



# Freshman Curriculum Guide

## Graduation Requirements

Theology ( <i>including 60 hours of Christian Service</i> )	4.00
English	4.00
Mathematics	3.00
Science	3.00
Social Studies	3.00
World Language ( <i>or 2 year sequence in Fine Arts/Reading</i> )	2.00
Physical Education	1.00
Visual Arts	0.50
Performing Arts	0.50
Health	0.50
Computer Applications	0.50
<u>Electives (<i>one elective must be a core course</i>)</u>	<u>3.00</u>
Total Credits	25.00

## Sequence of Courses

<u>Freshman Year</u>		<u>Sophomore Year</u>		<u>Junior Year</u>	
Theology	1.00	Theology	1.00	Theology	1.00
English	1.00	English	1.00	English	1.00
Mathematics	1.00	Mathematics	1.00	Mathematics	1.00
Science	1.00	Science	1.00	Science	1.00
World Language*	1.00	World Language*	1.00	U.S. History	1.00
World History	1.00	Health	0.50	<u>Electives</u>	<u>2.00</u>
Computer Applications	0.50	Physical Education	0.50	<b>Total</b>	<b>7.00</b>
<u>Physical Education</u>	<u>0.50</u>	Visual Arts	0.50		
<b>Total</b>	<b>7.00</b>	<u>Performing Arts</u>	<u>0.50</u>	<u>Senior Year</u>	
		<b>Total</b>	<b>7.00</b>	Theology	1.00
				English	1.00
				Economics	0.50
				U.S. Government	0.50
				<u>Electives***</u>	<u>4.00</u>
				<b>Total</b>	<b>7.00</b>

*Christian Service: Freshmen students are required to complete five (5) service credit hours for a person or group outside of JCA as a part of their Theology class.*

*\*Or 2 year sequence in Fine Arts/Reading*

*\*\* One elective must be a core course*

## Course Information

(A denotes Accelerated Curriculum, H denotes Honors Curriculum, U denotes Upper College Prep Curriculum, and C denotes College Prep Curriculum)

### Theology I - U

**1.00 Credit**

**Prerequisite: None**

The course will focus on The Revelation of Jesus Christ in Scripture. The purpose of this course is to give students a general knowledge and appreciation of the Sacred Scriptures. Through their study of the Bible, they will come to encounter the living word of God, Jesus Christ.

### English I - A

**1.00 Credit**

**Prerequisite: Administrative Placement**

In this course, students will enhance their reading and vocabulary skills to prepare for upper level courses by reading and studying two novels, poetry, mythology and a Shakespearean play, as well as other modern and traditional classic literature. They will review grammar, mechanics and usage in order to refine their writing. Students will practice effective writing as they compose paragraphs, a literary analysis, and a research report.

### English I - U

**1.00 Credit**

**Prerequisite: Administrative Placement**

This course concentrates on introducing such literary genres as the novel, poetry, mythology, epic characters and a Shakespearean drama. Library skills and grammar review are emphasized. Writing will emphasize the development of sentences into clear, logical paragraphs. Narrative, descriptive, and expository modes of writing will be studied.

### English I - C

**1.00 Credit**

**Prerequisite: Administrative Placement**

This course includes library orientation, a review of study skills and the fundamentals of grammar. Reading activities include mythology, poetry and drama. Student writing activities will emphasize the development of correct sentence structure and paragraph writing.

### Reading I - C

**1.00 Credit**

**Prerequisite: Administrative Placement**

This course is designed for students who do not meet expected levels of achievement in reading and who require a review or a complete re-learning of unmastered skills. Placement is determined by the reading scores from the JCA Placement Exam and junior high school reports. Students enrolled in English I-C are automatically enrolled in this course in lieu of being enrolled in a world language.

### Spanish I - U (*Elective*)

**1.00 Credit**

**Prerequisite: Administrative Placement**

This course will develop world language skills in the four areas of listening, speaking, reading and writing of basic compositions. This course will also promote an awareness, appreciation and understanding of the Spanish-speaking world's way of life, history and traditions.

**French I - U (Elective)****1.00 Credit****Prerequisite: Administrative Placement**

This course offers an introduction to the language and culture of the French-speaking world. It is designed to help the student attain an acceptable degree of proficiency in the areas of listening, speaking, reading and writing. The grammar and French vocabulary reinforce and develop the students' English proficiency.

**World History - A****1.00 Credit****Prerequisite: Administrative Placement**

This course takes a chronological approach to examine key periods in the history of the world from the earliest human communities to the very recent past. Cultural, economic, political, intellectual and geographic concepts are emphasized. Special attention is paid to the themes of both change and continuity over time.

**World History - U****1.00 Credit****Prerequisite: Administrative Placement**

In this course, the development of civilization is traced from the ancient Middle East to the latter half of the twentieth century. Special emphasis is placed on the common elements that cultures have shared over time as well as the diversity that has made each civilization unique.

