



2018-19
Course Catalog

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Minimum Credits Required for Graduation

English (4.0 credits)

Grade 9 English	1.0
Grade 10 English	1.0
Grade 11 English	1.0
Grade 12 English	1.0

Social Science (4.5 credits)

Grade 9 World History	1.0
Grade 10 World History	1.0
Grade 11 American History	1.0
Grade 12 Economics option (see course catalog)	1.0
Additional .5 credit (choice of eight courses)	0.5

Science (3.0 credits)

Biology	1.0
Two additional science credits	2.0

Mathematics (3.0 credits)

Algebra I	1.0
Geometry	1.0
Algebra II	1.0

World Language (2.0 credits)

Two consecutive years of a world language in grades 9-12	2.0
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Fine Arts (1.0 credit)

Any fine arts course(s)	1.0
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Computer Science (.5 credit)

Any one-semester computer course taken in grades 7-12	0.5
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Personal Fitness (.5 credit)

0.5

Life Management Skills (.5 credit)

Taken in grade 8	0.5
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Electives (3.0 credits)

Credit taken in a discipline beyond the minimum requirement	3.0
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Total Credits

22.0

COMPUTER SCIENCE DEPARTMENT

The goal of the computer science department is to provide each student the opportunity to develop his/her skills in a variety of areas, including presentation formats, coding, robotics, and multimedia, by providing courses that are current in today's society as well as developing an understanding of current trends and the ethical use of technology.

The department has a three-tiered approach: programming, multimedia, and robotics. In the programming area, students can follow two paths: graphics or coding. A sequential development in the programming courses allows students to maintain competency with current programming trends in JAVA and C++. Both paths allow students to enroll in the advanced classes of Honors Computer Programming C++ and AP Computer Science A.

Students interested in robotics have the opportunity to take the middle school FTC Robotics program and the upper school courses of FRC Robotics, which include working with professional engineers.

In media, students can explore anything from the basics of animation to the study of film production. Students learn to use sound, light, and camera as well as current professional software and develop basic techniques, such as storyboarding, to plan and execute projects.

Students in grades 7 through 12 can meet their ½ credit graduation requirement with any computer course.

869. Introduction to Programming and Graphics (spring semester – grades 7 and 8)

Students in middle school are introduced to JAVA programming language through applet graphics, object creation, object manipulation, and animation. This course introduces the basics needed for Computer Programming I and II. Prerequisite: Students must be in Pre-Algebra or above.

865. Computer Programming I (fall semester – grades 8-12)

Students are introduced to the basic elements of the programming language JAVA: hardware vs. software, variables, constants, selection structures, iteration structures, and file processing. Students learn how to write object-oriented programs as individuals and in groups. Coding and testing require a high degree of interaction with the computer. Prerequisite: Completion of or current enrollment in Algebra I.

866. Computer Programming II (spring semester – grades 8-12)

Students continue from Programming I by adding advanced JAVA features: structures, matrices, vectors, and binary searches with sequential access files. They will also learn how to pick the most efficient solutions for their computer problems. Random-access files will be discussed in depth but not addressed in a practical form. This course also prepares students for the challenging AP Computer Science A course. Prerequisite: Computer Programming I.

870. Honors Computer Programming C++ (Offered in odd years only for grades 9-12)

This advanced full-year elective course includes a study of programming methodology, algorithms, computer platforms, and the difference between structured and object-oriented programming. Students will study the differences in programming styles and syntax between JAVA and C++. They will be given a real-world problem to solve by breaking it down, writing the methodology, and learning to work as a team to complete a large project. Students learn to read existing code and make changes to create a more efficient end-user product. They will compete in programming tournaments. Prerequisites: B+ in Computer Programming I and II.

871. AP Computer Science A (grades 10-12)

This advanced full-year elective course includes a study of programming methodology, algorithms, pure object-oriented programming, and computer platforms. The students will study, discuss, and practice advanced topics such as searching, sorting, efficiency of run time, and recursion. Students will be given several labs during the year to simulate building a complex real-world solution. They will learn to read existing code and make changes to create a more efficient end-user

product. Students will also compete in programming tournaments. Prerequisites: B+ in Computer Programming I and II and permission of the instructor.

872. FTC Robotics I (semester – grades 7-9)

The *FIRST* Tech Challenge is more than a robotics program. We are a community focused on building a better world for tomorrow by engaging students in Science, Technology, Engineering, and Math (STEM). FTC is about teaching students the value of hard work, innovation, and creativity. It goes beyond competition by teaching teenagers the importance of working together, sharing ideas, and treating each other with respect and dignity.

873. FTC Robotics II (semester – grades 7-9)

The *FIRST* Tech Challenge is more than a robotics program. We are a community focused on building a better world for tomorrow by engaging students in Science, Technology, Engineering, and Math (STEM). FTC is about teaching students the value of hard work, innovation, and creativity. It goes beyond competition by teaching teenagers the importance of working together, sharing ideas, and treating each other with respect and dignity. Prerequisite: FTC Robotics I or permission from the instructor.

874. FTC Robotics III (semester – grades 7-9)

The *FIRST* Tech Challenge is more than a robotics program. We are a community focused on building a better world for tomorrow by engaging students in Science, Technology, Engineering, and Math (STEM). FTC is about teaching students the value of hard work, innovation, and creativity. It goes beyond competition by teaching teenagers the importance of working together, sharing ideas, and treating each other with respect and dignity. This level starts the stage of mentoring new members of the competition team. Prerequisite: FTC Robotics II or permission from the instructor.

875. FTC Robotics IV (semester – grades 7-9)

The *FIRST* Tech Challenge is more than a robotics program. We are a community focused on building a better world for tomorrow by engaging students in Science, Technology, Engineering, and Math (STEM). FTC is about teaching students the value of hard work, innovation and creativity. It goes beyond competition by teaching teenagers the importance of working together, sharing ideas, and treating each other with respect and dignity. This level focuses on mentoring and helping to build the team. Prerequisite: FTC Robotics III or permission from the instructor.

876. FRC Robotics I (semester – grades 9-12)

Upper school students will be introduced to areas of electrical, mechanical, and practical engineering, including interaction with professional engineers as mentors. Students will also be expected to demonstrate a basic grasp of mechanical engineering, electrical engineering, practical engineering, and pneumatics.

877. FRC Robotics II (semester – grades 9-12)

Upper school students will continue to increase knowledge in electrical, mechanical, and practical engineering, including interaction with professional engineers as mentors. Students will also be expected to motivate newer students in all areas. Prerequisite: FRC Robotics I or permission from the instructor.

878. FRC Robotics III (semester – grades 9-12)

Upper school students will continue to increase knowledge in electrical, mechanical, and practical engineering, including interaction with professional engineers as mentors. Students will also be expected to motivate and mentor newer students in all areas. This level starts the stage of mentoring newer members of the competition team. Prerequisite: FRC Robotics II or permission from the instructor.

879. FRC Robotics IV (semester – grades 9-12)

Upper school students will continue to increase knowledge in electrical, mechanical, and practical engineering, including interaction with professional engineers as mentors. Students will also be expected to motivate and mentor newer students in all areas. This level is focused on mentoring and helping to build and guide the team. Prerequisite: FRC Robotics III or permission of the instructor.

862. Introduction to Multimedia (semester – grades 7-8)

Students will be introduced to the basics of multimedia. The course will include discussion on what makes good media, how to design a project, and basic animation. Students will develop skills by storyboarding ideas, creating flipbooks, exploring more advanced techniques in video, and building basic animations. This class requires a 500 GB external hard drive.

860. Web Design and Basic Animation (semester – grades 8-12)

Students will learn how to use many tools for developing multimedia. In the first portion of the course, students will work with Dreamweaver and Photoshop to create websites. As part of the process, students will learn organization, how to create a stylesheet for use on their site, and will participate in integrated projects such as developing an educational training site. In the second portion of the course, students learn to use Adobe Animate to develop basic computer animations. This class requires a 500 GB external hard drive.

861. Digital Video Production (semester – grades 9-12)

Students will learn how to use many of the tools for developing multimedia – sound, images, and movie clips – through specified up-to-date media software. Students using professional video-editing software learn how to edit video, use camera tricks, and create media presentations. Students are also instructed on developing a media project through storyboarding, record keeping, lighting, and use of the digital video camera. This class requires a 500 GB external hard drive.

850. Introduction to Social Media and Ethics (fall semester – grades 10-12)

This course provides students with an introduction to the history, theory, technology, and uses of social media. Social media tools enable individuals to create, collaborate, and share with audiences of all sizes. Students will explore the possibilities, limitations, and ethical uses of social media through hands-on experience, case studies, timely readings, guest speakers, and class discussions. **This course fulfills either a Computer Science or Social Science (ethics) credit for graduation.**

653. Film Production (semester – grades 10-12)

This is an introductory course to film that provides a broad overview of the history, aesthetics, and technical aspects of the medium. This course is designed for students interested in film production and/or acting. The technical track emphasizes teamwork and the technical and creative skills needed to produce student films, some of which may be selected for the Trinity Prep Film Festival. The performance track covers acting techniques rooted in theater but applicable to film. Students learn how to pitch a film idea, write a treatment and screenplay, and will provide the talent for the films produced in class. All students will work collaboratively on writing and creating the scripts and storyboards for the student films. **This course fulfills either a Fine Arts or Computer Science credit for graduation.**

880. Sports Media (semester – grades 9-12)

Upper school students will develop the skills for producing a sports program, including play-by-play, interviewing techniques, research, and presentation. The course will look into “greatest moments” in sports history, changes in the rules of the game, and current related topics. Students will develop pre-production plans; interview athletes, coaches, and guest speakers; and develop post-production skills.

881. Honors Advanced Competition Program

This is an advanced study course designed to increase competition in programming tournaments. Topics include graph theory, geometric algorithms, combinatorics, and string manipulation. There will be constant practice for programming competitions both internal and on college campuses. Prerequisite: AP Computer Science A.

882. Honors App Design

In this course students will design, maintain, and carry out the implementation and ongoing enhancements for the Trinity Prep app for iPhones and android phones. There is online and class instruction for the beginner. Prerequisite: AP Computer Science A.

ENGLISH DEPARTMENT

English courses have three main objectives: to develop the capacity for both expository and imaginative writing, to increase students' understanding of literature, and to encourage critical thinking and analysis. English is required of all students each year.

The curriculum is developmental and sequential, allowing students to progress from simple sentence structure and syntax in middle school to a complex and articulate use of language in upper school. Students are introduced to much of the world's great literature, with selections chosen from all genres and many nations. Research techniques are adapted to each grade level, and students learn the skills of library research and literary criticism.

106. English 6

English 6 incorporates the study of literature, vocabulary, grammar, and writing. Basic reading comprehension skills are honed through the reading of short stories, poetry, essays, and novels. Critical reading and thinking skills are developed through class discussions of these works related to the basic elements of literature. Vocabulary skills are expanded through the study of words in literature as well as those commonly seen on assessments associated with college admissions. Basic grammar, upon which subsequent English classes build, is introduced, including sentence structure, usage, punctuation, and parts of speech. The writing component of the class is an important one, introducing the principles of good writing and providing numerous opportunities for student writing in addition to developing students' typing skills. The writing process is stressed and approached in a step-by-step manner as students become proficient in literary analysis and persuasive writing. Interdisciplinary writing is also a part of the program as students write in the content areas of science and history, applying skills learned in English class.

107. English 7

English 7 explores the art of communication and the relationship between thinking and expression. Analytical thinking is cultivated in reading, writing, and speaking while exploring the basic elements of literature (narrative structure, theme, characterization, symbolism, point of view, etc.) through a study of selected fiction, non-fiction, sequential art, and poetry. Response to literature includes comprehension and analysis as well as connection to personal experiences and contemporary issues. Emphasis is placed on using higher-level vocabulary words, taken directly from the current text of study, in speech and writing. Students develop their creative and formal writing skills in a collaborative setting, with an emphasis on developing pre-writing, drafting, and editing skills as part of the writing process. Grammar topics include parts of speech, parts of a sentence, sentence structure, punctuation, proper usage, and application.

108. English 8

English 8 deepens and further develops the students' critical vocabulary as they study the elements of literature, with emphasis on plot structure, point of view, symbolism, and allegory. Major literary selections include novels, short stories, and two Shakespearean plays. Writing assignments include expository essays, blogging, reaction papers, and creative writing. Critical and analytical essays involve multi-step development of a thesis, supported and developed by examples, details, and reasoning. Themes include justice, identity, prejudice, and the courage needed to make moral choices.

101. English 9

English 9 will explore the conventions of different genres using both canonical and modern texts. The course will center around journeys and heroes, examining what it means to be a hero in different times and cultures, and the conventions that provide the foundation for heroic poems, plays, and stories. It will also consider authorial intention in regards to content and conventions when exploring different styles of writing. Mirroring many elements of the Honors English 9 curriculum, English 9 will focus on close reading, writing, and research in preparation for Honors English 10.

109. Honors English 9

Honors English 9 explores literary works from Ancient Greece, Classical Rome, the Middle Ages, and the Renaissance. Major genres include drama, the short story, the frame narrative, poetry, and the essay. Students learn to read more closely and develop the skills of analysis, inference, and synthesis. Grammar is learned through written assignments, with special

emphasis on sentence variety and common grammatical errors. Process writing, especially the five-paragraph essay format as the foundation for future analytical and research writing, is integral. Honors English 9 is taught at a faster pace and has a heavier workload than English 9.

110. Honors English 10

Honors English 10 covers major English–language literature written either during or about the period from 1550 to 1900. There is a focus on the continuum of ideas in western culture, from Puritanism to the Enlightenment and Romanticism. The Realists, including Mark Twain, and Victorians are introduced as a transition into the 20th century. Important writers like Dickens, Jane Austen, and the great English Romantic poets are studied. Writing focuses on critical thinking, literary analysis, and reading response in both personal and critical assignments. A short research paper emphasizes research techniques and correct citation and documentation. Vocabulary expansion, public speaking, and presentation techniques are included.

111. Honors English 11

Concentrating on the 20th century, the Honors English 11 curriculum continues to complement what students are learning in their history courses. Knowledge of Modernist literature is enriched by supplementary studies of art, music, theater, motion pictures, and major inventions of the past 100 years. Broadened cultural literacy is an expected outcome. Literature reflects stylistic and subjective changes in the wake of Modernism. Writing focuses on formal explication of shorter works and formal essays relating to issues attending the longer works. Students write personal essays in preparation for the college application and an informative research paper in preparation for further research during their senior year.

