

# UNIVERSITY HIGH SCHOOL

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O F I N D I A N A

**Course Guide**  
2019 – 2020



## University High School Four-Year Planning Sheet

Student: \_\_\_\_\_

This is a document that each student should fill out as part of the registration cycle, in conjunction with discussions with mentor and parents. The idea is not to “set things in stone” but rather to facilitate conversations about academic goals and check that graduation requirements will be met. If the student and his/her mentor keep a copy, the plan can be revised each year during the registration cycle.

<p style="text-align: center;"><b>9<sup>th</sup> Grade:</b> <i>1<sup>st</sup> semester / 2<sup>nd</sup> semester</i></p> <ol style="list-style-type: none"> <li>1. Two semesters: Language &amp; Literature</li> <li>2. Two semesters: World History (AP or regular)</li> <li>3. Two semesters: Biology</li> <li>4. Math: _____ / _____</li> <li>5. World Lang.: _____ / _____</li> <li>6. Elective: _____ / _____</li> <li>7. Elective: _____ / _____</li> </ol>	<p style="text-align: center;"><b>10<sup>th</sup> Grade:</b> <i>1<sup>st</sup> semester / 2<sup>nd</sup> semester</i></p> <ol style="list-style-type: none"> <li>1. Two semesters: Great Books</li> <li>2. Two semesters: U.S. History (AP or regular)</li> <li>3. Two semesters: Chemistry</li> <li>4. Math: _____ / _____</li> <li>5. World Lang.: _____ / _____</li> <li>6. Elective: _____ / _____</li> <li>7. Elective: _____ / _____</li> </ol>
<p style="text-align: center;"><b>11<sup>th</sup> Grade:</b> <i>1<sup>st</sup> semester / 2<sup>nd</sup> semester</i></p> <ol style="list-style-type: none"> <li>1. Adv. Eng: _____ / _____</li> <li>2. Social Studies: _____ / _____ <i>(must be U.S. History or AP U.S. History, if not already taken)</i></li> <li>3. Elective: _____ / _____</li> <li>4. Elective: _____ / _____</li> <li>5. Elective: _____ / _____</li> <li>6. Elective: _____ / _____</li> <li>7. Elective: _____ / _____</li> </ol>	<p style="text-align: center;"><b>12<sup>th</sup> Grade:</b> <i>1<sup>st</sup> semester / 2<sup>nd</sup> semester</i></p> <ol style="list-style-type: none"> <li>1. Adv. Eng: _____ / _____</li> <li>2. Social Studies: _____ / _____</li> <li>3. Elective: _____ / _____</li> <li>4. Elective: _____ / _____</li> <li>5. Elective: _____ / _____</li> <li>6. Elective: _____ / _____</li> <li>7. Elective: _____ / _____</li> </ol>

Total number of credits (1 semester = 1 credit): \_\_\_\_\_

Number of credits in each area:

Eng: \_\_\_\_ Soc. St.: \_\_\_\_ Math: \_\_\_\_ Science: \_\_\_\_ World Lang.: \_\_\_\_ Arts: \_\_\_\_ PE/Health: \_\_\_\_

Make sure to refer to the Course Guide for course offerings, University High School graduation requirements, and Indiana Core 40 and Academic Honors requirements. Some students will take six classes in a semester and have the 7<sup>th</sup> period serve as a study hall. If that is part of your plan, simply write in ‘study hall’ for one of the electives.

