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# COURSE OF STUDY

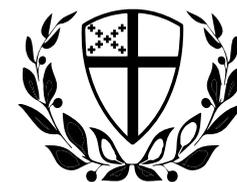
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UPPER SCHOOL  
2016-2017



EPISCOPAL  
COLLEGIATE SCHOOL

Jackson T. Stephens Campus  
1701 Cantrell Road  
Little Rock Arkansas 72201  
501.372.1194  
[www.episcopalcollegiate.org](http://www.episcopalcollegiate.org)



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## UPPER SCHOOL RECOMMENDED PROGRAM AT A GLANCE

9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
1. English	English	English	English
2. Math	Math	Math	Math
3. Biology	Chemistry or Elective ***	Physics or Elective ***	Physics or Elective ***
4. Civics and Economics	World History	United States History	Economics ½* Elective ½
5. World Language	World Language	World Language	Elective
6. Upper School P.E. ½ Upper School Health ½ OR Elective OR Study Hall	Religion ½ / Communications or Oratory and Debate ½ OR Elective OR Study Hall	Elective	Elective
7. Upper School P.E. ½ Upper School Health ½ OR Elective OR Study Hall**	Religion ½ / Communications or Oratory and Debate ½ OR Elective OR Study Hall**	Study Hall	Study Hall
<b>Standard Course Load</b>			
7	7	6	6

\*\* It is recommended that these required courses be taken as suggested above.

\*\*\* Students must be concurrently enrolled in Algebra II to take Chemistry.

## GRADUATION REQUIREMENTS

Twenty and half of the twenty six credits required to graduate are pre-selected. Exceptions to these requirements are made at the discretion of the Head of School and the Head of Upper School. Credits are as follows:

Course	Required Credits
English	Four
Mathematics	Four
Science	Three
History	Three
World Language	Three
Fine Arts	One
Economics	One-half
Health	One-half
Physical Education	One-half
Religion	One-half
Communications	One-half
Electives	Four-to-Six

## STANDARD COURSE LOAD

It is recommended that ninth and tenth grade students take seven (7) courses per semester.

It is recommended that eleventh and twelfth grade students take at least six courses per semester.

No fewer than four of the six must be taken in the core subject areas: English, math, history, science, and world language.



## ACADEMIC STANDARDS

Episcopal Collegiate offers its students the opportunity to become independent learners by providing a curriculum based on high expectations, academic achievement, personal responsibility, and spiritual development. Our students are expected to participate actively in discovering and creating their own solutions to problems, to think critically, and to write analytically. They develop personal responsibility, values for engaged citizenship, a healthy regard for human worth and dignity, tolerance of ideas and experiences different from their own, empathy for those around them, and an appreciation for human diversity. The spiritual foundation of Episcopal Collegiate encourages students and faculty to value each other as children of God worthy of dignity and respect.

## ADVANCED PLACEMENT

Advanced Placement (AP<sup>®</sup>) courses are college-level freshmen/sophomore courses taught by trained high school instructors. As such, they offer greater depth and detail in the study of the subject matter and require higher expectations with regard to writing, reading, and thinking skills. The time and effort required for a college course is expected if a student is to be successful in an AP<sup>®</sup> course. Students can expect additional homework during the week, over weekends, and during longer vacations to meet the expectations of these courses designed to earn college credit. All students completing Advanced Placement courses are expected to take the corresponding Advanced Placement exam in May. Successful performance on the AP<sup>®</sup> exam can earn the student college credit or placement while still in high school.

## ENGLISH

**Requirements:** English I, English II, English III or AP® English Language and Composition and English IV, or AP® English Literature and Composition

### English I: Great Traditions in Literature

**Prerequisites:** English 8

**Grade Level:** 9

**Time Allotment:** 1 Year

**Course Description:** In this course, students will read and analyze challenging fiction, nonfiction, poetry, and drama, including works of Dickens and Shakespeare, as well as contemporary literature. Close reading, critical thinking, and analytical writing will be emphasized. Students will demonstrate mastery of the conventions of standard written English and hone personal writing style and voice by writing literary analysis, as well as other essays and projects. Research will be a focus, incorporating current technology and software. Regular vocabulary study will increase proficiency in reading comprehension, writing, and taking standardized tests.

### English II: The Hero with a Thousand Faces

**Prerequisites:** English I

**Grade Level:** 10

**Time Allotment:** 1 Year

**Course Description:** The course introduces students to a variety of genres in world literature including the drama of ancient Greece and Shakespearean tragedy, Homer's epic poetry (*Odyssey* or *Iliad*), novels by Hemingway, Wiesel, Achebe, Hugo, and Martel, and contemporary short stories and poetry. Emphasis is placed on strengthening composition skills through a variety of traditional and creative writing assignments. This course further develops strategies to enhance critical reading, grammar and usage, analytical writing, and effective communication skills. Students will learn literary terminology, as well as vocabulary from Latin and Greek roots.

### English III: Survey of American Literature

**Prerequisites:** English II

**Grade Level:** 11

**Time Allotment:** 1 Year

**Course Description:** This course surveys the major authors and periods of American literature, including the Romantics, the Realists, and the

Modernists. Major literary works by Hawthorne, Twain, Hemingway, Fitzgerald, and Faulkner are included in the curriculum, along with numerous pieces of non-fiction, poetry, and short stories. Students will practice close reading and critical analysis. Students will write narratives, summaries, stylistic analyses, and conduct research. Speaking and listening skills will be developed through oral discussion, class presentations, and recitation of memory work. Consistent vocabulary study will include words in context and application.

### AP® English Language and Composition

**Prerequisites:** English II and recommendation of current English instructor

**Grade Level:** 11

**Time Allotment:** 1 Year

**Course Description:** The Advanced Placement English Language and Composition course is a college-level course in language, rhetoric, and expository writing and engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts such as novels, short stories, poems, essays, and speeches. Students will write original expository, analytical, and argumentative essays. Students will also be required to write frequent in-class timed essays based on AP® style writing prompts. The course assumes that students have mastered English grammar. Students who elect this course must be serious about honing a personal writing style. This AP® course is designed to prepare students to write with the same skill as would a college composition course.

### English IV: Survey of British Literature

**Prerequisites:** English III

**Grade Level:** 12

**Time Allotment:** 1 Year

**Course Description:** This course consists of a study of British literature from the Renaissance to modern times. Students will study the influence of political, cultural, and social changes on the development of English literature, as well as works of the major British writers. They will comprehend, evaluate, and respond to works of literature with clarity in speaking and writing. The focus of the writing is the extended essay form, with practice in descriptive, narrative, and expository writing. Each student will do independent research and produce a research project.

### AP® English Literature and Composition

**Prerequisites:** English III and recommendation of current English instructor

**Grade Level:** 12

**Time Allotment:** 1 Year

**Course Description:** In this college-level course, students will read challenging works from several genres and periods. They will read to understand a work's complexity, to absorb its meaning, and to analyze how that meaning is embodied in the literary form. Students will consider a work's structure, style, and themes, as well as such elements as the use of figurative language, imagery, symbolism, and tone. The course material will require students to be self-motivated, enthusiastic readers. Writing will be an integral part of the course. The goal of the writing assignments will be to increase students' abilities to explain cogently and clearly what they understand about literary works and why they interpret them as they do.

