

# High School Course Catalog

## Theology Program

The Theology program leads students to develop understanding of their Catholic faith. Students study the Church, the Sacraments, the Bible, Christology, and Catholic Social Teaching. All instruction is in line with the teachings of the Roman Catholic Church.

### Courses

#### ***Theology I- Understanding Catholic Christianity and Celebrating Sacraments***

**Full Year, One Credit**

This course offers students an overview of the Roman Catholic Church. In addition, this course offers students the opportunity to explore the rich tradition of sacramental theology and practice that is fundamental to the faith. The course seeks to engage students in an encounter with this essential dimension of Catholic life so that they can better appreciate the meaning of the sacraments and their relationship to the students' life.

#### ***Theology II- Old Testament and Moral Theology***

**Full Year, One Credit**

This course is a survey of the Old Testament wherein students learn about God's involvement in the lives of the Jewish people. In addition, this course focuses on the question: What kind of person am I becoming and what kind of person do I want to become? Students learn about the moral teachings of the church and explore the importance and impact of moral and ethical decision making in their own lives.

#### ***Theology III- Christology and Catholic Social Teaching***

**Full Year, One Credit**

This course will offer a thorough presentation of the life, ministry, message and meaning of Jesus Christ. The student will develop an awareness of the role of Jesus Christ in his or her life as well as an understanding of the various books of the New Testament. A special focus will be given to the four Gospels. During the second semester, the course will support the U.S. Bishop's call for a renewed commitment to integrate and to share the riches of the Church's social teachings. This aspect of the course will expose students to the essentials of Catholic social teachings, and will hopefully inspire them to work tirelessly towards building the Kingdom of God in their present and future lives.

#### ***Theology IV- Christian Lifestyles, The Church and Community***

### **Full Year, One Credit**

This course is designed to aid students in facing the challenges of adulthood so that they can shape a future that is hopeful, healthy, and full. The belief that underlies this course is that a Christian lifestyle is the optimal way to grow and be fully alive. The following themes will be considered: identity and autonomy, love, communication, sexuality, money and possessions, and the role of community and service. These will be considered in light of Church history, tradition and scripture. Included in this course is the required Moreau Project wherein students identify problems that afflict the local community, and based on the message and vision of Father Basil Moreau, design and implement original and creative solutions to these problems.

### ***Campus Ministry***

#### **Full Year, One Credit**

This course is offered to students who wish to take active roles of ministerial leadership in the Campus Ministry programs of the school. Students will be responsible for working with the instructor in preparing for school liturgies, retreats, drives and service projects. Students will be challenged to develop their personal as well as group leadership skills. Principles of leadership and ministry will be drawn from the values and examples of Jesus and the Church. This course also includes all aspects of the Theology IV curriculum.

## **Fine Arts Program**

The art program offers courses that provide instruction in aesthetic valuing, creativity and problem solving. The classes are studio classes which stress the hands-on creation of original art. The courses provide avenues for future study, develop self-confidence, and provide mental stimulation. Depending on course enrollment, the following courses are available:

### **Courses**

#### ***Fine, Applied and Performing Arts (FAPA)***

##### **Full Year, One Credit**

This introductory course will consist of one quarter each of Fine Arts, including units in art history, drawing and painting; Drama, including drama and oratory; Music, including music appreciation and theory.

## **Computer Science/Technology Program**

Through the study of technology students learn to make informed decisions about technologies and their applications. The efficient acquisition of information includes the identification of task requirements, the plan for using search strategies; and the use of technology to access, analyze, and evaluate the acquired information. By using technology as a tool that supports the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create a solution, and evaluate the results.

## **Courses**

### ***Computer Science/Technology Applications***

#### **Full Year, One Credit**

This course introduces students to several different software packages and requires an understanding of hardware basics. Students will create and properly use and apply spreadsheet technology using Microsoft Excel, including basic number manipulation, graph making, formatting and data sorting. They will create and manipulate a basic database using Microsoft Access, and create innovative and engaging multimedia presentations using Microsoft PowerPoint. In addition to becoming skilled word processors using Microsoft Word, all students will become proficient in webpage design and manipulation using HTML and Microsoft FrontPage, and will be exposed to basic programming languages.

### ***Advanced Computers/Web Mastering***

#### **Full Year, One Credit**

Students enrolled in this elective course will be required to become proficient at hardware repair and maintenance and work with a variety of software packages on applied school-based technology applications. They will research projects, generate problems and tasks, perform the tasks with the aid of computer technology and produce a finished project. This is an advanced course wherein the student will be trained in a variety of specialized technology and will work with the school's Director of Technology to help troubleshoot and maintain the systems computer infrastructure.

