

CROSSROADS CURRICULUM GUIDE 2017-2018



CROSSROADS
COLLEGE PREPARATORY
SCHOOL

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ENGLISH & LITERATURE

The English department offers a culturally and globally diverse and challenging curriculum. The curriculum includes a wide body of contemporary and classical fiction, poetry, drama, and essays. The writing program offers individual feedback and prepares students for the demands of college level writing by introducing students to a rigorous writing program starting in seventh grade and continuing through senior year. The English classes listed below for grades 7-11 are required of all students. Seniors and juniors may choose an AP class. (Classes with an * are offered every other year.)

Fundamentals of Literature (grade 7): This class has two basic objectives: to refine the students' reading ability and to help them become effective writers. Students work on close critical reading skills and learn to articulate their observations and analysis both verbally and in well-constructed analytical paragraphs. Vocabulary and grammar will be taught in conjunction to enhance the students' reading and writing skills. Representative works are *A Midsummer Night's Dream* by William Shakespeare and *The Samurai's Garden* by Gail Tsukiyama.

Introduction to American Literature (grade 8): This class emphasizes the writing process and the reading of literature for understanding and pleasure. Students study literary terms and interpret literature using elements such as plot, point of view, mood, imagery, and symbolism. Students hone their close reading skills and learn to express their interpretations in well-constructed full-length essays. The course includes a fiction writing unit and a personalized study of the Harlem Renaissance. Literature read in class includes *To Kill a Mockingbird* by Harper Lee and *Of Mice and Men* by John Steinbeck.

World Literature I (grade 9): This World Literature class includes texts that shape literary and cultural traditions from the ancient world through contemporary society. By recognizing thematic and archetypal connections among the selected works, students conduct a critical examination of the commonalities among humans across ages and cultures. We focus on ideas that course through the hero's journey and the tragedy, while examining the epic traditions. Students continue to develop as writers with an increasing emphasis on independent revision. Required texts include *The Odyssey*, *Othello*, and *Beowulf*. The class works with the history class in an interdisciplinary Classics Festival.

Classics of World Literature II (grade 10): This class examines the developments in literature from the English Romantic period to the twentieth century, beginning with significant British works and moving to works from other parts of the world that offer varied cultural glimpses of identity. Several works parallel the historical periods in Modern World History as well as the corresponding artistic movements students examine in Art in Perspective, thereby synthesizing these artistic movements and eras. Readings include *Frankenstein*, *Macbeth*, *The Stranger*, and 1984.

American Literature (grade 11): American Literature is a study of the development of American thought as expressed by diverse authors, exploring the variety of perspectives and experiences in our nation and our literary history. The encompassing questions of the class are about the search for identity — who are we? who and what define us? — and the question of authority — who claims it? who bestows it? how is it challenged? As literature provides great insight into the culture and ideals of a country, this class also increases student understanding of the growth of a collective American identity. Some of the works read are *The Bluest Eye* by Toni Morrison, *The Great Gatsby* by F. Scott Fitzgerald, and *The Joy Luck Club* by Amy Tan.

Honors American Literature Seminar (optional addition in grades 11 and 12): Honors American Literature Seminar is a supplement to the regular American Literature class that all Crossroads eleventh graders take. This class, which meets once a week, will prepare students for the AP Language & Composition exam. Students explore readings written for diverse purposes and audiences and learn to write using multiple rhetorical strategies. Through this practice, students continue to refine their abilities to read critically, analyze thoroughly, and write effectively. All students who enroll are expected to take the AP English Language exam in May.

AP English Literature and Composition (grade 12): Advanced Placement English Literature and Composition simulates the reading and writing demands of an introductory college class in literary analysis while encouraging each student's love of reading and writing and preparing them to take the AP Literature exam in May. Major themes — explored through works of fiction, poetry, and drama — are the nature of tragedy, gender and self-fulfillment, and the individual, family, and society. Works read include *Heart of Darkness* by Joseph Conrad, a novel by William Faulkner, and *Invisible Man* by Ralph Ellison.

Fall 2017 **Modern Drama (semester elective, grades 9-12):** Covering a period from the early twentieth century to the present in the United States, this course will help students understand and appreciate drama, as they read, analyze, interpret, and discuss works by representative modern playwrights from this country. They will consider each play's historical context and examine how the plays have been staged. During many class periods, students will read the plays out loud together, thus bringing the genre alive as was intended and enhancing their understanding of text. The course will include journal and essay writing. Playwrights include Tennessee Williams, Edward Albee, and August Wilson.

Fall 2017 **Creative Writing (semester elective, grades 9-12):** This course explores various modes of writing, speaking, and listening, through investigating available genres, reading widely and carefully, writing purposefully, and presenting original work. Writing assignments will include both fiction and nonfiction, both formal and informal pieces, and both polished and unpolished works, all of which will help students become better thinkers and better writers. Students will participate in workshops on student drafts, and substantive revision of each workshoped piece is expected in the final version. Each quarter, students will produce two workshoped, revised projects.

Fall 2017 **Advanced Creative Writing (semester elective, grades 10-12):** Students who have previously enrolled in Creative Writing may enroll in an advanced course which is offered within the general Creative Writing course. These students will continue to refine their skills in multiple genres through separate, more challenging projects than those in the general course.

Fall 2017 **Authors at the Margin (semester elective, grades 11-12):** In this course, we study minority and non-traditional U.S. authors from the Civil Rights Movement to the present. We will read essays, poetry, and fiction by authors who identify as people of color, LGBTQ+, differently-abled, or any other identity that puts their experience at the margin of what may seem traditional or mainstream. This course will give students an opportunity to discuss themes of identity as well as issues-bias, stereotypes, and prejudice and how marginalized authors have used writing as a means to define themselves. Students will use reader response and critical theory as frames for reading, thinking, and writing about the literature in this class. Students will also write a personal narrative, or other creative piece, to add their voice to the voices we study.

Spring 2018 **Knausgaard and Personal Perspective (semester elective, grades 9-12):** With Karl Ove Knausgaard's *My Struggle: Book 1* as a centerpiece, this course will investigate and analyze this "memoir" genre as a means to creating our stories and recreating our memories through detailed personal narrative. The works of other authors will be included as companion pieces, allowing for the comparison of style, approach, application and other aspects of these works.

Spring 2018 **Young Adult Lit and Ethics (semester elective, grades 9-12):** This course studies literature for and about young people, looking specifically at moments when protagonists are challenged to make difficult decisions and must reason through while developing their understanding of right and wrong. Students will explore the genre by reading widely both classic and modern texts, sampling a variety of the experiences and perspectives represented in YA literature. Using their knowledge of literary analysis, and developing a vocabulary for discussing ethics, students will refine their reading and writing skills, generating two formal essays and a final project.

Spring 2018 **Graphic Novels (semester elective, grades 9-12):** This class examines the graphic novel's unique intersection of typical genre classifications, specifically considering the interplay of words and images to make meaning for the reader. Students explore the genre by reading several highly acclaimed graphic novels with serious themes and experiment with the combination of language and text in their own creative projects, enabling them to grow as readers, writers, and artists. Students will write two formal essays and conclude with a researched presentation on a graphic novel of their choice.

***African American Literature (semester elective, grades 9–12):** This course studies major African American authors from the 17th century to the present. As the African American experience has altered dramatically in the past 400 years, the literature has shifted as well. This course will give students an opportunity to discuss themes such as identity, double-consciousness, and racism as they are represented in many genres of writing, including poetry, fiction, and essays. Students use reader response and critical race theory as critical frames for reading, thinking, and writing about African American literature.

***Reading and Writing the Short Story (semester elective, grades 9–12):** This semester class is dedicated to the reading, writing, and enjoyment of short fiction. Students will read a variety of short stories from different historical periods and cultures and have an opportunity to critique and discuss them. In addition to this examination, students will practice the craft of writing short fiction by following the model of authors they respect in writing original short fiction themselves. Class discussions, sharing work, and offering one another feedback using a workshop model are central to this course.