### Creative Writing

**Prerequisites:** English II and Recommendation of Instructor

**Grade Level:** 11 – 12

**Time Allotment:** 1 Semester

**Course Description:** Literary discovery and self-discovery are goals of Creative Writing. The course will provide opportunities for the imaginative exploration of the genres of short fiction, poetry, drama, and creative nonfiction. Students will read examples of a variety of genres, learn how to use literary elements, descriptive writing techniques, critiques, and evaluation as part of the writing process, and generate original pieces in a workshop atmosphere. The students will also publish *Reverie*, the literary magazine of Episcopal Collegiate School.

### Minority Voices in Literature

**Prerequisites:** Recommendation of Instructor

**Grade Level:** 11 – 12

**Time Allotment:** 1 Semester

**Course Description:** What is it like to live as a minority member of a majority culture? The fiction and verse of contemporary writers will provide the basis for this elective course through which students will gain insight into the minority experience. Literary works may vary, but may include novels, poetry, short stories, non-fiction, and drama. Students will write in response

to the works in order to clarify and deepen their own understanding of the life experiences depicted in these selections. They will explore the authors' styles through analytical writing, occasional projects, and oral interpretations. This course emphasizes recurrent themes through diverse literature. By taking this course, students will gain proficiency in reading and writing, increase vocabulary, and explore diverse life experiences.

### Shakespearean Drama: "The Play's the Thing"

**Prerequisites:** Recommendation of Instructor

**Grade Level:** 11 – 12

**Time Allotment:** 1 Semester

**Course Description:** In this course, students will read and study Shakespearean plays not currently covered in the English curriculum. Through reading a history, a comedy, and a romance, in addition to a tragedy, the student will be able to grasp the breadth and depth of Shakespeare's genius. Student writing will include informal, reader-response pieces and more structured, analytical essays. Students will read examples of each genre and learn how to use literary elements, descriptive writing techniques, and evaluation as part of the writing process as students generate original works in each genre. When possible, students will see live performances of Shakespearean plays.



## Film Studies

**Prerequisites:** Recommendation of Instructor

**Grade Level:** 11 – 12

**Time Allotment:** 1 Semester

**Course Description:** Stories are an essential part of every human culture; they help us to glean life lessons and to understand ourselves, and our place in the world with others. The means by which these stories are told—whether written, spoken, or performed on stage or screen—influence the way we approach and interpret them. While it may be influenced by written work, film should be considered an entirely unique art form for the purposes of critique and analysis. This course explores the complex interplay between film and literature. Selected novels, short stories, and plays are analyzed in relation to film versions of the same works in order to gain understanding of the possibilities and problems involved in the transposition to film. We will also investigate films that do not have written work as their inspiration, in order to discover the ways in which these stories work in terms of understanding the nature of stories and the roles they play in our lives.

## Humanities I and II

**Pre-requisites:** None

**Grade Level:** 11 – 12

**Time Allotment:** Either 1 Semester or 1 Year

**Course Description:** Humanities is a two-semester interdisciplinary study of the culture of the Western world, with a particular emphasis on the arts. Historical, literary, and philosophical documents will be examined as well as artifacts that reflect the artistic expression of a culture: the music, art, and architecture of each period. A special focus of the course is to explore the creative process and to recognize the relationship of the arts to the social and political contexts in which they were created. The first semester will focus on Classicism through the Renaissance, and the spring semester will begin with the Seventeenth Century and go through the Modern and Post-modern eras. Students may enroll in either or both semesters.

## The Science of Science Fiction

**Pre-requisites:** None

**Grade Level:** 11 – 12

**Time Allotment:** 1 Semester

**Course Description:** Science Fiction contemplates the possibilities of the future and provides a platform for innovation. This course will study science fiction novels, short stories, and films to help students to glean life lessons through an understanding of humankind. It will also offer a study of the science and technology involved in the works of fiction we will cover, in order to foster an ability to critically analyze scientific realities and possibilities, a key skill for modern culture and future human endeavors.

This course will be taught in conjunction with John Ray, a Chief Training Officer for NASA.

## VISUAL AND PERFORMING ARTS

**Requirements:** One Credit Elective and ½ credit of either Communications or Oratory and Debate

### Introduction to Broadcast Journalism

**Prerequisites:** None

**Grade Level:** 9 – 12

**Time Allotment:** 1 Semester

**Course Description:** Introduction to Broadcast Journalism is an introductory video production class. Students in this semester-length class will learn the fundamentals of writing, reporting, and shooting video for an audience. Students will also learn the basics of digital non-linear video editing using iMacs and Final Cut Pro.

### Advanced Broadcast Journalism

**Prerequisites:** Intro. To Broadcast Journalism and Instructor Approval

**Grade Level:** 10 – 12

**Time Allotment:** 1 Year

**Course Description:** This is an advanced reporting and production class for the student who wishes to further his or her video skills. Students in this class make up the leadership staff which both contributes to and produces the Upper School news magazine, “ECTV News.” The leadership staff also assists the school with special projects and productions. Advanced Broadcast

Journalism students will represent Episcopal Collegiate School at competitions at both the state and national level.

### Communications: Storytelling in a Global Age

**Prerequisites:** None

**Grade Level:** 9 – 10

**Time Allotment:** 1 Semester or Summer

**Course Description:** This course addresses students’ abilities to develop original ideas about the world around them, to understand various audiences and global perspectives, to research and implement appropriate resources and technology, and to express clear personal perspectives reflecting their enhanced awareness through effective interpersonal and intrapersonal communications. Students will work individually and collaboratively to discover and present new information and advocate for real solutions in a complex and changing world.

### Oratory and Debate

**Prerequisites:** None

**Grade Level:** 9 – 12

**Time Allotment:** 1 Semester

**Course Description:** Oratory and Debate is a course that allows students to gain a deeper understanding of research, writing and competitive speaking. The course provides students with opportunities to use oral argumentation in a variety of settings, gather evidence from a variety of sources, participate in a debate, and use logic to reason clearly. Students learn the purpose and principles of parliamentary procedure, learn the purposes of each of the types of motions, write a formal proposal, debate the proposal, and vote upon it. Additionally, they review the different purposes of public speeches, compare various methods of speech delivery, and construct public speeches including planning, researching, and outlining. The course will also satisfy the communications requirement.

### Publication Design I and II

**Prerequisite:** None

**Grade Level:** 10 – 12

**Time Allotment:** Either 1 Semester or 1 Year

**Course Description:** Students explore ideas and gain skills in the following areas: creative and journalistic writing, editing, page design, advanced

publishing techniques and tools, and photography while producing a creative, innovative yearbook to document school memories and events. The course emphasizes journalism skills, and participants gain useful experience with creative software tools, time management, marketing, blogging, teamwork, and design principles. Students can take one or both semesters.

### Foundations of Art

**Prerequisite:** Recommended for transfer students or those with no visual arts experience in middle school

**Grade Level:** 9 – 12

**Time Allotment:** 1 Semester

**Course Description:** This course will explore the areas of drawing, painting, printmaking, and sculpture. The methods and techniques will vary based on the materials and surfaces available, in addition to the time allowed to complete the assignments. Note taking, sketching, and research will be a part of the art making experience. Lessons will build on prior techniques and experience from art studio lessons. Students will participate in written and verbal critiques. Critiques will be conducted in small groups, by the individual, and with the entire class. Research will cover historical art movements, techniques, and artists. Students will maintain a sketchbook throughout the course.

