Disorders - Psychological Therapies 	<ul style="list-style-type: none"> - Social Psychology - Review and preparation for the AP Exam - Extension and enrichment activities and projects
AP Microeconomics/ Macroeconomics	<ul style="list-style-type: none"> - Basic Economic Concepts - Supply and Demand - Production, Cost, and the Perfect Competition Model - Imperfect Competition 	<ul style="list-style-type: none"> - Factor Markets - Market Failure and the Role of Government 	<ul style="list-style-type: none"> - Economic Indicators and the Business Cycle - National Income and Price Determination 	<ul style="list-style-type: none"> - Financial Sector - Long-Run Consequences of Stabilization Policies - Review and preparation for the AP Exam

				- Extension and enrichment activities and research
Semester Electives				
Course	Marking Period 1/3		Marking Period 2/4	
Geography	<ul style="list-style-type: none"> - Five Themes of Geography - Physical and Cultural Geography of: <ul style="list-style-type: none"> • United States and Canada • Latin America • Europe • Russia 		<ul style="list-style-type: none"> - Physical and Cultural Geography of: <ul style="list-style-type: none"> • North Africa, Southwest, and Central Asia • Africa South of the Sahara • South Asia • East Asia • Southeast Asia 	
Peace Studies	<ul style="list-style-type: none"> - Foundations of Peace/Historical Racism and Discrimination - Holocaust and Genocide 		<ul style="list-style-type: none"> - Peacemakers and Advocacy - Philosophy of War, Modern Movements, and the World Today 	
Psychology	<ul style="list-style-type: none"> - History of Psychology - Research Methods - Psychobiology/Learning - Developmental Psychology 		<ul style="list-style-type: none"> - Sensation and Perception - Psychopathology - Therapies - Social Psychology 	
History Through Media	<ul style="list-style-type: none"> - Ancient Rome - Medieval Europe and the Dark Ages - The Holocaust in Film 		<ul style="list-style-type: none"> - Pre 1900 America: From Colonies to Empire - America in Crisis: The Great Depression and World War II - Final Project/Cultural Groups in Media 	
Sociology	<ul style="list-style-type: none"> - History of Sociology - Three Main Paradigms - Research Methods - Ethics - Culture - Types of Societies 		<ul style="list-style-type: none"> - Self Development - Socialization - Types of Groups - Formal Organizations - Social Control and Criminal Justice System - Modern Media and Technology 	
Social Problems	<ul style="list-style-type: none"> - Social Problems - Research Methods - Collective Behavior - Social Classes, Change and Mobility - Prejudice and Discrimination - Global Patterns 		<ul style="list-style-type: none"> - Sex, Gender, and Gender Inequality - Global Differences - Aging - Diversity - Development of Economic Systems - Social Epidemiology 	
American Military History	<ul style="list-style-type: none"> - Foundations of the American Military Tradition - Colonial Wars and Revolution - The Birth of a National Military and Westward Expansion - The American Civil War 		<ul style="list-style-type: none"> - Reconstruction - Expanding Westward and Overseas - World War II - Cold War, Hot War and Beyond 	
Economics	<ul style="list-style-type: none"> - Introduction to Economics - Scarcity - Types of Economic Systems - Supply and Demand 		<ul style="list-style-type: none"> - Pricing and Incentive - Government and the Economy - Taxes - Government Spending 	

		<ul style="list-style-type: none">- The Federal Reserve- Globalization
Intro to Entrepreneurship	<ul style="list-style-type: none">- Entrepreneurship Basics- Supply and Demand- Risks- Recognizing Opportunities- Business Ethics	<ul style="list-style-type: none">- Advertising and Marketing- Management- Finances- Legality,- Business plan

World Languages Department Curriculum Map

Course	Marking Period 1	Marking Period 2	Marking Period 3	Marking Period 4
French 1	<ul style="list-style-type: none"> - Greetings and Courtesies - Introduce someone - Age - Classroom Objects/Commands - Spelling - Email Address - Likes/Dislikes - Agree/Disagree - Activities and Preferences 	<ul style="list-style-type: none"> - Describe People - Opinions - Family - Classes - Require/Inquiry 	<ul style="list-style-type: none"> - Interests - Extend, Accept, and Refuse an Invitation - Make Plans - Offer, Accept, and Refuse Food - Inquire about Food - Food Order - Prices and Check 	<ul style="list-style-type: none"> - Store - Opinions - Prices - Decision-Making - Permission - Frequency of Events - House - Item Location