115. AP Language and Composition (for juniors only)

AP Language and Composition is a course that introduces students to the rigors of college-level work in writing and analysis. It engages students in becoming sensitive, savvy readers, and it involves the study of texts from a variety of periods, disciplines, and rhetorical contexts. It also helps students develop their writing skills and teaches them to respond to a wide range of writing situations and purposes. AP Language devotes much of its curriculum to the discussion of the craft of writing and rhetorical analysis. In terms of literature, the twentieth century is emphasized, but the focus is not exclusively on this period. In the second semester, students are introduced to the analysis of visual texts. Prerequisite: B+ or better in Honors English 10.

112. Honors English 12

Honors English 12 builds a bridge between high school and college. In the fall semester, the class studies the genres of flash fiction, comedy, and tragedy, focusing mainly on the works of contemporary short-story writers and Shakespeare. In the spring, students will study additional genres of literature, including autobiography, the novel, and detective fiction. Additionally, students will continue to develop research skills and write a major research paper. Analytical reading and writing remain an integral part of the curriculum, but students will also be asked to expand their repertoire of writing modes and develop their writing skills by paying particular attention to style, diction, and grammar. Presentations and a dramatic performance provide students with opportunities to hone their public speaking skills.

114. AP Literature and Composition

The fall semester begins with discussion and writing about two late 20th-century novels assigned as summer reading, followed by an in-depth study of three Shakespeare plays and a related major research project. The course also includes a survey of critical approaches, projects involving works of short fiction and selected schools of poetry, interactive class blogs, and short critical papers. During spring semester, students explore mostly 20th and 21st century works—reading, thinking, and writing critically as they prepare and practice for the AP exam. This college-level course involves challenging material and assignments. Prerequisite: B+ or better in junior English course.

120. Journalism/Newspaper (grades 9-12)

Students learn the techniques and obligations of journalism. With emphasis on principles of journalism, ethics, standards, and styles, students learn how to plan assignments, meet deadlines, and accept and/or give editing advice. Members of the

class publish The Trinity Voice. Prerequisites: A or B in all previous English classes and demonstrated ability to work independently. Students must submit an application, and the approval of the newspaper adviser is required.

121. Yearbook (grades 9-12)

The yearbook staff plans, produces, and distributes a well-designed and accurate yearbook to the Trinity Prep community. Students learn skills that are in high demand in the workplace: writing, analysis, organization, communications, photography, desktop publishing, computer graphics, and leadership skills.

127. Young Adult Literature (semester – grades 8-12)

Students will have an opportunity to read and critique young adult literature. They will be required to read one title as a class and then choose from a variety of genres within the spectrum of young adult literature to read and then use Blogs, Twitter, and YouTube to explore and expound on the books. Additionally, students will have the chance to interact with authors online and in person through the Visiting Writer Series.

FINE ARTS DEPARTMENT

"In the beginning God created the heavens and the earth...and on the sixth day he made man after his own image." Genesis
"To be creative is to be human."

The fine arts department approaches each student with the belief that everyone has a fundamental and insatiable urge to create. In order to guide the student to a full expression of that urge, we offer opportunities for exploration of the arts disciplines and their potential to communicate the truth of the human spirit. Through ongoing study and application of their craft, students can begin to develop their artistic skills as they seek to elevate their capacity for creative expression.

Due to the diversity of disciplines in the fine arts department, students are urged to consult with the instructors of the course(s) they are considering. Many courses require the instructor's permission.

ART

606. Art 6 (semester – grade 6)

Students will create artwork using a variety of different materials. Ceramics, printmaking, drawing and painting, and sculpture will be introduced.

607. Art 7 (semester – grade 7)

In this course, students explore with many tools and materials used in artistic expression. Within a cultural and historical framework, they sculpt, draw, paint, and work with clay.

611. Art 8 (semester – grade 8)

Students explore more advanced techniques and materials used in artistic expression. Within a cultural and historical framework, they sculpt, draw, paint, and work with clay.

613. Printmaking (semester – grade 8)

This course explores the art of producing multiple images of a drawing or design, familiarizing students with the print as a series of original or identical images which are produced from a plate or block. Students will use studio processes such as monotype, relief, drypoint, and screen printing. They will be acquainted with the history of printmaking and view work by contemporary artists as they develop an experimental approach to thematic projects.

610. Ceramics (semester – grade 8)

Ceramics students will learn traditional skills, including hand-building, wheel-throwing, surface decoration, glazing, and firing. Students will work on individual and group projects while studying historical and contemporary examples of pottery from various cultures. Prerequisite: Art 7 and permission of the instructor. Class size limited to 10.

637. Visual Foundations (semester – grades 9-12)

This course explores art history while discovering the methods and materials of drawing, painting, and three-dimensional art. Students will become familiar with a variety of materials and techniques. Visual Foundations is required for students who plan to continue to the advanced-level courses of Painting, Drawing, Sculpture, Pottery, 2-D Design, or Printmaking.

633. Drawing I (semester)

This course teaches the basics of drawing and the art of seeing. It will cover a variety of methods of drawing and rendering in pencil, pen, ink, watercolor, and pastels. Prerequisite: Visual Foundations.

639. Drawing II (semester)

Intermediate to advanced-level drawing assignments in charcoal, pencil, ink, pastels, and more are included. The course may be taken more than once. Prerequisite: Drawing I or permission of the instructor.

632. Painting I (semester)

Beginning to intermediate-level painting assignments, using watercolor, acrylics, oils, pastels, and more, are included. Study of color is emphasized in this course. Prerequisite: Visual Foundations.

629. Painting II (semester)

Advanced-level painting assignments using oils, acrylics, watercolor and mixed media are included. Still-life, landscape, and portrait studies are emphasized. Prerequisite: Painting I or permission of the instructor.

661. 2-D Design I (semester)

This course is an introduction to basic design elements and principles and their applications on two-dimensional surfaces. Traditional art media as well as modern technology, such as digital camera, scanner, copier, and digital image manipulation software, will be used. Prerequisite: Visual Foundations.

662. 2-D Design II (semester)

This course focuses on solving advanced-level design problems and researching elements and principles of design in depth. Historical and contemporary trends of design will be reviewed. Students will use traditional art media as well as digital image manipulation software. Prerequisite: 2-D Design I.

663. Printmaking (semester)

This course explores the art of producing multiple images of a drawing or design, familiarizing students with the print as a series of original or identical images which are produced from a plate or block. Students will use studio processes such as monotype, relief, drypoint, and screen printing. They will be acquainted with the history of printmaking and view work by contemporary artists as they develop an experimental approach to thematic projects. Prerequisite: Visual Foundations.

664. Advanced Printmaking (semester)

Students will create monotypes, linoleum prints, multi-block prints, etchings, lithographs, and silkscreen. Exploration of mixed-media techniques will be encouraged. Prerequisite: Printmaking

631. Sculpture I (semester)

This course includes beginning to intermediate-level sculpture assignments, using wood, wire, clay, plaster, stone mixtures, and more. Prerequisite: Visual Foundations.

634. Sculpture II (semester)

Advanced-level sculpture assignments, using a variety of materials with a strong focus on design and 3D printing, are included. Prerequisite: Sculpture I.

635. Pottery I (semester)

This course teaches the fundamentals of hand-building, wheel-throwing, and glaze techniques. Prerequisite: Visual Foundations.

638. Pottery II (semester)

Advanced-level assignments in hand-building, wheel-throwing, and glaze techniques are included. Prerequisite: Pottery I.

636. Advanced Pottery (semester)

This course is designed for students who have experience on the potter's wheel. Students will expand wheel-throwing and hand-building skills by working in series and sets. They will refine finishing skills and explore firing techniques. Prerequisites: Pottery I and II.

665. Honors Portfolio Development 2-D (semester)

666. Honors Portfolio Development 3-D (semester)

These courses are designed for the serious art student who wishes to create a portfolio for college or to develop one section of the AP Studio Art portfolio without submitting it to the College Board for grading. In this course, offered at the same time as AP Studio Art 2-D and 3-D, students create works that demonstrate broad experience and accomplishment or works organized around a compelling visual concept. This course can be taken more than once. Prerequisites: Four semesters of art classes, which can include one semester of photography, and permission of the instructor.

667. AP Studio Art 2-D

668. AP Studio Art 3-D

These courses require advanced skills and a strong work ethic. Assignments include a combination of specific design assignments and self-directed projects. Submission of a portfolio of thirty or more works of art is required for completion of an AP portfolio. For a detailed description of the course, students should speak with the instructor. Prerequisites: Four semesters of art classes, which can include one semester of photography, and permission of the instructor. One semester of drawing is recommended.

CREATIVE WRITING

625. Writing Workshop (semester – grades 9-12)

First semester students will be exposed to and invited to try a variety of poetic and creative non-fiction forms. In the second semester, fiction and script-writing will be the stronger focus, although all genres will be sampled in both semesters. Visiting professional writers will share their expertise, and students will learn the workshop and portfolio methodology prevalent in higher-education creative-writing courses. We will also be the core group responsible for creating and maintaining the new online version of Skylight, Trinity Prep's student literary magazine. This course can be taken in either semester or both and can be taken multiple times.

FORENSICS

614. Middle School Forensics: Speech and Debate (semester – grade 8)

This introductory semester course will teach students the basics of public speaking with a focus on the expressive performance of literature, basic debate rhetoric and argumentation, and effective public address. Students will learn skills to help manage nervousness, create compelling speeches, and present ideas with passion to an audience. They will explore literature and speeches by established authors as well as writing their own scenes, speeches, and debate cases. Students will learn a variety of debate styles, learning self-assessment and effective peer critique through creative assignments and in-class presentations. The skills learned in this class can help students build confidence speaking in front of a group and be applied to interviews and in-class oral presentations. Additionally, Middle School Forensics provides an excellent knowledge base for students interested in the competitive forensics program at Trinity Prep in the upper school.

640. Forensics I (semester)

641. Forensics II (semester)

Upper school students learn the techniques required for successful competition in forensics and public speaking. In these semester courses, emphasis is on all three areas of competition: debate, public address, and dramatic interpretation. Students are encouraged, but not required, to attend regional and local-level competitions to fine-tune their skills.

642. Forensics III

Students learn the techniques required to win at the national level in forensics competition. They may choose areas of expertise to explore in depth; independent study is encouraged. Competition at the local, regional, and national levels is required. Prerequisite: Forensics I or II.

643. Honors Forensics IV

A continuation of the independent study program, this course requires students to participate in national-level competition. At this level, students are required to enter multiple events. Prerequisite: Forensics III.

644. Honors Forensics V

A continuation of the independent study program, this course requires students to participate in national-level competition. Multiple-event participation is also required at this level. Prerequisite: Honors Forensics IV.

MUSIC

655. Middle School Piano Lab 1/2 (semester – grades 7-8)**656. Upper School Piano Lab 1/2** (semester – grades 9-12)

This course is open to student who have little or no experience playing piano. If you have taken piano in the past and would like to start at an advanced level, an audition is required with the instructor for appropriate placement. Each student is placed on a track that is appropriate for his/her current skill and theory level. The emphasis of this class is to develop solid fundamentals in solo and ensemble piano performance technique and reading fundamental music notation. Students will explore the literature written for piano solo and duet while advancing their fundamental understanding of technique, sight-reading, performance skill, and music theory through a planned sequence of appropriate materials and repertoire. It is not required that students have a piano/keyboard at home, though it will help for practice as needed.

695. Beginning Orchestra

This is a full-year course for students who have little or no experience in playing a string instrument. Students will learn the fundamentals of playing violin, viola, cello, or bass while learning basic note-reading and musicianship. In addition, students enrolled in Beginning Orchestra may also learn the fundamentals of playing classical guitar along with their studies of a classical string instrument.

698. Intermediate Orchestra

Students who have some basic knowledge of a string instrument and have successfully auditioned can take this course. Students will explore the literature written for string orchestra while advancing their fundamental techniques on their instruments. The intermediate orchestra players will get opportunities to perform as mentors with a beginning group, as well as performing with the advanced orchestra class.

681. Blue and Gold Orchestra

Students must successfully audition for this courses and demonstrate a developing knowledge of shifting, vibrato, and bow strokes. Students will continue to explore the literature written for string orchestra while developing their individual instruments. The advanced orchestra players will get opportunities to perform as mentors with a beginning group, as well as performing with the chamber orchestra. Students will begin to explore chamber ensembles and are encouraged in solo playing.

680. Honors Advanced Orchestra

Students must successfully audition for this course and demonstrate a developing knowledge of shifting, vibrato, and bow strokes. Students will continue to explore the literature written for string orchestra while developing their individual instruments. The advanced orchestra players will get opportunities to perform as mentors with a beginning group, as well as performing with the chamber orchestra. Students will begin to explore chamber ensembles and are encouraged in solo playing.

683. Honors Trinity Chamber Orchestra

This course is for the most advanced orchestra players. Students are placed in this highly selective course by audition and must demonstrate a variety of advanced bow strokes and tone colors as well as a full working knowledge of upper positions. Scales and a solo piece are required for placement. Students will explore a variety of literature written for this

kind of ensemble and will also explore smaller chamber works. This group is often featured in the school and community. These students are encouraged to mentor the beginning and intermediate groups.

691. Beginning Winds

This year-long ensemble is open to students who have little or no prior experience playing a wind instrument. With the aid of the instructor, students choose an instrument within the first two weeks of instruction. The emphasis of this class is to develop solid fundamentals, i.e. posture, embouchure, hand positions, breathing, and listening skills. Concepts of rhythm, music theory, sight-reading, and ear training are discussed and demonstrated on a daily basis. A planned sequence of appropriate pedagogical materials and repertoire is explored through daily rehearsal and performance.

687. Blue and Gold Band

This year-long ensemble is designed for the musician who has experience on his/her instrument. Fundamental concepts of rhythm, music theory, sight-reading, and ear training are discussed and demonstrated on a daily basis. Concepts of ensemble balance and blend are introduced. This ensemble performs several times throughout the year.

669. Honors Trinity Wind Ensemble

This year-long ensemble is designed for the musician who has demonstrated a solid command of the fundamentals on his/her instrument. Fundamental concepts of rhythm, music theory, sight-reading, and ear training continue to be discussed and developed on a daily basis. Private lessons are strongly encouraged, and opportunities for solo and chamber performance are provided outside class time. Prerequisite: Permission of the instructor.