### Drawing I-III

**Prerequisite:** Foundations of Art Recommended

**Grade Level:** 9 – 12

**Time Allotment:** 1 Semester

**Course Description:** Art courses will be offered at introductory, intermediate, and advanced levels for all course types. The art instructor will differentiate instruction based on the level of experience for each student, and the correct level (I, II, or III) will display on transcripts. Drawing builds and extends the basic drawing knowledge gained in previous studio courses and refines the student’s skills. Students will work on varied surfaces and use different drawing media. The subjects of study will be based on direct observations and the artist’s imagination. Art history and current art movements will be introduced into the lessons throughout the semester to enhance the students’ final pieces. Students will be required to maintain an art binder to keep sketches, classroom handouts, and reflections that critically analyze the work completed in class.

### Painting I-III

**Prerequisite:** Foundations of Art Recommended

**Grade Level:** 9 – 12

**Time Allotment:** 1 Semester

**Course Description:** Art courses will be offered at introductory, intermediate, and advanced levels for all course types. The art instructor will differentiate instruction based on the level of experience for each student, and the correct level (I, II, or III) will display on transcripts. Painting builds and extends the basic knowledge of painting gained in previous studio courses and refines the student's skills. Students will work with wet media on varied surfaces and with watercolor, tempera, ink, and acrylic. The subjects of study will be based on direct observations and on the artist's imagination. This course will support and refine the student's painting skill set and will help the student develop personal style, media, and voice. Students will use basic drawing skills to lay out the painting compositions. Art history and specific art movements will be introduced into the lessons to enhance student work. Students will be required to maintain an art binder to keep sketches, classroom handouts, and reflections that critically analyze work completed in class.

### Printmaking I-III

**Prerequisites:** Foundations of Art Recommended

**Grade Level:** 9 – 12

**Time Allotment:** Semester (1st Semester)

**Course Description:** Art courses will be offered at introductory, intermediate, and advanced levels for all course types. The art instructor will differentiate instruction based on the level of experience for each student, and the correct level (I, II, or III) will display on transcripts. Printmaking is designed to explore and introduce different printmaking processes. Students will learn how to work with the printing press and how to create a variety of plates to create a print. The manipulation of ink, paper, and print transfers will open a whole new way of manipulating the artist's mark-making skills. The processes the course will explore include relief and intaglio. Students will learn how prints differ from other traditional forms and how to develop their personal voice within the lessons. Students will be required to maintain an art binder for sketches, classroom handouts, and reflections that critically analyze the art work completed in class.

### Sculpture I-III

**Prerequisite:** Foundations of Art Recommended

**Grade Level:** 9 – 12

**Time Allotment:** 1 Semester (2nd Semester)

**Course Description:** Art courses will be offered at introductory, intermediate, and advanced levels for all course types. The art instructor will differentiate instruction based on the level of experience for each student, and the correct level (I, II, or III) will display on transcripts. Sculpture explores the three-dimensional form, low relief, high relief, earthworks, and sculpture in the round. Projects are designed to further the students' understanding and communication of self-expression, cultural analysis, problem solving, and manual art skills. Media includes wire, wood, clay, plaster, and found materials. Students will relate to art history and culture to create original themes and compositions. Students will be required to maintain an art binder to keep sketches, classroom handouts, and reflections that critically analyze the art completed in class.

### Mixed Media Art I-III

**Prerequisite:** Foundations of Art Recommended

**Grade Level:** 9 – 12

**Time Allotment:** 1 Semester (2nd Semester)

**Course Description:** Mixed Media Art is designed for students to learn and practice art techniques through less traditional forms such as photography and fashion design, and other media. Students will learn the history of photography and design and experiment with the most current practices of digital imaging and design. The primary focus of the class will include shooting with a digital camera in a controlled and technical manner, editing images in a photographic editing program, and learning the varied processes of printing. Research assignments, note-taking, and sketching will form the art-making experience. Students will be required to maintain an art binder and a web gallery of all assignments throughout the course. Students will be required to supply their own digital cameras and flash drives.

### AP® Studio Art

**Prerequisites:** Instructor Approval

**Grade Level:** 11 – 12

**Time Allotment:** 1 Year

**Course Description:** AP® Studio Art is designed for the serious art student who desires a well-developed art

portfolio. The course will be individualized for the advanced art student through assessment of the student's strengths and weaknesses in addition to the student's interest and goals. Students will submit an artist's portfolio to the College Board Advanced Placement Program in May. Students will be required to be self-directed and highly-motivated to assemble a quality portfolio. This course is rigorous and will require study outside of class. An art binder will be required to maintain student notes and handouts. Students will work on written reflections throughout the school year. The purchase of an artist's portfolio is recommended for storage and transport of artwork.

### Concert Choir

**Prerequisites:** None

**Grade Level:** 9 – 12

**Time Allotment:** 1 Year

**Course Description:** Concert Choir is the premiere vocal ensemble at Episcopal Collegiate. Theoretical and historical musical knowledge is extended through this course as students rehearse and perform literature from various cultures and stylistic periods. The ongoing development of proper singing technique and music reading skills are practiced on a daily basis in rehearsal. Concert Choir members perform studied literature regularly in chapel, concerts, competitions, and special events.

### AP® Music Theory

**Prerequisites:** None

**Grade Level:** 10 – 12

**Time Allotment:** 1 Year

**Course Description:** AP® Music Theory will serve to strengthen and enhance the student's oral, aural, and analytical skills. This will be accomplished through the study of the elements of music (pitch, rhythm, melody, harmony and texture) and through the development of composition, analytical, and sight-singing skills. Possessing a greater understanding of the structure of music enables the performer to make informed choices of interpretation and the listener to appreciate at a deeper level what he or she is hearing. This course will not only benefit those students who are in a performing ensemble at Episcopal Collegiate, but also those who are interested in continuing music studies in college as well as those who merely seek to achieve a deeper understanding of music.

### Orchestra

**Prerequisites:** Instructor Approval

**Grade Level:** 9 – 12

**Time Allotment:** 1 Year

**Course Description:** This course is for those students who have mastered the fundamental techniques involved in playing a string instrument and would like to further develop their playing ability. The music will become increasingly more difficult as the year progresses and as students work on advancing their technique and sound. Orchestra members will perform regularly at concerts, competitions, and special events.

### Beginning Percussion Ensemble

**Prerequisites:** None

**Grade Level:** 9 – 12

**Time Allotment:** 1 Year, Maximum: 12

**Course Description:** This beginning percussion course will introduce students to all of the instruments that make up the percussion section, including mallet and keyboard percussion, snare drum and timpani, and drum set. The class also focuses on world percussion and music created by different cultures from around the globe, including West Africa, Brazil, Cuba, and the Middle East. Not only do the students study this music, but they have the opportunity to perform the music in a variety of venues, including chapel performances, community events, school-sponsored events, home football games, pep rallies, and the annual percussion ensemble concert.



## Intermediate Percussion Ensemble

**Prerequisites:** Beginning Percussion

**Grade Level:** 9 – 12

**Time Allotment:** 1 Year, Maximum: 12

**Course Description:** Intermediate percussion ensemble puts into practice and further explores the skills and techniques acquired in beginning percussion. While world percussion is still a feature of the course, there is a greater emphasis put into the traditional percussion ensemble repertoire. Students will acquire the knowledge and skills to play a greater number of the accessory percussion instruments involved in Western percussion repertoire, including bass drum, cymbals, triangle, tambourine, timpani, and another accessory instruments. In addition, the repertoire will increasingly feature one player per part, developing the student's ability to play independently of other instruments. Students will continue their study of percussion through the use of Teaching Percussion by Gary Cook. Intermediate percussion students will maintain the performing schedule found in beginning percussion classes.

