

Oakland Early College
Course Guide: High School Courses
Winter, 2009

The following high school courses are being offered to students at OEC at the high school level:

ALGEBRA 2 (YR) 11, 12

Algebra 2 continues with the study of Algebra, paying special attention to functional analysis and problem solving. Geometry continues to be studied and reinforced, while transcendental functions (exponential, logarithmic and trigonometric) continue to be explored and developed through real-life phenomena. Trigonometry has a much greater place in this course as trigonometric ratios, the Law of Sines and the Law of Cosines continue to be utilized. This demanding course also integrates preparation for the major assessments (i.e., ACT, SAT, MEAP) within the constructs of the curriculum.

CHEMISTRY (YR) 10, 11, 12

This course is designed for students who do not intend to major in science in college. It begins with a study of fundamental concepts of chemistry as an experimental science. The metric system will be reviewed. Also studied are classification of matter, properties of liquids and the solution process, quantitative relationships, acids, bases and salts, development of the properties of gases, liquids, solids, stoichiometry, atomic structure and chemical bonding.

CIVICS (SEM) 10, 11, 12

To participate effectively, American citizens need intellectual and participatory skills, as well as knowledge about their government and society.

Acquisition of civic knowledge and skills makes possible a reasoned commitment to those fundamental values and principles essential to the preservation and improvement of American Constitutional democracy. Citizenship requires the use of knowledge to think and act in a reasoned manner. The intellectual and participatory skills component of civic education enables students to learn how, when, and where to apply civic knowledge in the many and varied roles of citizens. These skills help citizens identify, describe, explain, and analyze information and arguments as well as evaluate, take, and defend positions on public policies. Participatory skills enable citizens to monitor and influence public and civic life by working with others, clearly articulating ideas and interests, building coalitions, seeking consensus, negotiating compromise, and managing conflict.

The civics content will engage students in thinking critically about civic life, politics, government and social justice. Students will study the origins and foundations of the American political system. They will understand how the Constitution functions to

embody the purposes, values and principles of American constitutional democracy. Students will further examine the relationship of the United States to other nations and its role in world affairs. They will also explore the roles of citizens in American society. In addition students will acquire skills to help them as citizens identify, describe, explain, and analyze information and arguments as well as evaluate, take and defend positions on public policies.

The acquisition of knowledge and skills and the development of civic values take place within a variety of contexts. Those of home, school, community, state, nation, and the world are especially important in civic education. Beyond mere knowledge or participation skills, these reflect the core democratic values and include becoming an independent member of society; respecting individual worth and human dignity; assuming the personal, political, and economic responsibilities of a citizen; accepting the legitimate decisions of the majority while protecting the rights of the minority; participating in civic affairs in an informed, thoughtful, and effective manner; and promoting the healthy and lawful functioning of American constitutional democracy in the wake of promoting social justice. Together, these skills constitute the primary arenas in which citizens acquire the ability to put their knowledge and skills into practice.

DRAMA (SEM) 10, 11

Beginning Drama has three main objectives. The first is to make students feel confident and comfortable when speaking, interviewing, presenting or performing in front of large or small groups. The second is to give students a basic knowledge of the literature, methods and technology of the theater and the third is to allow students to apply relevant knowledge, prior learning and experience of the real world.

Areas covered are interpersonal communications, perception, speech and various forms of group and individual presentations. Class participation is heavily weighted in grading, written work is the other emphasis. Written report, activity sheets for each performance and a journal.

ELA 10 (YR) 10

As mandated by the Michigan Merit Curriculum for English Language Arts 11, students will add to the list of various genre of classic and contemporary narrative and informational texts that will be read and analyzed through high school with a special focus on world literature and ACT Success.

ELA 11 (YR) 11

This thematically approached writing based course will allow students to refine their writing and vocabulary skills while developing their independent thinking and reasoning skills through the analysis of American literary classics and historical events. Writing experiences include logical structure of a persuasive paper with textual evidence and

valid sources, paragraphs with five or more sentences, formal expository and creative writing. Activities may include video creations, oral presentations and field trips. Attention will be given to preparation for the SAT, ACT and High School MEAP examinations.

