Social Studies

U.S. History I

Students examine the major turning points in American history that reflect continuity and change during the period from the Industrial Revolution to the present day. Students identify and analyze social, political, economic, geographic, and cultural issues.

U.S. History II

Students identify and analyze social, political, economic, geographic and cultural issues. It includes extended analysis of content and additional coursework and homework. Students develop a research paper each semester incorporating independent reading and investigation. Students write document-based essays.
Students volunteer in community activities that support multicultural understanding. Students examine major turning points in American history that reflect continuity and change during the period from the Industrial Revolution to the present.

World History, Modern World

Students examine major turning points that shaped the modern world from the late eighteenth century to the present, including the causes and course of the two world wars. Students demonstrate an understanding of the roots of current world issues by studying the expansion of the West and the growing interdependence of people and cultures throughout the world. Students conduct extensive research and apply their investigative skills to a research paper that relates two contemporary world problems. Students will write document-based essays.

American Government

In this course students pursue a deeper understanding of American government institutions. They draw on their studies of American history and other societies to compare different systems of government in the world today. This course prepares students to vote, to reflect on the responsibilities of citizenship, and to participate in community activities. Fundamental documents of American government are examined in depth.
This course includes a research paper incorporating the following: independent reading and research; utilizing community resources, and if possible, volunteering in government-related institutions/activities. Students will write document-based essays.

Economics

In this course students demonstrate their deepening understanding of economic operations, problems, and institutions of our nation and the world. Students make reasoned decisions on economic issues as citizens, workers, consumers, business owners, and managers. This course is primarily a course in social science, enriching students' understanding of the operations and institutions of economic systems.

Sociology

This course is designed to give students an understanding and appreciation of the complex network of social relationships in their lives. Students demonstrate their knowledge and understanding of the development of self-concept, parent-child relationships, and adolescent culture. Students gain knowledge and understanding of the major social institutions—family, education, religion, economic policy—and how these institutions interrelate and shape our lives. They demonstrate their knowledge and understanding of the problems of stereotyping and prejudice and the processes of social change in American life.

Mathematics

Algebra I (grade 8)
In Algebra I students will study the concepts and techniques of Algebra. Students explore rational numbers, solve linear equations and inequalities, graph relations and functions, solve quadratic and exponential functions, and solve system of equations and inequalities, and explore statistics.

Algebra II
In Algebra II students demonstrate their advanced knowledge of real numbers. Students solve problems in functions, systems of equations, curve sketching, equations of high degrees, matrices, systems of inequalities, advanced manipulative techniques, sequences, sums, and statistics. Students use graphing calculators.

Geometry
In this course students learn the skills and concepts of plane and solid geometry. Students develop the ability to construct formal, logical arguments and proofs in geometric settings and problems. Students use graphing calculators.

Trigonometry

The trigonometry course is designed for students who successfully complete Algebra II and will continue to Pre-calculus or Calculus. In this course, students will study relations, functions and trigonometry. The student will analyze, apply and illustrate the properties of the unite circle. The student will determine trigonometric values and graph trigonometric functions on the coordinate plane. He/she will utilize and apply trigonometric properties and trigonometric identities to solve problems. Scientific calculators and/or graphing calculators are integrated throughout the course.

Pre-Calculus
This is the fourth year of high school mathematics. Students learn the major components of trigonometry, analytic geometry, and function analysis, complex numbers, simple harmonic motion, and vectors in space. Graphing calculators are used to visualize a variety of elementary functions. This course prepares students for the AP calculus course.

Health & Physical Education

Health Education

Students learn an integrated approach to health issues, with an emphasis on the Minnesota state standards of accepting personal responsibility for health, respecting and promoting the health of others, understanding the process of growth and development, and using health-related information and products wisely. Students will assess their own level of fitness in relation to the five components of physical fitness: flexibility, cardiovascular health, muscular strength, muscular endurance, and body composition.