## Advanced Percussion Ensemble

**Prerequisites:** 1 year of Intermediate Percussion Ensemble (Middle or Upper School)

**Grade Level:** 9 – 12

**Time Allotment:** 1 Year, Maximum: 12

**Course Description:** Advanced Percussion Ensemble serves as an extension to the concepts started in Beginning Percussion Ensemble. This course will further develop the student's understanding of percussion, not only through the ability to perform on the individual instruments of the percussion family, but through focused reading and research of drumming and the percussion heritage of different cultures from around the world. Students will become proficient at playing the individual instruments that make up the percussion family, including, but not limited to: orchestral percussion (snare drum, timpani, cymbals, accessories), drum set, mallet instruments (marimba, xylophone, bells, chimes), and world percussion (African and Afro-Cuban). The course will also emphasize chamber music performance.

## Technical Theatre

**Prerequisites:** Middle School Theatre I or II or Instructor Approval

**Grade Level:** 9 – 12

**Time Allotment:** 1 Semester

**Course Description:** This one-semester course examines the role of technical theatre in the overall theatre production process by teaching the basic skills and vocabulary used by theatre technicians. The skills include basic set construction, manipulating stage lighting, basic theatre maintenance, and basic set design.

## Acting

**Prerequisites:** Middle School Theatre I or II or Instructor Approval

**Grade Level:** 9 – 12

**Time Allotment:** 1 Semester

**Course Description:** This one-semester course examines the role of the actor in the theatrical process. The course focuses on developing each actor's unique physical and vocal instrument and honing that instrument toward performance of scripted and improvisational actions in the presence of an audience.

## Theatre Practicum

**Prerequisites:** Acting or Technical Theatre

**Grade Level:** 10 – 12

**Time Allotment:** 1 Semester

**Course Description:** In Theatre Practicum, students will spend the semester working on at least three self-guided theatrical projects of their choosing and will assist in the production of the school play. Projects may include an audition sequence, a set design, a playwriting project, or any other theatrical project approved by the instructor.

## American Drama

**Pre-requisites:** Instructor Approval

**Grade Level:** 11 – 12

**Time Allotment:** 1 Semester

**Course Description:** In this one-semester course, students will explore five important works of American Drama through the lenses of dramatic structure, historical context, and performance considerations. During class time, students will read the plays aloud, rehearse and perform scenes, watch film versions of the plays, and complete small research projects.

## WORLD LANGUAGES

**Requirements:** Three credits of the same world language while in the Upper School

### French I

**Prerequisites:** None

**Grade Level:** 9 – 12

**Time Allotment:** 1 Year

**Course Description:** The goal in French is two-fold: first, to introduce students to essential grammar and vocabulary in the target language, and second, to create a connection with the francophone world through consistent study of and interaction with authentic cultural materials. The purpose of this is to form a bond between the student and the language, while giving him or her tools needed to interact and to communicate in France and other French speaking regions of the world. Students will be exposed to the four language skills (speaking, listening, reading, and writing), and will be required to exercise them daily through oral and written activities.

### French II

**Prerequisites:** French I

**Grade Level:** 9 – 12

**Time Allotment:** 1 Year

**Course Description:** This course will expand upon grammar and vocabulary presented in French I while continuing to develop skills of speaking, listening, and writing. Advanced grammatical structures and complex tenses, such as the imperfect, simple future, and conditional will be introduced. Grammar lessons will be reinforced through daily conversational practice and varied written activities. Francophone culture will continue to be explored, with a focus on France itself, its people, and its history.

### French III

**Prerequisites:** French II

**Grade Level:** 10 – 12

**Time Allotment:** 1 Year

**Course Description:** French III is intended to serve as an immersion into the French language. Students will improve their competence with the language through both in-depth analysis of grammar previously learned as well as the introduction of more complex structures. The focus will be an improving ease of communication, both written and oral. Students will also be introduced

to authentic francophone literature through the analysis of short stories, poetry, and other literary genres. Conversations will be inspired by a continued study of francophone culture, as well as cross-cultural comparisons and analysis.

### French IV

**Prerequisites:** French III

**Grade Level:** 11 – 12

**Time Allotment:** 1 Year

**Course Description:** The focus of French IV will be francophone history and art; however, all four language skills (reading, writing, speaking, and listening) will continue to be developed. Students will receive an overview of the vast literary history of France and the French-speaking world, and will apply reading strategies and analytical skills to short stories, poetry, and novels from varying literary periods. Students will continue to be exposed to various francophone cultures. Daily conversations in the target language will further develop fluency.

### AP® French Language

**Prerequisites:** French IV and Instructor Approval (or French III and Instructor Approval, on a case-by-case basis)

**Grade Level:** 11 – 12

**Time Allotment:** 1 Year

**Course Description:** The AP® French Language course will work to build an advanced oral and written proficiency level in the French language. Students will study vocabulary in a cultural and literary context and converse in French on a daily basis. This course is taught primarily in French and students are expected to respond primarily in French. Advanced vocabulary and grammar will continue to be addressed, and students will become increasingly proficient in the four fundamental areas of language: reading, speaking, listening, and writing. The ultimate goal of the course is to prepare students for the AP® Language examination in May.

## Latin I

**Prerequisites:** None

**Grade Level:** 9 – 12

**Time Allotment:** 1 Year

**Course Description:** Latin I establishes a firm foundation in vocabulary and grammar principles. Students develop comprehension through practice readings and translations. In addition, the course introduces students to the lasting connections of the Classical World to our own, in particular through exploring English derivations, mythology, and an overview of the social and political history of Ancient Rome.

## Latin II

**Prerequisites:** Latin I

**Grade Level:** 9 – 12

**Time Allotment:** 1 Year

**Course Description:** Latin II builds upon the extensive vocabulary and grammar principles of Latin I while introducing students to primary source translations. Students read selected texts of Republican Age writers Julius Caesar, Catullus, and Pliny. Students receive a thorough review of the material from Latin I and pursue further instruction in advanced grammar, vocabulary, and style.

## Latin III

**Prerequisites:** Latin II

**Grade Level:** 10 – 12

**Time Allotment:** 1 Year

**Course Description:** Latin III immerses students in the Latin language. Students complete their study of advanced Latin grammar principals while delving deeper into the translation and textual work of classical authors. Students analyze the varied styles of ancient Roman writers, including Cicero, Martial, Horace, and Catullus. Students also learn skills to translate material still present in modern Rome, including ancient funerary inscriptions, dedications, and political statements. In addition, students conduct an in-depth study of Roman history by reading English translations of Rome's important historians (Livy and Suetonius).

## Latin IV

**Prerequisites:** Latin III

**Grade Level:** 11 – 12

**Time Allotment:** 1 Year

**Course Description:** Students read primary source materials of authors in the two greatest periods of literary achievement in Rome, commonly known as The Golden and the Silver Ages. Students pursue a rigorous course with a singular focus on translation skills. Instruction emphasizes improved reading speed and comprehension, mastery of advanced Latin grammar, basic literary analysis, and familiarity with conventions of Latin epic poetry. Students translate selected texts of Horace, Catullus, Ovid, Juvenal, Tacitus, Plautus, Terence and explore the Greek influence on Roman poetry and prose. In addition, students become familiar with Vergil's *Aeneid* and examine the cultural and historical importance of Rome's greatest epic.

## AP® Latin: Vergil

**Prerequisites:** Latin III and Instructor Approval

**Grade Level:** 11 – 12

**Department:** World Language

**Time Allotment:** 1 Year

**Course Description:** AP® Latin: Vergil is a critical survey of the poetry of Vergil's epic, *The Aeneid*. By carefully studying the text, students learn to create a literary translation based on the original Latin, increase their ability to scan poetic lines, and interpret the required poems in their own modern context. The course requires the student to read extensively, study literary devices such as structure, meter, and plot, and understand the cultural, social, and political context of the required poems. AP® classes are expected to take the Latin Advanced Placement Vergil exam in the spring.