672. Beginning/Intermediate Percussion

673. Honors Advanced Percussion

These year-long ensembles are designed for the percussionist who has demonstrated a solid command of the fundamentals. Concepts of rhythm, music theory, sight-reading, and ear training are discussed and developed on a daily basis. Private lessons are strongly encouraged, and opportunities for solo and chamber performance are provided outside class time. Prerequisites: Piano skills and permission of the instructor.

676. Honors Jazz Band

This ensemble is designed for middle and upper school students who want to examine the distinct styles of jazz. Fundamental concepts of rhythm, music theory, sight-reading, and ear training will be discussed and developed. Students will be exposed to swing, be-bop, blues, and jazz rock forms as well as principles leading to good improvisational skills. Students will attend one sectional rehearsal and two full rehearsals each week and receive ½ credit for the school year. Prerequisite: Students are required to audition at the beginning of the fall semester. See the instructor for audition requirements and dates.

689. AP Music Theory

This course is designed for the serious musician who intends to pursue music at the college level. Skills learned include realizing figured bass, harmonizing given melodies, sight-singing, and four-part chorale writing. For a detailed description of the course, students should speak with the instructor. Prerequisite: Score of 70% on the entrance exam or Trinity Prep music teacher recommendation submitted to the instructor.

688. Advanced Music Theory and Composition II

This course is designed to develop young composers who have completed the requirements for AP Music Theory. Students will continue writing music for a variety of instruments and voices and explore not only common practice theory, but contemporary elements as well. The students in this course will be required to demonstrate a mastery of transposition, analysis, aural recognition of intervals, and harmonic progressions. This course will be offered concurrently with AP Music Theory and provide instrumental and vocal resources for new compositions. Theoretical review and perimetric formal analysis will be demonstrated in a sequential series of compositions and performances. Prerequisite: Completion of AP Music Theory.

627. Introduction to Chorus (semester – grade 6)

This is a semester course for sixth grade students who have little or no experience in choral performance. Students will learn the fundamentals of using the voice as an instrument in a choral setting while learning basic note-reading and musicianship. The basics of live performance skills will be practiced and a theater component led by a theater instructor is included as a portion of this class. Students who wish to advance to the next level will take Select Chorus next year.

628. Select Chorus (year preferred, semester accepted – grades 6-8)

This is a mixed-voice ensemble (male and female). The repertoire for this choir is eclectic and varied. Vocal and choral foundations, including reading music notation and solfege singing, will be taught and practiced. It is possible to take this course for one semester, but year-long participation is strongly encouraged. Students will have the option to audition to participate in Florida All-State Choirs, perform with community Honors Choirs as opportunities arise, and perform in all choral department productions on campus and in the community. Prerequisite: Completion of Introduction to Chorus OR teacher permission upon audition.

685. Upper School Choir “Vocal Society” (year preferred, semester accepted – grades 9-12)

This is a mixed-voice ensemble. The repertoire for this choir is eclectic, intermediate to advanced level, and varied. Acapella performance wherein vocal percussion is performed is also a component of the class at a choral competitive level. Vocal and choral foundations, including reading music notation, solfege singing, and improvisation, will be taught and practiced. It is possible to take this course for one semester, but year-long participation is strongly encouraged for competition and touring performers. Singers will have the opportunity to audition for participation in Florida All-State Choirs, will perform with community Honor Choirs, master classes, charity events, and participate in competitions in addition to performing leadership roles in all choral productions on campus. Prerequisite: Teacher permission required.

PHOTOGRAPHY

650. Photography I (semester – grades 10-12)

Students will become proficient in capturing, uploading, manipulating, and printing color as well as black-and-white digital photographs. Emphasis will be placed on the rigid rules of an exacting craft as well as on the imaginative freedom inherent in an expressive creative visual medium. Students will learn the intricacies of digital camera capture, computer processing in Adobe Lightroom, working in the digital darkroom, and output to a printer. Subjects covered include camera care and operation, principles of composition, proper exposure and capture size, cropping, and image evaluation, as well as manipulation in the digital darkroom and proper output. In addition, students will explore the history of photography and be exposed to a variety of assignments to improve their skills with the camera and on the computer. A D-SLR camera is strongly recommended.

651. Photography II (semester)

Students will build on the skills they learned in Photography I, working on camera techniques of enhanced interpretation, lighting evaluation, advanced computer skills for manipulation in Adobe Photoshop, and various output techniques. In addition, students will be exposed to studio lighting, developing their skills in lighting techniques including portraiture, fashion, still life, and product photography. This course will focus students’ concentration on seeing photographically, making a good photograph better, and utilizing solid techniques for creating outstanding images. A D-SLR is strongly recommended. Prerequisite: Photography I.

652. Honors Photography Portfolio Development (semester)

This course is designed for serious photography students who wish to delve deeper into the medium and create personal portfolios. In refining their photography skills and exploring their own personal style, students will have the opportunity to develop a portfolio in preparation for AP Photography. Prerequisites: Photography I and II.

654. AP Studio Art 2D: Photography

This course requires advanced skills and a strong work ethic. Assignments include a combination of specific design assignments and self-directed projects. Submission of a portfolio of thirty or more works of photography is required for completion of an AP portfolio. For a detailed description of the course, students should speak with the instructor. Prerequisites: Photography I and II and permission of the instructor.

THEATER

609. Theater I (semester - grades 6 and 7; priority for grade 7)

Students will learn and develop the skills they need to perform in front an audience. Theater vocabulary will be expanded, good voice and diction work established, and awareness and appreciation of the collaborative nature that exists in the theater developed. Students will rehearse and perform monologues and scenes. Students are required to attend live theater performances and report on them.

612. Theater II (semester – grades 7 and 8; priority for grade 8)

This course serves to equip students with the knowledge, skills, and familiarity with theatrical production and performance to carry them into high school. Students will review stage areas, stage terms, and blocking techniques. An overview of theater history will be covered. Students will learn basic performance skills, including diction, breath control, balance and body control, beginning audition skills, character development, and student scene work. Students will end the semester by reading and producing scene work from plays by Neil Simon and Shakespeare.

624. Beginning Dance (grades 6-12)

This course is open to students with little or no dance training. Students will explore the various dance styles: ballet, modern, jazz, and musical theater. Students will develop a dance vocabulary, build an understanding of different dance techniques, and improve coordination, flexibility and self-confidence. This course may be taken for one semester or a full year.

615. Intermediate Dance (grades 6-12)

This course is open to students with prior dance experience. Students will continue to build their dance technique and ability in ballet, modern, jazz, and musical theater. Permission of teacher required. This course may be taken for one semester or a full year.

621. Acting I (fall semester)

Students will explore the intellectual, emotional, physical, and psychological demands of performance. They will explore the history of modern acting methods and master the fundamentals of physical self-awareness and self-control, including breath control, vocal technique, diction, connecting with fellow actors, balance, body awareness, and control. Students will learn steps to building and creating a character and will put them to work through scene study.

622. Acting II (spring semester – grades 11-12)

Acting II students will spend time in scene study, script analysis, and character development. Prerequisite: Acting I and teacher recommendation.

626. Advanced Acting and Audition Prep (fall semester)

Dramatic and comedic monologues and, for those interested in musical theater, song selections will be chosen, studied, and polished for the individual student enrolled in the class. Pieces for the thespian festival will be generated, as well as material for college auditions. Opportunities for student leadership positions can be available by directing a scene or choreographing a musical number. Prerequisite: Acting I and II or permission of instructor.

623. Musical Theater Performance (spring semester)

This course is performance-based, with an emphasis on putting together a show to be performed at the end of the semester. This class gives each student an opportunity to develop a character, learn choreography and songs, and perform in front of an audience. Personal performance goals must be set at the beginning of the semester and revisited at the end of the semester. Prerequisites: Acting I and permission of the instructor.

682. Stagecraft (semester)

In this class, students are exposed to the fundamentals of technical theater. Students will learn set construction, tool use and safety, and set-painting techniques. Ideas will be generated and executed for the set design of the semester productions.

653. Film Production (semester – grades 10-12)

This is an introductory course to film that provides a broad overview of the history, aesthetics, and technical aspects of the medium. This course is designed for students interested in film production or acting. The technical track emphasizes teamwork and the technical and creative skills needed to produce student films, some of which may be selected for the Trinity Film Festival. The performance track covers acting techniques rooted in the theater but applicable to film. Students will practice auditioning for film and will provide the talent for the films produced in class. All students will work collaboratively on writing and creating the scripts and storyboards for the student films. **This course fulfills either a Fine Arts or Computer Science credit for graduation.**

MATHEMATICS DEPARTMENT

Trinity Prep's mathematics program aims to provide students whose abilities range from average to gifted with the quantitative, critical thinking, and creative problem-solving skills necessary for success at college and in the real world. As a minimum, college-bound students should take all courses necessary to complete Pre-Calculus before graduation. The courses offered range from Math Concepts in grade 6 through AP Calculus BC, AP Statistics, Advanced Multivariable Calculus and Advanced Linear Algebra. Students who complete the Trinity Prep sequence before their senior year may take more advanced classes at local college campuses or through the Malone School Online Network.

High-achieving students who desire to advance in the math curriculum have summer options. Click [to access the instructions and approval form](#).

Sequencing begins with Math Concepts, and every effort is made to place students appropriately so they may experience success in their classes. The criteria used for placement include prior records, standardized test scores, and/or placement exams as well as teacher recommendations. Honors courses are recommended for students who possess great strength in mathematics and who can work independently on challenging problems. Students who fall short of an Honors or AP math course prerequisite by no more than one percentage point may appeal for placement in that course, provided they have an overall GPA of no less than 3.5, a final exam grade of B or better, and strong recommendations from their current and past math teachers.

Our middle school curriculum is accelerated so that students in 8th grade take Algebra I or Honors Algebra I. Students must take three years of mathematics in the upper school to meet graduation requirements; four years of math in the upper school are recommended and sought by highly selective colleges. The three basic course sequences listed below provide guidelines for course selection. Crossovers are possible in appropriate/exceptional cases and may be made at the beginning of a school year or at other convenient times with departmental approval.

Sequence 1

Math Concepts
Pre-Algebra
Algebra IA
Algebra IB
Geometry
Algebra II
Pre-Calculus, Statistics,
or College Algebra

Sequence 2

Math Concepts
Pre-Algebra
Algebra I
Geometry
Algebra II
Pre-Calculus or College Algebra
Honors Calculus, Statistics,
or AP Statistics

Sequence 3

Expanded Math Concepts
Expanded Pre-Algebra
Honors Algebra I
Honors Geometry
Honors Algebra II
Honors Pre-Calculus
Advanced courses in Mathematics:
AP Calculus AB, AP Calculus BC,
AP Statistics, Advanced Multivariable
Calculus, Advanced Linear Algebra

406. Math Concepts

Students entering Math Concepts should have a strong foundation in using the four math operations with whole numbers, fractions, and decimals. Continuous review of these operations, using whole numbers, fractions, decimals, ratios, percents, and integers, will be covered throughout the year. Fundamental concepts of number theory, equations, algebraic expressions, measurement, statistics and data analysis, and the geometry of plane figures will also be included. Students will strengthen their computational skills while developing their ability to follow procedures and solve problems to provide a solid foundation for further study in mathematics. Students entering grade 6 and scoring less than six on either or both sections of the ISEE (math achievement and quantitative reasoning) will be placed in this course without taking a Trinity Prep math placement test.

405. Expanded Math Concepts

This course is intended for students entering grade 6 who have solid study habits, excellent computational skills, and genuine problem-solving ability. It includes all the topics covered in Math Concepts but progresses at a faster pace.

Additional topics in elementary algebra, geometry, and statistics are covered as well. Students scoring some combination of sixes and sevens on the math sections of the ISEE exam will be tested for placement in this course. Prerequisites: A score of at least six on both math sections of the ISEE **and** a B+ on Trinity's Expanded Math Concepts placement exam.

407. Pre-Algebra

Students learn the skills necessary for success in Algebra I. Topics include elementary algebraic equations, inequalities, and polynomials and graphing, as well as review and maintenance of basic math skills. These skills include computation with whole numbers, decimals, integers and rational numbers, solving equations, ratio and proportion, and working with percents. Additionally, students are introduced to informal geometry, probability, statistics, and problem solving. Students entering grade 7 and scoring less than seven on either or both math sections of the ISEE (math achievement and quantitative reasoning) will be placed in this course without taking a Trinity math placement exam.

408. Expanded Pre-Algebra

Students learn the skills necessary for success in Honors Algebra I and are expected to excel in computational skills, to be particularly industrious, and, above all, to understand and use mathematical theory. Topics include the use and properties of number systems, ratio, proportions, equation and inequality solving in one variable, polynomials, problem solving, informal geometry, and probability and statistics. Prerequisites: A score of at least seven on both math sections of the ISEE, a 95 in Math Concepts, at least a B+ in Expanded Math Concepts, and/or an A- on Trinity's Expanded Pre-Algebra placement exam for new students.

403. Algebra IA

404. Algebra IB

Algebra IA and Algebra IB are to be taken in consecutive years in place of the Algebra I course. These two courses will provide a firm foundation for more advanced mathematics courses and are intended for the student who will benefit from an in-depth, repetitive, slower-paced class environment to allow for full comprehension. Prerequisite: C+ or below in Pre-Algebra.

Algebra IA will provide a review of the skills taught in Pre-Algebra and will focus on linear algebra, including graphing first degree equations/inequalities and systems of linear equations/inequalities. All these concepts will be taught with a real-life approach and application.

Algebra IB will provide a review of the linear algebra concepts studied in Algebra IA and then continue with studies of polynomials, rational expressions, exponential functions, trigonometric ratios, and connections to geometry. All these concepts will be taught with a real-life approach and application.

410. Algebra I

This course provides the foundation for more advanced mathematics courses. Topics include sets, variables, structure and properties of the real number system, solving and graphing first-degree equations/inequalities, systems of linear equations/inequalities, integral exponents, operations with polynomials, factoring, operations with rational algebraic expressions, relations and functions, quadratic equations, radical expressions, irrational numbers, and word problems. Prerequisite: B- in Pre-Algebra or B- on the Algebra I placement test for new students.