French 2	<ul style="list-style-type: none"> - Family Nicknames - After-School Activities - Cafés - People / Self - Activities - Emotions - Holidays, Celebrations, Party Preparation - Use of Formal vs. Informal Language - Adjective Agreement - Negative Expressions - Present Tense Regular Verbs - Direct/Indirect Object Pronouns 	<ul style="list-style-type: none"> - Metric System - Typical Foods of Quebec - Shopping in Quebec - The Partitive Article - Indefinite articles UN, UNE, DES - Pronoun Y and EN - Question formation - Prepositions - Review of Object Pronouns - Contractions with À and DE 	<ul style="list-style-type: none"> - School Places and Events - Computer Terms - Curiosity - Negative Pronouns - Morning Routine - Expressing Impatience - Daily Routine - Recommendations - Childhood Activities - Country Life - Review of Direct/Indirect Object Pronouns - Usage of Object Pronouns with the Passé Composé - Reflexive Verbs - Adverbs and Adverb Placement - Imperfect Tense 	<ul style="list-style-type: none"> - Camping - Nature - Animals - Activities - Parts of the Body - Injuries and Illnesses - Improving Health - Future Tense of Regular/Irregular Verbs - Subjunctive Regular/Irregular Verbs
French 3	<ul style="list-style-type: none"> - Back-to-School - After-School Activities - Summer (Activities, Things, Places) - Likes/Dislikes - Professions and Services - Telephone and Formal Letter - Regular/Irregular Verbs in Present Tense/Future Tense - The Passé Composé 	<ul style="list-style-type: none"> - Legends - Fairy Tales and Fables - Historical Accounts from Africa - Events and Settings from Story - Reciprocal Actions and Emotions - Life Events and Emotions - Review of Imperfect Tense - Reflexive Verbs in the Passé Composé - The Subjunctive 	<ul style="list-style-type: none"> - Nature and Animals - Exploration - Francophone Newspaper and Magazines - News - Direct Pronouns - Sequence of Tenses - Negative Expressions 	<ul style="list-style-type: none"> - Natural Phenomena - Environmental Issues and Solutions - Political Campaign - Government / Government Services - Comparative and Superlative - Future Simple and Perfect - Passive Voice - Prepositions - Adverbs - Past Subjunctive
French 4	<ul style="list-style-type: none"> - Prehistoric France and Art - Current French Provinces and Departments - Gallic Period in France 	<ul style="list-style-type: none"> - Read and Discuss French Literary Pieces - Formation and Use of Future and Conditional Tenses of Regular/Irregular Verbs and Present 	<ul style="list-style-type: none"> - History of France in 18th Century, Louis XV, Madame de Pompadour, Pre-Revolutionary France, Louis XVI, Marie Antoinette, the Estates General, French Revolution 	<ul style="list-style-type: none"> - Napoleon - Leadership in France through 19th Century - Impressionist Movement in Art - 20th Century France

	<ul style="list-style-type: none"> - Clovis' Death, the Normand Conquest, William the Conqueror, and the Bayeux Tapestry - Conjugation and Use of Select Verbs - Usage of Articles and Gender Nouns - Present and Imperative formations of the three regular classifications of verbs –er, -ir, -re verbs - Formation and Placement of Adverbs - Passé Composé and Imparfait - Cultural Differences and Similarities 	<ul style="list-style-type: none"> and Past Subjunctive of Regular/Irregular Verbs - Francois I, Henry IV, L'Académie Française, Louis XIV, and Versailles - Personal and Public Identities - Review of Numbers (Cardinal and Ordinal) - Cultural Differences and Similarities 	<ul style="list-style-type: none"> and Storming of the Bastille Prison - Official Time Schedules - Conjugation and use of Reflexive/Reciprocal Verbs - French Narratives - Adjectives and Negative Phrases - Present Participle - Possessive/ Relative Pronouns 	<ul style="list-style-type: none"> - Future and Conditional Tenses - Love, Friendship and Family - Cultural Differences and Similarities