## Spanish I

**Prerequisites:** None

**Grade Level:** 9 – 12

**Time Allotment:** 1 Year

**Course Description:** Spanish I focuses on a beginning level of communication by developing competency with the four skills of language: listening, speaking, reading, and writing. Students will use these components to perform a variety of language functions, such as listening, asking questions, describing, giving and following directions, and expressing opinions using

the present, present progressive or preterit tenses. Students will gain a basic overview of the Spanish language and culture. The course is an immersive one and will be conducted in the Spanish language.

## Spanish II

**Prerequisites:** Spanish I

**Grade Level:** 9 – 12

**Time Allotment:** 1 Year

**Course Description:** Spanish II is designed to build on the student's level of communication through listening, speaking, reading, and writing competencies. Grammatical concepts and vocabulary will be expanded through a cultural framework that students will be able to apply to everyday life. Increased emphasis on vocabulary and verb tenses (preterite, imperfect, and commands) will enable students to comprehend and produce more complex material that they can apply to the in-class opportunities as they communicate with others. The course is an immersive one and will be conducted in the Spanish language.

## Spanish III

**Prerequisites:** Spanish II

**Grade Level:** 10 – 12

**Time Allotment:** 1 Year

**Course Description:** Spanish III is designed to build grammar and communicative skills as well as cultural awareness. This course focuses on grammatical skills encompassing past, future, perfect, progressive and subjunctive tenses. Literature and aspects of the culture also are explored. The course includes the reading of short stories and a sequence of activities designed to engage students as readers, writers, and speakers of Spanish. Students will develop conversational and speaking skills by communicating primarily in Spanish. The course is an immersive one and will be conducted in the Spanish language.

## Spanish IV

**Prerequisites:** Spanish III

**Grade Level:** 11 – 12

**Time Allotment:** 1 Year

**Course Description:** Students will continue to use the Spanish language in various formal and informal contexts with proper pronunciation, aural comprehension, vocabulary, and grammar skills. They will continue to learn how and where to say what to whom and why. Students will further appreciate the

concept of living in a global community by exploring Hispanic cultures worldwide and understanding that culture is the foundation of language. Students will further develop listening, speaking, reading, writing, and visual skills. The course is an immersive one and will be conducted in the Spanish language.

## AP® Spanish Language

**Prerequisites:** Spanish IV and Instructor Approval

**Grade Level:** 11 – 12

**Time Allotment:** 1 Year

**Course Description:** AP® Spanish Language is intended for students who wish to develop proficiency and integrate their language skills, using authentic materials and sources. The course will be conducted entirely in Spanish, and students will be expected to speak only Spanish in the class. Throughout the course, students will: improve communicative abilities in formal and informal situations, gain increased accuracy and fluency in speaking and writing, comprehend Spanish intended for native speakers in a variety of settings, produce Spanish comprehensible to native speakers, and increase their understanding of Hispanic cultures. Students will also improve their writing skills, primarily through writing letters and essays, and their speaking skills through simulated conversations and short formal presentations.

## Ancient Greek

**Prerequisites:** None

**Grade Level:** 11 – 12

**Time Allotment:** 1 Year

**Course Description:** Ancient Greek is a year-long elective that introduces students to the Greek language, as well as Greek history and culture. Since many English technical vocabularies are built on Greek words, the language is valuable for students who plan to enter those professions (e.g., legal and medical professions as well as New Testament studies and several fields of science). The class focuses on beginning and intermediate vocabulary, grammar, sentence structure, and translation, as well as the enhanced study of Greek mythology, important cultural, historical, and political events of the Classical World, and their relation to the modern world. Course content will include the works and major authors of Greek epic and dramatic literature, as well as an introduction to Greek philosophy and historiography.

## PHYSICAL EDUCATION AND HEALTH

**Requirements:** One semester Physical Education course and one semester Health course

### Physical Education

**Prerequisites:** None

**Grade Level:** 9

**Time Allotment:** 1 Semester

**Course Description:** This course will fulfill the physical education requirement. It is a foundation course, which emphasizes concepts of an overall health, fitness, and wellness education, particularly improvement of health-related fitness components. The main activities to achieve this goal are the following: aerobics, power walking, jogging, physical conditioning, stress management, strength training, and recreational activities. Recreational activities may consist of a variety of games which prepare the student to participate in team sports, individual sports, and lifetime activities.

### Health

**Prerequisites:** None

**Grade Level:** 9

**Time Allotment:** 1 Semester or Summer

**Course Description:** This course will fulfill the Health requirement. The course presents eight major topics: nutrition, community, personal and environmental health, human body, safety and first aid, mental health, drugs, and sexuality. As time permits, additional topics may be covered. Each subject is pursued with peer group reflection on the benefits of choosing a healthy lifestyle as well as the hazards of living a non-healthy lifestyle.

### Health & Fitness

**Prerequisites:** None

**Grade Level:** 9

**Time Allotment:** 1 Year

**Course Description:** This course will meet the physical education and health requirements. It is a foundation course, which emphasizes the concepts of an overall health, fitness, and wellness education, particularly improvement of health-related fitness components. This course presents eight major topics: nutrition, community, personal and environmental

health, human body, safety and first aid, mental health, drugs, and sexuality. The overall course will be administered utilizing both the classroom and fitness center environments.

### Personal Fitness and Strength Training

**Prerequisites:** None

**Grade Level:** 9 – 12

**Time Allotment:** 1 Semester

**Course Description:** This course will meet the physical education requirement or can be taken as an elective. This course will teach students the various aspects of personal fitness, including proper nutrition and weight management. It will also focus on strength training, utilizing both free weights and machines. Students will learn correct lifting and spotting techniques to promote safety. It will be a goal of the class to help students develop an understanding of lifetime fitness and the knowledge to develop a program of their own.

### Personal Fitness and Strength Training ("0" Period)

**Prerequisites:** Approval from Physical Education Department

**Grade Level:** 9 – 12

**Time Allotment:** 1 Semester/2 Quarters

**Course Description:** Class meets during the zero period (6:55-7:50 am, Monday-Thursday.) This course will fulfill the PE requirement or may be taken as an elective. This course will teach students the various aspects of personal fitness, including proper nutrition and weight management. It will also focus on strength training, utilizing both free weights and machines. Students will learn correct lifting and spotting techniques to promote safety. It will be a goal of the class to help students develop an understanding of lifetime fitness and the knowledge to develop a program of their own. This is a semester class that has the potential to be broken into two quarters.

## HISTORY

**Requirements:** Civics and Economics, Survey of World History or AP® World History, Survey of United States or AP® United States History

### Civics and Economics

**Prerequisites:** None

**Grade Level:** 9

**Time Allotment:** 1 Year

**Course Description:** This required freshman History course will introduce students to important concepts in Civics and Economics. The course covers all of the Civics and Economics standards as outlined by the Arkansas Department of Education. The scope and sequence weaves the curricula together, highlighting the constant interaction between the two concepts. The Civics course work will focus on the structure and function of government at the national, state, and local levels. Special emphasis will be placed on constitutional principles, the rights of individuals in a democracy, the roles of political parties and interest groups, and the participation of an informed citizenry in democratic processes. Economics course work will emphasize economic fundamentals, the role of the market in a global society, and personal finance.