***Lit and Film (semester elective, grades 9–12):** With four excellent texts in hand, this course seeks to develop an eye for how screenwriters, producers, and directors make decisions about portrayals of literature. What is lost and what is gained in the translation? We will read the literature to ascertain central themes, analyze characters, and examine other literary choices such as narrative perspective and imagery. Our abiding question in the comparison is how do the choices made in production on the screen affect the success of the work? There are two essays and a final project.

***Based on a True Story (semester elective, grades 9–12):** Many true events have been depicted powerfully in literature. These portrayals are sometimes broadly imagined and in some cases detailed and accurate. This course examines these real events through the lens of excellent writing as the composition of the story shapes the reader's experience of the event. Events include the WWII, a deadly season on Everest, a murder, and a terrible storm. This is not historical fiction, but the more intimate portrayal of a real moment with a fictional touch. There are two essays and a final project which focuses on the ability to depict a real event well.

***Travel, Sports, and Science Writing (semester elective, grades 9–12):** English classes have traditionally focused on fiction, poetry, and drama. However, there is excellent writing to study in nonfiction genres as well. This class will read from the compilations Best Sports Writing, Best American Essays of the Century, and Best Science and Nature Writing. Using their knowledge of literary and rhetorical analysis, students will turn to nonfiction works, in which the same linguistic devices are used and close reading is similarly rewarding. Writing assignments in the course will include analysis of readings as well as efforts to write in each genre.

***Contemporary Prize-Winning Literature (semester elective, grades 9–12):** How does an author's work earn a prestigious award such as the Booker Prize, The Pulitzer Prize, or the National Book Award? Is it an original plot, a distinctive

writing style, dynamic characters, realistic dialogue? In this class, students will read contemporary fiction and nonfiction to explore why these works are worthy of their awards, and how each work reflects the current political, cultural, and philosophical trends of contemporary life. Emphasis will be on developing the skills of close reading, critical analysis, and writing. For each work, students will write a multi-draft essay or respond creatively to the text.

***War Literature (semester elective, grades 9–12):** While war and literature may seem at first to have little in common, war’s nearly constant presence in the world makes it an inescapable part of human experience, and literature is about capturing that experience. In writing about war, authors can portray the horrors and effects of conflict as well as the courage and camaraderie found among the participants. In this course, we will read works dealing with war from a variety of periods, perspectives, and genres. We will begin with works addressing World War I, such as *A Farewell to Arms*, and move through to texts, such as *The Things They Carried*, about more recent conflicts. Students will write two formal, multi-draft essays and conclude with a final presentation.

MATHEMATICS

Higher-level math success is determined by the strength of the mathematical foundation a student builds in his/her early years. An integral part of this early development is mastery of algebra concepts, and initial mastery gives every student the best chance of developing confidence as a math student, going on to be successful at higher level mathematics, and performing well on the standardized tests required for college entrance. Placement is based on math mastery, confidence, and the level of challenge most appropriate for fostering success. In all classes, students are expected to demonstrate cumulative mastery. The math sequence follows NCTM principles. Most students follow the sequence beginning with Algebra in seventh grade. There are honors classes available in grades 9–11 that lead to AP Calculus in 12th grade.

Algebra 1A (grade 7): Algebra 1A is our introductory mathematics course, grounded in a constructivist, problem-solving approach. Students make conjectures, refine their thinking with manipulatives and practice, share and debate ideas with peers, apply a variety of problem-solving strategies, and move to quick and accurate application of mathematical ideas and algorithms. The first year algebra student receives a well-rounded approach to mathematics including everything from big ideas to computational fluency. Topics include, but are not limited to, variables and functions, rational numbers, solving equations, solving inequalities, graphs and functions, and linear equations and graphs.

Algebra IB (grade 8): This Algebra class covers the more formal, abstract language of mathematics. Algebra I students make conjectures about patterns present in the world and learn how to move from conjectures to generalizations to equations. Topics covered include variables, proportional reasoning, linear equations, solving equations and inequalities, solving systems of equations and inequalities, exponents and exponential models, functions, transformations, polynomials, factoring polynomials, quadratic equations.

Algebra I (grade 9): Students in Algebra 1 learn all the basic principles of algebra. Emphasis is on graphing and solving linear and quadratic equations, solving inequalities, and becoming familiar with and adept in using algebraic concepts.

Geometry & Honors Geometry (grades 9-10): Geometry focuses on informal and formal proofs of geometric relationships. Emphasis is placed on practical applications including constructions and the analysis of geometric principles. Topics in this course include line and angle relationships, polygons and their properties, circles, the Pythagorean Theorem, area, and volume. Students are expected to master geometric logic and deductive reasoning through the use of formal proofs.

Algebra II/Trigonometry & Honors Algebra II/Trigonometry (grades 10-11): Algebra II/Trig covers all the topics in Algebra II from a functions approach. Linear, polynomial, root, rational, and trigonometric functions will be studied in great depth, while other types of functions, including exponential and logarithmic, will be introduced. Students will work with functions represented in a variety of ways — graphically, numerically, verbally, and analytically — and understand and explain the implications of these representations. Graphing calculators will be used extensively.

Pre-Calculus (grades 10-12): Pre-Calculus completes the formal study of the elementary functions begun in Algebra I and Algebra II. Students focus on the use of technology (graphing calculators will be used daily in class and on homework), modeling, and problem solving. Functions studied include polynomial, exponential, logarithmic, rational, radical, piece-wise, and trigonometric and circular functions and their inverses. Students will continue to work with these functions represented in a variety of ways.

Honors Pre-Calculus (grades 10-12): Honors Pre-Calculus covers all topics from Pre-Calculus at an accelerated pace. In addition, this course covers several topics in calculus, including the concept of limit applied to functions and to infinite sequences and series. Students explore exponential and logarithmic functions, rational algebraic functions, irrational algebraic functions, quadratic relations and systems, higher-degree functions, and complex numbers. Graphing calculators are used in this curriculum and students are expected to apply these skills to real-world problems involving economic, business, and scientific applications.

Introduction to College Algebra (grade 12): Intro to College Algebra solidifies the knowledge and skills learned in Algebra II and Pre-Calculus and builds upon them to prepare students for the rigors of a college mathematics course. Students will develop a more sophisticated appreciation of functions through extensive inspection of applications and examples. Students will further be challenged to understand statistical concepts both from a practical and analytical standpoint. This exploration will be supported by graphical as well as numerical and analytical methods.

AP Statistics (grade 12): This course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad, conceptual themes: exploring data, describing patterns and departures from patterns; sampling and experimentation: planning and conducting a study; anticipating patterns: exploring random phenomena using probability and simulation; and statistical inference: estimating population parameters and testing hypotheses. Students who successfully complete the course and exam may receive credit, advanced placement, or both for a one-semester introductory college statistics course.

AP Calculus (grade 12; prerequisite: Honors Pre-Calculus): This advanced calculus course will follow the AP curriculum to prepare students for the AP Calculus AB exam in May. AP Calculus is a college level course and enrollment requires departmental approval. Students will engage in a complete analysis of limits of ratios (derivatives) and perform the same analysis on limits of sums (integrals). In mastering the derivative and integral, students will continue to work with functions represented in a variety of ways — graphically, numerically, verbally, and analytically and understand and explain the implications of these representations. For students strong enough to take AP Calculus BC exam in May, units will be added in April to ready them independently for that exam.

SOCIAL STUDIES

The social studies department offers a varied course selection that is multicultural and global and prepares students for a heterogeneous and globally interdependent world. The curriculum is designed to prepare students for college by exposing them to challenging and diverse content material, helping them to develop research skills, writing skills, and the ability to think independently. Students will acquire the tools to survive in an ever-changing world by making connections across the curriculum as well as between past and current world events whenever possible. The sequence of courses in grades 7–10 is required for all students. Eleventh graders may choose between US History and AP US History. 12th graders have an array of electives from which to choose, including some AP courses, and many electives are also open to 9th–11th grade students. (Elective classes with an * are not offered every year.)

