





# Upper School Course Offerings

## ALGEBRA II

Algebra II gives students a solid foundation in the study of the real number system, linear, quadratic and polynomial relations and functions, exponential, logarithmic, radical and rational functions and complex numbers. It includes the study of transformations of function. Where possible, topics are explored graphically, algebraically, and numerically. Prerequisite: Geometry and departmental approval Algebra II with Analysis One unit This course gives students a solid foundation of the real number system; linear and quadratic relations and functions; complex number systems; polynomial operations and functions; rational expressions and functions; exponential functions and logarithmic functions. It includes the study of transformations of functions. The emphasis in this course is on an increased depth in analyzing and describing relationships. Where possible, topics are explored graphically, algebraically, and numerically. **Prerequisite:** *Geometry and departmental approval*

## ALGEBRA II WITH ANALYSIS

Algebra II with Analysis covers all of the topics included in Algebra II. Additional topics covered include: transformations of functions as applied to real world applications and to the study of data analysis techniques to find the best-fit model. An introduction to matrices as a way of organizing and displaying data and a means of solving systems of equations will be covered. The emphasis in this course is on an increased depth in analyzing and describing relationships. Topics are explored graphically, algebraically and numerically, where possible. **Prerequisite:** *Geometry and departmental approval*

## HONORS ALGEBRA II WITH PRE-CALCULUS

This course is more demanding than Algebra II with Analysis. It is for the serious student who has a firm grasp of Algebra I and is ready for a challenging course. All standard Algebra II topics are covered, but approached from a higher order thinking level equivalent to that expected of the precalculus student. The intent is to prepare the student with the analytical experience necessary for the study of BC Calculus. The course focuses on polynomial, exponential, logarithmic and trigonometric functions from algebraic and geometric perspectives. **Prerequisite:** *Geometry and departmental approval*

## World Languages:

The minimum requirement for graduation is **three consecutive years** of one foreign language. Students who have successfully completed the first year level in middle school and who continue and successfully complete the next two levels of the same language finish their foreign language requirement at the end of their Second Academic year. First Academic students will be appropriately placed in a foreign language based on a placement test and teacher recommendations.

## FRENCH I

This course develops the use of fundamental language skills used in listening, speaking, reading and writing. Students learn to express ideas in the present, the past and the near future using basic structures and vocabulary related to daily-life topics. Extensive communicative practice is provided through varied oral and written exercises in meaningful situations and personalized contexts. Students build cultural awareness of the French-speaking world through videos, music, presentations, readings and discussions. The class is conducted in French.

## FRENCH II

This course completes the study of fundamental grammar structures and vocabulary begun in French I. Students learn to express ideas, actions and thoughts in the present, past, and future. Students also learn to express opinions, recommendations, doubts and preferences in the subjunctive mood. Students continue to learn about Francophone culture, civilization, geography and traditions. Communication, both written and spoken, is practiced using authentic materials that provide cultural information and insights. The class is conducted in French. **Prerequisite:** *French I or by department approval*

## SPANISH I

This course develops the use of fundamental language skills used in listening, speaking, reading and writing. Students learn to express ideas in the present, the past and the near future using basic structures and vocabulary related to daily-life topics. Extensive communicative practice is provided through varied oral and written exercises in meaningful situations and personalized contexts. Students build cultural awareness of the Spanish-speaking world through videos, presentations, readings and discussions. The class is conducted in Spanish.

## SPANISH II

This course completes the study of fundamental grammar structures and vocabulary begun in Spanish I. Students learn to express ideas, actions and thoughts in the present, past, and future. Students also learn to express opinions, recommendations, doubts and preferences in the subjunctive mood. Students continue to learn about Spanish-speaking culture, civilization, geography and traditions. Communication, both written and spoken, is practiced using authentic materials that provide cultural information and insights. The class is conducted in Spanish. **Prerequisite:** *Spanish I or by department approval*

## SPANISH FOR HERITAGE SPEAKERS

This class is designed for students who have experience with the Spanish language in an informal setting. The purpose of this course is to provide students with formal study of the syntax, spelling, accentuation and written conventions of the Spanish language. In addition to developing a solid grammatical foundation, students will learn the essential concepts of critical reading and effective writing by examining essays, poems, stories, and short films from a variety of Hispanic authors and thinkers. The level of the course will be tailored to meet the needs of the students. This course is taught in Spanish. **Prerequisite:** *Placement test and departmental approval*