AP French	<ul style="list-style-type: none"> - Tolerance - Environmental Issues - Health - Human Rights and Politics - Food - War and Peace - Usage of Present Tense and Imperative Forms of Regular/Irregular Verbs - Gender and Agreement of Nouns and Articles - Usage of the Recent Past, Passé Compose, and Past Participle - Cultural Differences 	<ul style="list-style-type: none"> - Innovations and Inventions - Science and Ethics - Technology and Intellectual Property - Publicity and Consumers - Usage and Formation of Adjectives and Adverbs - Comparison of Past Tenses including the Imperfect and Passé Simple - Usage of Future, Future Antérieur, Conditional and Conditional Past Tenses - Cultural Differences 	<ul style="list-style-type: none"> - Rites of Passage - Patriotism and Nationalism - Education Communities - National and Ethnic Identities - Beliefs and Value Systems - Alienation and Assimilation - Sports and Leisure - Language and Identity - Usage of Possessive and Demonstrative Adjectives - Usage of the Subjunctive Verb Tense - Cultural Differences 	<ul style="list-style-type: none"> - Family Structure - Childhood and Adolescence - Customs and Heritage - Friendship and Love - Architecture - Visual and Performing Arts - Usage of Relative Pronouns - Review of Prepositions and Conjunctions - Negative Words Usage - Cultural Differences - Review and preparation for the AP Exam - Extension and enrichment activities
German 1	<ul style="list-style-type: none"> - Alphabet - Feelings - Greetings & Farewells - Numbers 0-100 and Ordinal Numbers - Days, Months and Birthday - Name, Age, Location - Family - Pets - Appearance and Character - Basic Geographical Vocabulary - Subject Pronouns (Singular and Plural) - Definite/Indefinite Articles - Conjugation of Regular Verbs - Possessive Adjectives - Negative Article - Formation of Basic Questions 	<ul style="list-style-type: none"> - Leisure Activities - Instruments and Games - Indications of Time - Sequencing Words - Likes/Dislikes - School Types - School Subjects and Grades - School Supplies and Currency - Time and Duration - Expressions of Sympathy, Encouragement, and Praise - Conjugation of Regular Verbs - Syntax in Statements and Questions - Accusative Case for Direct Objects 	<ul style="list-style-type: none"> - Hunger and Thirst - Table Settings - Food Related Content - Taste - Types of Houses - House Details - Email - Accusative Case for Direct Objects - Dative Case - Addressing People Formally 	<ul style="list-style-type: none"> - Clothing Items/Fit and Look - Colors - Prices - Clothing Store Options - Names of Stores and Facilities - Directions - Frequency - Separable Prefix Verbs
German 2	<ul style="list-style-type: none"> - Luggage 	<ul style="list-style-type: none"> - Vacation Destinations 	<ul style="list-style-type: none"> - Restaurant Foods 	<ul style="list-style-type: none"> - Hobbies

	<ul style="list-style-type: none"> - Airport Facilities - Airport Jobs - Transportation - Youth Hostels - Morning Routine - Camping Items - Adjectives and Adverbs/Superlative Forms - Reflexive Verbs - Dative and Accusative Cases 	<ul style="list-style-type: none"> - Weather Expressions - Housing Comparison - Activities at Home - Farm Animals and Pets - Regular/Irregular Verbs in Narrative Past Tense - Infinitives 	<ul style="list-style-type: none"> - Table Settings and Tableware - Fruits and Vegetables - German Department Store - The Genitive/Prepositions - Demonstrative Pronouns - Question Words 	<ul style="list-style-type: none"> - Interests - Contemporary Discussion Topics - Outdoor Survival Skills - Amusement Park Attractions - Holidays/Greetings - Adjectives
German 3	<ul style="list-style-type: none"> - Travel/Transportation - Airport Jobs - Sightseeing - Film and Cinema - Coordinating and Subordinating Conjunctions - Present Perfect and Narrative Past - Expressions for Times of Day 	<ul style="list-style-type: none"> - Values/Beliefs - Technology/Internet - Board Games - Cars/Dashboard - Relative Pronouns - Present Subjective II: Request and Wishes - Compound Nouns - Imperative - Prepositional Verbs - If/Then Clauses 	<ul style="list-style-type: none"> - Austria Tourism - Hiking - Class Reunion - Job and Applying - Comparative and Superlative - Comparison of Adjectives/Adverbs - If/Then Statements in Past Tense - Da-Compounds - Double Infinitive - Narrative Past and Present/Past Subjunctive 	<ul style="list-style-type: none"> - Hobbies and Interests - Health and Nutrition - Sports Equipment - Relative Pronouns - Wo-Compounds - Infinitive Clauses - The Genitive