411. Honors Algebra I

This course provides a rigorous in-depth study of algebra, emphasizing deductive reasoning skills. It is a foundation for more advanced mathematics courses, developing the skills needed to solve mathematical problems. Topics include, but are not limited to, operations and properties used within the real number system; algebraic and graphical solutions to first-degree equations and inequalities in one and two variables; relations and functions; direct and inverse variation; operations with polynomials, including all forms of factoring; rational and irrational algebraic expressions; quadratic equations; quadratic inequalities; integral and fractional exponents; radical expressions; irrational numbers; and word problems. Prerequisites: A on the Honors Algebra I placement test, permission of department chair, and summer work (for new students); or a 95 in

Pre-Algebra, B+ on Honors Algebra I placement test, permission of the department chair, and summer work; or B+ in Expanded Pre-Algebra; or B+ on Honors Algebra I placement test for new students.

412. Algebra II

This course continues the study of the structure of algebra and the foundation for applying the skills to other mathematical and scientific fields. Topics include extending the study of the structure and properties of the real number system, complex numbers, relations, functions and graphs, polynomial functions, quadratic equations and inequalities, real exponents, word problems, polynomials and rational expressions, and logarithms. Conic sections are introduced if time permits.

Prerequisites: Algebra I, or Algebra IA and Algebra IB, and Geometry.

413. Honors Algebra II

This advanced course presents an in-depth study with emphasis on theory, proof, and development of formulas, as well as their applications. Topics include, but are not limited to, algebraic structure, first-degree equations in one and two variables solved algebraically and graphically, systems of equations and inequalities, functions and relations, polynomials and rational expressions, exponents and radicals, logarithms, complex numbers, conic sections, sequences and series, permutations, combinations, and probability. Prerequisite: B+ in Honors Geometry; at least a B+ on Honors Algebra II placement test for new students; or A+ in Geometry and a teacher recommendation.

414. Geometry

Students learn about sets of points in the plane and space, gain understanding of the deductive method of thinking, develop creative thinking involving the discovery of relationships and proofs, and develop skill in applying the deductive method to mathematical situations. Topics include the Euclidean geometry of lines, planes, angles, triangles, polygons, circles, area, volume, similarity, congruence, geometric inequalities, constructions, tessellations in the plane, and logic.

Prerequisites: Algebra I or Algebra IA and IB.

416. Honors Geometry

Students begin the first semester with a rigorous, in-depth study of geometry, emphasizing basic concepts and properties; methods of proof; angle relationships; triangles, quadrilaterals, and other polygons; perpendicularity and parallelism in the plane and in space; congruence of geometrical figures; and midsegment relationships in triangles, trapezoids, and quadrilaterals. Topics in the second semester include, but are not restricted to, transformation geometry, areas and volumes, circles and spheres, proportionality relationships in polygons, similarity of polygons, more advanced work on the Pythagorean Theorem, geometric probability, and an introduction to trigonometry. Relevant aspects of algebra, general probability theory, geometric constructions, and some preparation for math competitions and the PSAT/SAT are integrated into the curriculum throughout the course. Prerequisite: B+ or above in Honors Algebra I, a 95 in Algebra I, or a minimum of B+ on the Honors Geometry placement test for new students.

418. Pre-Calculus

Content is focused on an in-depth study of various classes of functions, including polynomial, rational, exponential, logarithmic, and trigonometric functions. In each case, the nature of graphs and their use as mathematical models for solving real-world quantitative problems are explored. Prerequisite: B- or above in Geometry and Algebra II; B- or above in College Algebra.

420. Honors Pre-Calculus

Content is focused on preparation of prerequisite skills and subject matter required for success in future enrollment in Advanced Placement Calculus. Topics include polynomial, rational, exponential, logarithmic, and trigonometric functions, limits, conic sections, vectors, sequences and series, and an introduction to calculus. Prerequisite: B+ or above in Honors Geometry and Honors Algebra II; A+ in Algebra II with permission of the department chair.

422. Honors Calculus

This course provides an introduction to topics covered in a college-level calculus class. These include a review of the properties of functions studied in Pre-Calculus, limits and continuity, the derivatives and antiderivatives/integrals of

functions, and their applications to real-world problems encountered in business and the physical, biological, and human sciences. Prerequisite: C or above in Honors Pre-Calculus or 85% or above in Pre-Calculus and permission of the department chair.

425. AP Calculus AB

AP Calculus AB is primarily concerned with developing the students' understanding of the concepts of calculus and providing experiences with its methods and applications. It is a course designed by The College Board and is intended to be both challenging and demanding. The four major topics of this course are limits, differential calculus, integral calculus and their applications. Students enrolled in this course who are interested in physics should enroll in AP Physics C. Prerequisite: B+ in Honors Pre-Calculus or A+ in Pre-Calculus.

426. AP Calculus BC

This course continues the study of calculus begun in AP Calculus AB and includes a review of all the topics of AP Calculus AB. The five major topics of this course are limits, differential calculus, integral calculus, polynomial approximations and series and their applications. Parametric, polar and vector functions will be studied in this course. Prerequisite: A minimum score of three on the AP Calculus AB exam.

427. Advanced Multivariable Calculus

This course will explore the geometry of higher dimensional Euclidean space. Topics to be covered will include vectors, vector functions, partial derivatives, multiple integrals, line integrals, vector fields, Green's Theorem, and Stokes' Theorem. A robust unit on differential equations will be included to allow students to review the topics of single-variable calculus. Additional topics will be included as time permits. Prerequisite: AP Calculus BC.

428. Advanced Linear Algebra

Advanced Linear Algebra introduces students to abstract mathematical concepts by way of matrix theory and vector spaces. This course focuses on systems of linear equations, matrices, vector spaces, inner product spaces, orthogonality, eigenvalues and eigenvectors. Applications to chemistry, coding theory, cryptography, economics, genetics, geometry, graph theory, linear programming, and Markov chains will be included. Additional applications and topics will be included as time permits. This course cannot be taken instead of AP Calculus AB or BC. Prerequisites: 1) Completion of AP Calculus BC or Advanced Multivariable Calculus; OR 2) may be taken concurrently with AP Calculus AB with permission of the Honors Pre-Calculus instructor; OR 3) may be taken concurrently with AP Calculus BC and a desire to take two mathematics courses in one year.

434. AP Statistics (grades 11-12)

This course covers the entire AP Statistics syllabus, which is equivalent to a one-semester introductory non-calculus-based college course in statistics. Students are exposed to four broad conceptual themes: 1) exploring data (observing patterns and departures from patterns); 2) planning a study (deciding what and how to measure); 3) anticipating patterns (producing models using probability theory and simulation); and 4) statistical inference (confirming or disconfirming models through inferential and diagnostic methods). Prerequisite: minimum of B- in Honors Pre-Calculus or B in Pre-Calculus.

435. Statistics (grade 12 only)

This is an introductory statistics course covering collection, description, interpretation of data, and statistical report writing. Topics include sampling and experimentation, descriptive statistics, probability, binomial and normal distributions, estimation, and single-sample and two sample hypothesis tests for means and proportions. Additional topics will be selected from descriptive methods in regression and correlation and contingency table analysis. Prerequisite: completion of Geometry, Algebra II, College Algebra, and/or Pre-Calculus and permission of the department chair. Students are advised that the completion of Pre-Calculus is highly recommended and is required by many colleges. Students may take Pre-Calculus and Statistics concurrently.

439. College Algebra (grades 11-12)

This course reviews basic algebra and progresses through more advanced topics including polynomial and rational functions, systems of equations and inequalities, and probability theory. Some basic trigonometry may be covered as well. Prerequisites: completion of Geometry and Algebra II or any higher-level course in the regular math track and permission of the department chair. Students are advised to enroll in Pre-Calculus at the conclusion of this course.

PHYSICAL EDUCATION DEPARTMENT

Trinity Prep's physical education program is based on the standards developed by the National Association of Sports and Physical Education (NASPE) and Sunshine State Standards (SSS). Daily P.E. is required for students in grades 6 and 7 throughout the school year. Students in grade 8 participate daily in P.E. for one semester. All activity classes are separated by gender. Students are assessed in the following areas: effort and preparedness, motor skills, portfolio containing fitness logs and other written assignments, and content knowledge of units. The curriculum includes the following units of activity: badminton, basketball, flag football, pickleball, recreational games, soccer, softball, swimming, tennis, volleyball, ultimate Frisbee, lacrosse, speedminton, and golf. FitnessGram fitness testing is part of the P.E. curriculum as students are tested monthly in one area of health-related fitness. Reports of results are sent home during the spring semester.

1006/1016. PE6G and 6B (grade 6)

1007/1017. PE7G and 7B (grade 7)

1008/1018. PE8G and 8B (grade 8)

1009/1019. Personal Fitness (grades 9-12)

Ninth grade students are encouraged to complete this course in the fall or spring semester. They may complete the course during the summer session prior to their ninth grade year, but space is limited. This course is designed to increase the students' personal fitness level through daily exercise and training, giving students the knowledge and desire to establish personal health and fitness programs, helping them realize that daily physical activity will increase their energy level and productivity, and providing lifetime fitness activities. The goal of this course is to provide participants an overall health and wellness awareness that will lead to behavior change. This course satisfies the graduation requirement.

1020/1021. Life Management Skills 8G and 8B (grade 8)

1022. Life Management Skills (grades 9-12)

Life Management Skills is offered as a semester course in the 8th grade. Upper school students who have not yet received credit for this course can take it during the summer, fall, or spring semester. Students learn the skills they need to become health literate, maintain and improve health, prevent disease, and reduce health-related risk behaviors. The curriculum includes units on mental, emotional, social, and family health; growth and development; nutrition; personal health; alcohol, tobacco, and drugs; communicable and chronic diseases; consumer and community health; and injury prevention and safety. This course satisfies the graduation requirement.

1025. Team Sports and Lifetime Fitness (spring semester – grades 9-12)

Students will participate in team sports such as basketball, volleyball, and flag football along with activities such as strength training and cardiovascular fitness. Opportunity for dual sports such as tennis and badminton will be offered as well.

Prerequisite: Personal Fitness

1031. Conditioning I (fall semester – grades 9-12)

This course is for students who are either staying in shape in season or interested in getting in shape for their upcoming season. The purpose of the course is to introduce the students to the basic fundamental principles of weight training and conditioning. Areas that will be covered include, but are not limited to, identifying muscles of the body, stretching and flexibility, improving cardiovascular fitness, proper use of the equipment, and safety precautions while weight training.

Prerequisite: Personal Fitness.

1032. Conditioning II (spring semester – grades 9-12)

The purpose of the course is to expand the student's background on the basic fundamental principles of weight training and conditioning and explore the areas of proper nutrition, effects of supplements and drugs, and creation of an individual fitness program. Prerequisite: Conditioning I.

SCIENCE DEPARTMENT

To be informed citizens today, students must understand the language, dispositions, and methods of science. The science department strives to develop scientific literacy by giving the student a thorough understanding of scientific principles. A successful science student develops the characteristics, attitudes, and techniques of a scientist, some of which are an inquiring mind, accurate and critical observations, alertness to recognize the unexpected, willingness to reject old ideas and to accept new ones when sufficient data warrant, resistance to the tendency to make generalizations on the basis of insufficient data, and scientific writing.

Laboratory work is central to every course; it is this experimentation which distinguishes science from other disciplines.

Students who do not meet the grade prerequisite for a course may initiate an appeals process, which includes a recommendation from previous science teachers, a department chair meeting with the director of curriculum to evaluate students' overall academic performance, and a final decision made by the department chair and the director of curriculum.

In the upper school, students with a strong science background may wish to take two science courses in the same academic year. This is a viable option for students who have consistently maintained the highest level of academic success, who meet all the additional prerequisites for the course, and who receive a recommendation from the current science teacher. Rising 9th graders may be eligible for dual science enrollment if they have maintained a 4.0 GPA in middle school. Student placement in more than one science course per year is dependent upon availability of space in the class. Finally, the number of major assessments per day is generally limited to two. However, dual science enrollment may necessitate three assessments on a given day. Students should be prepared to handle this increased work load.

506. Science 6

The course is an integrated introduction to the major areas of biology, physical science, and chemistry, focusing on selected topics in exploring life, understanding matter, and understanding energy. A "hands-on" approach develops the students' powers of observation and critical thinking skills. Students learn the proper use of basic laboratory equipment and procedures. Special emphasis is placed on the use of the microscope, the scientific method, and collection of data.

507. Science 7

The course is a continuation of the topics introduced in Science 6. Students will focus more in depth on the integrated areas of biology, physical science, and chemistry. Other concepts in the selected topics of exploring life, understanding matter, and understanding energy will be introduced. A "hands-on" approach will continue to develop the students' powers of observation and critical thinking skills. Students learn the proper use of additional laboratory equipment and procedures. Special emphasis will continue to be placed on the use of the microscope, the scientific method, and the collection and analysis of data.

508. Science 8

This course is a continuation of the topics introduced in Science 6 and Science 7. Students will focus more in depth on the integrated areas of biology, physical science, and chemistry. Other concepts will be introduced in the selected topics of motion and energy, interactions of matter, and heredity and human body systems. A "hands-on" approach will continue to develop the students' powers of observation and critical thinking skills. Students will learn the proper use of additional laboratory equipment and procedures. Special emphasis will continue to be placed on the use of the microscope, the scientific method, and the collection and analysis of data.

501. Biology

This upper school freshman course explores major themes of biology through rigorous laboratory investigations, problem-based research, and writing. Systems and design thinking are developed. Assessment rigor is shifted to focus on lab write-ups, projects, presentations, and daily productivity. Quizzes and tests are used, but minimized. Students discuss contemporary topics as well as the social issues related to biology. Laboratory skills are continually reinforced, with

particular emphasis on experimental design and analysis. A grade of B+ or higher in Biology serves as a prerequisite to many upper school science courses.

509. Honors Biology

This upper school freshman course emphasizes the ten major themes of biology: biological systems, cell theory, form and function, inheritance by reproduction, environmental interaction, energy, regulation, evolution and adaptation, bioethics, and science as inquiry. Students discuss contemporary topics as well as the social issues related to biology. Laboratory skills are continually reinforced, with particular emphasis on data accumulation and analysis. A grade of B+ or higher in Honors Biology serves as a prerequisite to many upper school science courses.