World Cultures and Geography (grade 7): This course takes students on an exciting journey to each of the major regions of our world. The students will examine how the geography of each region, including its physical features, has shaped the development of the many unique cultures found in our world. Included in this course is the close examination of how regions influenced — and continue to influence — one another culturally, socially, and politically. Students will explore the causes, consequences and possible solutions to persistent contemporary and emerging global issues.

American Government and Citizenship (grade 8): This course examines the United States Government from its roots in American history to the Constitution in action today. We will explore active citizenship and the role of the individual and groups in effecting social and political change throughout the history of the United States. Students will examine and discuss the philosophies held by the prominent thinkers responsible for the forming of our Federal Government. We will analyze the components of the United States Constitution, including the Bill of Rights, citing examples of it in action throughout history and today.

World Civilizations (grade 9): World Civilizations provides a broad overview of global history from early hunter-gatherer communities through the medieval era. Through units focused on the emergence and development of civilizations around the world, students will become familiar with forces that shape societies, including religion, politics, economics, and geography. Students will also discover how past civilizations continue to influence current societies and culture.

Modern World History (grade 10): This course provides a broad overview of global history from the early modern period through the Cold War. The class examines major events in modern world history, including the emergence of modern thought, expanded global interactions and integration, global conflict, and the rise of Western hegemony. Students will also consider how historical events and emerging ideologies influenced current political, economic, and cultural systems.

Honors World History Seminar (optional addition in 10th grade): Honors World History is a supplement to the regular World History class that all Crossroads tenth graders take. This class, which meets once a week, will cover the survey material of the required course in greater depth and introduce additional topics to prepare the students for the Advanced Placement World History exam in May. All students who enroll in this course are expected to take the AP exam.

United States History (grade 11): The US History course examines American national heritage and the history that has influenced it. Students will study important events in U.S. History such as the American Revolution, the American Civil War, the Industrial Revolution, the Civil Rights Movements, and the United States' emergence as a world power. Students will examine how founding ideologies and ongoing struggles have shaped American democracy and how the United States has, over time, influenced the modern world. A particular emphasis on the historical method and, more broadly, history as a discipline is central to the course.

AP United States History (grade 11): The AP U.S. History course is designed for students who want to challenge themselves with a more detailed and in-depth study of U.S. history. Although this is a survey course, the reading and writing involved help students to understand key events and to develop cohesive and well-verbalized opinions on issues at the heart of U.S. society. The course simulates an introductory college course. All students take the AP exam in May.

AP Psychology (elective, grades 11-12): This 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 of each of the sub fields. Significant themes in psychology, landmark research findings, awareness of ethics in research, the history of psychology, and basic statistics are central. The course will be the equivalent of a college introductory class and will prepare students for the AP exam in May. (It may be considered either a social studies class or a science class.)

All Year 2017–2018 ***AP Art History (elective, grades 11-12):** This class is designed to prepare students for the AP Art History exam in May. Students develop an understanding and enjoyment of architecture, sculpture, painting, and other art forms in a historical and cultural context. The students examine the major forms of artistic expression of past and of distant cultures, as well as those of their own time and environment. Students learn to look at works critically, with intelligence and sensitivity, and to articulate what they see and experience.

Fall 2017 ***Sociology (semester elective, grades 9-12):** Sociology is a one-semester elective course focusing on human social behavior by studying its origins, development, and influences. Students will learn about the sociological perspective and methods of sociological inquiry. Units will focus on the individual in society, social institutions, and systems of inequality (such as gender, race, and socioeconomic status). Students will also have the opportunity to explore an area of interest through a sociological lens as part of their final project. Past projects have included the sociology of sports and the influence of mass media.

Fall 2017 ***Modern Global Issues (semester elective, grades 9-12):** This course examines major patterns of change and global movements from the postcolonial era to the 21st century. Students will explore topics including decolonization, globalization, the role of international organizations, and the challenges of the developing world, with particular attention paid to significant current events.

Fall 2017 ***History of the '60s and '70s (semester elective, grades 11-12):** This course is designed to provide students with an in-depth look at two decades that transformed American life socially, politically, and economically. Through textual assignments and primary source readings, students will gain an understanding of the social and political motivations of the key players of the era, the purpose and goal of American foreign policy during the time, and an exposure to the political shifts that emerged. Units will include the Civil Rights Movement, Vietnam, The Cold War: From Russia to Cuba, and Political Intrigue: Watergate. The course will include scholarly articles, documentary film, and primary sources to establish content and will not be taught using a traditional textbook. Students will be engaged in a research project throughout the semester that will culminate in a paper, presentation, or podcast. A final exam will not be given.

Spring 2018 ***Anthropology (semester elective, grades 9-12):** Anthropology aims to understand the human condition, both past and present. In doing so, anthropologists study a wide variety of topics from early hominids to modern cultures. This class will introduce students to each of the four major subfields of anthropology: physical anthropology, archaeology, linguistics, and cultural anthropology. By exploring these disciplines, students will be able to consider the relationships between culture, biology, and environment.

Spring 2018 ***Great Ideas of Philosophy: The Examined Life (semester elective, grades 9-12):** This discussion-based course will follow the advice of Socrates and look closely at the nature of our existence, considering some of the biggest questions in the history of human thought: What is true, beautiful, and good? Who are you? Are you free? What is real? What is right? Coursework will lead students back and forth between ancient times and modern life, between Plato's *Allegory of the Cave* and Neo in *The Matrix*. By analyzing sections of primary source documents from the great philosophers as well as texts, film, video, and podcasts from modern writers, thinkers, and artists, students will become high school philosophers.

Spring 2018 ***Economics and Social Issues (semester elective, grades 10-12):** Students in this course will learn the basics of economic principles and theory. Beginning with universal ideas of the discipline, the content includes microeconomic concepts key to understanding markets as well as the factors that influence consumer and producer decisions. As the semester progresses, students will study the macroeconomy, how resources are allocated at a societal level, and how these actions affect employment, prices, and standard of living. Students apply both macro and micro concepts in weekly seminars that engage them in discussion of social issues.

Spring 2018 **AP U.S. Government (spring semester elective, grades 11-12):** This course simulates a college level course designed to enhance the student's understanding of the foundations of our federal government, as well as the daily execution of its duties. The course will involve a study of each branch of the federal system, the U.S. Constitution, civil rights as guaranteed by law, and public policy. Students should expect significant amounts of reading and writing each week. Students will also be asked to be engaged in current political discourse during the semester by reading papers, watching news shows, and keeping track of current political blogs. The course will prepare the student to successfully pass the AP exam in May.

***Justice: Political Philosophy and Ethics (semester elective, grades 9-12):** This discussion-based course is based on Michael Sandel's book and college course *Justice: What's the Right Thing to Do?*, which "relates the big questions of political philosophy to the most vexing issues of our time." Using the Socratic method as a basis for discussion, students will be asked to consider their own thinking and the thinking of others in a series of thought experiments and ethical dilemmas. Through analysis of the ideas of great philosophers such as Aristotle, John Stuart Mill, and John Locke, students will embark on an intellectual journey that will challenge their presuppositions.

***Existentialism (semester elective, grades 9-12):** Are you condemned to be free? Does existence precede essence as Sartre claimed? Do you create who you are through the choices you make? How are you to live? This discussion-based course will follow the work of existentialist philosophers, such as Kierkegaard, Sartre, and Camus. Readings, plays, movies, podcasts, and art will be used to stimulate thinking and to challenge students to question the nature of what it means to be free and the role of choice in their lives. The primary commitment one must make to this class is to prepare carefully and participate fully and earnestly.

***Road to the Election (fall semester elective, grades 11-12):** This course is designed to help students understand the political process of, the social influences on, and the important outcomes of the election of 2016. The course will lead students into a deeper understanding of the way the electoral process works in the United States and will help them to examine the role that social media will play in the elections of today and the future. Students will be expected to read daily from major news sources and current scholarship on this distinct area of political science. Students will be challenged to read, watch, and listen to media that might represent a different bias from their own. This class will be largely based on student participation in daily assignments and discussions. Students should be prepared to think critically and write weekly about the election as it unfolds.