German 4	<ul style="list-style-type: none"> - Free Time Activities - Technology Use of Germans <ul style="list-style-type: none"> • Communication, Entertainment, and News - Present Tense Formation of Regular/Irregular Verbs - Past Tense Formation of Regular/Irregular Verbs 	<ul style="list-style-type: none"> - History Since World War II - Family Structure - Family and Career - Verb Positions in Statements and Questions - Dependent and Independent Clauses - Nominative and Accusative Cases - Time Expressions 	<ul style="list-style-type: none"> - Popular Music <ul style="list-style-type: none"> • Types and Bands - Careers - German School System - Dative Case - Time Expressions with Dative Case - Da- and Wo-Compounds - The Genitive Case 	<ul style="list-style-type: none"> - Ethnic Make-Up - Contribution of Immigrants to Germany - Obstacles Faced by Immigrants into German Society - Common Stereotypes - German Attitude Toward Americans and Self - Cultural Misunderstandings - Preceded and Unprecedented Adjectives - Comparison of Adjectives/Adverbs - The Subjunctive II Tense - Conditional Sentences
AP German	<ul style="list-style-type: none"> - German school customs - Free Time Activities of German Young People - Important Ages and Rites of Passage for Teenagers in German Society - Structure of the German Educational system - Post Graduation Options for Teenagers in German Society - Usage of Present Tense, Past Tense, and Reflexive Verbs 	<ul style="list-style-type: none"> - Technology - Obtaining Information - Internet Privacy - Social Networking - Customs and Values - Role of Art in German Society - Graffiti in Germany - Food and Culture - Cultural Differences 	<ul style="list-style-type: none"> - Recycling in Germany - Nuclear Power in Germany - Fossil Fuels and Renewable Energy in Germany - German Inventors - Social Media - Data Protection and Online privacy - Usage of Subjunctive II - Cultural Differences 	<ul style="list-style-type: none"> - Immigration to Germany - Emigration from Germany - What is German? What is Germany? - Symbols and History - Germany's Position in Europe - Usage of Dative, Accusative, and Two-Way Prepositions - Usage of Coordinating and Subordinating conjunctions - Multicultural Society

	<ul style="list-style-type: none"> - Usage of the Comparative and Superlative - Usage of Da and Wo Compounds - Cultural Differences 			<ul style="list-style-type: none"> - Integration of Foreigners into Society - Review and preparation for the AP Exam - Extension and enrichment activities
Spanish 1	<ul style="list-style-type: none"> - Greetings and Courtesies - Leave-Taking Phrases - Introductions - Exchanging Phone Numbers - Origin - Numbers 1-10 - Addressing People Formally vs. Informally - Spanish Alphabet and Pronunciation - Date and Weather - Cultural Differences and Similarities - Likes/Dislikes - Subject Pronouns - Definite and Indefinite Articles - Agreement of Nouns and Adjectives - Basic Transitions 	<ul style="list-style-type: none"> - Time - Daily Schedules - Frequency - School Subjects - Classroom Activities - Classroom Objects - Adverbs/Adjectives - Prepositions of Location - Select questions - Cultural Differences and Similarities 	<ul style="list-style-type: none"> - Meals and Common Foods - Food Likes/Dislikes - Family and Pets - Asking/Answering Questions with Target Question Words - Select Verb Conjugation - Possessive Adjectives - Comparatives and superlatives - Cultural Differences and Similarities 	<ul style="list-style-type: none"> - Seasons and Weather - Clothing Descriptions - Stores and Places - Discuss Purchases - Use of Direct Object Pronouns - Cultural Differences and Similarities
Spanish 2	<ul style="list-style-type: none"> - Descriptions of People - Activities - Places - Emotions - Food - Travel Preparations - Airport - Around Town - Vacation Activities - Vacation Lodgings - Gifts and Souvenirs - Definite/Indefinite Articles - Adjectives - Present Tense Regular/Stem-Changing Verbs - Direct/Indirect Object Pronouns - Using Interrogatives 	<ul style="list-style-type: none"> - Sports - Staying Healthy - Daily Routines - Sequencing Words - Parts of the Body - Clothing and personal items - Places to shop - Expressing opinions - Demonstrative Adjectives and Pronouns - Reflexive Verbs - Present Progressive - Pronouns After Prepositions 	<ul style="list-style-type: none"> - Marketplace Items - Expressions of Courtesy - Legend Terms - People Descriptions - Ancient Civilizations and Modern Cities - Giving Directions - Past Participles as Adjectives - Expressions of Time - Irregular Preterite Verbs - Imperfect tense - Preterite vs. Imperfect 	<ul style="list-style-type: none"> - Ingredients - Food Preparation - Food Description - Meals - Phrases Used in a Restaurant - Restaurant Dishes - Formal Commands - Formal Commands with Pronouns - Affirmative and Negative Words