Physical Education 1 **Grades:** 9

In this ninth grade program students participate in and learn the skills and rules of team and individual sports activities. They develop life time fitness knowledge by assessing personal needs, interests, abilities and opportunities by participating in activities that contribute to the achievement of personal fitness goals. Students learn to apply biomechanical principles in analyzing a variety of movement skills. The four areas of study emphasize individual sports, dual sports, dance, and analysis of movement. (May be repeated for elective credits)

Science

Biology

This is a laboratory science course that investigates the relationship between structure and function from molecules to organisms and systems, the interdependence and interactions of biotic and abiotic components of the environment, and mechanisms that maintain continuity and lead to changes in populations over time. Students explore biological concepts through an inquiry approach. Embedded standards for Inquiry, Technology & Engineering, and Mathematics are taught in the context of the content standards for Cells, Interdependence, Flow of Matter and Energy, Heredity, and Biodiversity and Change.

Chemistry I

This introductory course follows a laboratory-centered curriculum that develops the content and methods of chemistry with the necessary mathematical foundations. Students investigate the composition of matter and the physical and chemical changes it undergoes. Students use science process skills to study the fundamental structure of atoms, the way atoms combine to form compounds, and the interactions between matter and energy. Students explore chemistry concepts through an inquiry-based approach. Embedded standards for Inquiry, Mathematics, and Technology & Engineering are taught in the context of the content standards for Atomic Structure, Matter and Energy, and Interactions of Matter.

Physics

This laboratory-oriented course covers the development of physical laws and how the laws apply to the science of everyday life. Through laboratory experiences, lectures and discussions, and demonstrations, students explore the mechanics, optics, waves, electricity, atomic structure, and transformations of matter and energy. This laboratory-oriented course requires students to solve problems, often with mathematical operations.

Freshman English: Writing and Grammar

This is a core course designed to develop the writing skills of students. The main focus is learning to write well-constructed essays for a variety of audiences and occasions. For these essays and other writing activities, students will work with peers to write, revise, proofread and rewrite drafts until they produce polished writing ready for publication. Throughout the year, students will review parts of speech, grammar, and mechanics to build a strong base for understanding how to form solid sentences and paragraphs and how to correctly edit their work. Major assessments for this course will include at least two formal essays per quarter for expository, narrative, persuasive, and descriptive writing; period quizzes and tests for assessing language usage; and various creative writing assignments in which students will apply appropriate grammar and mechanics. By the end of this course, students should be ready for college-level reading and writing. By the end of this course, students will be well prepared for the GRAD writing test.

Sophomore English: Introduction to Literature

This is a core course designed to develop the reading and analytical skills of students. Using literature from authors around the world, students will read, analyze, and respond to literature from a variety of perspectives. They will learn to recognize the attributes of various genres, to consider the author's purpose for writing, and to understand and utilize literary techniques in their writing. To improve their comprehension, students will learn to use reading strategies and focus on specific concepts, such as figurative language, characterization, and tone. Major assessments for this course will include unit quizzes and tests for primary literary concepts; one persuasive essay and two formal literary analysis essays in response to fiction, non-fiction, and drama; and creative writing in the form of short story and poetry. Throughout the year, students will build abundant vocabulary both in academic and every-day language. By the end of this course, students will be well prepared for the MCA (Minnesota Comprehensive Assessment) reading test.

Junior English: World Literature

This is a literature-based course designed to challenge students to read and critically discuss influential texts that span multiple countries, cultures, and time periods. From Orwell to Wiesel, Shakespeare to Anaya, students will explore and compare how different texts may express universal themes, discuss

world conflicts, and impact society. They will make connections between contemporary articles about current world issues and significant short and novel-length fiction and nonfiction texts, such as Holocaust literature and stories of colonization. In this course students will apply the skills they achieved in the two core courses of ninth and tenth grade and develop them further by analyzing texts more deeply, writing in more advanced, mature styles, and adding higher level academic and every-day language into their vocabulary. Major assignments will include several formal literary analysis essays in response to fiction, non-fiction, poetry, and drama; creative writing in the form of short story and poetry; and a persuasive speech and essay. By the end of this course, students should be ready for college-level reading and writing.