SCIENCE

The science department helps students develop the critical thinking skills used in the scientific method. The science curriculum is structured in a developmentally appropriate sequence to enable students to build connections among the various scientific disciplines and related branches of mathematics. The curriculum allows students to discover basic scientific principles through an investigative approach in the laboratory and through a study of the historical development of scientific knowledge and its many applications. All students take the required science class in grades 7-11. In addition, upper school students may choose elective science courses; AP courses are generally limited to 11th and 12th graders. (Classes with an * may not be offered every year.)

Earth and Environmental Science (grade 7): The mission of Earth and Environmental Science is to teach students how to use scientific methods of inquiry to study the physical characteristics of our planet and how human activity impacts the earth's environment. Students will learn how to practice sustainable living and will increase their awareness of environmental issues through analysis of current events and topics. Topics we will study include: the scientific method, energy, sustainability, structure and function of the Earth, weather and climate, astronomy, and oceanography. In addition, students will practice important science skills including: how to keep a scientific notebook, conduct research, design and experiment, form scientific hypotheses, collect and organize data, interpret and draw conclusions based on data and communicate their findings both orally and in writing.

Introduction to Biology and Chemistry (grade 8): This laboratory-based course helps students discover the nature of science, learn science content, and experience the relevance of science in the world. The curriculum was originally developed by the Science Education for Public Understanding Program and was funded by the National Science Foundation. The course is hands-on and provides inquiry-based experiments and laboratory explorations, readings, models, discussions, and projects. In addition to gaining knowledge of introductory biology and chemistry topics, students gain experience and skill in designing investigations, organizing and analyzing data, recognizing scientific evidence, and communicating scientific ideas.

Conceptual Physics (grade 9): Physics offers students an introduction to the classic topics of physics. This class is a conceptual introduction and relies on basic mathematics for its computations. Topics covered include motion, gravity, momentum, energy, states of matter, thermal energy, vibrations and waves, light, electricity and magnetism, and nuclear physics. This is a laboratory class that incorporates the use of relevant technology and introduces students to data gathering and manipulation in a laboratory setting.

Chemistry (grade 10): Chemistry is a laboratory and quantitative problem-solving course. Laboratory experiments stress precision, accuracy, and quantitative reasoning. Lectures, demonstrations, reading assignments, computer programs, and problem sessions emphasize the chemical bond, polarity, quantum model of the atom, periodicity of the elements, nuclear chemistry, gas laws, types of reactions, stoichiometry, and the mole concept. The history of chemistry and of modern technology is presented when it serves to enrich and clarify ideas. A research paper on a chemistry related topic continues the development of scientific writing skills.

Biology (grade 11): Biology is a laboratory course designed as a survey of major biological principles. Topics covered include: life processes at the cellular level; an examination of how physical traits are controlled, expressed, and inherited; evolution and natural selection; ecology; and basic physiological processes of multicellular organisms. The scientific method is emphasized throughout this course, along with the practice of both written and oral scientific communication. Students compose a major research paper on a current biology topic as a way to practice scholarly research.

All Year 2017–2018 **Introduction to Engineering (grades 9–12 with mastery of Algebra 1):** Introduction to Engineering uses University of Texas at Austin's Engineer Your World curriculum, funded by the National Science Foundation. Engineer Your World is an innovative, high-quality, year-long high school engineering design curriculum that engages students in authentic engineering practices in a project-based environment, scaffolds student learning over a series of engaging and socially relevant design challenges, and requires the purposeful application of relevant STEM concepts. This course gives students an introduction to the scope of possible engineering careers and to the collaborative nature of engineering.

All Year 2017–2018 **AP Psychology (elective, grades 11–12):** This 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 of each of the sub fields. Significant themes in psychology, landmark research findings, awareness of ethics in research, the history of psychology, and basic statistics are central. The course will be the equivalent of a college introductory class and will prepare students for the AP exam in May. (It may be considered either a social studies class or a science class.)

All Year 2017–2018 ***AP Environmental Science (elective, grades 11–12):** AP Environmental Science is a laboratory-based course which focuses on understanding how human beings and other organisms on earth interact with each other and with the non-living components of the environment. AP Environmental Science is interdisciplinary, drawing from the fields of chemistry, biology, geology, meteorology, economics, and political science, among others. Fieldwork is an important aspect of this course. In addition to the text, students also study current environmental issues using a variety of sources. Students take the AP Environmental Science exam in May.

All Year 2017–2018 ***Eco-Act (elective, grades 11–12):** Eco-Act is a program coordinated by the Missouri Botanical Garden to engage high school students with science and the environment and to bring high school science students into the elementary school classroom for weekly visits in which they teach 4th and 5th graders about ecology. The high school course begins in the summer, with an intensive orientation by Missouri Botanical Garden personnel. During the school year, students attend after-school workshops, develop lesson plans, take their elementary school students on field trips, and spend time working and learning outdoors. They also research an environmental topic of local interest and develop an action plan to be carried out in their school or local community.

All Year 2017–2018 ***AP Biology (elective, grade 12, or with instructor's permission):** AP Biology is a college-level laboratory course designed to meet the guidelines established by the College Board. It provides a thorough grounding in basic biological concepts. Topics include the relationship between structure and function at the molecular, cellular, and organism levels; the production and use of energy in living systems; genetics and its reflection in inheritance and expression in individuals and populations; the relationship between organisms and their environment; the use of evolutionary theory to explain biological adaptation and diversity; and the historical study of science. Students are prepared for the AP Biology exam in May.

All Year 2017–2018 ***Advanced Chemistry (elective, grades 11–12):** This course is designed to introduce advanced level topics in chemistry. Each student will understand lab testing of various concentrations of chemical solutions, leading into the study of kinetics and thermodynamic reactions. They will then work on chemical equilibrium and acid-base theory. Students will balance chemical reactions involving oxidizing and reducing agents. Electrochemistry, organic chemistry, biochemistry, and nuclear chemistry will also be explored.

All Year 2017–2018 ***Anatomy and Physiology (elective, grades 11–12):** This course introduces students to human physical development, microscopic and gross anatomical structure, and the functions of human organ systems. This course includes a laboratory component centered on vertebrate dissection. Eleventh grade biology is the normal prerequisite for this course; juniors who receive permission from the Science Department Chair may enroll concurrently with their biology course.

Fall 2017 & Spring 2018 ***Science and Society (semester elective, grades 9–12):** This course teaches students about the major scientific discoveries that affect our lives in the fields of medicine, energy, cosmology, information technology, and environmental science. Each semester will begin with a study of ethical systems and how policy is formed and shaped. Students will study various scientific ideas through current events, debates, film, fiction, and scientific literature. Each semester will cover independent topics.

***Advanced Physics (elective, grades 11–12):** Advanced Physics is a college-level survey course. Students are challenged to discover physical principles using a process of observation, experimentation, data analysis/interpretation, and interactive discussion. The class builds upon the foundation of knowledge of the physical universe gained through the conceptual physics course in 9th grade. This course assumes a thorough understanding of algebra and trigonometry. Topics covered include one and two-dimensional motion, force, energy, momentum, rotational motion, waves (light and sound), electricity, and magnetism.

WORLD LANGUAGE

Exposure to world languages embraces the high value that the Crossroads community places on learning about and being open to the different ideas and values of people from other cultures. Through a four skill approach developing reading, writing, listening, and speaking competencies via a wide range of traditional and experiential activities, the department strives to teach to a student's strengths. The long-term goal in the study of the language is to begin to develop a level of proficiency that can be used in the student's future academic, professional, and personal life. Spanish is taught primarily in the target language throughout, as will Mandarin Chinese after laying a foundation of pronunciation and character writing in the first year. The study of world languages begins in 7th grade and is usually continued through 11th grade. Students are required to take two years of a World Language in Upper School, but are encouraged to continue on with the language.

