

## High School

# What is a Course Catalog?

A course catalog is a document that lists courses taught at a school complete with a brief description of each course. In addition to a brief overview of the course, the description will sometimes include the grade level, prerequisites, course length, amount of credit, etc.

A course catalog can also be known as:

- » Program of studies.
- » Curriculum guide.
- » Registration guide.
- » Course description book/guide.

Examples of what cannot substitute for a course catalog:

- » Course listing.
- » Course flow charts.
- » Table of contents from texts.
- » State standards.
- » Common core standards.
- » Syllabi.



## SCIENCE

### **PHYSICAL SCIENCE 9A & 9B - full year**

**\*\*Required for graduation\*\***

**Intended Audience:** Grade 9

**Prerequisites/Selection Process:** none

**Major Outcomes:** Physical Science 9 is a prerequisite to all other high school science courses.

**Instructional Focus:** Ninth grade physical science provides students with an overview of both physics and chemistry. Science 9A covers the science inquiry process and physics topics of motion, work and energy, energy resources, sound, light, and wave theory. Science 9B covers an introduction to chemistry, properties and states of matter and its changes, atomic structure, the periodic table, bonding, equations and reaction types.

**Projects, activities, etc.:** Energy Alternatives Project/History of Science Project

### **BIOLOGY A & B - full year**

**\*\*Required for graduation\*\***

**Intended Audience:** Grades 10-12

**Prerequisites/Selection Process:** Physical Science 9A & 9B

**Major Outcomes:** The MCA-II Science test is administered at the completion of the course. Students must pass the MCA science test in order to graduate. Students will be able to perform several laboratory techniques including: gel electrophoresis, microscopy, and chromatography.

**Instructional Focus:** Biology provides the introduction to basic biological techniques and principles. Students will be introduced to the basics of microbiology, including the use of the microscope and life functions at the cellular level. The dynamics of evolution and ecosystems will also be discussed. Genetic principles will be introduced and studied in detail, including topics of Mendelian Genetics, chromosomal defects and genetic mutations. Students will also study the animal kingdom concentrating on vertebrates.

**Projects, activities, etc.:** IB Science projects will be completed each quarter on varying topics such as cells, bacteria, forensics, and genetics.

### **ADVANCED BIOLOGY A & B - full year**

**Intended Audience:** Grades 10

**Prerequisites/Selection Process:** Physical Science 9A & 9B and teacher approval

**Major Outcomes:** The MCA-II Science test is administered at the completion of the course. Students will be able to perform several laboratory techniques including: gel electrophoresis, microscopy, and chromatography.

**Instructional Focus:** Advanced Biology provides an in-depth understanding of biological techniques and principles. Students will be introduced to the basics of biotechnology techniques currently used in industry, including the use of the digital

microscopes, gel electrophoresis equipment, and much more. Topics covered will include ecosystems, cells, DNA, genetics, evolution and the human body.

**Projects, activities, etc.:** IB Science projects will be completed each quarter on varying topics such as cells, bacteria, forensics, and genetics.

### **CHEMISTRY 1 A&B – full year**

**Intended Audience:** Grades 11 – 12

**Prerequisites/Selection Process:** Physical Science 9A & 9B

**Major Outcomes:** Students will discover and explore the theories of chemistry through laboratory experiments and activities. Students will develop their ability to investigate research questions in a lab environment. Students will continue to develop their abilities to solve real-world scientific problems and to think critically. Students will construct their own knowledge using imaginative and creative thinking.

**Instructional Focus:** Chemistry is the study of matter. Students will use both qualitative and quantitative techniques to explore the composition of substances and the changes they undergo. Along with extensive laboratory work, students will study the theories and principles of chemistry. Students will also continue to develop their problem solving abilities through logical and critical thinking. Like all sciences, chemistry gives us a better understanding of our world.

**Projects, activities, etc.:** Research projects and performance labs, which will correspond to the major topics covered during the semester, will be completed using accepted scientific methods.

### **CHEMISTRY 2 A – 1 semester**

**Intended Audience:** Grades 12

**Prerequisites/Selection Process:** Completion of Chemistry 1 A & B with grades of A or B.

**Major Outcomes:** Students will continue to discover and explore the theories of chemistry through laboratory experiments and activities. Students will continue to develop their ability to investigate research questions in a lab environment. Students will continue to develop their abilities to solve real-world scientific problems and to think critically. Students will continue to construct their own knowledge using imaginative and creative thinking.

**Instructional Focus:** This course is a continuation of Chemistry 1. In this class the student will discover and explore some of the more advanced topics found in a high school chemistry class. Many of the experiments in this course will be completed using electronic data collection sensors and graphing calculators.

**Projects, activities, etc.:** Research projects and performance labs, which will correspond to the major topics covered during the semester, will be completed using current scientific methods.

## Language Arts Course Descriptions

### INTERNATIONAL BACCALAUREATE COURSES (page

64 for information on the IB program)

- Language A1 SL and HL
- Theory of Knowledge

### ADDITIONAL ELECTIVE COURSES

- Etymology
- Expository Writing
- Language Lab (Developmental Reading)

## TENTH GRADE

### EN21004A ENGLISH 10 1-2 EN61004A

Length/Credits: 2 semesters/2 credits  
Offered: 1/Fall – 2/Spring  
Open to: Grades 10, 11, 12  
Prerequisite: None

Literature instruction focuses on opportunities to respond critically, reflectively, and imaginatively to World Literature, including major authors and cultures from Europe, North and South America, Africa, Greece and Rome, India, the Orient, and other world civilizations. In their studies, students will read and experience various literary genres, such as short story, drama, poetry, the novel, and the essay. Students will distinguish between the different types of content and purposes language can hold, for example, logic, opinion, ideology, point-of-view, and suggestion.