Spanish 3	<ul style="list-style-type: none"> - Descriptions of People - Activities - Places - Emotions - Daily Routine - Food - Camping Trip Terminology 	<ul style="list-style-type: none"> - Volunteer Activities - Project Organization - Persuade or Influence Others - Media/Actions - Express Opinions - Community - Environmental Concerns 	<ul style="list-style-type: none"> - Social Awareness - Inventions - Mistakes - Persistence - Present/Support Opinion - Personal Characteristics and Professions 	<ul style="list-style-type: none"> - Personal Possessions - Computers - Email - Online Chats - Requirements - Subjunctive with Conjunctions/Unknown

	<ul style="list-style-type: none"> - Nature - Family Relationships - Places/Climate - Trips/Transportation - Present Tense of Regular/Irregular/Stem-Changing Verbs - Reflexive Verbs - Comparisons - Preterite and Imperfect Tense of Regular/Irregular Verbs - Preterite vs. Imperfect 	<ul style="list-style-type: none"> - Impact of Technology - Predictions - Commands - Impersonal Expressions - Future Tense 	<ul style="list-style-type: none"> - Commands - Express Positive/Negative Emotions - Actions - Present Subjunctive of Regular/Irregular Verbs 	<ul style="list-style-type: none"> - Conditional Tense
Spanish 4	<ul style="list-style-type: none"> - Gender and Agreement of Nouns and Articles - Present Tense - Difference Between Verb Usage - Prepositional/Direct/Indirect Object Pronouns - Unintentional events - Cultural Differences and Similarities - Preterite and Imperfect Tenses - Gender and Agreement of Adjectives - Possessive/Demonstrative Adjectives and Pronouns - Adverbs - Cultural Differences and Similarities 	<ul style="list-style-type: none"> - Adverbs - Ordinal Numbers - Comparison and Superlative Phrases - Present Progressive Tense - Cultural Differences and Similarities - Past Participle as an Adjective - Present Perfect and Pluperfect Tenses - Future and Conditional Tenses - Future Perfect and Conditional Perfect Tenses 	<ul style="list-style-type: none"> - Past Participle as an Adjective - Present Perfect and Pluperfect Tenses - Future and Conditional Tenses - Future Perfect and Conditional Perfect Tenses - Formal and Informal Commands - Present Subjunctive - Present Perfect Subjunctive - Past Subjunctive - Past Subjunctive in If/Then clauses - Past Perfect Subjunctive - Cultural Differences and Similarities 	<ul style="list-style-type: none"> - Past Subjunctive in If/Then clauses - Past Perfect Subjunctive - Cultural Differences and Similarities - Relative Pronouns - Passive Voice with Verbs - Indefinite and Negative Words - Television - Television Equipment - Media and Newscast - Cultural Differences and Similarities
AP Spanish	<ul style="list-style-type: none"> - Alienation and assimilation - Heroes and historical figures - National and ethnic identities - Personal Beliefs - Personal Interests - Self-Image - Education and Careers - Entertainment - Travel and Leisure - Lifestyles - Usage of Present Tense and Reflexive Verbs, Future and Conditional, Past Participle, and Perfect Tenses - Usage of Preterite vs. Imperfect - Cultural differences 	<ul style="list-style-type: none"> - Relationships - Social Customs and Values - Volunteerism - Education Communities - Family Structure - Global Citizenship - Human Geography - Social Networking - Gender and Agreement of Nouns and Adjectives - Usage of Possessive Adjectives/Pronouns and Demonstrative Adjectives/Pronouns - Usage of Para vs. Por - Indefinite and Negative Words Usage - Tourism, Entertainment, Family, and Idioms - Cultural differences 	<ul style="list-style-type: none"> - Architecture - Beauty - Creativity - Fashion and Design - Language and Literature - Visual and Performing Arts - Technology - Health Care and Medicine - Formal and Informal Commands - Usage of the Subjunctive and Relative Pronouns - Home Architecture, Health, and Idioms - Cultural differences 	<ul style="list-style-type: none"> - Innovations - Natural Phenomena - Science and Ethics - Economic Issues - Environmental Issues - Philosophical Thought and Religion - Population and Demographics - Social Welfare and Conscience - Identify Prepositional, Direct, and Indirect Object Pronouns - Passive Voice - Woman in Past Hispanic Society - Struggles and Stereotyping of Hispanics in the United States - Review and preparation for the AP Exam - Extension and enrichment activities