### World History

**Prerequisites:** None

**Grade Level:** 10

**Time Allotment:** 1 Year

**Course Description:** This course provides students with a survey of World History from its beginnings to the present. It includes an exploration of the geographic influences on history, the evolution of nations, and the scientific and technological revolutions, all of which created new economic conditions and produced critical social and political changes. Emphasis is placed on recognizing historical themes and writing about them analytically.

### AP® World History

**Prerequisites:** Instructor Approval

**Grade Level:** 10

**Time Allotment:** 1 Year

**Course Description:** This course develops greater understanding of the evolution of global processes and contact and interaction with different types of human societies, building on an understanding of cultural, institutional, technological, and geographical precedents. It is designed to help students think critically and analytically, write persuasively, discuss articulately, and read extensively with content mastery and discernment. This course is writing intensive and is designed to promote sophisticated research and writing appropriate for students of history entering college.

### United States History

**Prerequisites:** None

**Grade Level:** 11

**Time Allotment:** 1 Year

**Course Description:** This course covers the broad aspects of U.S. history beginning with 15th Century colonization and continuing through the Cold War. Major topics covered include colonization, the creation of the nation, territorial expansion, Reconstruction, the emergence of modern America, and the wars and conflicts in which the United States has been involved. The course also focuses on the continued development of writing and critical analysis skills.

### AP® United States History

**Prerequisites:** Instructor Approval

**Grade Level:** 11

**Time Allotment:** 1 Year

**Course Description:** AP® United States History is a challenging course that is meant to be the equivalent of an introductory-level college course. This course examines American history from the age of exploration to the present, focusing on key events and figures. Emphasis is placed on reading, essay writing, critical and evaluative thinking skills, and interpretation.

## AP® European History

**Prerequisites:** Instructor Approval

**Grade Level:** 12

**Time Allotment:** 1 Year

**Course Description:** Advanced Placement European History focuses on the basic chronology, events, and trends from the Renaissance to the present. This course also introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping Modern Europe. The goals of this course are to develop an understanding of the principal themes in modern European history, to learn to analyze historical evidence, and to express historical understanding in writing.

## AP® Psychology

**Prerequisites:** Instructor Approval

**Grade Level:** 11 – 12

**Time Allotment:** 1 Year

**Course Description:** AP® Psychology is a college-level introduction to psychological and brain science. The course is designed as an introduction to the environmental and biological processes that affect human thought and behavior. Students will use biological, behavioral, social, perceptual, and cognitive approaches to evaluate major developments in psychological research. Multiple-choice tests, analytical essays, graded discussions, research reviews, and observational studies will prepare students for the AP® Exam and college-level coursework.

## AP® US Government and Politics

**Prerequisites:** Instructor Approval

**Grade Level:** 11 – 12

**Time Allotment:** 1 Year

**Course Description:** Utilizing a Socratic seminar approach to teaching and learning, this course introduces students to political philosophy, federal institutions and policies, interactions, roles, and behaviors that characterize the political culture of the United States from its inception through the current election cycle. The course examines politically significant concepts and themes, and the conflict and connections between policy and politics. Through the application of sound reasoning, critical thinking, and analytical writing, students will assess causes and

consequences of political events, interpret data to develop evidence-based arguments, and engage in today's political culture within the United States and abroad through the study of international relations.

## Survey of Economics\*

**Prerequisites:** None

\*Students who entered the Upper School after the 2010-2011 school year must, as a result of a 2014 State of Arkansas education law, take the Survey of Economics course (in school or online) prior to graduation.

**Grade Level:** 11 – 12

**Time Allotment:** 1 Semester

**Course Description:** This course focuses on basic economic influences in society, how they work and how to work with them. Students analyze fundamental economic principles, including measurements of national activity, growth, inflation, deflation, employment/unemployment, and the business cycle. Students also study such topics as government taxation and borrowing, financial markets, the Federal Reserve System, and interest rates. An important part of the course also deals with the history of economic thought and comparative systems as well as the evolution of past economic ideas and future alternative systems. A central goal of the course is to develop and strengthen students' analytical abilities, specifically to develop an economics skill set students can use to analyze important and complex macroeconomic questions.

## Economics (Online Option)

**Prerequisites:** None

**Grade Level:** 11 – 12

**Time Allotment:** Online

**Course Description:** Students who want to take Economics online in the summer may do so to fulfill the semester requirement for graduation. Students must pay for the course and allow enough time to complete the class project (a minimum of 6 weeks) before the August 1st deadline. Transcripts must be received in the registrar's office by August 1st for students to receive credit. Late transcripts will result in a student taking the Episcopal Economics course in the fall or spring.

## Seminar in Southern History: African Americans in the South, 1877-1954

**Prerequisites:** None

**Grade Level:** 10 – 12

**Time Allotment:** 1 Semester

**Course Description:** This elective history course, available to tenth through twelfth graders, will focus each year on a specific topic in Southern history from 1787 to the present. Although the topics vary annually, the goals of the course remain static. Students will analyze and synthesize prominent historians' arguments and produce a scholarly article on a chosen topic. While the course is reading-intensive, much of the evaluation will rely on ability to participate in class discussions, demonstrating proper understanding of course materials through essays, and a research paper. The seminar topic for the 2016-17 academic year is: African Americans in the South from the end of Reconstruction to the Brown v. Board of Education of Topeka Supreme Court ruling.

## Survey of Native American History

**Prerequisites:** None

**Grade Level:** 10 – 12

**Time Allotment:** 1 Semester

**Course Description:** This elective history course, available to tenth through twelfth graders, examines the broad and general history of the indigenous people of the United States. The course places an emphasis on students contextualizing the social, cultural, political, and historical roles and legacies of the impact of the continent's first people. The overarching aim of this course is to provide a better understanding of Native American history by placing the emphasis on the indigenous people, rather than simply the ways in which Native Americans interacted with Europeans, Africans, and, later, Americans.

## Vietnam

**Prerequisites:** Survey of U.S. History or AP® U.S. History

**Grade Level:** 12

**Time Allotment:** 1 Semester

**Course Description:** This course focuses on the origins, events, consequences and legacies of the Vietnam conflict. Through an emphasis on the role of the United States in Vietnam, the course begins with a brief history of French colonialism and the

rise of Vietnamese nationalism which led to the First Indochina war, and continues until the end of U.S. involvement in Vietnam. Through the use of books, film, music, and primary source documents, students gain an understanding of the conflict and the controversy surrounding it.

## MATHEMATICS

**Requirements:** Algebra I, Geometry, Algebra II, Pre-Calculus. Four credits of Mathematics while in the Upper School.

### Algebra I

**Prerequisites:** Pre-Algebra and Instructor Approval

**Grade Level:** 8 – 9

**Time Allotment:** 1 Year

**Course Description:** This course focuses on the relationships between functions, graphs and tables as well as the use of functions to model real world relationships. The functions studied in Algebra I include both linear and quadratic. Students develop proficiency in writing and simplifying mathematical expressions, performing operations with polynomials, and solving both equations and inequalities. Algebra I also integrates topics such as statistics, probability, and geometry throughout the course.

### Advanced Algebra I

**Prerequisites:** Pre-Algebra or Advanced Pre-Algebra and Instructor Approval

**Grade Level:** 8 – 9

**Time Allotment:** 1 Year

**Course Description:** Like Algebra I, this course focuses on the relationships between functions, graphs and tables as well as using functions to model real-world relationships. The functions studied in Advanced Algebra I include both linear and quadratic. Students develop proficiency in writing and simplifying mathematical expressions, performing operations with polynomials, and solving both equations and inequalities. Students are expected to apply concepts in this course, thus allowing them to cover more topics in preparation for Advanced Geometry and Advanced Algebra II.