## **Language Arts Program**

Language Arts instruction is a core area that informs and embraces all subsequent academic disciplines. Accordingly, the proper study and application of these areas is critical to student success. Students are required to take English each year and must have completed four units of English in order to graduate from high school. The focus of Language arts instruction at Holy

Cross revolves around the development of critical literacy skills in the following areas: reading, vocabulary, writing, thinking, speaking and research. All English courses offered at Holy Cross are taught on a Pre-AP level to ensure that all students are being challenged. When students enter the eleventh grade they have the option of taking AP or non-AP courses, however, each course has its own unique and challenging qualities.

## **Courses**

### ***English I***

#### **Full Year, One Credit**

English I focuses on grammatical principles of the written language, including sentence patterns, paragraphing and the writing process. In addition, students will explore the elements of literature, using poetry anthologies, and high interest texts. Students will also explore and apply their knowledge of MLA style research guidelines and compile an original research project based upon their study of particular texts.

### ***English II***

#### **Full Year, One Credit**

English II is a more in-depth exploration and study of writing and literary analysis. Students are also introduced to more advanced forms of grammar to enhance their writing abilities. There will be a focus on reading and comprehending literature with an emphasis on the short story, the novel, and the play; language arts development and vocabulary enrichment. Students will also be required to compile a research project.

### ***English III- The American Tradition***

#### **Full Year, One Credit**

English III is a survey of American culture and history through an exploration and analysis of various American literary texts, including, short stories, novels, poems, and journals. The course focuses on the appreciation of unique voices in American literary heritage reflected through literature and on students' writing and analytical interpretations of texts in a grammatically correct and stylistically enhanced form. Time will be devoted to a substantial mastery of the MLA style research paper.

### ***AP English Language and Composition***

#### **Full Year, One Credit**

This course engages students in becoming skilled readers of prose written in a variety of periods, disciplines and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. This course offers students a college-level seminar course that challenges them to explore other voices and experiences and interpret a variety of writing styles. Students taking this course will be prepared to meet the challenges of more rigorous writing-intensive programs.

## ***English IV- The British and World Traditions***

### **Full Year, One Credit**

English IV is a survey on British and World Literature using various literary genres (novels, short stories, poetry, and drama) and spanning from Medieval texts to more contemporary voices. This course emphasizes writing based on creative, interpretative and reflective texts and includes a research-based component.

## ***AP English Literature and Composition***

### **Full Year, One Credit**

This course engages students in becoming skilled readers of prose written in a variety of periods, cultures, disciplines and rhetorical contexts and in becoming skilled writers who master techniques of literary analysis. This course offers students a college-level seminar course that challenges them to explore other voices and experiences and interpret a variety of writing styles. Students taking this course will be prepared to meet the challenges of more rigorous writing-intensive programs.

## ***Journalism/Yearbook***

### **Full Year, One Credit**

Students learn to research and write in a concise and accurate fashion in order to relay news in print format. They will learn the ethics associated with the practice of genuine journalism, the importance of fairness and accuracy in reviewing the media, and will also learn the basics of photojournalism. In addition, all journalism students are expected to work with the yearbook staff and to make their own original contributions to Holy Cross' campus-based, award-winning student newspaper entitled "The Bard." The production of the school newspaper and yearbook is an important annual event at Holy Cross. By working as part of the staff, the students develop a variety of graphics skills, learn about journalism, photographic techniques and business skills. Besides being a part of a regularly scheduled elective course, newspaper/yearbook production also requires a good deal of time spent after school in order to meet deadlines.

## ***Speech***

### **Semester, Half Credit**

This course deals with the art of public speaking. It is an opportunity for the student to gain self-confidence and effective communications skills through oral and written exercises. The students will learn the basics of speech preparation, including outlining and research skills. Students are required to include LCD technology, overhead transparencies, handouts, and PowerPoint software in their presentations.

# **Foreign Language Program**

Acquiring another language incorporates communication skills such as listening, speaking,

reading, writing, viewing, and showing. Students develop these communication skills by using knowledge of the language, including grammar, and culture, communication and learning strategies, technology, and content from other subject areas to socialize, to acquire and provide information, to express feelings and opinions, and to get others to adopt a course of action. While knowledge of other cultures, connections to other disciplines, comparisons between languages and cultures, and community interaction all contribute to and enhance the communicative language learning experience, communication skills are the primary focus of language acquisition.

## **Courses**

### ***Spanish I***

#### **Full Year, One Credit**

This introductory course focuses on the basics of acquiring a foreign language. Emphasis is placed on proper pronunciation, vocabulary-building, reading, effective writing and conversational skills in Spanish.

### ***Spanish II***

#### **Full Year, One Credit**

This course continues to emphasize the basic skills presented in Spanish I, coupled with a movement toward intermediate levels of understanding. Vocabulary development and writing skills are increased through paragraph analysis and essay construction, and conversational skills are enhanced through oral presentations. Particular emphasis is placed on an in-depth exploration of various Hispanic cultures.