## LATIN I

This course is an introduction to Latin syntax, grammar, and vocabulary. In addition to their language study, students investigate various aspects of Roman culture, mythology, and literature. Particular emphasis is given to Latin's role as a root language for English and other Romance languages. During this course students will read units I and II of the Cambridge Latin series as well as several supplementary primary and secondary sources. The goal of Latin I is to provide a solid foundation for further Latin study and to foster an appreciation of Latin's influence on the English language and world civilization.

### Course Offerings: History & Social Studies

World History I and II  
United States History  
AP U.S. History  
H Economics  
AP African American Studies  
AP U.S. Government and Law  
AP Psychology  
AP Art History  
Social Sciences for Social Problems

### Course Offerings: Mathematics

Algebra I  
Geometry  
Geometry with Analysis  
Algebra II  
Algebra II with Analysis  
Algebra II with Precalculus – Honors  
Precalculus  
Precalculus with Analysis – Honors  
Precalculus with Differential  
Calculus – Honors  
Introduction to Calculus  
AP Statistics  
AP Calculus AB  
AP Calculus BC  
AP Computer Science  
AP Computer Science A

### Course Offerings: World Languages

French I–V  
AP French Language and Culture  
French Seminar – Honors  
Spanish I–V  
Spanish for Heritage Speakers  
AP Spanish Language  
AP Spanish Literature  
Spanish Seminar – Honors  
Latin I–V  
AP Latin  
Latin Seminar – Honors

### Course Offerings: Visual & Performing Arts

Foundations of Visual Arts  
Foundations of Digital Arts & Visual  
Communications  
Studio Art I  
Ceramics I  
Media Arts I  
Photography I  
AP Drawing: Year I and Year II  
AP 2D Art & Design: Year I and Year II  
AP 3D Art & Design: Year I and Year II  
Drama I–III  
Dance  
Introduction to Technical Theater  
Chorus Band  
Music Theory, History, and Appreciation  
String Ensemble

### Course Offerings: Publications

Journalism  
Yearbook

# Upper School Course Offerings

## Course Offerings: Science

Physics  
Chemistry  
Honors Chemistry  
AP Chemistry  
Biology  
Honors Biology & Biological Inquiry  
Computational Design  
Honors Molecular Biology &  
Biotechnology Lab  
AP Computer Science Principles  
AP Environmental Science  
AP Physics  
Anatomy and Physiology  
Explorations in Engineering  
Introduction to Bioorganic Chemistry

## Course Offerings: Theology

Scripture: Introduction to the Bible  
Catholic Traditions and History  
Christian Morality  
Bioethics  
Major World Religions  
Social Justice and Catholic Teaching

## Course Offerings: Athletic Options

### Fall Sports:

Cross Country – *Junior Varsity, Varsity*  
Field Hockey – *Junior Varsity, Varsity*  
Soccer – *Ninth Grade, Junior Varsity, Varsity*  
Tennis – *Junior Varsity, Varsity*  
Volleyball – *Junior Varsity, Varsity*

### Winter Sports:

Basketball – *Ninth Grade, Junior Varsity, Varsity*  
Swimming/Diving – *Junior Varsity, Varsity*  
Ice Hockey – *Junior Varsity, Varsity*  
Squash – *Junior Varsity, Varsity*  
Indoor Track – *Junior Varsity, Varsity*

### Spring Sports:

Golf – *Junior Varsity, Varsity*  
Lacrosse – *Junior Varsity, Varsity*  
Softball – *Junior Varsity, Varsity*  
Tennis – *Varsity*  
Track – *Junior Varsity, Varsity*

## Independent Study in Physical Education

### Club Sports:

Equestrian

## LATIN II

This is the second year of the Latin curriculum. In the first year, students established the basic Latin verb and noun forms and their functions. In this course, students build on that foundation and learn the grammatical concepts that are the basis for complex sentences and eventually start to read authentic and original Latin sources. In addition to their language study, students will investigate a wide variety of cultural topics such as Roman comedy, the Roman military, and the art and architecture of Rome itself. Our readings will be conducted primarily in Unit III of the Cambridge Latin course with several additional primary sources. **Prerequisite:** *Latin I or by departmental approval*