ECONOMICS (SEM) 10, 11, 12

Understanding economics and obtaining economic literacy is becoming essential for citizens in our national and integrated (globalized) world economy. Increasingly, productive members of society must be able to identify, analyze, and evaluate the causes and consequences of individual economic decisions and public policy including issues raised by constraints imposed by scarcity, how economies and markets work, and the benefits and costs of economic interaction and interdependence. Such literacy includes analysis, reasoning, problem solving, and decision making that helps people function as consumers, producers, savers, investors, and responsible citizens.

Students will understand how economies function and how to apply the concepts and principles of economics to their lives as individuals and as citizens. Understanding and applying these concepts and principles should help students make sense of daily events and enable them to analyze, investigate and develop practical thinking about economic challenges and public policies. Students will learn to use their minds to think critically about globalization so they may be prepared for responsible citizenship, further learning, and productive employment in our Nation's global economy.

The economics content involves individual and household choices, personal finance issues, business and entrepreneurial decisions and public policy. Students analyze and study economic concepts and principles in three contextual areas: individual and household context, a business context, and a government or public context and focused around four content areas: The Market Economy; The National Economy; the International Economy and Personal Finance.

GEOMETRY (YR) 10, 11

Geometry is a model Geometry course with continued reinforcement of algebra. In this challenging course, students continue with their examination of quadratic functions via translational geometry. Boolean algebra prepares students for the classic geometry topics of parallel lines, triangle congruence and similarity, which will be developed by the students in the form of proof. Finally, trigonometry and special right triangles are explored both symbolically and through real-life models.

PHYSICS (YR) 10, 11, 12

This challenging course offers students a hands-on experience of the elegance, importance and applicability of physics principles. Students will use the central concepts of physics (along with basic algebra skills) to solve real-life problems. We also explore the physics of commonly encountered phenomena such as bicycles, radios, stereo

speakers, cell phones, cars, lights, eyeglasses, tape players, ocean waves, and more. After this course, students will be able to apply physics concepts to all parts of their lives, and be conversant in the most basic and fundamental rules that govern our universe.

SCIENCE AND POPULAR CULTURE (SEM) 10, 11

Students in Science and Popular Culture explore foundational scientific and mathematic concepts through the lens of popular culture. Special attention is given to debunking pseudo-scientific theories implicit in comic books, literature, film, and television. Emphasis is given to specific academic domains, including, but not limited to, physics and mathematics.

SOAR (SEM) 10, 11

SOAR, which stands for Student Organization, Academics, and Research, is a course designed to help students attain crucial academic skills in various content areas. Special attention is given to organizational, study, and research skills necessary for collegiate success. COMPASS Odyssey is used as a central component of this course.

WORLD HISTORY (YR) 10, 11, 12

World History takes a global and comparative approach to studying the world and its past to develop greater understanding of the development of worldwide events, processes, and interactions among the world's people, cultures, societies, and environment. The course is organized within historical eras and on different geographic scales. That is, within each era, students will work at three interconnected spatial scales: the global, interregional and regional. Just as a photographer uses multiple lenses—close-up, wide-angle, and zoom—to tell pictorial stories, students will study the world's history and geography through several different lenses to understand the world more completely.

The content of the course is organized by Era: Era's 1-3 Foundations, 8,000 BCE – 300CE, Era 4 Expanding and Intensified Hemispheric Interactions, 300 to 1500CE, Era 5 The Emergence of the First Global Age, 15th to 18th Centuries, Era 6 An Age of Global Revolutions, 18th Century to 1914, Era 7 Global Crisis and Achievement, 1900 to 1945, Era 8 The Cold War and its Aftermath: The 20th Century Since 1945 – Contemporary Global Issues. Throughout each era, students will focus on five large historical and geographic patterns which include:

- The causes, consequences, and patterns of changes in human governance systems and changes over time.
- The causes, consequences, and patterns of interactions among societies and regions, including trade, war, diplomacy, and international institutions.
- The impact of demographic, technological, environmental, and economic changes on people, their culture, and their environment.
- Causes, consequences, and patterns of cultural, intellectual, religious and social changes across the world, and among and within societies.

between the environment and global and regional developments in population, settlement, economy, and politics.

As students study World History, they will learn about the human experience over time and space. They will encounter powerful and sometimes conflicting ideas while learning about people and events in different places and times. Students will investigate our diverse and common traditions, and work to understand the complex interactions among various environmental, human and social forces which have influenced and continue to influence us as human beings.

Learning about a world that we can traverse in hours and communicate across within minutes is now essential for every individual, thus understanding the world's peoples, cultures, and societies and the story of our past.