Spanish A and B (grades 7-8): The main goal of beginning Spanish is to introduce students to language and culture. These courses are designed to build an elementary foundation in Spanish. The students receive exposure to the spoken language, supplemented by Spanish music, films, games, food, and Internet sites.

Spanish I (grade 9): The primary goal of this class is to introduce students to the fundamentals of the Spanish language (reading, writing, speaking, and listening). Students will learn about the geography and culture of many Spanish-speaking countries. The students receive exposure to the spoken language, supplemented by Spanish music, films, and internet sites.

Spanish II (grades 9-10): The primary goals of this class are to solidify the basic language skills acquired in Spanish I and to build upon them, allowing students to speak and write with more sophistication. The past tense is taught extensively to improve communication.

Spanish III (grades 10-11): The third year course focuses on strengthening grammar, speaking, and writing skills. Students also build upon their vocabulary base. The students write a research paper in Spanish on a Spanish-speaking artist or architect and present to the class. The students also give a presentation on a musician or group from a Spanish speaking country and create a mix. We will also cook some traditional dishes from multiple Spanish-speaking countries as a class and sample foods from Spanish-speaking countries.

Spanish IV (grades 11–12): The primary goal of this course is to converse with greater fluency and to improve reading and writing skills. We review grammar while focusing largely on building a more extensive vocabulary base. The students practice circumlocution on a regular basis in order to improve conversational skills. Students also generate discussion questions for the class. We discuss current events and cultural topics often times related to Spanish-speaking countries. The students create a video that educates about a problem topic in society and presents possible solutions. The students give a presentation on practical life skills that they wish to learn about. They also write a research paper on a Spanish speaking country, and give a presentation that includes interpreting a song from the country and cooking a traditional dish for the class. We will also continue cooking traditional dishes and sampling foods from Spanish-speaking countries as a class.

Spanish V (grade 12): The primary goals of this class are to improve conversational abilities and acquire more practical Spanish vocabulary, which the students will be more likely to use in the future. We review the fundamentals of the Spanish language while reading authentic texts, such as poetry from the Spanish speaking world, and watching films including *Diarios de Motocicleta*, *Mar Adentro*, and *La Historia Oficial*. Students learn vocabulary from each film and research cultural topics as well as write compositions on film topics that lead to discussions of ethical themes. We read articles in Spanish and write about them and then discuss them as a class. We will also continue cooking traditional dishes from Spanish-speaking countries as a class and each student will visit a different restaurant from a Spanish-speaking country and write a critique to present to the class. The students also go out into the community and record an interview with a Spanish speaker and the class watches the interviews and discusses what we have learned and experienced. The students also choose a country they wish to visit in the future and create an itinerary that they wish to follow in the future. The write a paper on the country and cook a traditional dish and teach the class a song from that country. We also take a field trip to Cherokee Street and visit multiple Mexican stores and eat at an authentic restaurant.

Mandarin A (grade 7): Students learn about Chinese holidays, geography, and a variety of cultural topics through projects, activities, technology, music, film, etc. Through these topics and projects, students will learn how to pronounce Chinese words, basic character stroke order, and the pieces of characters that bring them to life.

Mandarin B (grade 8): This course continues to build a basic foundation of Chinese language and culture. By the end of the course students will be able to obtain and provide in-depth personal information, talk about times and dates, describe people, animals and objects, and interpret a variety of authentic materials. Students will build to a foundation of about 250 Chinese characters.

Mandarin I (grades 9): This course is an introduction to Chinese language and culture. Students learn the pinyin Romanization system, basic character stroke order, and begin to build a foundation of Chinese characters and vocabulary using the textbook *Integrated Chinese* and a variety of authentic materials and media. Students will learn to provide and obtain information about themselves and others, talk about times and dates, describe people, animals and objects, and will build a foundation of about 250 Chinese characters. Students will also learn about Chinese holidays, geography, and a variety of cultural topics based both on the curriculum and their individual interests.

Mandarin II (grades 9–10): In this course students build upon their foundation of Chinese characters, vocabulary, and grammar. Using the textbook *Integrated Chinese* and a variety of authentic materials and media, students will be able to talk about the people and objects in the world around them, discuss events in the past, present and future, and will build to a foundation of 400–500 Chinese characters. Cultural projects and activities begin incorporating more use of language skills in addition to building knowledge of Chinese products, practices, and procedures.

Mandarin III (grades 10–11): In this course students continue to build upon their foundation of Chinese characters, vocabulary, and grammar. Using the textbook *Integrated Chinese* and a variety of authentic materials and media, students will expand their conversations to include practical topics such as the weather and seasons, dining, asking for and giving directions, and visiting the doctor. Students will master many useful grammatical structures and will build to a foundation of 400–500 Chinese characters. Students will also study the art of translation and will use their Chinese skills to give back to the community through volunteer work translating.

Mandarin IV (grades 11–12): In this course students engage in project-based learning, researching Chinese culture and exploring authentic sources. They continue their volunteer work translating quarterly reports for children in the foster system in China and explore opportunities to volunteer their own time offering their Chinese skills. Mandarin IV students become leaders in the classroom, presenting and leading class activities in immersion Mandarin Chinese.

Mandarin V (grade 12): Students of Mandarin V expand their vocabulary to discuss a wide range of relevant topics in full immersion Chinese. Students will use a combination of textbooks and authentic sources to learn and interact with the language. By the end of this course, students will have learned over 1000 Chinese characters.

FINE ARTS

The primary goal of the Crossroads College Preparatory School's arts department is to provide a solid arts education for all students as well as a strong arts foundation for students preparing for careers in the arts. Students will develop an awareness of their unique vision, which combines their creative eye with their own personal experiences and the confidence to express that vision through artistic avenues. The arts department seeks to encourage this awareness and confidence in this discovery in a non-threatening, nurturing environment. (Arts classes with an * are not offered every year.)

VISUAL ARTS

Art in Perspective (year-long, grade 10): This is a required course designed to enrich students' academic and artistic experiences by introducing art as a link to understanding human actions in both western and non-western traditions. Students will create works resulting from academic exploration, using a variety of media. A key feature of the course is the exposure to cultural institutions and off-campus experiences.

All Year 2017–2018 ***AP Art History (elective, grades 11–12):** This class is designed to prepare students for the AP Art History exam in May. Students develop an understanding and enjoyment of architecture, sculpture, painting, and other art forms in an historical and cultural context. The students examine the major forms of artistic expression of past and distant cultures, as well as those of their own time and environment. Students learn to look at works critically, with intelligence and sensitivity, and to articulate what they see and experience.

Fall 2017 **Life Drawing (semester elective, grades 9–12):** This semester class will focus exclusively on observational drawing. We will study various objects, textures, lighting, and composition. Drawing still-life, the figure, and portraiture will be major elements of the class. Life drawing is appropriate for students at any level, from beginner to advanced.

Fall 2017 ***Illustration (elective, grades 9–12):** Students in illustration will learn the history of this art form that creates a visual context for textual material. Studying examples of illustrations that highlight different periods, styles, and media, students will use existing pieces of written expression or will write their own with which to visually translate the words and/or the essence of the content. Work may be generated from short stories, magazine or newspaper articles, poems, songs, or creative writing and will be approached using a variety of media including but not limited to drawing, printmaking, pen and ink, and watercolor.

Fall 2017 ***Painting (semester elective, grades 9-12):** Learning to paint involves understanding the properties of paint, mixing colors, and understanding how to minimize what we observe. This course will break down these challenges by introducing student-friendly painting exercises designed to raise levels of confidence and skill. As students draw with paint, they can expect to work primarily from life, paying particular attention to the effects of light on a surface, and the intersection of planes where lines occur. This course will benefit all students, regardless of experience.

Fall 2017 & Spring 2018 **Digital Photography (semester elective, grades 9-12):** In this course we will cover the basic functions of a digital camera, shooting, color, lighting, storage, and printing. We will learn the evolution of photography over the past 2 centuries and the differences and similarities between digital and film. Also we will utilize Photoshop as a digital darkroom. We will achieve this through class discussion, demonstrations, lab time, and critiques. We will also learn specific techniques to enhance and improve your pictures technically, visually and conceptually. Alternative photographic processes will also be covered. This class will provide you with the unique opportunity to not only learn a set of skills but to express yourself visually in a new way.