510. Honors Chemistry

Students learn the basic principles of chemistry, including a logical problem-solving approach as applied to chemical theories. Some concepts examined include states of matter, atomic theory and structure, stoichiometry, thermodynamics, and qualitative analysis. Laboratory experimentation reinforces the theoretical modes studied in the classroom. Prerequisite: Students who have earned a B grade in Biology or Honors Biology and who earned at least a B in Algebra I or Honors Algebra I may be recommended for Honors Chemistry.

520. Florida Ecology

The goal of this course is to introduce students to the natural ecosystems and native species of Florida through outdoor exploration and collection of wildlife data for collaborative research and citizen science. As mentioned in "Priceless Florida," "Only when one understands a thing can one come to love and cherish it." By the end of the course, students should be able to identify the major ecosystems of Florida and many of the native plant and animal species. Additionally, students will learn how to collect, manage, and submit wildlife data to scientists. Prerequisite: Biology or Honors Biology.

563. Earth and Space Science

Earth and Space Science covers areas of geology, meteorology, oceanography, astronomy, and energy resources, with some basic background in chemistry and physics. Laboratory investigations which include the use of scientific inquiry, research, measurement, problem solving, and experimental procedures are an integral part of this course. This course will help students develop the following science practices: asking scientific questions, developing and using models, planning and carrying out investigations, analyzing and interpreting data, using mathematics and computational thinking, engaging in argument from evidence, and evaluating and communicating information. Prerequisite: Biology or Honors Biology.

535. Honors Anatomy and Physiology

This advanced course is designed for the self-motivated student who has a strong interest in the biological sciences. A college-level textbook is used. The course includes an in-depth study of the structure and function of the human body. All systems and their interdependence are discussed. Laboratory activities supplement the lecture material, including microscope work and use of working models. A major portion of the course is devoted to dissections, including individual organs such as the brain and heart. Students will also be responsible for a research project during the year. Prerequisites: B+ in Biology or Honors Biology and recommendation of biology instructor.

525. AP Environmental Science

This course will introduce students to scientific principles, concepts, and methodologies required to understand the interrelationships of a natural world. Students will be able to identify and analyze environmental problems, both natural and human-caused, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving them. AP Environmental Science is an interdisciplinary and applied subject that requires students not only to use their past scientific knowledge, but also to combine that knowledge with social and economic understanding. Students will be required to keep a lab book and will conduct several in-class and outdoor research projects throughout the course of the year. Prerequisites: B+ in Biology or Honors Biology and Honors Chemistry and permission of the department chair and director of curriculum.

540. AP Biology

AP Biology is designed to be the equivalent of a college introductory biology course taken by biology majors during their first year. Students cultivate their understanding of biological science through inquiry-based investigations as they explore the following topics: evolution, cellular processes (energy and communication), genetics and information transfer, and ecology and interactions. The course requires 25% of the instruction time to be spent in laboratory work, with emphasis on inquiry-based investigations. Prerequisites: B+ in Biology or Honors Biology, B+ in Honors Chemistry, and recommendation from current science instructor or department chair.

515. Honors Physics (grades 10-12)

Students learn the fundamental laws of physics. First semester is devoted to the study of kinematics and Newtonian mechanics, while second semester includes the study of electricity, magnetism, waves, light, and optics. These subjects are presented in a context that is related to everyday, observable phenomena and are accompanied by numerous demonstrations and laboratory exercises. Prerequisite: Successful completion of Algebra II. This course *may* serve as a prerequisite for either AP Physics 2 or AP Physics C.

544. AP Physics 1

In this introductory college-level course, students will build upon their knowledge of the basic natural laws governing the following specific areas: kinematics, Newton's Laws, circular motion, universal gravitation, harmonic motion, momentum, work, energy, rotational motion, electrostatics, DC circuits (resistors only), waves, and sound. Concepts are reinforced with numerous laboratory investigations and experiments. As advised by the College Board Advanced Placement program, special attention will be paid to the "7 Big Ideas" of physics. Students must take the AP Physics 1 exam. As AP Physics 1 is an introductory course, students should plan to take AP Physics 2 or AP Physics C the next academic year. Prerequisite: Successful completion of an Algebra II course.

545. AP Physics 2

AP Physics 2 is a continuation of the physics concepts learned in AP Physics 1. It is an algebra-based, college-level physics course that explores topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical geometric optics; and quantum, atomic, and nuclear physics. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. Prerequisite: Successful completion of AP Physics 1 and a required teacher recommendation. AP Physics 1 exam scores will be considered prior to placement in AP Physics 2.

546. AP Physics C

This is a calculus-based course paralleling introductory college physics. It includes an in-depth study of Newtonian mechanics and electromagnetism. Concepts are reinforced with laboratory investigations and experiments. Students must take the AP Physics C Mechanics and the AP Physics C Electricity and Magnetism exams. Prerequisite: Successful completion of AP Physics 1 AND concurrent enrollment in either of the AP Calculus courses, with AP Calculus BC recommended.

550. AP Chemistry

This course meets two class periods a day in the first semester and one class period a day in the second semester. The course is structured according to the College Board course description for AP Chemistry. It includes a detailed study of bonding, chemical reactions, equilibrium, electrochemistry, thermodynamics, and kinetics. Prerequisite: B+ in Honors Chemistry and a recommendation from previous chemistry instructor.

560. Independent Research in the Sciences (fall semester - grades 9-12)

Student researchers will learn traditional experimental approaches to investigation, basic statistical analysis, and research methods. Each student will propose a research question, design and conduct an original experiment, and present the findings in the form of a research paper and poster to be presented at a research symposium. Students who register for the course also commit to entering their research in a local regional science fair and will receive teacher support to enter their research in science competitions at the state and local level and in online forums, if eligible. An application must be submitted to the instructor prior to placement in the course.

561. Science Writing (spring semester – grades 10-12)

Students will explore the craft of making scientific concepts, discoveries, and research literature accessible to general readers through articles, blogs, and long-form writing. Topics for readings and writing will include natural sciences, medicine, technology, and current events in the science community. The student writers will focus on effective communication through close reading, peer editing, and writing exercises. Science enthusiasts will develop their communication skills, and proficient writers will grow in science literacy. An application must be submitted to the instructor prior to placement in the course.

562. Honors CSI: Forensic Science (semester)

This course is designed for students interested in learning the disciplines of forensic science and crime-scene investigations. Students will be introduced to some of the specialized fields of forensic science. Topics will include blood spatter and pattern analysis, death investigation, ballistics, trace and glass evidence, toxicology, entomology, anthropology, serology, and DNA fingerprinting. Students will explore the forensic analysis of substances such as glass, soil, hair, bullets, gunpowder, blood, and drugs; they will be expected to understand at an introductory level. This class will include a mixture of laboratory experiments, demonstrations, and speakers who are experts in the field. Prerequisite: Completion of Biology or Honors Biology, Honors Chemistry and Algebra II (or current enrollment)

SOCIAL SCIENCE DEPARTMENT

Charting a Course: History for the 21st Century

The vision of the social science department is to develop well-educated people who share a body of knowledge, understand common cultural references, preserve a set of values, acknowledge the role of religion and ethics, and are prepared to participate with confidence in the dynamics of political, economic, and social groups.

MIDDLE SCHOOL

306. Geography and World Cultures

This sixth grade course provides a thorough introduction to geography and a regional approach to exploring the world. The varied geography, history, and culture of the regions of the world will be studied. Students will understand the important role that geography has played throughout history and recognize its influence on daily life as they follow the sweep of history, from its beginnings in the Middle East through the growth of Europe, Africa, and Asia, to the emergence of the nations of the Western Hemisphere.

307. U.S. History

This seventh grade course presents a dynamic chronological history of the United States, from the period of early exploration of North America to the contemporary United States. Important themes include the development of a uniquely American national identity and vision from a diverse population, developing and evolving democratic and social institutions, and America's changing role in the global community. Through this course students will become more aware of and better understand the origin and impact of significant historical events, people, and ideas that shape our society.

308. Civics

This eighth grade course is directed toward developing a sound, basic understanding of the theories, the structure, and the functions of the U.S. political system. Students learn the rights and responsibilities of citizens and the importance of individual civic participation in the democratic process. Topics include analysis of the three branches of government at the local, state, and federal levels; the role of the political parties; and economic fundamentals. Students also learn about foreign affairs and selected social, economic, and political problems.

UPPER SCHOOL

Upper School students must complete a minimum of 4.5 credits in social science for graduation.

3.0 credits taken in grades 9-11:

- Grade 9 World History to 1550 **OR** Honors World History to 1550
- Grade 10 Honors World History 1550-Present **OR** AP World History
- Grade 11 Honors American History **OR** AP United States History

1.0 credit from the following options (can be taken in grade 11 and/or 12):

- AP Microeconomics/AP Macroeconomics **OR** Honors Economics plus another ½ credit social science course

.5 credit from one of the following options:

- Introduction to Ethics
- Introduction to the Bible
- World Religions
- Ethical Leadership
- Introduction to Social Media and Ethics
- MSON Honors Medical Bioethics
- MSON Honors Environmental Bioethics
- Christianity and Film (summer school only)

301. World History to 1550

This ninth grade study of world history and geography provides an extensive survey of history, from ancient civilizations to 1550. This course uses a high school level textbook and addresses skills in preparation for either AP World History or Honors World History 1550-Present in tenth grade. To be eligible for AP World History, students must receive a grade of A or higher and demonstrate the writing ability necessary to handle the demands of an AP level history course.

309. Honors World History to 1550

This ninth grade study of world history and geography provides an extensive survey of history, from ancient civilizations to 1550. This course uses a college level textbook and addresses skills in preparation for AP World History in tenth grade. To be eligible for AP World History, students must receive a grade of B+ or higher and demonstrate the writing ability necessary to handle the demands of an AP level history course. There is no prerequisite for admission into this course.

310. Honors World History 1550-Present

This tenth grade course covers the major world civilizations, beginning with a study of the factors that brought the world together and the creation of a global community: the Age of Discovery and the Colombian Exchange. The course then shifts towards the great ideas that shaped the modern world: nationalism, liberalism, and the expansion of human rights and liberties through the study of the Revolutionary period to the early modern period. The second semester is devoted to an analysis of the cataclysmic 20th century. Students will analyze the root causes of the World Wars, the communist revolutions in Europe and Asia, and the formation of the post-Cold War society. As a final note, students should understand that this is a world history course displaying the development of the contemporary world through the perspective of cultures outside the United States.

322. AP World History

Available to qualified tenth graders, this highly challenging course covers world history from the development of hominids through the beginning of the 21st century. The AP World History course addresses the challenges of this breadth by providing a clear framework of six chronological periods, viewed through the lens of related key concepts and course themes, accompanied by a set of skills that clearly define what it means to think historically. Students who score well on the AP World History exam are sometimes able to obtain college credit for world history. Prerequisites: A in World History to 1550 or B+ in Honors World History to 1550, B+ in ninth grade English, and permission of the current history teacher and the department chair.

311. Honors American History

The theme of this eleventh grade course is how modern-day America has been affected by events leading up to and through the Civil War. The opening six weeks of the course will cover federalism, expansion, and the Civil War, which will be treated as a key turning point in the development of the country. We will spend the remainder of the year looking at how this early time period influenced the development of modern America. The reading in the course will focus primarily on one text, supplemented with additional readings. The course will end with a unit on globalization, 9/11, and the current war on terror.

314. AP United States History

This eleventh grade course can be taken in place of Honors American History by students who want the additional challenge of college-level work. The course is an in-depth study of the entire scope of U.S. history, with emphasis on critical thinking and evaluative writing. Text material is college-level, and students are encouraged to read outside sources of historical interpretation. Prerequisites: B+ or higher in previous year's social science course and permission of the current history teacher and the department chair.

316. AP European History (grades 11-12)

While a global approach to the study of history is important, the world we live in today has been significantly shaped—for better and for worse—by the inhabitants of Europe. This survey course exposes students to the history of Europe since 1450. A variety of perspectives—political, diplomatic, economic, social, intellectual, and cultural—will be explored so that students can enhance their understanding of Europe's impact on all aspects of the modern world. While much of the course

is devoted to these perspectives, there will also be an emphasis on analysis of primary documents, identification and evaluation of historical interpretation, and the development of writing and critical thinking skills vital to success on the Advanced Placement examination. Prerequisites: B+ or higher in previous social science course and permission of the current history teacher and the department chair.

358. Honors The Third Reich and the Final Solution (semester – grades 11-12)

This course will examine the appeal of the German National Socialist Party, the rise of the party during the Weimar period, the use of terror and propaganda to maintain power, the European war, and the “Final Solution” to the “Jewish Question.” Other topics covered will include the question of German guilt as expressed in Goldhagen’s book, “Hitler’s Willing Executioners,” resistance efforts (Valkyrie), the myth of the invincible Wehrmacht, and Nazi historiography as expressed in books and film. Prerequisite: B+ in previous year’s social science course.

360. Ancient Greece and the Modern World (semester – grades 11-12)

This course will use an interdisciplinary approach to explore the ways in which the ancient Greeks have impacted the modern world. Topics to be explored include political science, the aesthetics of harmony/order in the visual and performing arts, medicine, biological science, physics and engineering, mathematics, psychology, ethics, rhetoric, music, and education. The course will frequently employ cooperative learning groups for research-based projects and experiments. There will be an emphasis on connecting as many topics as possible to current occupations/fields of study. The final six weeks of the course will be spent developing and working on a capstone project of the student’s choice with the teacher and an additional faculty adviser. The project and associated research will be presented to an academic/professional panel at the conclusion of the course. Prerequisite: B+ in previous year’s history course; sophomores may seek special permission to take this course from the teacher and department chair.

318. Honors Economics (semester – grades 11-12)

This course covers basic economic concepts and will be an introduction to both microeconomics, the study of the nature and functions of individual decision makers in the modern economic system, and macroeconomics, the economic system as a whole. Students will participate in the Florida Stock Market Challenge as a term project for this course.

319. Honors Government (semester – grades 11-12)

Students in this course will examine the structure and function of our government with regard to the current political system, public policy, and the impacts of those policies. In addition to the text, the students will use newspaper articles, editorials, speeches, political debates, Supreme Court cases, and political films to explore the contemporary scope of government in the United States.