Science Department Curriculum Map

Course	Marking Period 1	Marking Period 2	Marking Period 3	Marking Period 4
Concepts of Science 9	<ul style="list-style-type: none"> - Science and the Scientific Method - Earth's Spheres, Systems, and Cycles - Population Ecology 	<ul style="list-style-type: none"> - Population Ecology - Community Ecology - Energy in Ecosystems 	<ul style="list-style-type: none"> - Energy in Ecosystems - Terrestrial Biomes and Ecosystems - Aquatic Ecosystems - Characteristics of Living Things, Biodiversity, and Biological Classification 	<ul style="list-style-type: none"> - Natural Resource Management: <ul style="list-style-type: none"> ● Fisheries and Forestry ● Agriculture and Food production ● Mining and Mineral Resources ● Water ● Renewable and Non-Renewable Energy - Environmental Issues Final Project
Science 9	<ul style="list-style-type: none"> - Science and the Scientific Method - Earth's Spheres, Systems, and Cycles - Population Ecology 	<ul style="list-style-type: none"> - Population Ecology - Community Ecology - Energy in Ecosystems 	<ul style="list-style-type: none"> - Terrestrial Biomes and Ecosystems - Aquatic Ecosystems - Characteristics of Living Things, Biodiversity, and Biological Classification - Natural Resource Management: <ul style="list-style-type: none"> ● Fisheries and Forestry ● Agriculture and Food production 	<ul style="list-style-type: none"> - Natural Resource Management: <ul style="list-style-type: none"> ● Mining and Mineral Resources ● Water ● Renewable and Non-Renewable Energy - Earth's Atmosphere and Climate Change - Human Populations - Environmental Issues Final Project
Concepts of Biology	<ul style="list-style-type: none"> - Scientific Method and Experimentation - Themes of biology - Ecology - Biochemistry 	<ul style="list-style-type: none"> - DNA structure, replication, transcription, and translation - Structure and Function of Cell, Cellular Processes and Homeostasis - Bioenergetics <ul style="list-style-type: none"> ● Photosynthesis and Cellular Respiration 	<ul style="list-style-type: none"> - Cell Reproduction (Mitosis), - Production of Sex Cells (Meiosis) - Mendelian Genetics - Human Genetics - Biotechnology 	<ul style="list-style-type: none"> - Evolutionary Principles <ul style="list-style-type: none"> ● Significance in Biology ● Evidence of Evolution ● Charles Darwin and Natural Selection ● Evolutionary Adaptations - Classification <ul style="list-style-type: none"> ● Taxonomy ● Eubacteria and Archaea Domains ● Fungi, Protist, Plant and Animal Kingdoms
Biology	<ul style="list-style-type: none"> - Scientific Method and Experimentation - Themes of biology - Ecology - Biochemistry 	<ul style="list-style-type: none"> - Structure and Function of Cell, Cellular Processes and Homeostasis - Bioenergetics <ul style="list-style-type: none"> ● Photosynthesis and Cellular Respiration 	<ul style="list-style-type: none"> - DNA structure, replication, transcription, and translation - Cell Reproduction (Mitosis), - Production of Sex Cells (Meiosis) - Mendelian Genetics - Biotechnology 	<ul style="list-style-type: none"> - Evolutionary Principles <ul style="list-style-type: none"> ● Significance in Biology ● Evidence of Evolution ● Charles Darwin and Natural Selection ● Evolutionary Adaptations - Classification <ul style="list-style-type: none"> ● Taxonomy ● Eubacteria and Archaea Domains

				<ul style="list-style-type: none"> Fungi, Protist, Plant and Animal Kingdoms
Honors Biology	<ul style="list-style-type: none"> - Scientific Method and Experimentation - Themes of biology - Ecology - Biochemistry 	<ul style="list-style-type: none"> - Cell Structure and Function - Cell Transport - Enzyme Dynamics and Cellular Energetic 	<ul style="list-style-type: none"> - DNA structure, replication, transcription, and translation - Cell Reproduction (Mitosis), - Production of Sex Cells (Meiosis) - Mendelian Genetics - Epigenetics - Biotechnology 	<ul style="list-style-type: none"> - Evolutionary Principles <ul style="list-style-type: none"> • Significance in Biology • Evidence of Evolution • Charles Darwin and Natural Selection • Evolutionary Adaptations - Classification <ul style="list-style-type: none"> • Taxonomy • Eubacteria and Archaea Domains • Fungi, Protist, Plant and Animal Kingdoms • Animal Body Systems
