**Frederick County High Schools Curriculum Chart**

**Spring 2009**

**Created by Kate Walters, Governor Thomas Johnson High School**

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| **English** |
| English 9 | English 10 | English 11 | English 12 | AP Language | AP Literature | Journalism |
| plot elements persuasive & narrative writing; poetic devices & forms | American poetry, drama, short stories, novels, and nonfiction; rhetorical devices; research methods; literary criticisms | World poetry, drama, short stories, novels, and nonfiction; revolutionary writing; resume & cover letter writing  | composition variety including compare & contrast, narrative, cause & effect, & persuasive; revision techniques | essay structure; argumentation essays; syntax; world literature; narrative and descriptive essays; college essays  | literary works from diverse cultures; motifs in literature; philosophical, political, & social influences on world literature; essay structure | news, opinions, & features, sports writing; history of journalism; journalists in the field; Associated Press style; advertisements |
| **Mathematics** |
| Algebra I  | Algebra II | Advanced Algebra | Geometry | Pre-Calculus | AP Calculus | Statistics | Contemporary |
| single variable inequalities; linear functions & systems; data analysis | quadratic equations; polynomials; exponential, rational, & logarithmic functions | polynomials; exponential, rational, logarithmic, & trigonometric functions | points, lines, & planes; polygons; trigonometry; mathematical proofs | polynomials; limits; exponential, rational, logarithmic, & trigonometric functions  | derivatives; integrals; differential equations; infinite series; limits | data analysis; sampling; probability; distributions; hypothesis testing;  | personal finance; common & abnormal investments; banking; budgeting |
| **Science** |
| Biology | Introduction to Chemistry and Physics | Chemistry | Algebra-Based Physics | Environmental Science |
| carbohydrates, lipids, & proteins; organic molecules; anatomy of a cell; fertilization; genetics & DNA; structure & function of body systems | three phases of matter (solid, liquid, & gas); subatomic particles; kinetic & potential energy; chemical reactions; ionic & covalent bonding; Law of Conservation of Mass and Energy | Hess’s Law; Atomic Theory; Lewis electron dot diagrams; Periodic Table; hybridization; bonding in single, double, and triple bonds; solutions; metals | laws of mechanics; friction; gravity; Newton’s Laws; momentum; waves & optics; electromagnetism; thermodynamics; fission & fusion; Doppler Effect; Ohm’s Laws & electricity;  | biogeochemical cycles; ecosystems & habitats; natural selection; water treatment; soil conservation; air pollutants; greenhouse effect; Chesapeake Bay |
| **Social Studies** |
| Government | Modern World  | AP World & European | American Studies II | AP US History  | Civil War | World War II | Ancient & Medieval  | Sociology | Psychology | Economics  |
| US Constitution; Bill of Rights; Supreme Court Cases; Archived documents; branches of the Government | Renaissance; Reformation; Age of Exploration; Scientific Revolution; Enlightenment; Napoleonic Era; Industrial Revolution; Nationalism; Imperialism; Revolution; World Wars I & II; Cold War | Reconstruction; Industrialization; reform; Imperialism; World War I; the 1920s; economic crisis & the New Deal; World War II; the Cold War | Sectionalism; slavery; secession; Lincoln, Grant, & Lee; war in 1862, 1864, &1865; Reconstruction | Fascism; Japan’s involvement; American involvement; Holocaust; Axis’ Defeat; Mussolini & Hitler | Prehistoric Humans; River Valley; Ancient Greeks & Romans; early, middle, and late Medieval | aging; social stratification; ethnic relations; deviance & social control; social institutions | states of con-ciousness; memory; cognition; psychological disorders; abnormal psych | supply & demand; market structure; fiscal policy; globalization; trade |
| **Foreign Language** |
| Spanish | German | French | Latin |
| Spanish culture; Spanish art; Spanish folktales; Ancient South & Central American civilizations; Spanish cuisine; Spanish dance; Spanish language; conjugations | German culture; the Rhine; German fairytales (anthology); Holocaust; German art; classical and modern German music; German language; conjugations & vocabulary | French history; French revolutions of 18th & 19th centuries; Impressionism; Renaissance; French scientists; French language; conjugations & vocabulary | Ancient Greek & Roman culture; classical mythology; Latin & Greek derivatives; ancient history; everyday Latin expressions in English |
| **Performing Arts** |