### ***Spanish III***

#### **Full Year, One Credit**

Students in this course gain the knowledge to understand cultural practices and products and to increase their understanding of other cultures as well as to interact with members of those cultures. Through the learning of languages other than English, students obtain the tools and develop the context needed to connect with other subject areas and to use the language to acquire information and reinforce other areas of study. Students develop an understanding of the nature of language, including grammar, and culture and use this knowledge to compare languages and cultures and to expand insight into their own language and culture. Students enhance their personal and public lives and meet the career demands of the 21st century by using Spanish to participate in communities in Texas, in other states, and around the world.

## **Mathematics Program**

In Mathematics, students use algebraic, graphical, and geometric reasoning to recognize patterns and structure, to model information, and to solve problems from various disciplines. Students learn algebra, geometry, probability, and statistics and connections among these to solve problems from a wide variety of advanced applications in both mathematical and nonmathematical situations. Students use a variety of representations (concrete, pictorial, numerical, symbolic, graphical, and verbal), tools, and technology (including, but not limited to, calculators with graphing capabilities, data collection devices, and computers) to link modeling techniques and purely mathematical concepts and to solve applied problems. As students do mathematics, they continually use problem-solving, language and communication, connections within and outside mathematics, and reasoning (justification and proof).

## **Courses**

### ***Algebra I***

#### **Full Year, One Credit**

The concepts of algebra are presented with a strong emphasis on structure and problem solving. The additive and multiplicative properties of real numbers are developed and extended to open sentences, polynomials (including factoring and working with rational expressions), and radical numbers. Solutions to word-based problems, systems of linear equations, inequalities and quadratic equations are also studied in detail. In addition, graphing of linear and quadratic functions will be emphasized.

### ***Geometry***

#### **Full Year, One Credit**

The concepts of congruence, similarity, and the Pythagorean Theorem and its applications will be studied, including an introduction to trigonometry. Coordinate geometry will be covered, as well as geometric applications of algebra. There will be geometric proofs.

### ***Algebra II***

#### **Full Year, One Credit**

The first semester of this course is a review of those concepts learned in Algebra I along with a more detailed extension of those concepts coupled with an increased emphasis on the structure of algebra and problem solving. In the second semester, new materials are introduced which include complex numbers, graphing techniques, logarithmic and exponential functions and progressions.

### ***Pre-Calculus***

#### **Full Year, One Credit**

Success in a Calculus course depends upon having acquired a thorough understanding of functions. In this course, considerable emphasis will be given to functions and their graphs. Polynomial, logarithmic, exponential, trigonometric, and circular function and their inverses will be treated extensively. Practical applications, particularly from Physics will be emphasized. Differential Calculus will also be introduced.

## ***Calculus***

The major component of this course is the introduction to the complete first year college *Calculus* course. Students will review and extend their knowledge of algebra, geometry, and trigonometry. Students will study differentiation, integration, and other calculus topics.

# **Physical Education/Health Program**

In Physical Education, students acquire the knowledge and skills for movement that provide the foundation for enjoyment, continued social development through physical activity, and access to a physically-active lifestyle. The student exhibits a physically-active lifestyle and understands the relationship between physical activity and health throughout the lifespan.

## **Courses**

### ***P.E. I/II***

#### **Semester/Full Year, Half Credit/Full Credit**

This course is a continuation of lessons and activities which develop appropriate fitness and motor skills. Emphasis is placed on the lifelong integration of sports-based habits and activities, and positive physical fitness habits.

### ***Health***

#### **Semester, Half Credit**

This course emphasizes the proper attitudes and understandings of human health concepts in young adults. The various functions of the body, anatomical and physiological, are explored in detail. An emphasis is also placed on sound mental health in students, and the development of a healthy sense of self-esteem.

# **Science Program**

Science is a way of learning about the natural world. Students should know how science has built a vast body of changing and increasing knowledge described by physical, mathematical, and conceptual models, and also should know that science may not answer all questions. Investigations are used to learn about the natural world. Students should understand that certain types of questions can be answered by investigations, and that methods, models, and conclusions built from these investigations change as new observations are made. Models of objects and events are tools for understanding the natural world and can show how systems

work. They have limitations and based on new discoveries are constantly being modified to more closely reflect the natural world.

## **Courses**

### ***Biology***

#### **Full Year, One Credit**

This course will be using the scientific method of investigation to identify the structures of plant and animal cells and their functions along with understanding the basics of genetics and comparing and contrasting the systems of vertebrates and invertebrates. In addition, students will learn to integrate the basic systems of the human body and recognize the ecological relationship between organisms and their environments. This course is laboratory-based.