## Geometry

**Prerequisites:** Algebra I and Instructor Approval

**Grade Level:** 9 – 10

**Time Allotment:** 1 Year

**Course Description:** Geometry is an integrated study of Euclidean and 3-D geometry as well as the geometric foundations of trigonometry. This is a one-year course in the figures of geometry and the nature of proofs, including work with points, lines, angles, polygons, and circles. Algebraic skills will be applied to solving problems in plane and space geometry, trigonometry, area, and volume. Emphasis will be on problem solving and applications. The course will also include development of conjectures into theorems. The TI-84C graphing calculator is required.

## Advanced Geometry

**Prerequisites:** Algebra I and Instructor Approval

**Grade Level:** 9 – 10

**Time Allotment:** 1 Year

**Course Description:** Advanced Geometry is an integrated study of Euclidean and 3-D geometry and beginning trigonometry. The course content contains the traditional tools of geometry in addition to problem-solving and standardized test skills, as well as trigonometric concepts. Proof is used to develop reasoning skills and to gain an appreciation of the relationships among geometric principles. The TI-84C graphing calculator is required.

## Algebra II

**Prerequisites:** Geometry and Instructor Approval

**Grade Level:** 10 – 11

**Time Allotment:** 1 Year

**Course Description:** Algebra II presents more complex ideas and applications of algebra and provides the skills necessary for students to advance through Pre-Calculus and beyond. The course and text offer a broad survey of advanced algebraic skills as well as a comprehensive study of real-world applications. In addition to application problems and skill development activities, students will hone their standardized test and problem-solving skills. The TI-84C graphing calculator is required.

## Advanced Algebra II

**Prerequisites:** Advanced Geometry and Instructor Approval

**Grade Level:** 10 – 11

**Time Allotment:** 1 Year

**Course Description:** Advanced Algebra II provides a faster-paced learning environment that extends and builds upon algebraic concepts with an emphasis on analytical thinking. The course is designed to prepare students who will continue into Advanced Pre-Calculus and Advanced Placement Calculus or Statistics as well as advanced mathematics courses in college. Topics include coordinate geometry, systems of equations, complex numbers, rational expressions, exponential and logarithmic functions, right-triangle and circular trigonometry, law of sines, and law of cosines. Graphing calculators are used extensively. The TI-84C graphing calculator is required.

## Pre-Calculus

**Prerequisites:** Algebra II and Instructor Approval

**Grade Level:** 11 – 12

**Time Allotment:** 1 Year

**Course Description:** The course further develops students' abilities to problem- solve, communicate, and reason mathematically. This full-year course contains a thorough investigation of the basic functions and their relationships. The functions studied include polynomial, exponential, logarithmic, and trigonometric. Students will be prepared to continue these investigations in calculus. This course relies heavily on the use of graphing calculators. The TI-84 or TI-84C graphing calculator is required.

## Advanced Pre-Calculus

**Prerequisites:** Advanced Algebra II and Instructor Approval

**Grade Level:** 11 – 12

**Time Allotment:** 1 Year

**Course Description:** Advanced Pre-Calculus, a combination of advanced algebra and trigonometry, is a thorough preparation for Advanced Placement Calculus for students of strong mathematical maturity. The basic functions will be studied, including polynomial, exponential, logarithmic, and trigonometric functions. They will be studied both graphically and analytically. Also included are such topics as the polar coordinate system, conics, and an

introduction to sequences and series. This course relies heavily of the use of graphing calculators. The TI-84 or TI-84C graphing calculator is required.

## College Algebra

**Prerequisites:** Math ACT of 19 and co-requisite of Pre-Calculus

**Grade Level:** 12

**Time Allotment:** 1 Semester

**Course Description:** This course is offered in conjunction with the University of Central Arkansas for college credit. This course provides a solid foundation of algebraic concepts. The course includes the study of functions, relations, graphing, and problem solving, and provides knowledge of how to apply these concepts to real problem situations. Lecture/demonstration format. Tuition payments and application fees apply.

## Statistics for Decision Making

**Prerequisites:** Algebra II

**Grade Level:** 11 – 12

**Time Allotment:** 1 Semester

**Course Description:** What information is required to make informed decisions in business? How can today's entrepreneurs sift through the mountains of data out there to draw reasonable and effective conclusions? This course introduces students to techniques used for the visualization of numerical data and helps them determine how to use descriptive statistics in business. Students begin with concepts related to data mining and tools for determining data validity and reliability for statistical purposes. Students will produce tables and charts to organize and display qualitative and quantitative business data, interpret numerical business data using measures of central tendency and dispersion, apply concepts of probability for inferential decision making, and perform a linear trend analysis.

## Calculus

**Prerequisites:** Pre-Calculus and Instructor Approval

**Grade Level:** 12

**Time Allotment:** 1 Semester

**Course Description:** This one-semester course is designed to give students an introduction to the study of calculus in preparation for further study in college. Topics to be included are a thorough review of essential pre-calculus topics, slope and rate of change, limits, continuity, derivatives, and curve sketching, along with complementary applications in business, economics, and the life, social and physical sciences. The course will emphasize fluency in the language of functions—verbally, numerically, visually and algebraically. The TI-84 or TI-84C graphing calculator is required.

## AP® Calculus AB

**Prerequisites:** Advanced Pre-Calculus and Instructor Approval

**Grade Level:** 12

**Time Allotment:** 1 Year

**Course Description:** This Advanced Placement course in calculus focuses on developing a strong understanding of the concepts, applications, and methods of calculus. AP® Calculus AB encourages students to approach learning concepts and problems graphically, numerically, analytically, and verbally. The topics covered include differentiation and integration of polynomial, logarithmic, exponential, and trigonometric functions. The AP® Calculus AB exam is intended to cover the equivalent of a semester of college calculus at a depth appropriate for a science or engineering major. Additional topics not required by the AB exam may be covered if time permits. The TI-84 or TI-84C graphing calculator is required.

## AP® Calculus BC

**Prerequisites:** Advanced Pre-Calculus and Instructor Approval

**Grade Level:** 12

**Time Allotment:** 1 Year

**Course Description:** AP® Calculus BC will cover all topics of Calculus AB with the addition of indeterminate forms, infinite series, vector calculus and calculus of polar graphs. Emphasis will be placed on the analysis of functions graphically, numerically, algebraically and verbally. The AP® Calculus BC exam is intended to cover the equivalent of a full year of college calculus at a depth appropriate for a science or engineering major. The TI-84 or TI-84C graphing calculator is required.

## AP® Statistics

**Prerequisites:** Advanced Algebra II/ Pre-Calculus

**Grade Level:** 11 – 12

**Time Allotment:** 1 Year

**Course Description:** The Statistics course is designed to be similar to an introductory, algebra-based college course in statistics. The topics for Advanced Placement Statistics are divided into four major themes: exploratory analysis, planning a study, probability, and statistical inference. Exploratory analysis of data makes use of graphical and numerical techniques to study patterns and departure from patterns. Data must be collected according to a well-developed plan if valid information or conjecture is to be obtained. Probability is the tool used for anticipating what the distribution of data should look like under a given model. Statistical inference guides the selection of appropriate models. Students will be required to use technology, including graphing calculators, internet applets, and statistical software to make connections in each area.