| Band | Chorus | Orchestra | Piano | Guitar | Theatre Arts  | Advanced Theatre Studies |
| pitch accuracy; posture, & embouchure; music styles (canon, chorale, etc.); history (Baroque, Renaissance, etc.) | uniform vowel system; diction; major scales and intervals of Octave,Perfect 5th, Perfect 4th, Major 3rd, & Minor 3rd. | fingering techniques; bowing; tempo; articulation; dynamics; music styles & history | finger dexterity; hand-eye coordination; sight-reading competency; historical and cultural development of piano &/or guitar; correct hand, arm & wrist positions; scales, chords, & arpeggios;  | lighting; costume; sound; make-up; American theatre; musical theatre; comedies and tragedies; improvisation; script interpretation | styles (comedy, tragedy, farce, musical); performance production (script to performance); stage; technical aspects (lighting, sound, etc.) |
| **Visual Arts** |
| Art I, II, & III | Ceramics | Painting and Drawing | Computer Graphics | Photography & Digital Photography | Publications-Yearbook | AP Studio Art | AP Art History |
| ceramics, sculpture, painting, digital art, & commercial art; influences of art on history and society | purposes of ceramic works; application of hand-building; wheel-throwing, wedging, recycling clay, & glazing | feelings and moods in paintings; application of pencils, pen & ink, charcoal, pastel, tempura, & watercolor | Photoshop, Freehand, Illustrator, Quark Express, & InDesign; work that requires multiple programs | lenses; darkroom use; expertise in enlarging, cropping, solarizing, burning-in dodging, & mounting; Photoshop | InDesign; staff organization, promotion, editing, advertising, circulation, & photography | Drawing; painting; photography; ceramics; diagrams; animation; sculpture; fiber arts; computer graphics | art interpretation; analysis of art throughout history; relationship between art and society  |
| **Health and Physical Education** |
| Health | Sports Medicine | Fitness for Life | Strength Training & Fitness | Team Sports |
| interpersonal relationships; knowledge of drug abuse; disease prevention & control; responsible decisions about sexual behavior | training programs; prevention, evaluation, & treatment of injuries; exercise physiology; sports psychology; internal medicine | regular, moderate, and vigorous physical activities; movement effectiveness and safety; motor skills; relationship between exercise and stress reduction | personal training needs; individualized training programs; understanding of performance-enhancing substances | basketball, volleyball, baseball; football, field hockey, swimming, & softball; focus on increased offensive and defensive skills; game participation rules |
| **Family and Consumer Science** |
| Child Development | Personal Relationships & Parenting | Independent Living | Nutrition | Cultures and Cuisine |
| childhood developmental stages; behavioral guidelines for children; factors that impact human growth; abnormal development stages | personal vs. relationship needs; interpersonal communication skills; human development; conflict prevention; teamwork skills | employability skills; management of individual & family resources; consumer rights & responsibilities; financial resources; nutrition & wellness practices | concept of ideal diet; food groups; essential nutrients; carbohydrates, fats, &oils; energy balance & metabolism | Meal planning; recipes; food preparation safety; geography & resources; international cuisine; food preparation & implementation of international cuisine |
| **Information Technology and Careers**  |
| Accounting | Keyboarding | Management and Entrepreneurship | Computer Science and Programming | Website Development | Agriculture |
| accounting cycle; assets, liabilities; owner’s equity; financial statement preparation; payroll, income taxation, & managerial systems | input technologies; composition of personal and business documents; pursuit of employment via digital communication; keyboard architecture | business organization; entrepreneur characteristics; target markets; business plans & records; human resources; supervision of employees | computer languages; numeric & symbolic computations; computer architecture; ethical issues; software engineering; algorithms & data structures  | web site coding tools; software tools; key design concepts; multimedia elements; web site career paths; ethical issues | metals; bio-related technology; engines and power; horsecare; pre-veterinary science; large animals; small animals; horticulture |

Sources: Frederick County essential curriculum 2008-2009 located in *www.fcpsteach.org*; Samuel Mills, Mary Kay McDonald, Charlet Remus, Therese Wilson, Nancy Jones, Ambereen Khan, William Caulfield, and Jenica Gill