326. Honors Bad Data, Shady Science, and Fake News (semester – grades 11-12)

In an age of big data, social media, privatized research, and fake news, how do we separate fact from fiction? How do we identify truth, evidence, bias, persuasion, and nonsense in scholarly discourse? Students will learn to analyze information and identify common ways people can be misled by evidence and research. Students will complete required readings and write responses, conduct research projects, and participate in class deliberations. The course will culminate in a final research and analysis paper on a topic of each student’s choosing. Prerequisite: Approval of instructor. Student must view and sign acknowledgment of syllabus prior to approval.

327. Italian Renaissance Art, 1300-1550 (spring semester – grades 10-12)

This course explores Renaissance art in the context of the culture of the Italian city-states in the fourteenth through sixteenth centuries. We will trace the beginnings of the “rebirth” of the visual arts in Italy and examine the series of masterpieces created during this time. We will focus on the major artistic centers of Rome, Florence and Venice, while learning about the leading patrons and artists of Renaissance Italy. We will analyze works of art in formal terms as well as learn how they were influenced by the political, social, and religious issues of the era. This is a spring semester course and is open to grades 10-12.

320. AP Microeconomics/AP Macroeconomics (grades 11-12)

This college-level course is comprised of two one-semester AP courses. Students will learn about the nature and functions of individual decision makers in the modern economic system, as well as the principles of economics that apply to an economic system as a whole. Specific topics include the nature of product markets, factor markets, the role of government in promoting greater efficiency and equity in the economy, the study of national income and price-level determination, economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students will prepare for both the AP Microeconomics and AP Macroeconomics exams. Prerequisites: B+ or higher in previous year's social science course, completion of or concurrent enrollment in Precalculus, and permission of the current history teacher and the department chair.

317. AP U.S. Government and Politics/AP Comparative Government (grades 11-12)

In this year-long course, students are offered the opportunity to examine the structures and processes of the American political system. The curriculum places equal emphasis on formalized institutions, influential nongovernmental groups (political parties, lobbyists, mass media), and policymaking (especially civil liberties). Significant time is also allocated to the comparative study of politics in six countries: Great Britain, Mexico, Nigeria, Russia, China, and Iran. This course prepares students to take both the AP U.S. Government and AP Comparative Government exams. Prerequisites: A- or higher in previous year's social science course and permission of the current history teacher and department chair.

323. AP U.S. Government (grades 11-12)

This is a year-long course focusing on the unique forms and processes in the American political system. Students will delve into American political topics such as political behavior, civil rights and liberties, and policy development while simultaneously gaining an in-depth understanding of the modern political institutions that govern public reaction to these topics. The course will feature a text, with supplements from a variety of primary sources, academic journals, and news outlets, and a variety of projects, case studies, and hands-on activities. Students interested in law and American politics are encouraged to consider this course as it is designed to teach the fundamental principles of the American political system and provide a base for more advanced political science studies in college. Prerequisite: B+ in previous year's history course and approval of the instructor and department chair.

325. AP Human Geography (fall semester – grades 11-12)

This course will cover the entire AP Human Geography curriculum in a single semester. Human geography introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. The course covers topics such as population and migration, political geography, conflict, rural and urban land use, agriculture, and industry. Prerequisite: B+ in previous year's history course and approval from the instructor and department chair.

342. Psychology (semester – grades 10-12)

Students examine the history of psychology from ancient to modern times. Early philosophers and schools of psychology are studied. Major psychological theorists' lives, theoretical concepts, and important research are discussed. Topics include development, personality, abnormal psychology and treatment of psychological disorders, social psychology, cognition and language, learning and memory, intelligence and its measurement, sensation and perception, and motivation and emotion. Introduction to experimental methods and influential experiments in the history of psychology are also covered.

341. AP Psychology (grades 11-12)

This advanced course introduces students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major sub-fields in psychology and learn about the methods psychologists use in their science and practice. Main topics include methods, history, biological bases of behavior, sensation and perception, motivation and emotion, developmental psychology, personality, testing, abnormal psychology, treatment, and social psychology. Prerequisites: B+ or higher in previous year's social science course, or permission of the AP Psychology teacher and the department chair.

344. Ethical Leadership (semester – grades 10-12)

Students will explore a multitude of ethics and leadership theories while also exploring how these theories can be used in real-life scenarios. Students will also develop an understanding of their own ethical roots and leadership styles. The first part of the class focuses on gaining a strong foundation in theory, while the second part looks at ways this can be applied to their surroundings. Students will use current readings as well as movie clips and other sources to supplement class discussions. The class will be taught by the guidance department in conjunction with experts in the leadership field. Students will be required to participate in a community-service project that they coordinate and implement throughout the semester. This course fulfills the additional ½ credit social science requirement for graduation.

345. Introduction to Ethics – Religion, Philosophy, and Popular Culture (semester – grades 10-12)

The purpose of this course is to introduce students to ethics and religion through popular works of fiction or media such as the “Harry Potter” series, “The Chronicles of Narnia,” “The Hobbit,” “The Lord of the Rings,” “Batman,” and “The Matrix.” Those and similar works provide unique and imaginative material for engaging philosophical topics of perennial interest: good and evil, friendship, personal identity, the use and abuse of technology, and so on. This course fulfills the additional ½ credit social science requirement for graduation.

348. Introduction to the Bible (semester – grades 9-12)

This course is a survey of the Hebrew and Christian Testaments of the Bible with emphasis on major stories and passages. Reading and discussing biblical texts and connecting the texts to the development of both Judaism and Christianity are the focus of the class as well as the premise that knowledge of the Bible is essential to understanding western culture. This course fulfills the additional ½ credit social science requirement for graduation.

355. World Religions (semester – grades 10-12)

Students will be exposed to the faith traditions, practices, and sacred writings of primal religions, Hinduism, Buddhism, Islam, Judaism, and Christianity. If there is time, other traditions prevalent in the world will be explored. Through reading, research, project presentations, field trips, and other experiences, the class will consider each tradition in the light of the basic questions of a worldview: Is there a god, and if so, what is his/her/their/its nature? What are human beings, and do they have a purpose? What constitutes the “good life?” Why is there suffering? Is there an afterlife, and, if so, does it have any bearing on one’s current existence? This course fulfills the additional ½ credit social science requirement for graduation.

850. Introduction to Social Media and Ethics (fall semester – grades 9-12)

This course provides students with an introduction to the history, theory, technology, and uses of social media. Social media tools enable individuals to create, collaborate, and share with audiences of all sizes. Students will explore the possibilities, limitations, and ethical uses of social media through hands-on experience, case studies, timely readings, guest speakers, and class discussions. **This course fulfills either a Computer Science or Social Science (ethics) credit for graduation.**

WORLD LANGUAGES DEPARTMENT

In an increasingly global society, it is essential that students develop good language and communication skills. Linguistic proficiency and cultural understanding achieved by language study will aid students seeking success in college and beyond. The world languages department is devoted to helping students achieve the proficiency to use language in their future role as world citizens.

Students begin language study in the 6th grade and can progress to college-level courses. While the minimum requirement is two consecutive years of one language and continuous language study through sophomore year, Trinity encourages continuing language study throughout upper school, reaching the highest level of individual proficiency possible.

FRENCH

201. French IA (grades 6-7)

This course is designed for students who have not had prior exposure to French. Oral aspects of the language are emphasized, with attention also given to promoting proficiency in speaking, listening, writing, and reading skills. Students are introduced to the basic principles of French grammar. Culture and geography of the French-speaking world are introduced.

202. French IB (grades 7-8)

This course is designed for students who have completed French IA. The primary goal is to develop oral proficiency through frequent oral presentations, oral drills, and songs. More complex grammar is studied, such as the past tenses of the indicative and elements of the subjunctive present. Upon successful completion of this course, students advance to French II.

203. French I (grade 8-12)

The primary goal in French I is to develop oral proficiency through frequent oral presentations, oral drills, and songs. Grammar is also a vital component with the study of the indicative present and past tenses, as well as the study of some elements of the subjunctive present. Culture is a significant part of this course. Students learn the geography and history of France as well as its language.

204. French II

In this course, a continued emphasis is placed on the development of oral proficiency. Frequent oral presentations are given throughout the school year. The study of grammar is reinforced and expanded. Culture is an integral part of the curriculum. The study of the French provinces and Quebec is conducted. Prerequisite: French I or French IB.

206. French III

French is spoken almost exclusively in this class. Oral proficiency continues to be emphasized through frequent oral presentations and impromptu questions. The study of grammatical structures is also further explored. Culture is present through an overview of modern history and of the scientific advances of France. Current events are also discussed through the readings of newspaper articles and TV broadcasts. Prerequisite: French II.

207. Honors French III

In this course, the study of advanced grammatical structures complements an increased emphasis on composition writing. The class is conducted entirely in French, and students are expected to participate in class discussions and to speak French at all times. Oral presentations followed by impromptu questions continue to be emphasized to optimize oral proficiency. Current events are also discussed through the reading of newspaper articles and TV broadcasts. Students explore real-world problems and challenges following the project-based learning approach. Students are encouraged to follow the honors sequence leading to AP French Language. Prerequisites: B+ in French II and permission of the instructor.

230. French IV

The purpose of this course is to further increase students' knowledge of French through the study of its culture and grammar, while continuing to emphasize speaking, listening, reading, and writing skills. Instruction materials include authentic audio and video recordings in addition to a variety of authentic literary and non-literary texts. Students will also be introduced to literature from the French-speaking world. The class is conducted entirely in French, and students are expected to participate in class discussions and to speak French at all times in order to increase oral proficiency.

Prerequisite: French III.

233. Honors French IV

This course is primarily designed to prepare students for the AP French Language course, focusing on strengthening all four language skills of speaking, listening, reading, and writing. Grammar is reviewed. Essay writing and impromptu speaking skills reflect a growing ability to analyze and synthesize information from a variety of sources. Instruction materials include authentic audio and video recordings in addition to a variety of authentic literary and non-literary texts. Students will also be introduced to literature from the French-speaking world. The class is conducted entirely in French, and student participation is vital for success, as oral proficiency is emphasized. Prerequisites: B+ in Honors French III and recommendation of the Honors French III instructor.

208. AP French Language and Culture

This is a college-level course designed to meet the needs of highly motivated students interested in a college-level intensive language study through language immersion. By stressing speaking, reading, writing, and listening, students work towards proficiency in interpersonal, interpretive, and presentational communication. The AP French Language and Culture course enables advanced French students to improve writing skills and problem-solving techniques in preparation for the AP Exam. Students explore the French-speaking world through a variety of perspectives based on authentic and up-to-date materials and the use of French media. Prerequisites: B+ in Honors French IV and permission of the instructor.

209. Advanced French Independent Study (grade 12 only)

This year-long course will be divided into four quarters during which pre-approved students will research and become specialists of a topic of personal interest with the guidance of their supervising teacher. Areas of research may include but are not limited to Francophone Cinema, Literature, History, Music, Politics, Architecture, and Culinary Arts. Weekly meetings will take place with the supervising teacher and each quarter will culminate with a graded research portfolio including a written thesis and an oral presentation among other submissions. Creativity, commitment, independence and diligence are key for successful completion of this advanced course which will follow the AP grading scheme. Prerequisite: AP French Language and Culture.

LATIN

210. Latin IA (grades 6-7)

In this introduction to the language and culture of the Roman world, students acquire the skills needed to read and use Latin as soon as possible. The study of English derivatives based on Latin vocabulary is an important element of the class.

211. Latin IB (grades 7-8)

Students are introduced to more sophisticated sentence patterns, and grammatical concepts are reinforced and augmented. In addition to new Latin vocabulary, students expand their English vocabulary through the study of derivatives while continuing to develop the skills needed to read Latin immediately. They also build on the pronunciation, aural comprehension, and speaking of Latin begun in level IA. Prerequisite: Latin IA.

212. Latin I (grades 8-12)

This is a combination of Latin IA and Latin IB. Students are introduced to the language and culture of the Roman world and learn basic grammatical concepts and terminology. In addition to new Latin vocabulary, students expand their English vocabulary through the study of derivatives. They are introduced to spoken Latin. Students develop the skills needed to read Latin immediately.

213. Latin II (grades 8-12)

Students learn more sophisticated sentence patterns and grammatical concepts. They expand their knowledge of Latin vocabulary, English derivatives, and Roman culture. Open to students in grade eight and above with the recommendation of current instructor and completion of Latin I.

257. Honors Latin III

This course completes the introductory curriculum and refines and reviews knowledge of grammar and vocabulary from previous years. Students translate original Latin authors, both prose writers and poets, for the first time. They are introduced to Latin meter, scansion, and poetic devices. The Latin authors are presented in historical context. Derivative work continues. Prerequisites: Recommendation of current instructor and completion of Latin II.

258. Honors Latin IV

Students read original passages from Caesar and Cicero and verses from the poetry of Vergil, Ovid, Catullus, and Horace. They expand their knowledge of the language through selections of authentic Latin texts from the Medieval and Renaissance writers: Bede, Einhard, Copernicus, Holberg, and Erasmus. Students analyze different styles of writing. They master all the essential elements of classical Latin grammar and syntax. They practice how to recognize and read different poetic meters and discuss rhetorical and poetic devices. Through many projects and presentations, students deepen their understanding of western civilization. Prerequisites: Recommendation of current instructor and completion of Honors Latin III.

259. Advanced Latin Survey Course

This is a survey course which begins with translating archaic writers, (Livius Andronicus) and continues through the Silver (Tacitus) and Medieval Ages (Carmina Burana). Students traditionally study authors from the Classical Age, so this is an opportunity to read something different. The texts are online with some of the more obscure vocabulary added; students can download and bring them to class for reading aloud, translation, analysis of changes in language and grammar, and historical/cultural background discussion. Prerequisite: Completion of Honors Latin IV or AP Latin.

216. AP Latin

Students study Vergil's "Aeneid" and selections from Caesar's "Gallic War." The syllabus is determined by the College Board AP Latin Committee, and students prepare for the national examination in May. Prerequisites: Permission of the instructor and a B+ or above in Honors Latin IV.

SPANISH

220. Spanish IA (grades 6-7)

This course is intended as an introduction to Spanish in middle school. Students begin to master basic vocabulary and grammatical concepts through listening, speaking, reading, and writing activities and start to appreciate Hispanic traditions and culture. Frequent assessments help in the development of oral proficiency.

221. Spanish IB (grades 7-8)

The Spanish IB curriculum provides a continuation of foundation building through conversation and study of basic grammatical structures. A continuing goal is the development of oral proficiency.