The Composition component of language arts provides students with opportunities to write for various audiences and purposes. Students identify and employ various elements of good writing in well-organized descriptive, expository, and narrative writings. The study of grammar, usage, and language mechanics is integrated into the study of writing. Using technology, students receive instruction and practice in the writing process including prewriting, drafting, revising, editing, and publishing. Students are encouraged to use Modern Language Association (MLA) guidelines in formatting their compositions.

Oral Communication (speech) provides students with opportunities to develop greater facility with choosing and employing different elements of effective oral communication.

### EN21004B ENGLISH 10 1H-2H EN61004B

Length/Credits: 2 semesters - 2 credits  
Offered: 1/Fall – 2/Spring  
Open to: Grades 10, 11, 12  
Prerequisite: None

**NOTE:** Students will have a summer reading assignment the summer before they take this course.

Literature instruction focuses on opportunities to respond critically, reflectively, and imaginatively to World Literature, including major authors and cultures from Europe, North and South America, Africa, Greece and Rome, India, the Orient, and other world civilizations. In

their studies, students will read and experience various literary genres, such as short story, drama, poetry, the novel, and the essay. Students will distinguish between the different types of content and purposes language can hold, for example, logic, opinion, ideology, point-of-view, and suggestion.

The Composition component of language arts provides students with opportunities to write for various audiences and purposes. Students identify and employ various elements of good writing in well-organized descriptive, expository, and narrative writings. The study of grammar, usage, and language mechanics is integrated into the study of writing. Using technology, students receive instruction and practice in the writing process including prewriting, drafting, revising, editing, and publishing. Students are encouraged to use Modern Language Association (MLA) guidelines in formatting their compositions.

Oral Communication (speech) provides students with opportunities to develop greater facility with choosing and employing different elements of effective oral communication.

While students will study some of the same works as students taking English 10 1-2, this course provides a more rigorous, in-depth analysis of those works. In addition, students will read additional works of American literature.

## ELEVENTH GRADE

### EN21020A AMERICAN LITERATURE 1-2 EN61020A

Length/Credits: 2 semesters - 2 credits  
Offered: 1/Fall – 2/Spring  
Open to: Grade 11, 12  
Prerequisite: None

American Literature provides a survey of the literature produced in the United States from pre-Revolutionary times to the present. This course includes a study of representative works of literature that reflect American culture. Students are provided with the study of a variety of literary genres, such as drama, poetry, and prose, as well as Native American folk legends. Influences of classical literature can be experienced in the historical, literary, and cultural contexts. Quality works of various ethnic and cultural minorities, such as African-American writers, women writers, Native American writers, are included as are the work of contemporary writers. Written and oral exercises require students to analyze and explain how their readings of literature, history, and culture are interconnected and distinctly American.

### EN21056C AP ENGLISH LANGUAGE AND EN61056C COMPOSITION 1-2

Length/Credits: 2 semesters - 2 credits  
Offered: 1/Fall – 2/Spring  
Open to: 11, 12  
Prerequisite: None

**NOTE:** Students enrolled in this course will be expected to take the AP Language Examination.



## SOCIAL STUDIES

### 20TH CENTURY AMERICAS, IB

1538

This course is the in depth study of the 20th Century of the Americas; United States, Canada, and Latin America. The course follows the IB survey class in American history. The purpose of 20th Century Americas is to allow students a more detailed exploration of topics such as the causes and effects of the two World Wars and the rise and the rule of single party states that caused the Second World War. Other topics will include the colonial expansion that introduces the century and causes the First World War as well as the Cold War that ends the century. 20th Century Americas will include various novels and first person sources for a critical interpretation of historical events. This course is weighted for those who participate in the International Baccalaureate examination program.

- Recommended Grade Level: Grade 11
- Recommended Prerequisites: Completion of AP U. S. History
- Credits: A 2 semester course, 1 credit per semester
- Fulfills the Social Studies requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas or counts as an Elective for any diploma

### AFRICAN AMERICAN HISTORY (AFR STUDIES)

1500

*African American History* will cover African American History-Literature and the Arts from the African origins prior to the development of European contact through the model Civil Rights Movement. The African American History course will not be taught with the emphasis of afro centrism, but as a cultural recognition of ethnic contributions to American society. The heritage and cultural contributions of African Americans will be strongly emphasized. The course will provide a foundation for strengthening the understanding and skills needed for successful interaction in a multi-cultural society.

- Recommended Grade Level: 10, 11 or 12
- Recommended /Prerequisites: none
- Credits:1 credit
- Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### ECONOMICS (ECON)

1514

*Economics* examines the allocation of resources and their uses for satisfying human needs and wants. The course analyzes economic reasoning used by consumers, producers, savers, investors, workers, voters, and government in making decisions. Key elements of the course include study of scarcity and economic reasoning, supply and demand, market structures, role of government, national income determination, the role of financial institutions, economic stabilization, and trade. Students will explain that because resources are limited, people must make choices and understand the role that supply, demand, prices, and profits play in a market economy. The functions of government in a market economy and market structures will be examined. Students will understand economic performance, money, stabilization policies, and trade of the United States. The behavior of people, societies and institutions and economic thinking is integral to this course.

- Recommended Grade Level: Grades 11 or 12