## Visual and Performing Arts:

### FOUNDATIONS OF VISUAL ARTS

This course is designed to introduce various art mediums, techniques and styles. Students will learn the basic elements and principles of art and design, and use these elements and principles to guide and assess their work. Units of study may include drawing, painting, printmaking, photography, sculpture, design, and collage. Students will also develop their critical thinking skills through the creative problem-solving process, as they learn to assess the quality of their own artwork as well as those of other artists.

### FOUNDATIONS OF DIGITAL ARTS & VISUAL COMMUNICATIONS

This course is an introductory course to digital principles of art and design concepts as a visual communications tool, which is approached in the context of the constantly changing digital world. Students will learn: traditional photography, digital photography, graphic design, typography, video, including interview and motion graphics. Students will also develop their critical thinking skills through the creative problem-solving and decision-making process, as they learn new digital concepts.

### DRAMA I

Drama I is designed to allow students to explore the world of the theater and all its components. The preparation and performance of dramatic scenes and monologues, playwriting exercises and theatre attendance help students to identify and develop internal and external personal resources, to participate in artistic collaboration, to relate theatre to its social context and to form aesthetic judgments.

### CHORUS

This course is open to all Upper School students who are interested in developing their vocal skills, abilities and musicianship through the study of choral literature from all major periods in music history. Concepts of proper vocal care and technique, sight reading, vocal development, music history and the building of confidence in the voice will be a focus of the course. An emphasis on developing both the student's individual sound and the group's ensemble sound will be emphasized throughout the year as we prepare for concerts, festivals and liturgies. Pianists may audition for this class as an accompanist.

**Note:** Students are required to participate in concerts and productions outside of school to earn credit for this course. Concerts are credited as final exams in this course. This course can be repeated for credit.

### CONCERT BAND

This course is open to all Upper School students who play a band instrument. Students will develop musicianship and ensemble skills through the study of concert band repertoire from various styles and genres. In addition, music appreciation, history and theory are integrated into the curriculum to provide well rounded knowledge and musicianship. Special attention will be paid to developing artistry and creative expression and all elements necessary for successful ensemble experiences. Students will participate in performances throughout the year and have adjudication and master class/workshop opportunities. **Prerequisite:** *Permission of the instructor is required to enroll in this course.*

**Note:** Students are required to participate in concerts to earn credit for this course. Concerts are credited as final exams in this course. This course can be repeated for credit.

### STRING ENSEMBLE

This course is open to all Upper School students who play an orchestral string instrument (violin, viola, cello, bass). US String Ensemble is designed to engage students in a variety of musical styles and genres for rehearsals, formal and informal performances. In addition, music appreciation, history and theory are studied in association with repertoire and units of study. Special attention will be paid to developing artistry and creative expression. 39 Students will participate in performances throughout the year and receive adjudication and master class/workshop opportunities on occasion.

**Note:** Students are required to participate in concerts to earn credit for this course. Concerts are credited as final exams in this course. This course can be repeated for credit.

### DANCE

Dance is designed to allow students who have limited experience in dance, along with those who might be at an intermediate level, a greater understanding of how to express themselves through movement and motion. For advanced students, the course will allow them to serve as mentors to others and also provide the opportunity to choreograph and develop dances of their own. We will focus on multiple styles of dance and also study varied choreographers throughout the year. Elements of body awareness and care, health and wellness, flexibility, and strength and conditioning as it applies to dance will be covered. *\*Students will need to provide dance shoes for the course.*

### INTRODUCTION TO TECHNICAL THEATER

This course is open to all US students with little or no previous experience in technical theater. Learning objectives will focus on the basics of the theatrical production process, including: roles of the production process; tool use and scene shop safety; introduction to carpentry and stagecraft; basics of electrics, sound and costume/wardrobe; and fundamentals of working on stage crew. The course workload will include class meetings, assigned readings, and active participation in technical preparation for department productions. Permission from parents to use power tools will be required. This can be taken for repeat credit.