Senior English: American Literature

This is a literature-based course designed to challenge students to read and critically discuss texts from the United States. Moving towards college-level difficulty in writing assignments and content, this course encourages critical thinking and in-depth engagement with the texts. Students will compare and contrast the diverse perspectives of the American experience through reading and analyzing folktale, autobiography, histories, poetry, essays, short stories, novels, and drama both from canonical authors (e.g., Bradford, Dickinson, Poe, Fitzgerald, Miller) and more recently acknowledged American authors (e.g., Silko, Apess, Clifton, Dunbar, Cisneros). In this course students will apply the skills they achieved in all of their previous courses and develop them further by analyzing texts more deeply, writing in more advanced, mature styles, and adding higher level academic and every-day language into their vocabulary. Major assignments will include several formal literary analysis essays in response to fiction, non-fiction, poetry, and drama; a major research project; and various informal and formal presentations. By the end of this course, students should be ready for college-level reading and writing.

Advanced Placement Courses

AP Human Geography

This AP Human Geography course is a year long, four quarters, course. It covers wide ranging topics that include population, migration, culture, language, religion, ethnicity, political geography, economic development, industry, agriculture, and urban geography. The purpose of the course is studying the spatial distribution of population and human activities and the effects of population distribution and human activities on the planet. Also important to this course are patterns, interactions, and interdependence between people and between people and the environment. The course offers well planned learning experiences in order to enhance students' understanding of major skills such as map reading and map making, concepts, theories, tool, and models that are essential to the field of study.

AP English Language and Composition

This AP English Language and Composition course will help students become skilled readers and writers. They will read texts from a variety of genres and time periods, though the focus will be upon nonfiction essays and articles. Students will write formal and informal responses to the texts, but they will go beyond the typical literary analysis paper. In previous high school courses, the curriculum focused on deep understanding of literary concepts, genre differences, and the characters, plot, and theme of various texts. Those literary concepts and analysis skills will certainly still be part of this course, but AP Language and Composition seeks to take analysis further. This AP course shifts the focus from *what* the author is writing to *how* and *why* an author is writing. Through intense study and practice of the art of language (rhetoric), they will learn to analyze the language of texts with a range of scrutiny: from individual word choice to the structure of sentences to the form of argumentation.

As part of their study of rhetoric, students will consider the concept of the rhetorical triangle: the credibility and motivations of the author, the assumptions about audience, and the subject material. Students will then apply this awareness of the rhetorical triangle to their own writing by creating expository and argumentative essays. Part of the course will include a formal research paper, which will allow students to review and improve upon their researching and citation skills. They will learn to look for quality, credible sources and use correct MLA format to compose and properly cite those sources. By the end of the course, students will have gained valuable techniques for presenting information and composing strong persuasive arguments. Along the way, they will study new terms in order to bolster their personal vocabulary and use more precise language. They will also review grammar and mechanics to ensure that they are communicating their ideas accurately. In addition, since their college credit depends upon their successful completion of the Advance Placement Test, students will also practice test-taking techniques and reading strategies.

AP Chemistry

AP Chemistry seeks to cover in greater breadth and depth the topics introduced in a first year chemistry course. A college level textbook is used, chemical calculations are more involved and laboratory work is to build student's general understanding of chemical principles more in depth. The course seeks to enable students to succeed in a first year college chemistry course and to have the opportunity to take other science courses where a first year course is a prerequisite. The last two weeks before the AP Chemistry Exam is spent on review of the AP Chemistry Topics from the entire course. All AP Chemistry students will be required to take the Advanced Placement Examination.
General Objectives

AP Calculus AB

Calculus AB is a year- long course. It is designed for students who are well prepared for advance mathematics. Students must complete all the prerequisites courses prior to signing for Calculus AB. In particular students must be familiar with the properties of functions, the algebra functions and graph functions. These functions include linear,

polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric and piecewise-defined functions. The calculus AB course is primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. The main topics that are covered in this course are: functions, graphs and limits; derivatives and its application; definite integrals and its applications; differential equations and mathematical modeling.