AP Biology	<ul style="list-style-type: none"> - Biochemistry - Cells, Cell Transport and Cell Communication - Energy and Enzymes 	<ul style="list-style-type: none"> - Cellular Respiration and Photosynthesis - Cell Division: Mitosis and Meiosis - DNA and Protein Synthesis 	<ul style="list-style-type: none"> - Biotechnology - Genetics - Evolution - Origins, Diversity and Classification 	<ul style="list-style-type: none"> - Ecology and Behavior - Animal Kingdom and Human Body - Plant Diversity and Structures
Chemistry	<ul style="list-style-type: none"> - Introduction to Chemistry and Matter - Scientific Measurement and Data Collection - Atomic Structure 	<ul style="list-style-type: none"> - Electrons in Atoms - The Periodic Table - Chemical Formulas and Nomenclature 	<ul style="list-style-type: none"> - Methods of Evaluating Data <ul style="list-style-type: none"> • Qualitative and Quantitative Relationships in Matter - Mole Concept - Stoichiometry - Limiting reactants - Solubility rules - Molarity 	<ul style="list-style-type: none"> - Types of Reactions - Atomic Emission - Electron Geometry - Acids and Bases - Gas Laws
Honors Chemistry	<ul style="list-style-type: none"> - Introduction to Chemistry and Matter - Methods of Evaluating Data <ul style="list-style-type: none"> • Qualitative and Quantitative Relationships in Matter - Lab Techniques 	<ul style="list-style-type: none"> - Stoichiometry - Limiting Reactants - Solubility Rules - Molarity of Ions in Solution - Periodic Trends - Electromagnetic Spectrum Calculations 	<ul style="list-style-type: none"> - Periodic Law - Atomic Structure - Molecular Geometry - Kinetic Molecular Theory - Gas Laws - Acids and Bases 	<ul style="list-style-type: none"> - Chemical Equilibrium - Thermochemistry - Reaction Kinetics - Principles of Electrochemistry <ul style="list-style-type: none"> • Oxidation-reduction
AP Chemistry	<ul style="list-style-type: none"> - Atomic Structure and Properties - Molecular and Ionic Compound Structure and Properties - Intermolecular Forces and Properties 	<ul style="list-style-type: none"> - Chemical Reactions - Kinetics - Thermodynamics 	<ul style="list-style-type: none"> - Equilibrium - Acids and Bases - Applications of Thermodynamics 	<ul style="list-style-type: none"> - Applications of Thermodynamics - Review and preparation for the AP Exam - Extension and enrichment topics/labs
Physics	<ul style="list-style-type: none"> - Energy <ul style="list-style-type: none"> • Work, power, conservation of energy, simple machines, efficiency - Light 	<ul style="list-style-type: none"> - Atomic and Nuclear <ul style="list-style-type: none"> • The Atom and the Quantum • Nature of Matter • Atomic Nucleus and Radioactivity 	<ul style="list-style-type: none"> - Electricity and Magnetism <ul style="list-style-type: none"> • Electric charge, fields and potential, current, circuits • Magnetic force • Electromagnetic induction 	<ul style="list-style-type: none"> - Special Relativity - Sound <ul style="list-style-type: none"> • Waves, speed, decibel scale, Resonance - Thermodynamics

	<ul style="list-style-type: none"> Color, reflection and refraction, lenses, diffraction and interference 	<ul style="list-style-type: none"> Nuclear Fission and Fusion <ul style="list-style-type: none"> Gravity <ul style="list-style-type: none"> Universal Gravitation Satellite Motion General Relativity Stellar Evolution 	<ul style="list-style-type: none"> Motion <ul style="list-style-type: none"> Mechanical Equilibrium Linear/Projectile/Rotational Motion Applying Newton's Laws Force and Momentum 	<ul style="list-style-type: none"> Temperature, heat, and expansion Heat Transfer/Change of Phase
AP Physics 1: Algebra-Based	<ul style="list-style-type: none"> Introducing Physics Kinematics: Motion in One Dimension Newtonian Mechanics Applying Newton's Laws 	<ul style="list-style-type: none"> Circular Motion Impulse and Linear Momentum Work and Energy 	<ul style="list-style-type: none"> Extended Bodies at Rest Rotational Motion Vibrational Motion Mechanical Waves 	<ul style="list-style-type: none"> Electric Charge and Electric Force DC Circuits Modern Physics Electromagnetism Optics Real World Project