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University High School Minimum Graduation Requirements

<b>English</b>	<b>8 credits</b> <b>2 credits:</b> Language & Literature; <b>2 credits:</b> Great Books; <b>4 credits</b> of advanced coursework in the junior and senior years
<b>Mathematics</b>	<b>6 credits</b> <b>A minimum of 6 credits must be taken in Grades 9 – 12.</b> Students must complete at least Algebra I, Geometry, and Algebra II. <b>Most Indiana state universities require 7 or 8 semesters of mathematics.</b>
<b>Science</b>	<b>6 credits</b> <b>2 credits:</b> Biology; <b>2 credits:</b> Chemistry; <b>2 credits:</b> Additional credits from Biology, Chemistry, Physics, Earth and Space Science or an equally challenging program
<b>World Languages</b>	<b>6 credits</b> <b>2 credits:</b> Level 1; <b>2 credits:</b> Level 2; <b>2 credits:</b> Level 3 <b>Minimum of 4 credits must be taken at a high school</b>
<b>Social Studies</b>	<b>8 credits</b> <b>2 credits:</b> World History (AP or regular); <b>2 credits:</b> U.S. History (AP or regular); <b>4 credits</b> of advanced coursework in the junior and senior years
<b>Fine &amp; Performing Arts</b>	<b>4 credits</b> <b>It is highly recommended that at least two of these credits be earned by the end of the 10<sup>th</sup> grade year and at least one more of these credits be earned by the end of the 11<sup>th</sup> grade year.</b>
<b>Phys. Ed. &amp; Health</b>	<b>3 credits</b> <b>1 credit:</b> Health; <b>1 credit:</b> Physical Education; <b>1 credit:</b> 1 additional credit physical education (note: successful participation in a full season on an athletic team can satisfy this third credit). <b>It is highly recommended that at least one of these credits be earned by the end of the 10<sup>th</sup> grade year and at least one more of these credits be earned by the end of the 11<sup>th</sup> grade year.</b>
<b>Electives</b>	At least enough to meet the minimum total credit requirement
<b>Total</b>	<b>48 credits</b>

University High School’s educational program is a four-year commitment. All students have to carry at least 6 classes per semester and take one January Term class per year. Courses taken outside of University High School can be used towards the requirements only if approved beforehand. Students and parents should understand that the requirements stated above are *minimum* requirements; the school expects students to push themselves above these requirements.

## Indiana Standards for Core 40 and Academic Honors Diplomas:



Effective beginning with students who enter high school in 2012-13 school year (class of 2016).

### **Core 40 with Academic Honors** (minimum 47 credits)

Course and Credit Requirements	
<b>English/ Language Arts</b>	<b>8 credits</b> Including a balance of literature, composition and speech.
<b>Mathematics</b>	<b>6 credits (in grades 9-12)</b> 2 credits: Algebra I 2 credits: Geometry 2 credits: Algebra II <small>Or complete Integrated Math I, II, and III for 6 credits. Students must take a math course or quantitative reasoning course each year in high school.</small>
<b>Science</b>	<b>6 credits</b> 2 credits: Biology I 2 credits: Chemistry I or Physics I or Integrated Chemistry-Physics 2 credits: any Core 40 science course
<b>Social Studies</b>	<b>6 credits</b> 2 credits: U.S. History 1 credit: U.S. Government 1 credit: Economics 2 credits: World History/Civilization or Geography/History of the World
<b>Directed Electives</b>	<b>5 credits</b> World Languages Fine Arts Career and Technical Education
<b>Physical Education</b>	<b>2 credits</b>
<b>Health and Wellness</b>	<b>1 credit</b>
<b>Electives*</b>	<b>6 credits</b> <small>(College and Career Pathway courses recommended)</small>
<b>40 Total State Credits Required</b>	

Schools may have additional local graduation requirements that apply to all students (not required for students with an IEP).

\* Specifies the number of electives required by the state. High school schedules provide time for many more electives during the high school years. All students are strongly encouraged to complete a College and Career Pathway (selecting electives in a deliberate manner) to take full advantage of career and college exploration and preparation opportunities.