## Three-Dimensional Modeling

**Prerequisites:** Pre-Calculus

**Grade Level:** 12

**Time Allotment:** 1 Semester

**Course Description:** Students will design a three-dimensional object using a full or partial revolution of a solid, write equations to find a two-dimensional basis, and find the figure's volume using integral calculus. Students will design a three-dimensional model of the object and then create

a digital 3-D model. Students will then apply what they have learned to create a physical three-dimensional model of their object using modeling software and a 3-D printer.

## Coding and Logic

**Prerequisites:** Algebra II

**Grade Level:** 11 – 12

**Time Allotment:** 1 Semester

**Course Description:** Effective computer programming begins with a solid understanding of math, especially logic. This class explores logical reasoning and the process of applying logic to computer programming. Students will then apply these concepts to design and development of computer and web-based applications.

## Religion

**Requirements:** World Religion

World Religion

**Prerequisites:** None

**Grade Level:** 10

**Time Allotment:** 1 Semester

**Course Description:** This required course is a study of humankind's experience of the sacred and secular through the study of the world's major religions: Christianity, Islam, Judaism, Hinduism, and Buddhism. This course presents an intellectual foundation for comprehending and appreciating the unique beliefs and practices of each religion, as well as presenting pluralism as one of the great spiritual challenges of our times.

## World Religion II

**Prerequisites:** World Religion

**Grade Level:** 11 – 12

**Time Allotment:** 1 Semester

**Course Description:** With World Religion I as a background, this course continues a study of the religions of the world. The concept of the sacred, as experienced by humankind from the ancients to contemporary society, will be explored. This course will enhance one's understanding of the sacred presence of God through comparative analysis of such themes as cosmology and salvation, and a comparison of the eight dimensions of religion.

## SCIENCE

**Requirements:** Biology, Chemistry, Physics or Advanced Physics

## Biology

**Prerequisites:** None

**Grade Level:** 9

**Time Allotment:** 1 Year

**Course Description:** Biology is the study of living things—from bacteria and fungi to plants and animals, from single-celled to multicellular organisms, from the extinct to the extant. The course focuses on several major unifying principles that are the underpinnings of introductory biology: the nature of science, chemistry, cell structure and function, central dogma, genetics, evolution, ecology and diversity of life. With extensive laboratory investigations, students interpret analytical data and learn research techniques.

## AP® Biology

**Prerequisites:** Biology and Instructor Approval

**Grade Level:** 11 – 12

**Time Allotment:** 1 Year

**Course Description:** Advanced Placement Biology is designed for students who wish to learn the biological principles presented in a first-year college course. Laboratory work will be extensive. The student is expected to gain knowledge of facts, principles, and chemical processes. Scientific reasoning, interpreting data, and designing experiments are a major focus of this course.

## Chemistry

**Prerequisites:** Biology

**Co-requisite:** Algebra II

**Grade Level:** 10 – 11

**Time Allotment:** 1 Year

**Course Description:** The Chemistry course is designed to prepare students for college-level chemistry. Chemistry emphasizes both a conceptual and mathematical understanding of chemistry. Students will perform a variety of laboratory experiments to gain first-hand knowledge of how chemical reactions occur and how these changes are the basis for understanding chemistry. First semester topics include laboratory and measurement techniques, atomic structure, nuclear chemistry, the periodic table,

and chemical bonding. Second semester topics include chemical reactions, organic chemistry, gas laws, and solution chemistry.

## AP® Chemistry

**Prerequisites:** Chemistry, Algebra II, and Instructor Approval

**Grade Level:** 11 – 12

**Time Allotment:** 1 Year

**Course Description:** The AP® Chemistry course is designed to be the equivalent of a first-year college chemistry course. The course is geared to meet the needs of highly-motivated high school students with solid backgrounds in math and science. The course provides an intensive qualitative and quantitative study of the structure and states of matter, chemical reactions, equilibrium, thermodynamics, and kinetics. Emphasis will be placed on developing analytical thinking, communication skills, problem-solving skills, and laboratory techniques.

## Physics

**Prerequisites:** Algebra II and Chemistry

**Grade Level:** 11 – 12

**Time Allotment:** 1 Year

**Course Description:** Physics brings the world around the student to life. The goal is for students to gain an appreciation of their physical world in a way they have not considered before. The fundamentals of physics are emphasized in a conceptual manner. Students will perform a variety of laboratory experiments and other hands-on activities throughout the year. Topics include classical mechanics, waves, optics, electromagnetism, and relativity. These will be covered at the algebra- and geometry- based level with an emphasis on physical concepts.

## Advanced Physics

**Prerequisites:** Algebra II or higher math course and Chemistry with recommendation of an instructor.

**Grade Level:** 11 – 12

**Time Allotment:** 1 Year

**Course Description:** This course is an advanced introduction to physics, emphasizing both the conceptual and the mathematical underpinnings of physics. Advanced Physics is designed for students who have a passion for science and want to experience and understand their physical world in a deeper manner. With greater mathematical rigor, this course prepares students to take AP® Physics as seniors. Students will perform a variety of laboratory experiments and other hands-on activities throughout the year. Course topics include classical mechanics, waves, optics, electromagnetism, and relativity.

## AP® Physics C

**Prerequisites:** Advanced Physics and recommendation. Prior or concurrent enrollment in Calculus is required.

**Grade Level:** 12

**Time Allotment:** 1 Year

**Course Description:** This course is designed to be the equivalent of a first-semester university physics course with enrichment. Topics in classical mechanics will be covered at the calculus-based level. During the fourth quarter, the course will be enhanced with special topics selected based upon student interest. Past topics have included circuits, particle physics, and relativity. Calculus is used freely in formulating principles and solving problems. Incorporated into the course are opportunities for students to design their own labs to test physical theory.

## Anatomy and Physiology

**Prerequisites:** Biology, Chemistry

**Grade Level:** 11–12 or Instructor Approval

**Time Allotment:** 1 Semester

**Course Description:** Anatomy and Physiology is intended for students who are curious about the human body and want to know more about how this amazing machine works. The study of the human body will be organized by systems. Each system will be investigated from three approaches: 1) the individual organs and their tissue makeup, 2) how the organs function individually and collectively, and 3) the more

common diseases and defects. This course involves a considerable amount of memorization. Laboratory investigations, including microscope work and dissections, are also a part of the course.

## Astronomy

**Prerequisites:** None

**Grade Level:** 11–12 or Instructor Approval

**Time Allotment:** 1 Semester

**Course Description:** This is a survey course providing an introduction to the field of astronomy. The course will present a basic understanding of the history of astronomy, orbits, gravitation, optics and the properties of light and matter. With these basics, the course will go on to explore the Sun and the other components of the Solar System as well as properties of the universe beyond our solar system, including stars, nebulae, pulsars, black holes, galaxies, quasar, and the Big Bang. Students will examine a range of natural phenomena that includes different types of stars and how these fit together in the general scheme of a galaxy. Evening observing sessions with telescopes and visits to an observatory and/or planetarium may be included.

## Environmental Science

**Prerequisites:** Biology, Chemistry

**Grade Level:** 11–12 or Instructor Approval

**Time Allotment:** 1 Semester

**Course Description:** Environmental science seeks to understand and to solve real-world problems, problems that have a scientific basis but also a social context. While environmental science embraces a wide variety of topics from different fields of study, the following unifying themes provide the structure of the course: science is a process; energy conversions underlie all ecological processes; the earth itself is one interconnected system; humans alter natural systems; environmental problems exist within a cultural and political framework; and human survival depends on developing practices that achieve sustainable yields. Lab work, field studies, projects and off-campus excursions will be significant components of the course.