Fall 2017 & Spring 2018 **Ceramics (semester elective, grades 9-12):** Students will be introduced to the medium of ceramics through fundamental hand-building techniques using slabs, coils, and pinch pots. Students will also be introduced to basic wheel-throwing skills such as centering, opening, and pulling up a cylinder. Along the way, they will gain an understanding of the properties of clay and its history throughout the world as a vehicle for communication and a culturally integral source of functional vessels and decorative objects.

Spring 2018 ***Multi-Media Expression (elective, grades 9-12):** In this unique course, students will explore the incorporation of objects and three-dimensional effects with the traditional concepts of painting and drawing. Students will go beyond the picture plane to discover new depths and illusionary surfaces by thinking of the flat surface as either a window or as a foundation on which to build an image. Both figural and conceptual styles will be introduced, along with interactive art that encourages viewer participation. Students are encouraged to base their compositions on themes that reflect an area of interest to them as they respond to the assignments.

Spring 2018 **Sculpture (semester elective, grades 9-12):** Students will be guided through a process where a leap is made from a two-dimensional concept to a three-dimensional reality. An exploration of movement, scale, intersection of planes, and texture will be validated by creative expression. Both additive and subtractive techniques will be introduced in a variety of materials. A willingness to explore options is the only requirement for this course.

***Book Making (semester elective, grades 9–12):** In this course, students will learn several traditional bookbinding techniques, along with the materials and tools used to create a variety of book structures including accordion, Japanese stab, pamphlet stitch, carved books, and Coptic. Ways to incorporate imagery into the books will be discussed. At the end of this course, students will have acquired the basic knowledge to make the book structures introduced along with the basic tools to continue making books.

***3D Design (semester elective, grades 9–12):** This course is designed to give students a strong foundation in the elements of art and principles of design that permeate our everyday lives. Students will be given three-dimensional design problems to solve both by hand and digitally. In the process they will develop an aptitude for recognizing and applying the elements of art: line, shape, texture, form, space, color, and value, as well as the principles of design: balance, emphasis, movement, pattern, proportion, repetition, rhythm, symmetry, variety, and unity. The goal of the course is to provide students with the aesthetic tools to distinguish, create, and discuss works of art that manifest the qualities inherent in a strong and harmonious composition, thereby building a foundation for drawing, painting, sculpting and constructing three-dimensional designs.

***Drawing and Design (semester elective, grades 9–12):** In this intermediate to advanced course students will combine their drawing skills with the elements of two-dimensional design. Drawings from life will be adapted to design concepts such as line variations, patterns, textures, colors, abstractions, optical illusions and values. Graphic elements will be introduced. Words and characters will be used in ways other than as a literal message, seen as construction blocks of composition. Students sustain work for extended periods, creating a more finished product and continue to challenge themselves with more in-depth investigation and observation as well as complex compositional effects. This unique course is designed to challenge and benefit those moving on to more advanced art courses.

***Design (semester elective, grades 9–12):** In this semester course, students will master two dimensional design elements and understand them as the tools of art. Each element will be introduced along with a “problem” to explore both by hand and digitally. The first part of the course will focus on black and white design, and the second part will concentrate on the use of color. Students at any artistic level will incorporate design elements into various project applications as they search for harmonious composition.

***Contemporary Art (semester elective, grades 9–12):** Students in this elective art course become familiar with current art forms and the ideas that drive them while exploring the contemporary reasons for making art. They examine and create the updated traditional subjects (still life, portrait, landscape) while examining environmental and performance art, graffiti, installation art, and media arts. Students create works that express both personal and interactive experience.

***Abstraction in Drawing and Painting (semester elective, grades 9-12):**

Upper school students will be led through a series of exercises that will develop their visual ability to eliminate unnecessary information. Drawings from life will be analyzed and reduced to the most basic form, becoming pure design while maintaining the subject. These simplified drawings will become the basis for expanded graphic design projects and eventually paintings. By the end of the course, students will be able to capture their subjects quickly, simply, and economically while keeping artistic expression fresh, vibrant and rich.

***Portraiture (semester elective, grades 9-12):** Students in portraiture will examine the history of the portrait genre through a comprehensive study of portraits throughout history and across cultures. They will gain experience with a variety of techniques, processes and materials integral to rendering the face and figure. They will work from live models (including themselves) and photographs. They will have exposure to the life of professional portrait artists working locally through classroom guest artist visits and studio tours.

***Printmaking (semester elective, grades 9-12):** In this semester course, students will investigate methods for making multiple artistic images as they explore the limitless possibilities of printing as an art form. Students will be introduced to the inking process and various types of plate-making, and they will develop skills specific to each printmaking method. Moderate proficiency in drawing is recommended.

***Art for Social Change (semester elective, grades 9-12):** This art class is a semester course for upper school students that uses creative expression to address contemporary issues, global and local, raising awareness by challenging participants to make works of art that confront societal ills. Students will incorporate a variety of media and approaches, including performance art, and will seek to collaborate with the Theater for Social Change program and the Social Justice Activity in discovering art as a means to activism.

***AP Studio Art Portfolio (elective, grades 11-12):** This is a yearlong class for those junior and senior art students who need to put together a portfolio for future use. The students will attain a level of workmanship similar to that of a first year college course. During their exploration of themes of personal interest, they may discover a passion for a particular media or technique and act upon that passion to produce art with profound meaning and expression.

THEATRE & DANCE

Fall 2017 ***Sketch Comedy/Improv (semester elective, grades 9-12):** Students will use improv skills to write and perform comic sketches. We will study the history of comedy, comic writing, and improvisation. The semester will culminate with an “SNL-like” performance.

Fall 2017 ***Dance — Introduction to Dunham Technique (semester elective, grades 9-12):** The choreography of Katherine Dunham was one of the first concert fusion styles of dance in the United States; merging several techniques and styles into what became Dunham Technique. Students will explore the philosophies of Katherine Dunham and different aspects of ballet, jazz, modern, musical theatre, tap, Caribbean, Asian, Polynesian, African, Haitian, Brazilian and more. They will be able to recreate and design various types of dance while deepening their knowledge and heightening their movement skills as well as their understanding and appreciation of dance. This class is appropriate for dancers of all levels, including beginners.

Spring 2018 ***Theater for Social Change (semester elective, grades 9-12):** In this course students will explore the cultural analysis of theater practice using improvisation, movement, spoken word, and music as an agent for social criticism and/or change. Students will promote the research and practice of theatre and the dynamic relationship between theatre and society through writing and performance.

Spring 2018 ***Dance — Choreography (semester elective, grades 9-12):** This course is designed to enrich students’ academic, physical, and artistic experience. Based on the philosophies of Katherine Dunham, students will strengthen their level of dance technique while creating short dance combinations, and progressing to greater form, variety, and scope of dance. Students will be exposed to video footage of great choreographers from the early twentieth century to contemporary artists, learning how to apply these influences into their own choreographic works.

***Improvisation (semester elective, grades 9-12):** In this course, students will be exposed to the techniques of successful improvisation. Using reading, writing, performance, and critiquing, students will explore these techniques and apply them to create successful improvisational scenes. In the process, they will deepen their knowledge of improvisation terminology and heighten their appreciation for the art of improvisation.

***Shakespeare Salon (elective, grades 9-12):** The Shakespeare Salon is a class dedicated to the enjoyment of Shakespeare’s plays. We will watch and discuss favorite film versions of his work, partake in scene and monologue study, play games and activities related to the Elizabethan time period, and hopefully enjoy and critique some live classical theatre. Students who love Shakespeare will enjoy this class, and students who would like to learn more about appreciating and understanding his work will surely benefit as well.

***Play Production (semester elective, grades 9–12):** In this class we will start with an idea and end with a full length, and completely finished, piece of theater. Students will participate in every part of the process that brings us from page to stage. Starting with concept meetings and design ideas, following through with creation of sets, costumes, lighting, and more, finishing with acting, rehearsal, and even marketing, we will explore every aspect of putting on a show. This class will culminate with a live performance.