\*\*SAT scores updated September, 2017

\*\*\*WorkKeys assessment titles updated, 2018

For the **Core 40 with Academic Honors** designation, students must:

- Complete all requirements for Core 40.
- Earn 2 additional Core 40 math credits.
- Earn 6-8 Core 40 world language credits (6 credits in one language or 4 credits each in two languages).
- Earn 2 Core 40 fine arts credits.
- Earn a grade of a "C" or better in courses that will count toward the diploma.
- Have a grade point average of a "B" or better.
- Complete one of the following:
  - A. Earn 4 credits in 2 or more AP courses and take corresponding AP exams
  - B. Earn 6 verifiable transcripted college credits in dual credit courses from the approved dual credit list.
  - C. Earn two of the following:
    1. A minimum of 3 verifiable transcripted college credits from the approved dual credit list,
    2. 2 credits in AP courses and corresponding AP exams,
    3. 2 credits in IB standard level courses and corresponding IB exams.
  - D. Earn a composite score of 1250 or higher on the SAT and a minimum of 560 on math and 590 on the evidence based reading and writing section.\*\*
  - E. Earn an ACT composite score of 26 or higher and complete written section
  - F. Earn 4 credits in IB courses and take corresponding IB exams.

### **Core 40 with Technical Honors** (minimum 47 credits)

For the **Core 40 with Technical Honors** designation, students must:

- Complete all requirements for Core 40.
- Earn 6 credits in the college and career preparation courses in a state-approved College & Career Pathway and one of the following:
  1. Pathway designated industry-based certification or credential, or
  2. Pathway dual credits from the approved dual credit list resulting in 6 transcripted college credits
- Earn a grade of "C" or better in courses that will count toward the diploma.
- Have a grade point average of a "B" or better.
- Complete one of the following,
  - A. Any one of the options (A - F) of the Core 40 with Academic Honors
  - B. Earn the following minimum scores on WorkKeys: Workplace Documents, Level 6; Applied Math, Level 6; and Graphic Literacy, Level 5.\*\*\*
  - C. Earn the following minimum score(s) on Accuplacer: Writing 80, Reading 90, Math 75.
  - D. Earn the following minimum score(s) on Compass: Algebra 66, Writing 70, Reading 80.

Above document from: <https://www.doe.in.gov/sites/default/files/student-assistance/core-40-and-honors-diploma-summary-class-2016-updated-june-2018.pdf>

### College Requirements

Students are reminded to keep in mind the high school course requirements of colleges and universities in which they are interested. It is their responsibility to check on collegiate websites or with college representatives about specific additional requirements for admission.

### Standard 9<sup>th</sup> grade courses

Unless compelling reasons are presented to the student's mentor, each 9<sup>th</sup> grade student is expected to take Language & Literature, two semesters of World History or AP World History, and Biology.

### **Standard 10<sup>th</sup> grade courses**

Unless compelling reasons are presented to the student's mentor, each 10<sup>th</sup> grade student is expected to take Great Books, two semesters of U.S. History (or AP U.S. History), and Chemistry.

### **Calculating Grade Point Averages (GPA)**

The following numerical values for grades are used to calculate GPA:

A+	A	A-	B+	B	B-	C+	C	C-	WF / F+ / F-
4.3	4.0	3.7	3.3	3.0	2.7	2.3	2.0	1.7	0

The sum of all the grade points divided by the total number of classes taken (excluding those with only a "P" [pass] grade) is the GPA.

The school assigns additional weight to AP courses by adding one (1) grade point to the semester grades earned in these courses (for example, a B+ earned in a semester of an AP course would count as a 4.3, instead of the standard 3.3). Weighted GPA is the official GPA stated on report cards and transcripts. Unweighted GPA is used for determining status for honor roll, high honor roll, and academic probation.

### **Honor Rolls**

University High School has two honor rolls: honor roll and high honor roll. A student earns a place on the honor roll when his or her unweighted semester grade point average is at least 3.30 but lower than 3.70. A student earns a place on the high honor roll when his or her unweighted semester grade point average is 3.70 or higher. All semester classes are included in these computations, except for those with only a "P" [pass] grade. January Term is not included in honor roll considerations, since it does not fall into the first or second semester.