AP Physics C: Mechanics and Electricity/Magnetism	<ul style="list-style-type: none"> Kinematics <ul style="list-style-type: none"> Motion in one dimension Motion in two dimensions Newton's Laws of Motion Work, Energy, and Power Systems of Particles and Linear Momentum 	<ul style="list-style-type: none"> Rotation Oscillations Electrostatics 	<ul style="list-style-type: none"> Electrostatics Conductors, Capacitors, Dielectrics Electric Circuits Magnetic Fields Electromagnetism 	<ul style="list-style-type: none"> Review and preparation for the AP Exam Extension and enrichment topics/labs
Citizen Scientist	<ul style="list-style-type: none"> Ethics, Worldviews, and Values Risk and Statistics DV/ Autumn Biodiversity Topics Food Issues 	<ul style="list-style-type: none"> Consumerism and Human Population Issues DV/ Winter Biodiversity Topics Citizen Science in the World <ul style="list-style-type: none"> Research Citizen Science Projects 	<ul style="list-style-type: none"> Climate Change Human Health, Evolution, and Reproductive Technology DV/ Spring Biodiversity Topics 	<ul style="list-style-type: none"> Water Issues DV/Summer Biodiversity Topics Humans and Issues Humans and Science Citizen Science in the World (Part 2) <ul style="list-style-type: none"> Research Citizen Science Projects
AP Environmental Science	<ul style="list-style-type: none"> Ecosystems Biodiversity Populations 	<ul style="list-style-type: none"> Earth Systems and Resources Land and Water Use Energy Resources and Consumption 	<ul style="list-style-type: none"> Atmospheric Pollution Aquatic and Terrestrial Pollution 	<ul style="list-style-type: none"> Global Change Review and preparation for the AP Exam Research Projects and Sustainability
Applications of Physical Science	<ul style="list-style-type: none"> Newton's Laws of Motion Gravity Force, position, speed, velocity, and acceleration 	<ul style="list-style-type: none"> Energy <ul style="list-style-type: none"> Related to motion, interaction, or a transfer of energy Momentum changes 	<ul style="list-style-type: none"> Atomic and Molecular Structure and Properties Periodic Table 	<ul style="list-style-type: none"> Metals, Nonmetals, and Metalloids Rules of naming compounds, classification of reaction, rate of reaction, and stoichiometry
Anatomy and Physiology	<ul style="list-style-type: none"> Introduction to Human Anatomy and Physiology Chemical Basis of Life Cells and Cellular Metabolism Tissues Integumentary System 	<ul style="list-style-type: none"> Skeletal System Muscular System 	<ul style="list-style-type: none"> Nervous System and Special Senses Endocrine System Blood and Cardiovascular System 	<ul style="list-style-type: none"> Lymphatic System and Immunity Digestive System, Nutrition and Metabolism Respiratory System Urinary System, Water, Electrolyte, and Acid-Base Balance Reproductive System, Pregnancy, Growth, and Development, Genetics

			and Genomics - Fetal Pig Dissection
Semester Electives			
Course	Marking Period 1/3	Marking Period 2/4	
Forensics A	<ul style="list-style-type: none"> - Introduction to Forensic Science - Testimonial Evidence - Physical Evidence 	<ul style="list-style-type: none"> - Forensic Pathology - Forensic Biology - Crime Scene Processing and Analysis 	
Forensics B	<ul style="list-style-type: none"> - Review of Crime Scene - Criminal Psychology and Profiling - Serology and DNA Analysis 	<ul style="list-style-type: none"> - Fingerprints and Other Patterns of Identifications - Questioned Documents - Cyber Crimes and Crime Scene Processing and Analysis 	
Astronomy	<ul style="list-style-type: none"> - Charting the Heavens - The Copernican Revolution - Radiation - Spectroscopy - Telescopes 	<ul style="list-style-type: none"> - The Solar System - Planetology - Stars and Stellar Evolution - Galaxies and Cosmology 	
Geology	<ul style="list-style-type: none"> - An Introduction to Geology - Plate Tectonics - Matter and Minerals - Igneous Rocks - Volcanoes and Volcanic Hazards - Weathering and Soils - Sedimentary Rocks 	<ul style="list-style-type: none"> - Metamorphism and Metamorphic Rocks - Earthquakes and Earth's Interior - Crustal Deformation and Mountain Building - Running Water and Groundwater - Glaciers and Glaciation - Geologic Time and Earth's Evolution Through Geologic Time - Global Climate Change 	