***Film Production (semester elective, grades 9–12):** In this class we will explore the basics of video production. We will learn the history and terminology associated with film-making, and we will watch several examples of films that exemplify the concepts and techniques used to create quality films. Utilizing a camcorder and video editing equipment, we will study video technologies, basic equipment operation, video composition, lighting, and audio. We will work together to create video projects utilizing storyboards, screenwriting, and post-production editing. Students will get experience directing, writing, editing, and acting in several film projects over the course of the semester.

***Musical Theater (semester elective, grades 9–12):** In this class, we will delve into the history of musical theatre from its humble beginnings in Vaudeville to the spectacles of today’s Broadway hits and everything in between. Students will get to put their knowledge to the test by performing musical pieces from each period of the musical’s history. Students will also have the opportunity to work on their audition skills, sight-reading, acting a song, and various forms of dance. Students will cultivate their skills to evaluate artistic merit of music, performance, and productions. This is a great class to celebrate and learn about this most beloved genre of theatre.

***Acting Intensive (semester elective, grades 9–12):** This is a class completely devoted to the craft of acting. Students will learn the techniques, theories, and practices of the great acting teachers and innovators including Stanislavsky, Stella Adler, Uta Hagen, Meisner, and more. We will dig deep into our emotions and intellects to study the works of Shakespeare, Chekhov, Williams, and others from the actors’ point of view. There will be a lot of reading, discussion, and memorization in this course. We will also learn about the “business” of acting.

***Directing Class (semester elective, grades 9–12):** This course will be focused on the art of stage directing, providing a brief history of its development, functions of the director, and components of the art. Specific areas to be studied include script analysis, composition, working with actors, and organizing a production. The student will direct monologues, scenes and one-acts.

MUSIC

All Year 2017–2018 **Computer Music/Composition (elective, grades 9–12):** This course is an introduction to MIDI and computer music. We will explore the many techniques for making music with computers. Students will gain theoretical, practical and historical knowledge of electronic and computer music. Students will also use Logic Pro and Native Instruments software to explore the fundamentals of composition and synthesis with emphasis on composing computer music. A substantial portion of our time will be spent working with software directly, although “learning software” is not our explicit goal. Our primary focus will be making and understanding music. In developing techniques for recording, manipulating, and mixing sounds, we will cover: digital audio, recording techniques, the sound file editor, the digital audio workstation (DAW), the sequencer, mixer, virtual studio technology (VST), the synthesizer, and musical instrument digital interface (MIDI). This is primarily a composition course with technical quizzes given on material covered in class, and assignments/projects will emphasize creativity.

All Year 2017–2018 **Concert Band (elective, grades 7–12 wind, brass or percussion instruments only):** This course is designed to give the student an enriching and diverse instrumental music education. The daily objective of the course is to foster and promote musical growth through the playing of an instrument. Classroom activities are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, and studying historically significant styles of literature. Students will be expected to perform assignments regularly, and all scheduled performances are a required element of this course. Dedication to improvement of skills and musical knowledge is essential to participate in concert band. Individual practice outside of class is required. As a member of the band program, group effort and cooperation is necessary to a successful program. Band is a skilled effort in which each student is expected to show technical and musical growth throughout this course. This class is appropriate for all students who play a wind, brass or percussion instrument, including beginners.

Fall 2017 & Spring 2018 ***Contemporary Music Ensemble (semester elective, grades 9–12):** The Music Ensemble will rehearse and perform a diverse repertoire of pieces taken from the worlds of Rock, Jazz, Funk and other contemporary styles. The ensemble will perform at various functions and festivals both on and off campus. Students should have prior experience reading music and at least one year of experience playing their instrument.

Fall 2017 & Spring 2018 **A History of Western Music (semester elective, grades 9–12):** This course gives a broad overview of Western music from the Middle Ages to the 20th century. The course addresses the musical characteristics, instruments and theory of each period as well as the cultural and historical contexts including philosophy, religion, politics, art, architecture, and daily life. This course is meant to give students a deep understanding of the West's rich musical history and attain these skills: music historical and stylistic literacy, stylistic listening, score reading, and analysis skills, critical thinking and communication skills.

Concert Choir (elective, grades 9–12): This course is designed to give the student an enriching and diverse choral music education. The daily objective of the course is to foster and promote musical growth through singing. Classroom activities are designed to develop elements of musicianship including tone production, technical skills, intonation, diction, music reading skills, listening skills, analyzing music, and studying historically significant styles of literature. Students will be expected to perform assignments regularly, and all scheduled performances are a required element of this course. Dedication to improvement of skills and musical knowledge is essential to participate in concert choir. Individual practice outside of class is required. As a member of the choir program, group effort and cooperation is necessary to a successful program. Singing is a skilled effort in which each student is expected to show technical and musical growth throughout this course. This class is appropriate for all students who enjoy singing.

***Jazz Band (semester elective, grades 9–12):** This course focuses on the performance of Jazz classics. Students explore the world of jazz standards, Latin jazz, and Afro-beat through musical performance.

***AP Music Theory (grades 10–12):** This course focuses on sight-singing, ear-training and on understanding how chords and scales are put together to form compositions. Topics include key signature, meter, intervals, major/minor scales, modes, chord construction, harmonic analysis, and harmonic progression. The course is designed to equip the student with the skills necessary to perform well on the AP Music Theory Exam. Students should have prior experience reading music and should be able to play major scales on their instrument.

PRACTICAL ARTS

The Practical Arts department offers a variety of courses to support the learning of practical skills relevant to our contemporary world; these include courses in technology, in designing, building, and making, and in leadership. Courses are taught with an emphasis on skill building and practical application to useful projects and situations. The content of each Practical Arts can be leveraged beyond each course in variety of ways as the habits and skills generalizable to other areas and interests in the student's life. Practical Arts courses range from a year-long AP offering to semester-long electives. All courses are highly interactive.

TECHNOLOGY

All Year 2017–2018 ***AP Computer Science Principles (elective, grades 10–12):**

This course introduces students to the foundation of modern computing. The course seeks to provide students with a foundation in computing principles so that they are adequately prepared to meaningfully participate in our increasingly digital society, economy, and culture. AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. Students will have the opportunity to use technology to address real-world problems and build relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.

***Introduction to Computer Applications (semester elective, grades 9–12):** This one semester course is designed to help students acquire skills in word processing, the Internet, research, web page design, and computer use. Internet etiquette, computer terminology, and hardware will also be examined. All students must demonstrate a minimum keyboarding competency of 25 words per minute. Some students may need practice in order to attain this skill. The course will allow for individual progress through these skills for students at vastly different levels of computer comfort and familiarity. The overall goal of the course is for all students to acquire computer confidence as well as the acquisition of skills necessary for the academic work at Crossroads College Preparatory School and beyond.

***Computer Programming and Topics in Technology (semester elective, grades 9-12):** This is an introductory course in computer programming using the languages C++ and Javascript. The course begins with an online introduction to Javascript, then advances to game programming in the C++ language. The course emphasizes the analysis of problems, the careful selection of an appropriate algorithm, and the implementation of the algorithm. Topics covered include data types, variables, input, output, control structures, functions, files, and objects. Also covered are graphics, work with audio, and games. Computer Programming and Topics in Technology assumes no previous programming experience.

Speech and Debate (semester elective, grades 9-12): This semester-long course will introduce students to the basic principles of public speaking and formal debate. The first half of the semester will focus on public speaking. Using both historic and original speeches, students will practice their verbal and physical presentation skills. In the second half of the semester, students will focus on formal debate styles. Students will learn how to express and support differing opinions and how to respectfully and constructively disagree. Throughout the semester, students will be responsible for assessing both themselves and their peers.