### **What is an F+?**

If a student's course grade average in the first semester of a year-long course (or a year-long sequence, like U.S. History or two advanced English electives) is at or above 66.5% but below 70%, the grade is recorded as an F+. This counts as an F towards GPA, honor roll, and academic probation. If, at the end of the second semester, the student's grade in the class is at or above 72.5% (C), then the F+ from the first semester will be changed to a C- (and GPA and credits recalculated). If not, then the F+ is changed to an F.

### **Reaction to Fs**

Any class specifically named in the graduation requirements that the student fails must be retaken – either in summer school or the following school year. Any other class not specifically named in the graduation requirements that the student fails must be accounted for by successfully passing another course – either in summer school or the following school year.

### Academic Probation

A student is placed on academic probation if one of the two conditions occurs: (a) the student's unweighted semester grade point average is below 2.00, or (b) the student earns three or more grades below a C (C-, F+, WF, or F) in a single semester.

If the student's performance hits any of the above conditions in any subsequent semester, the student is subject to dismissal. Such dismissal will not be automatic, as the school will wish to take extenuating circumstances into account, but it should be understood that it would be rare for a student to remain at University High School if he or she could not maintain an academic performance better than the two conditions stated on a semester-by-semester basis.

A student may also be placed on academic probation for other circumstances at the discretion of the Head of School.

A student entering into academic probation meets with his or her parents, mentor, and a school administrator early in the new semester to make sure that his or her status is understood and, more importantly, to describe a change in behavior that will result in the student not meeting one of the stated conditions for the rest of his or her University High School career.

### Who Should Sign Up for an Advanced Placement (AP) Class?

<b>Grades in the class preceding the AP class*:</b>	<b>Eligible to sign up for AP class?</b>	<b>Should sign up for AP class?</b>
B+ or higher in both semesters	Yes	Should very strongly consider – grades show you're a strong student up to the challenge
B- or B in both semesters	Yes	Should definitely think about it, but think carefully about the number of AP classes taken at one time
C+ or lower in either semester	No	Shouldn't think about it; grades show you're not ready for the AP level yet

\* Because the registration for classes is done *before* 2<sup>nd</sup> semester grades are finalized, this means a student may be denied registration for an AP class if his/her 2<sup>nd</sup> semester grade in the preceding class is below a B-.

Teachers are often asked about how hard an AP class is; the answer depends on the preparedness and work ethic of a given student. If a student has regularly earned high grades in a given academic discipline, then the AP class is probably the right choice; for them, it's the next logical step. If a student has earned good, but lower, grades (say, like B or B- grades) then the AP class will be more challenging – which, depending on the student, might be the right step or could be too much.



### **Expectations about Advanced Placement (AP) Classes**

AP classes are designed to give a student a chance to take an advanced, upper-level course. Each student will be doing college-level work throughout the year. In May, a national exam is held to test the student's knowledge of the subject studied. Students who do well on this exam may be able to earn college credit and/or placement. All students signing up for an AP class are expected to take the AP exam in the spring.

In order to be successful in an AP class, a student must be ready to make a serious commitment to work throughout the year. An AP course is designed as a college-level course. Therefore, the pace, level of thought expected, and grading standards are set accordingly.

Students in an AP course should commit to:

- 50 – 60 minutes of homework for each class period
- 3 – 6 mandatory class sessions during January Term
- Independent work over January Term, winter break, and spring break
- Possible Saturday sessions; these would include laboratory sessions for AP science courses, and exam preparation sessions for all AP classes
- Possible mandatory work over the summer to prepare for the class
- Taking the AP exam in May

### **Courses Taken Outside of University High School**

In general, once a student has enrolled in University High School, only courses taken at University High School count towards graduation. Any course taken by a University High School student outside of University High School for the purpose of grades or credits must be cleared by University High School prior to the course being taken. Only courses through an accredited high school, college, or university will be considered.