**World History - C****1.00 Credit****Prerequisite: Administrative Placement**

In this course, selected periods of world history are examined in chronological sequence, beginning with the ancient Middle East through World War II. Emphasis is placed on understanding characteristics and values of each time period and relating how these concepts affect the world today.

**Algebra I - A****1.00 Credit****Prerequisite: Administrative Placement**

This course includes the study of real numbers, both rational and irrational. Operations of polynomials are presented along with careful study of graphing solution sets of open sentences in two variables. Functions and quadratic equations are also studied. The "why and how" of Algebra are surveyed in this course.

**Algebra I - U****1.00 Credit****Prerequisite: Administrative Placement**

This course is intended as a traditional Algebra I course and serves as a basis for all further high school math studies. This course includes the study of real numbers, both rational and irrational. Operations of polynomials are presented along with careful study of graphing solution sets of open sentences in two variables.

**Algebra I - C****1.00 Credit****Prerequisite: Administrative Placement**

This course includes all the essential topics studied in Algebra I, including operations, the real number system, equations and inequalities with applications, and factoring trinomials. The study of rational expressions, graphing, and systems of equations are also included. Numerous examples and exercises are employed to ensure each student with the opportunity for success. Upon completion of the course, students are prepared for further advanced math courses.

**Algebra I, Part A - C****1.00 Credit****Prerequisite: Administrative Placement**

This course is the first year of a two-year Algebra I course. It will provide students with the first half of fundamentals of a standard one-year course. Since this course extends over a two-year period, it allows for a more intense emphasis on fundamental Algebra I topics. Taking both parts, A and B, this course will satisfy two of the three required math credits needed for graduation, however, it fulfills only one college admission credit.

**Geometry - H****1.00 Credit****Prerequisite: Administrative Placement**

**Prerequisite includes successful completion of JCA's Advanced Math Placement Exam and associated prerequisites, or a "C" or above in Algebra I - A for eighth graders with teacher recommendation.** This course begins with an introduction to the basic concepts and encompasses all the conventional topics included in an Euclidean Geometry course. It provides a rigorous and in-depth approach to covering geometric ideas and formal proofs as well as enhancing logical thinking and creativity.

**Biology - A****1.00 Credit****Prerequisite: Administrative Placement**

This course offers a phylogenetic approach to the study of molecular and cellular biology. This leads to an understanding of the continuity of characteristics of offspring by hereditary determinations, which gives meaning to organic variation and scientific classification. It includes a hands-on laboratory course dealing with various topics, as well as a methods course to acquaint students with the use of the microscope, balance, and other scientific instruments.

**Biology - U****1.00 Credit****Prerequisite: Administrative Placement**

This relevant and vital course in the study of life includes such topics as: microbiology, biochemistry, genetics, natural selection, cell structure and function, principles of heredity, evolution, classification of organisms, and characteristics of moneran, protist, fungi, plants and animals. Laboratory investigations pertinent to each topic area are used to stress scientific principles.

**Biology - C****1.00 Credit****Prerequisite: Administrative Placement**

This course is a practical study of the characteristics and functions of living things. The class emphasizes current knowledge, processes which keep organisms alive, and ecological relationships between organisms. Topics include: cell, plant and animal structure functions, microbiology, classification of organisms, bacteria, viruses and disease, animal behavior, genetics, reproduction, evolution and human anatomy. Pertinent laboratory investigations are used to stress scientific principles.

**Chemistry - H****1.00 Credit****Prerequisite: Administrative Placement**

This course emphasizes basic chemistry principles and scientific reasoning. Labs are used to reinforce concepts and to allow students to discover some principles by "doing." Material covered includes atomic structure, bonding, properties of elements and compounds, theories underlying reactions, nuclear chemistry and introductory organic chemistry.

**Computer Applications - U****0.50 Credit****Prerequisite: None**

Students report to the Computer Center daily to extend their proficiency in Microsoft Word, Excel and PowerPoint. Students will also learn research skills as well as how to use an online research database. They will also use various Web 2.0 tools to extend proficiency in writing skills, photo and video publishing skills, working with music and study skills.

**Physical Education - U****0.50 Credit****Prerequisite: None**

This course stresses the importance of learning through the total development of each student in a wide variety of sports and exercises. Students will participate in a program with emphasis on fundamental skills, self-control, teamwork and knowledge of each sport and activity.

**Band (Elective)****1.50 Credit****Prerequisite: Skill and previous experience playing a band instrument.**

This course is open to any student who plays a band instrument (wind, brass or percussion). Students must be proficient with an instrument and must be able to read music. This group will perform in a minimum of one major concert per semester. The first semester will focus on a combination of pep band and concert band. The second semester will focus on concert band. A variety of compositions will be played. Performances may include playing at football game halftimes, as well as various other venues. Note: Freshmen and sophomore band members will meet during D2. Junior and senior band members will meet during E2. All band members will meet during period H. Freshmen and sophomore band members may have to postpone taking their Physical Education, health, and computer courses until their junior and/or senior year.