222. Spanish I (grades 8-12)

This course is an introduction to Spanish. Students begin to develop mastery of basic grammar and vocabulary through listening, speaking, reading, and writing activities. Communication activities build oral proficiency.

223. Spanish II (grades 8-12)

This course continues to focus on skills learned in Spanish I by engaging students in open-ended communication. Students learn about cities, traditions, and customs in the Hispanic world and get a deeper understanding of grammar, increasing

their confidence in speaking and listening comprehension. The course's ultimate goal is to equip students with a strong foundation to successfully continue their studies of Spanish in an increasingly demanding world market.

224. Honors Spanish II

This course stresses oral proficiency through extensively studying grammar. Students are encouraged to go beyond the skills presented in the text and to express themselves in writing and speaking. This class is conducted in Spanish, and students are required to use Spanish at all times. Students in this class are highly motivated and active learners who understand and appreciate the demands of a global community. Prerequisites: B+ or higher in Spanish IB or Spanish I and instructor's recommendation.

225. Spanish III

This course focuses on everyday communication and prepares the student to use the language appropriately in a variety of situations and contexts, both in speech and writing. The skills of listening, speaking, reading, and writing are taught through the study of a wide range of materials. This class is conducted primarily in Spanish, and students are expected to participate in class discussions and to speak Spanish as much as possible to increase oral proficiency. The course includes insights into the cultures of Latin America and Spain. Prerequisite: Spanish II.

226. Honors Spanish III

This course focuses on enhancement of listening, speaking, reading, and writing skills. An overview of Latin American culture and geography, as well as insights into the culture of Spain, is included. Study of advanced grammar structures complements an increased emphasis on composition writing. The class is conducted entirely in Spanish, and students are expected to participate in class discussions and to speak Spanish at all times in order to increase oral proficiency. Students are encouraged to follow the Honors sequence leading to AP Spanish Language and Culture and AP Spanish Literature. Prerequisites: B+ in Honors Spanish II and permission of the instructor.

227. Spanish IV

The purpose of this course is to continue learning Spanish and to further increase students' knowledge through the study of culture and grammar while continuing to develop listening, speaking, reading, and writing skills. The fourth year of language acquisition is challenging, yet exciting, as we progress to more complex communication skills, with an emphasis on vocabulary building. The class is conducted entirely in Spanish, and students are expected to participate in class discussions and to speak Spanish at all times in order to increase oral proficiency. Prerequisite: Spanish III.

234. Honors Spanish IV

Although this course is primarily designed to prepare students for the Advanced Placement Spanish Language course, it is also an excellent course for seniors who plan to continue their language studies at the university level. The course focuses on strengthening all four language skills of reading, listening, writing, and speaking. Grammar from previous levels is reviewed and reinforced before proceeding to increasingly complicated and sophisticated grammatical structures. Essay writing and impromptu speaking activities are designed to foster a growing ability to express complex thoughts with increasing confidence. Students will also be introduced to literature from the Spanish-speaking world. The class is conducted entirely in Spanish, and student participation and engagement are vital for success since oral proficiency is emphasized. Prerequisites: B+ in Honors Spanish III and permission of the instructor.

237. Advanced Spanish Conversation and Culture of Spain and Latin America

This project-based course is designed to provide students with the opportunity to practice the language through discussion of selected films and related topics of interest. It will enable students to expand and enrich their knowledge of the diverse cultures of the Hispanic world by exploring ideological, philosophical, social, and political points of view through film. Since this is not a grammar-based course, group projects throughout the year permit students to further research the culture and history of both Spain and various countries in Latin America and to make comparisons with their own culture. All projects, whether student films, debates, mock trials, or other formats, allow students to synthesize and creatively utilize the knowledge of Spanish acquired in previous years. Prerequisite: Spanish IV or Honors Spanish IV.

240. Honors Spanish Language for Specific Purposes (grade 12 only)

Global competency implies that students have developed skills that include investigation, cultural perspectives, and communication skills in several disciplines such as business, health, law and STEM. This year-long course is designed to prepare students to apply their advanced communication and cross-cultural skills in their personal and professional lives. The course will address careers, leadership, general business skills and business etiquette. Prerequisite: Spanish IV or Advanced Spanish Conversation and Culture of Spain and Latin America.

228. AP Spanish Language and Culture with WE Service

This course continues to develop fluency and accuracy in language and engages students in an exploration of culture in both contemporary and historical contexts. The students entering this course have a reasonable proficiency in listening comprehension, speaking, reading, and writing. The course's holistic approach includes comprehension and comprehensibility, vocabulary usage, language control, communication strategies, and cultural awareness. The course also develops the students' appreciation of products (tools, books, laws, institutions), practices (patterns of social interactions), and perspectives (values, attitudes, and assumptions). Prerequisites: B+ in Honors Spanish IV and permission of the instructor.

229. AP Spanish Literature and Culture

This course is designed to provide students with a learning experience equivalent to that of a third-year college course in Peninsular and Latin-American literature. Students will be introduced to the formal study of a representative body of Peninsular and Latin-American literary texts. Content focuses on the works of Spanish and Latin American writers from medieval times to the 20th century. The reading list is determined by the College Board and may be subject to change. The reading selections are chosen to be representative of a particular author's style. Students are responsible for taking notes and communicating on all levels in Spanish, both orally and in written form. They make cross-media presentations of selected works in Spanish. Prerequisites: B+ in AP Spanish Language and Culture and permission of the instructor.

MALONE SCHOOLS ONLINE NETWORK (MSON)

The Malone Schools Online Network provides upper-level students at registered Malone schools with a variety of superior online courses, offered in an online classroom that will enhance each school's existing curriculum. The courses are taught by teachers from Stanford Online High School and other Malone schools in the network who are experts in their fields, have experience with independent school education, and share a commitment to excellence, small class sizes, and personal relationships. Course offerings target the most talented students at member schools who demonstrate sufficient independence and commitment to succeed in a virtual discussion seminar. Each course takes a blended approach, combining synchronous instruction and real-time video conferencing seminars with asynchronous instruction, recorded lectures, and exercises that students complete outside of class. A limited number of places will be available to Trinity Prep students. All students must have permission of the appropriate department chair and the director of curriculum.

MSON HUMANITIES

M101. Honors Creative Nonfiction Writing Workshop (semester begins January 2; Tuesday/Friday 2:30-3:30 p.m. EST)

Open to students in grades 11-12.

How do we write great non-fiction (and this includes all flavors of essays—college essays, literary journalism, memoir, and more), so that our stories have an injection of narrative tension that invites the reader to sit down inside our stories and stay a while? This workshop will help you become a better writer so that your stories contain an electrical charge that starts at the sentence level and travels through the entire piece. This tension, or electrical charge, is the engine that great non-fiction runs on. Students will search the places in their lives that have mattered most, and, using a series of fun writing prompts, generate new writing, using place as a portal to enter the life stories they most want to tell. Later, the class will move into workshops of each student's work. Each session will also look at other specific craft aspects primarily beginnings, endings, and the weaving of multiple story lines in one essay.

M103. Honors Etymology of Scientific Terms (semester begins September 6; Tuesday/Friday 2:30-3:30 p.m. EST)

Open to students in grades 11-12.

The purpose of this course is, to quote the textbook, "By teaching the root elements of medical terminology – the prefixes, suffixes, and combining forms of Greek and Latin--not only to teach students modern medical terminology, but to give them the ability to decipher the evolving language of medicine throughout their careers." This is, in many ways, a language course and deals with the elements that are used to create terms to meet the specific needs of medical scientists. As material is introduced, students will complete practice exercises during each class meeting, as well as completing approximately one quiz per week. Outside of class, students are expected to analyze and define fifty terms each week. Additional material deals with especially complex etymologies, the history of our understanding of certain aspects of medical science, and relevant material from Greek and Latin texts.

M104. Honors Creative Writing in the Digital Age (semester begins September 6; Tuesday/Friday 2:30-3:30 p.m. EST) Open to students in grades 11-12.

Storytelling is as important today as it was hundreds of years ago. What has changed, in many cases, is the medium through which writers tell their stories. Today's literary artists take advantage of digital tools to spread their messages and tell their stories in new ways that combine narrative and contemporary form. Students will begin with the traditional forms of poetry, short prose, and literary non-fiction and then go beyond those forms to explore how contemporary tools can enhance expression. We will study master writers in each of the traditional forms and be inspired by their examples. Then, we will look at how communication in the 21st century has provided us with even more ways to share our thoughts and to be creative. Possible explorations include hyperlinked narratives, social media as inspiration and tool, animated text, audio, video, and all manner of non-linear narrative. The class will ask an essential question: what happens when communication becomes wider and has an instant audience? The class routine, based on writing, reading, and discussion, will include weekly critiques of student work and required writing, including some non-traditional, contemporary formats.

M315. Honors American Voice, American Speech: Word as Action from Anne Bradstreet to Donald Trump (semester begins January 2; Monday/Wednesday 3:35-4:35 p.m. EST) Open to students in grades 11-12.

In this course, students will listen across history to the American voice—from Bradstreet and John Winthrop, through Franklin, Thoreau, Whitman, Dickinson, Jacobs, Douglass, Twain, Cole Porter, James Baldwin, and Gertrude Stein, to MLK, Dylan, Steinem, and Obama. We will listen to music, look at art and film, and consider the more tangled “voice” of advertising, television, and political theater. Even as it has proliferated and transformed, the American voice has maintained an urgent ambivalence about what it means to speak the truth, who should speak it, and to what end. Some of our guiding questions will be: what does it mean to speak as an American—to have an “American” voice? Does it have a distinctive character? Does it want to cause trouble or solve problems or both? Does it need to interact with history? We will look at the ongoing central tension in much of American speech between the individual and the democratic collective and also consider the related tension between reflection and action as conditions of possibility. We will also investigate what forms of speech are surrounding our students and how we might replicate them in order to understand them. Among other writing assignments, students will maintain an ongoing analytical blog and submit a final paper on a topic of the student’s choosing in consultation with the teacher. Prerequisite: Completion or concurrent enrollment in Honors American History or AP U.S. History.

M320. AP Microeconomics/AP Macroeconomics (full year course begins September 6; Tuesday/Friday 11:05 a.m.-12:05 pm EST) Open to students in grades 11-12.

This year-long course covers basic concepts in macroeconomics, the study of economics systems, and microeconomics, the study of individual economic factors. Specific topics include the study of economic performance measures, the financial sector, stabilization policies, economic growth, international trade, the nature of product and factor markets, game theory, and the role of government in promoting efficiency and equity in the economy. Students will deliberate on these topics, manipulate economic models, and practice “thinking like an economist.” Students must take the AP Macroeconomics and AP Microeconomics exams. Prerequisite: Completion or concurrent enrollment in Precalculus.

M340. Honors American Food System: Past, Present, Future (semester begins January 2; Tuesday/Thursday 11:05 a.m.-12:05 p.m. EST) Open to students in grades 11-12.

The American Food System consists of the interrelated components of how we get food from “farm to fork,” including the producing, harvesting, processing, transporting, marketing, distributing, and consumption of food. Through a humanities-based interdisciplinary approach, the course will examine the political, social, economic, and environmental aspects of the system, as well as the challenges and opportunities of moving from our current industrial food system to a more sustainable one. Students will engage in a variety of projects, allowing them to understand their regional and local food systems while learning from their classmates across the country. We will examine such topics as animal agriculture, organic farming, local production and distribution, the debate over GMOs, the marketing of unhealthy food to children, and the problem of hunger in America.

M350. Honors Environmental Bioethics (semester begins January 2; Tuesday/Friday 3:35-4:35 p.m. EST) Open to students in grades 11-12. This course fulfills the ½ credit social science requirement for graduation.

This course will focus on such cases as environmental sustainability, global energy, and food resources, gathered from sources in literature, journalism, and film. The academic study of ethics examines how we make decisions. The curriculum will build on a foundation of moral theories, more specifically how we make decisions when faced with complex, often controversial, issues. No prior knowledge of philosophy is assumed; however, authentic assessment of students’ initial facility with logical analysis will ensure that all students are challenged to grow and deepen their theoretical and practical understanding of the subject.

M351. Honors Medical Bioethics (semester begins September 6; Tuesday/Friday 3:35-4:35 p.m. EST) Open to students in grades 11-12. This course fulfills the ½ credit social science requirement for graduation.

This course will focus on such cases as medical practice, medical research and development, and health care policy, examined through a wide array of case studies gathered from sources in literature, journalism, and film. The academic study of ethics examines how we make decisions. The curriculum will build on a foundation of theoretical moral theories, more specifically, how we make decisions when faced with complex, often controversial, issues. No prior knowledge of

philosophy is assumed; however, authentic assessment of students' initial facility with logical analysis will ensure that all students are challenged to grow and deepen their theoretical and practical understandings of the subject.

M353. Honors Philosophy in Pop Culture (semester begins January 2; Wednesday/Friday 1:15-2:15 p.m. EST) Open to students in grades 11-12.

Have you ever had a realistic dream that you were sure was true and then woken up confused? How do you know that you are not in the Matrix? What is real and what is not? This course will investigate the nature of existence. It will combine classic philosophic works by philosophers like Descartes with contemporary movies like "The Matrix" and "Inception" to contemplate what it is to exist and what the meaning of life is or should be. No prerequisite is required, but some familiarity/experience with logic will be helpful.

M354. Honors Man's Inhumanity to Man: Genocide and Human Rights in the 20th Century (semester begins January 2; Wednesday/Friday 4:40-5:40 p.m. EST) Open to students in grades 11-12.

The story of genocide in the 20th century stands in stark contrast to the social progress and technological advancements made over the last hundred years. As brutal culmination of nationalist and racist attitudes and policies, as well as a poignant reminder of both the cruelty and resilience of human beings, these genocides punctuate modern history with harsh reality. This course will explore the many facets of genocide through the lenses of history, literature, art, sociology, and law. Specifically, we will turn our attention to understanding the framing of genocide as a legal concept. Using the Holocaust as our foundation, we will examine additional genocides in the 20th century. Ultimately, we will train our attention to the enduring legacy of genocides around the world, especially as we consider attempts to recognize, reconcile, and memorialize genocide from the individual to the collective. Students will read and analyze primary source material, secondary historical accounts, and genocide testimony and memoirs in addition to examining individual fictional and artistic responses and the collective memories and memorials of whole societies.