The student must submit to the Academic Affairs Committee a written proposal (at least one substantial paragraph) that demonstrates how the desired outside course fits into his or her larger educational plan, as well as details about the curriculum of the course (syllabus, topics covered, etc.). In general, the courses approved are ones that the student is taking to make up an earlier failing grade or that the student is taking to advance further in mathematics or world languages. Outside courses are not approved if the desire is simply to not take a given course at University High School. If the institution is not a local high school (such as Carmel, Zionsville, or North Central), the student should also submit information about the accreditation of the institution. This committee will review the information for the course, consult with the appropriate academic department, and either accept or reject the request. If the course is approved, it is the responsibility of the student to provide the school with the transcript of the class to demonstrate successful completion of the course.

Outside courses that are offered while University High School is in session are subject to more stringent criteria. In general, a student may not take such courses that would cause him or her to miss more than one period of the University High School day or courses that are currently offered by University High School. The only courses that the Academic

Affairs Committee will consider in this category are in subject areas in which the student (a) has already taken all the available University High School courses or (b) is taking the course in addition to a University High School course from this same subject area (that is, the outside course is for 'doubling up' in a given area).

A higher threshold also exists for an online course. Only junior or senior students are considered for these courses. A student may only take a maximum of one online course per year for University High School credit. The school takes on no responsibility for overseeing the student in such a course; he/she has to work with the oversight of the other institution. The school will also provide no special technological equipment for such a course; that is the responsibility of the student. Finally, given the independent nature of this type of course, the Academic Affairs Committee will evaluate whether the student is mature enough to handle the course within our school setting.

Approved outside courses may be used to satisfy graduation requirements only if they are passed with a C- or higher.

### **Middle School Courses**

If a student took a high school level mathematics or world language course in middle school (e.g., Algebra I, Geometry, Spanish 1, French 2, etc.), that course can be recorded on the official high school transcript. According to the State of Indiana's Department of Education, "Courses taught for high school credit in middle school must be equivalent to the high school and over the same Academic Standards. In addition, grades and credits for the course must be included on the student's high school transcript and factored into the cumulative GPA."

To meet Core 40 requirements (which are surpassed by the school's requirements), a student must take 6 credits (i.e., three years) of math classes at the level of Algebra I *or higher*. Similar for foreign language -- to earn Indiana Academic Honors, the student has to earn 6 credits in a language at first-year level *or higher* or 4 credits in two different languages at first-year level *or higher*. What this means, for instance, is that Algebra I does not have to be explicitly recorded on the transcript if the student takes Geometry, Algebra II, and Precalculus in high school.

When deciding whether to have the middle school courses placed on the transcript, a student should consider both the requirements (school/Core 40/Indiana Academic Honors) as well as the effect on the cumulative grade point average (GPA). If a middle school course is not needed for the requirements and the grades from the middle school course are lower than what the student expects his/her cumulative GPA to be, it would make sense to not place the middle school course on the transcript.

### **Dropping / Adding Classes**

Any kind of change to a student's schedule will be the result of consensus on the part of the student, parent(s), teacher, and mentor. If a change is suggested by any of these people, the mentor should be notified. The student should discuss the idea with the teacher, parent(s), and mentor. The mentor should direct the student to take the lead in having these

discussions, but then should also make a follow-up phone call or have a face-to-face conversation to confirm.

If all parties agree that the change is appropriate, then it will be made. If there is some disagreement, the schedule will not be changed until consensus can be reached. If a problem persists, then either an Assistant Head or the Head of School should be brought into the discussion to help reach a final decision.