Fall 2017 **Makerspace I: Design Thinking, Tool Craft, and Making (semester elective, grades 9-12):** This course is based on design thinking and will provide students with a creative outlet to learn sound habits in the context of creating, designing, tinkering, and building in the Makerspace. Students will become proficient in the design thinking process and its application in developing solutions to challenges, as well as salient problems identified by the community. Practical skills will serve as a part of the foundation of learning objectives and as a means of creating and finishing collaborative projects. Students will learn to use Makerspace tools including 3D printers, a CNC machine, sewing machines, a laser cutter, and traditional hand tools, among others. The Makerspace curriculum is an instrumental hands-on approach toward realizing the larger educational philosophy of Crossroads.

Spring 2018 **Makerspace II: Design for Social Change (semester elective, grades 9-12):** Now that students have experience with the design thinking model and a workable knowledge of the Makerspace tools through Makerspace I, this course will deepen their understanding of this work and its application to salient problems solicited from our community and identified by our students. Students will work together to discuss issues of social justice and address these issues in a way that will promote solutions. Students will also use their knowledge of art, design, making, and media, as well as being challenged to explore new tools to find creative ways to prototype their ideas. They will learn to listen and develop critical thinking and problem-solving skills. They will develop the vocabulary and presentational skills for effective communication of their ideas. The Makerspace curriculum is an instrumental hands-on approach toward realizing the larger educational philosophy of Crossroads.

Fall 2017 or Spring 2018 **Leadership: In Theory and Practice (semester elective, grades 9-12):** In this course, students will develop an understanding of the discipline of leadership, through defining a personal framework and set of values for leading self and others. Students will explore the skills and traits required for credible leadership by understanding that leadership of self is a prerequisite to leadership of others. Students will translate new skills into practical fieldwork leadership activities, in school and in the community.

PHYSICAL EDUCATION & ATHLETICS

The athletics program at Crossroads College Preparatory School is unique. While fielding extremely competitive teams that have been successful at the conference, district, and state level, we also believe in abiding by our stated mission and core concepts of community and inclusivity. All students that are interested in being members of a team are given the opportunity to do so. All team members are held to certain standards of attendance and effort. We emphasize the competitive nature of athletics while building a strong work ethic and striving for individual and team improvement. In addition to our gymnasium, we utilize outside facilities such as Dwight Davis Tennis Center, Midwest Soccer Academy, and Forest Park.

Physical Education (year-long, grade 9): Physical Education classes are designed to encourage healthy living and good physical habits for young people. The classes are vehicles to introduce key components of an active and healthy life. All middle school students are required to participate in physical education, either in the form of a competitive team or as a physical education class, both of which occur during the school day. Our approach to middle school athletics mirrors the philosophy of the school: all students who are interested may participate. Our 9th grade students also participate in physical education classes, meeting once or twice per week on a rotating schedule.

Health Education (year-long, grade 9): Health Education emphasizes the importance of knowledge, attitudes, and practices relating to personal health and wellness. It is a course designed to expose students to a broad range of issues and information relating to the various aspects of personal health, which include the physical, social, emotional, intellectual, spiritual and environmental aspects. Topics of exploration include, but are not limited to: drug and alcohol education, mental/emotional wellness, sexual health, and personal/environmental health

COMPETITIVE TEAMS

Fall

Boys' Varsity Soccer
Girls' Varsity Tennis
Girls' Varsity Volleyball
Girls' Jr. Varsity
Volleyball
Middle School
Boys' Soccer
Middle School
Girls' Volleyball

Winter

Boys' Varsity Basketball
Girls' Varsity Basketball
Boys' Jr. Varsity
Basketball
Girls' Jr. Varsity
Basketball
Middle School
Boys' Basketball
Middle School
Girls' Basketball

Spring

Boys' Varsity Baseball
Girls' Varsity Soccer
Boys' Track & Field
Girls' Track & Field
Middle School Boys'
Baseball
Middle School
Girls' Soccer
Middle School Track &
Field

OTHER CLASSES

All Year **Middle School Explore (grades 7-8):** Explore classes introduce students to the disciplines that will be elective choices in high school. Each student chooses one discipline in which to continue the whole year (a “concentration”), while also spending some time in each of the other areas.

Art: In this semester-long course, students will be introduced to a variety of materials and approaches to making visual works of art. We will study a broad spectrum of artists and art movements as a way to expand and inform our own approach to creating meaningful two-dimensional and three-dimensional works of art. Students will be encouraged to develop creative thinking processes and explore studio mindset through daily entries into sketchbooks. Sketchbook entries will provide students with a source for self directed projects that reflect themes that are important to their own interests.

Art students will gain insight into the studio environment, learn to care for materials, share creative inspiration with fellow students, and concentrate more on the process than the final product. Self-assessment and group critiques will encourage students to broaden their understanding of art as a visual language. Students will gain confidence in their ability to plan, execute, revise and interpret works of art from diverse genres, styles and media.

Dance: In this semester long course, students will study the choreography of Katherine Dunham. This was one of the first concert fusion styles of dance in the United States, merging several techniques and styles into what became the Dunham Technique. Students will explore the philosophies of Katherine Dunham and different aspects of ballet, jazz, modern, musical theatre, tap, Caribbean, Asian, Polynesian, African, Haitian, Brazilian and more. They will be able to recreate and design various types of dance while deepening their knowledge and heightening their movement skills as well as their understanding and appreciation of dance.

Music Appreciation: In this music appreciation course, students will build a foundation in music theory and explore music history by listening to and discussing a wide range of music genres. Emphasis will be placed on understanding the elements of music, building sight reading skills, and being able to identify music from different periods. There will be some exposure to musical instruments. Students will increase their ability to enjoy music by learning to listen more closely to each of its elements. Students will begin to recognize the differences between music of different periods and regions, and will learn performance practices appropriate to each of those styles.

Theatre: In the middle school theatre elective class, students will learn terminology from the theatre and gain a general overview of what it takes to mount a production. Students will have the chance to learn several acting exercises, activities and games that will help to free their inhibitions, build a sense of ensemble and stir their creative juices so that they will gain confidence and skill in front of an audience. Projects and performances will include both improvised and scripted material, Shakespeare training and work in technical theatre.

Computer Applications: This one-semester elective is designed to help students acquire skills in word processing, spreadsheets, presentation, web page design, animation and general computer use. Cloud computing, the arduino prototyping platform, internet etiquette, computer terminology, hardware, programming (scripting), and keyboarding are also examined. The overall goal of the course is for all students to acquire computer confidence as well as the acquisition of skills necessary for the academic work at Crossroads College Prep and beyond.

ACTIVITY CLASSES

A wide range of activity classes is offered each year from which students choose according to their interest. All students in grades seven through eleven are required to take an activity. Seniors may elect these classes according to their interests and schedules. Activity classes are designed to supplement and enrich the curriculum, and they often provide exposure to new interests and future avocations.

Recent activity classes have included:

A Cappella Singing	Digital Photography	Robotics
ACT/SAT Prep	Film Studies	Running Club
Archery	Graphic Design	School Store
Baseball Conditioning	Green Team	Science Fair Support
Bicycle Riding and Safety	IDEA: Invention Design Engineering Activity	Science Fiction and Philosophy on Television
Bike Repair	Improv	Shakespeare
Book Club	Journalism	Soccer
Builders	Knitting and Dyeing	Social Justice Club
Calligraphy	Life Skills	Speech and Debate
Card Games	Literary Magazine	Stage Makeup
Cheer Squad	Makers	Strategic Card Games
Chess	Mandarin Chinese	Ultimate Frisbee
Choir	Media Team	Upcycling
Classic Film Studies	Middle School Band	Walking for Inspiration
Collage Explorations	Middle School Robotics	Web News
Crochet	Mock Trial	Yearbook
Cross-stitching	Open Art Studio	Yoga
CurrentNewz	Orchestra	
Dance Studio	Pep Squad	
Dance Team	Ping Pong	
Dart Throwing	Racquetball	

THE BEST WAY
TO FIND OUT **WHO YOU ARE**
IS TO GO TO THE PLACE
WHERE YOU DON'T HAVE TO BE
ANYONE ELSE.



CROSSROADS
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