M355. Honors Diversity in a Global Comparative Perspective (semester begins September 6; Wednesday/Friday 4:40-5:40 p.m. EST) Open to students in grades 11-12.

This semester-long course examines the ways our human family has sought to create, marshal, contest, and maintain identities through culture and relations of power. These identities can be appreciated through "lenses of analysis." The course critically engages the traditional "Big Three" lenses of analysis: race, class, and gender, understanding that culture serves as an important backdrop against which these identities emerge. Once students appreciate the important ways the social sciences have engaged with, written about, and debated these three core modes of analysis, the course expands to incorporate other equally rich lenses: age, ability, intellectual diversity, geographic diversity, cognitive and neurological diversity, and the business case for diversity, as well as the study of synergistically intertwined phenomena. Film and critical film studies, as well as the role colonialism has played in the major conflicts of the last 500 years, serve to enrich student understandings of diversity.

M360. Honors Are We Rome? (semester begins January 2; Wednesday/Friday 11:05 a.m.-12:05 p.m. EST) Open to students in grades 11-12.

Inspired by Cullen Murphy's 2007 book of the same name, "Are We Rome?" will examine the similarities between the Roman empire and the United States. This course is designed to be a capstone for study in classics and history. The interdisciplinary nature of this course will serve as a vehicle by which students of Latin and history can expand their knowledge and apply that knowledge in an intercultural comparison. Since 1776, from our system of government to the architecture of government buildings, the United States has used Rome as a foil for itself, and forefathers of the U.S. created many institutions using Rome as a model. This course will be structured around one basic question: How can the United States learn from Rome?

Through discussion, we will examine, among other things, political and social ideologies, privatization, globalization, borders, and exceptionalism. Taking our beginnings from the founding of these two nations, we will discuss the governing practices and bodies, the rhetoric of politics, and the public view of governmental institutions, with emphasis on how these progress and change. Toward the end of the term, the course will culminate with analysis of the most recent political and social events in the United States and form a final conclusion on our topic. Our class discussions will be centered around

primary sources from both Rome and the U.S. Weekly reading and writing assignments will be required. Prerequisite: Completion or concurrent enrollment in Honors American History or AP U.S. History; background in Classics not required.

M361. Honors Building Utopia (semester begins September 6; Monday/Wednesday 3:35-4:35 p.m. EST) Open to students in grades 9-12.

Utopia, “a good place” as defined by the Greeks, is a term coined by Sir Thomas More referring to a fictional ideal island society. The act of intentionally shaping one’s environment to be “a good place” modeled after sustainability, economy, and delight is a uniquely human endeavor. This semester-long study examines the course of western architecture, from the ancient Egyptians to the 21st century, through the lens of the primary philosophic ideas that have driven an aesthetic vision through the ages. The course will offer an introduction to design principles, the visual language of architecture, and design analysis. The necessities, desires, and spiritual beliefs which go into the shaping of a culture’s aesthetic vision of their ideal environment will be examined in a series of seven units over the course of the semester.

1. Forming the Human Universe: Mark Making and the Necessity of Shelter
2. Creativity and Humankind: Beauty Defined and the Building of Civilization
3. Immortality and the Gods: Building for the Greater Glory
4. Getting Perspective: Perfect Geometry in Design and Building in the Humanist and Rational World
5. Power and Production: Society and the Machine
6. Modern Utopia and the Architect’s Vision: Shaping an Individual World
7. Back to the Future: Palimpsest and Irony

No prerequisite required, but background in Ancient and European History recommended.

M362. Honors Positive Psychology (semester begins January 2; Monday 4:40-5:40 p.m. EST/Thursday 3:35-4:35 p.m. EST) Open to students in grades 10-12.

This course begins by providing a historical context of positive psychology within broader psychological research and helps explain why the field is of particular importance to those in a high school or college setting. Students will be introduced to the primary components and related functions of the brain in order to understand the biological foundation of our emotional experiences. Current research will be used to develop a broader sense of what positive psychology is and is not, and how it can be applied in students’ own lives. Additionally, students will gain an understanding of basic research methods and their application to the science of psychology. This course will require substantial reading (sometimes on par with 100 level college courses) and writing. Students will be asked to reflect regularly on their individual experiences in order to integrate course material into their daily lives. One of the key learning outcomes is to have each participant identify his or her own strengths while simultaneously recognizing and respecting the attributes others bring to the course.

MSON STEM

M401. Advanced Multivariable Calculus (year-long course begins September 6; Monday/Thursday 12:10-1:10 p.m. EST) Open to students in grades 11-12.

The mathematics of three dimensions is the emphasis of this college-level year-long course. Multivariable Calculus will explore the geometry of three-dimensional space, including vector arithmetic. It will also explore three-dimensional surfaces, using the tools of derivatives and integrals expanded into multiple dimensions. A robust unit on differential equations will allow students to review the topics of single-variable calculus. The emphasis throughout the course will be on problem-solving and on real-world applications of the tools students learn in fields such as economics, astronomy, physics, engineering, and medicine. Prerequisite: Completion of AP Calculus BC.

M403. Honors Math Topics: Advanced Applied Math Through Finance (semester begins January 2; Monday/Wednesday 2:30-3:30 p.m. EST) Open to students in grades 11-12.

This course will provide students a mathematical and conceptual framework with which to make important personal financial decisions, using algebraic tools. Specifically, the class will investigate 1) the time value of money (i.e. interest rates, compounding, saving and borrowing), using exponential functions; and 2) the characteristics and risk/reward tradeoff of different financial instruments/investments, such as stocks, bonds and mutual funds, using algebra, probability and statistics. Other financial algebra topics selected with student input may include financial accounting, depreciation

methods and foreign currency exchange. The course will stress use of the TI 83/84 calculator, Excel spreadsheets and iPad apps. Students should be comfortable with exponential growth models and, preferably, the concept of the number e for continuous compounding. They should be willing to exhibit an interest in mathematical reasoning and display a hefty dose of curiosity about the language and problem solving nature of personal finance. Prerequisite: Completion of Algebra II.

M500. Honors Topics in Chemistry (semester begins January 2; Monday/Thursday 2:30-3:30 p.m. EST) Open to students in grades 11-12.

This semester course explores real-world applications to chemistry that are often skimmed over or omitted in most chemistry courses. Possible topics include nuclear, medical, atmospheric, industrial, food, water, and consumer-product chemistry. Learn how a nuclear power plant works, how fuels are chemically altered for vehicles, what chemicals are added to drinking water and why they are added, how ores are processed into useful products, and why a country's standard of living can be determined by its production of chlorine or other important chemicals. The periodic table will be explored for daily applications and technologies, from cell phones to photovoltaic cells to medical treatments. This course will be heavy in applications and theory, leaving out much of the problem-solving found in other courses. Prerequisite: Completion of Honors Chemistry.

M501. Honors Introduction to Organic Chemistry (semester begins September 6; Monday/Thursday 2:30-3:30 p.m. EST) Open to students in grades 11-12.

This semester course will provide useful background information in organic chemistry by covering topics not typically found in high-school chemistry courses. The course will give insight into the importance of the chemistry of carbon compounds in our daily lives. Topics covered will include organic nomenclature, structural formulas, stereochemistry, bonding, reaction mechanisms, chemical transformations of functional groups, and instrumental isolation and detection techniques. Applications to the life sciences (chemistry of proteins, nucleic acids, medicines, and natural products), biochemical applications to medicine, industrial applications, and environmental applications will be explored. Completion of the course should make students more confident in their chemical background when entering college biology or chemistry courses. Prerequisite: Completion of Honors Chemistry.

M505. Honors Comparative Ecosystems (semester begins January 2; Tuesday/Thursday 4:40-5:40 p.m. EST) Open to students in grades 11-12.

Comparative Ecosystems will provide an opportunity for students to study and understand large-scale interactions between biological communities and their physical environments on a global scale. Students will study geological processes, soils, and nutrient availability, analyze how these shape environments, and examine nutrient cycling, weather and climate, water cycles, and organic interactions among these systems. Students will engage in interactive lab-based projects examining ecosystems within their own environments and compare these results with their peers, as well as examining data from ecosystems around the globe. This style of analysis creates an opportunity for students to compare and contrast data and understand how statistics and collection methods are used to appropriately study communities and ecosystem processes. Students will also collect data on the environment in which they live, studying material in an immersive setting, providing an opportunity for students to see how ecological interactions occur and appreciate how climate systems connect these habitats on a global scale. Prerequisite: Completion of Honors Biology.

M508. Honors CSI: MSON Forensic Science (semester begins January 2; Tuesday/Thursday 1:15-2:15 p.m. EST) Open to students in grades 11-12.

This course is designed for those interested in learning the disciplines of forensic science and crime scene investigation. Students will be introduced to some of the specialized fields of forensic science; topics will include blood spatter and pattern analysis, death investigation, ballistics, trace and glass evidence, toxicology, entomology, anthropology, serology, and DNA fingerprinting. Students will explore the forensic analysis of substances such as glass, soil, hair, bullets, gunpowder, blood, and drugs. The class will include a mixture of laboratory experiments, demonstrations, and speakers who are experts in the field. Prerequisites: Completion or concurrent enrollment in Honors Biology, Honors Chemistry, and Algebra II.

M509. Honors Genetics and Genomics: Diving into the Gene Pool (semester begins September 6; Tuesday/Friday 1:15-2:15 p.m. EST) Open to students in grades 11-12.

This course will emphasize classic Mendelian genetics, molecular genetics, and population and evolutionary genetics. The topics include structure and function of genes (and the genome), biological variation, and gene regulations. Subsequently, the course will explore what experimental research has taught us about genome analysis methods and our use of this information in society. Topics also include recombinant DNA technology, mathematical models, and statistical methods for data analysis. Papers from current and classic literature will supplement lecture material. Prerequisites: Completion of Honors Biology, Honors Chemistry, and recommendation from current science instructor or department chair.

M510. Honors Astronomy (semester begins September 6; Monday/Wednesday 3:35-4:45 p.m. EST) Open to students in grades 11-12.

This semester-long course introduces students to historical and modern astronomy. Topics include the nature of light, the atom, telescopes, and orbits. In addition, students will learn about the life cycles of stars, including an introduction to black holes. Through various activities and experiments, students will explore our place in the universe as well as the relative scales of astronomical objects. Engaging with current research, we will examine the modern astronomical data used to search for and categorize the thousands of planets outside our solar system and the considerations involved in the ongoing search for extra-terrestrial life. Prerequisite: Completion of Honors Physics.

M511. Honors Astronomy Research Seminar (semester begins January 2; Monday/Thursday 11:05 a.m.-12:05 p.m. EST) Open to students in grades 11-12.

This course introduces students to modern research in astronomy. After learning about binary stars, teams of students will select a binary system, take images of it using the Skynet robotic telescope network, analyze the images in the context of past observations of the system, and write a paper for the *Journal of Double Star Observations*. Once their paper has been through a process of peer review by the journal editors, the data point will be added to the Washington Double Star Catalogue. Access to an Apple computer with Python installed is required. Prerequisite: Completion of Honors Physics.

M805. Honors Computer Science: Beyond the Graphical User Interface (semester begins September 6; Tuesday/Friday 11:05 a.m.-12:05 p.m. EST) Open to students in grades 11-12.

This is a project-based course in which students will spend the semester learning and thinking about a new paradigm in user interfaces: voice. Students will design and build an application of their choosing for a voice-operated assistant service, like Google Home or Alexa. Students will be exposed to the software development life cycle, with an emphasis on design, and will learn how to collaborate with classmates on a code base. Students should be comfortable working individually with limited assistance on projects. Coursework will include individual lab and homework assignments, as well as group projects. Prerequisite: Programming experience in a structured language such as Python or Java.

M806. Advanced Data Structures and Design Patterns (year-long course begins September 6; Monday/Thursday 4:40-5:40 p.m. EST) Open to students in grades 11-12.

This course will give advanced students the strong foundation needed to build complex applications, using object-oriented principles. This course covers the design and implementation of data structures including arrays, stacks, queues, linked lists, binary trees, heaps, balanced trees (e.g. AVL-trees) and graphs. The course will also serve as an introduction to software design patterns. Each pattern represents a best-practice solution to a software problem in a specific context. The course covers the rationale and benefits of object-oriented software design patterns. Numerous problems will be studied to investigate the implementation of good design patterns. Prerequisite: Completion of AP Computer Science A.

MSON WORLD LANGUAGES

M200. Arabic I (year-long course begins September 6; Two sections offered: Monday/Thursday 12:10-1:10 p.m. EST or Monday/Thursday 5:45-6:45 p.m. EST) Open to students in grades 9-12.

This course is the first part of a two-year sequence. It is an introduction to Modern Standard Arabic, the language of formal speech and most printed materials in the Arab-speaking world. Students will learn to read and write the Arabic alphabet

and will develop beginning proficiency in the language. Through frequent oral and written drills, students will develop their basic communication skills.

M201. Arabic II (year-long course begins September 6; Tuesday/Friday 12:10-1:10 p.m. EST) Open to students in grades 10-12.

This course is a continuation of the introduction to Modern Standard Arabic, the language of formal speech and most printed materials in the Arab-speaking world. Students will learn to read and write the Arabic alphabet and will develop beginning proficiency in the language. Through frequent oral and written drills, students will develop their basic communication skills. Prerequisite: Completion of Arabic I.

M209. Ancient Greek I (year-long course begins September 6; Monday 1:15-2:15 p.m./Wednesday 10:00-11:00 a.m. EST) Open to students in grades 9-12.

This is a beginning course for students who have not studied ancient Greek before or whose background in Greek is not sufficient for more advanced work. Students proceed through a study of grammar and vocabulary to the reading and writing of sentences and short narratives in the language of Athens in the 5th century B.C.E. Selected topics in Greek history and art are also considered.

M214. Honors Chinese V (year-long course begins September 6; Wednesday 11:05 a.m.-12:05 p.m./Friday 12:10-1:10 p.m. EST) Open to students in grades 11-12.

This intermediate level course, conducted entirely in Chinese, involves the reading of authentic texts of modern Chinese society and culture. Students explore current cultural topics through stories, dialogues, and documentaries, using multimedia materials ranging from internet, television, and films to traditional textbooks. Throughout the year, students write papers, critique films, and participate in oral discussion and debates. Prerequisite: Completion of Chinese IV or IV Honors.