### ***Chemistry***

#### **Full Year, One Credit**

The fundamental principles of the structure and behavior of matter and its different properties will be studied. Students will learn lab and problem solving techniques which will prepare them for college chemistry.

### ***Physics***

#### **Full Year, One Credit**

This course is a study of the physical world. It includes a study of matter and motion and their relationship to each other: energy, forces, projectile motion, momentum, gravitation, sound waves, light, electricity, magnetism, and modern physics. This course emphasizes the main concepts of physics with a heavy emphasis on discovery of physical principles through problem solving.

### ***AP Physics***

#### **Full Year, One Credit**

Includes topics in both classical and modern physics. A knowledge of algebra and basic trigonometry is required for the course; the basic ideas of calculus may be introduced in connection with physical concepts, such as acceleration and work. Understanding of the basic principles involved and the ability to apply these principles in the solution of problems should be the major goals of the course.

### ***AP Chemistry***

#### **Full Year, One Credit**

Students in this course should attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. The course should contribute to the development of the students' abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic.

## ***Anatomy & Physiology***

### **Full Year, One Credit**

This course prepares students for health-related college majors. It is a lab-oriented course which demonstrates the structure and function of human organ systems. It is an advanced course with the prerequisites of Biology and Chemistry.

## ***Environmental Science***

### **Full Year, One Credit**

Explores Earth's natural systems, as well as how human activity affects the environment; students will apply the scientific method to investigate natural flows of chemicals, water and energy in terrestrial, aquatic, and atmospheric systems, and how humans impact these natural flows and systems. ENVS 101 and ENVS 102 satisfy the 4-credit General Education science requirement.

# **Social Studies Program**

The Social Studies program is intended to be integrated for instructional purposes with the history and geography strands establishing a sense of time and a sense of place. A greater depth of understanding of complex content material can be attained when integrated social studies content from the various disciplines and critical-thinking skills are taught together. Throughout social studies students build a foundation in history; geography; economics; government; citizenship; culture; science, technology, and society; and social studies skills. The content, as appropriate for the grade level or course, enables students to understand the importance of patriotism, function in a free enterprise society, and appreciate the basic democratic values of our state and nation as referenced

## **Courses**

### ***World Geography***

#### **Full Year, One Credit**

In World Geography Studies, students examine people, places, and environments at local, regional, national, and international scales from the spatial and ecological perspectives of geography. Students describe the influence of geography on events of the past and present. A significant portion of the course centers around the physical processes that shape patterns in the physical environment; the characteristics of major land forms, climates, and ecosystems and their interrelationships; the political, economic, and social processes that shape cultural patterns of regions; types and patterns of settlement; the distribution and movement of world population; relationships among people, places, and environments; and the concept of region.

### ***World History***

### **Full Year, One Credit**

This course surveys world civilizations from ancient to modern times. It encompasses a comprehensive review of humanity's challenges and achievements throughout history and a special emphasis is placed on relating past achievements to contemporary times. Including in this course is a through study of world geography and included are significant map study and project work.

### ***U.S. History***

#### **Full Year, One Credit**

This course presents the student with the various forces and factors that have affected the development of the nation from the Age of Exploration to the present. Students will be called upon to examine America's domestic and foreign policies, both past and present, in order to gain an understanding of the nation's role in the world of today and tomorrow.

### ***AP World History***

#### **Full Year, One Credit**

World History is a course offering students an overview of the entire history of humankind. The major emphasis is on the study of significant people, events, and issues from the earliest times to the present. Traditional historical points of reference in world history are identified as students analyze important events and issues in western civilization as well as in civilizations in other parts of the world. Students trace the historical development of important legal and political concepts and examine the history and impact of major religious and philosophical traditions. They analyze the connections between major developments in science and technology and the growth of industrial economies, and they use the process of historical inquiry to research, interpret, and use multiple sources of evidence

### ***American Government***

#### **Semester, Half Credit**

Students will examine the origins of American democracy, the Bill of Rights, political parties and electoral process, and the operations of the three branches of government on national, state and local levels. Opportunities are provided for discussing current issues with which our government is involved.

### ***Economics***

#### **Semester, Half Credit**

This course is a basic study of the U.S. economy, including economic principles, issues and analysis that provides the student with an understanding of both the theoretical and practical approaches of this social science. The students will gain an understanding of the role that economics plays at the personal, national and international levels.

### ***Special Topics in Social Studies***

#### **Full Year, One Credit**

In Special Topics in Social Studies, students are provided the opportunity to apply the knowledge and skills of the social sciences to a variety of topics and issues. Students use

critical-thinking skills to locate, organize, analyze, and use data collected from a variety of sources. Problem solving and decision making are important elements of the course as is the communication of information in written, oral, and visual forms.