Students can make changes to their schedules without penalty by submitting a completed drop/add form to the scheduling coordinator no later than the beginning of the fourth week of the semester. After this point, up to the end of the first day of classes following mid-semester parent-mentor-student conferences, a student who drops a class will have the class recorded on his/her transcript with either a “WP” (withdrew – passing) or “WF” (withdrew – failing). A WP has no effect on the GPA; a WF counts the same as an F in the GPA. After the end of the first day of classes following parent-mentor-student conferences, a student may not make changes to his/her schedule for that semester. Any senior making any changes to his/her schedule must also get the signature of the college counselor.

### **Learning Support Services**

Learning Support Services is for students who have supporting documentation to indicate that they need learning support. The resource is also available for students who are referred by their mentors and upon approval of the Director of Learning Support Services for additional study skills, test-taking skills, time management skills and organizational skills.

### **Research Scholars Program**

Students who are accepted for this program will spend considerable time and effort to develop, research, and write an extensive thesis; they will also give an oral presentation of findings. Students will develop the initial idea for the project in the spring of their junior year, work on it over the summer, and continue the work through the first semester of their senior year. They will earn one credit upon its successful completion. Participation in this program will give a student significant experience in managing a complex independent research project, as well as the satisfaction of pursuing a topic of one’s own choosing. It will give a student considerable training for college honors/thesis programs, and it will enhance applications for college admission.

A junior student who is interested in pursuing this program for his or her senior year should speak to the Dean of Academic Affairs for more information.

## English

**Course:** Language & Literature

**Prerequisite:** None

**Length:** Year-long class

**Special Note:** This is the standard 9<sup>th</sup> grade English course.

This class is required of all freshmen so they can begin to master the skills necessary to become a more critical reader and a better writer. The ultimate goal of the class is to have students understand how these skills can enrich their lives and help them begin to make sense of a complicated world and their place in it. We will read various kinds of works. We will develop your critical thinking, your writing, and your appreciation about and of English literature. We will practice writing formally and informally, academically and non-academically, in class and out of it. We will study argument and correct grammar.

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**Course:** Great Books

**Prerequisite:** Language & Literature or equivalent 9<sup>th</sup> grade course

**Length:** Year-long class

**Special Note:** This is the standard 10<sup>th</sup> grade English course.

In this course, students will read excerpts of essays, novels, and articles written by some of the greatest writers and thinkers, from antiquity to modern times, in the Western tradition. Utilizing a seminar approach to facilitate discussion, students will explore the meaning, ethics, and motives of these authors, as well as seek to examine the connections between their own personal and cultural knowledge, popular/mass media knowledge, and mainstream academic knowledge, especially in considering the power of texts to transform society. Students will complete three to four formally drafted essays each semester, as well as sit for several exams covering specified units of study. Students will also be expected to submit less formally written pieces focusing on other aspects of class. These pieces will take the form of blogs and written journal responses. Regular vocabulary and grammar lessons will augment the class.

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**Course:** Advanced English: Gothic Literature

**Prerequisite:** Great Books or equivalent 10<sup>th</sup> grade course

**Length:** Semester-long class

**Special Note:** This satisfies 1 credit of advanced coursework from the English graduation requirements

Monsters and the idea of the monstrous have been a part of human culture since the dawn of time—from vampires and ghosts to beasts and demons. It is therefore no wonder that such monsters turn up quite frequently in literature. Those works (termed “the Gothic”) that deal with such monsters and the terror and horror they inspire will form the foundation of this course. What makes monsters such a fascinating field of study is how such monsters reveal larger anxieties about a given cultural milieu. In other words, what we fear tells us a great deal about who we are. So, at the same time that we explore dark fiction across time and space, we will look within ourselves to understand our own fears and, ultimately, our

own selves. Our readings will include *Dracula*, *The Strange Case of Dr. Jekyll and Mr. Hyde*, *The Picture of Dorian Gray*, and short works by Edgar Allen Poe and others.

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**Course:** Advanced English: The Hero

**Prerequisite:** Great Books or equivalent 10<sup>th</sup> grade course

**Length:** Semester-long class

**Special Note:** This satisfies 1 credit of advanced coursework from the English graduation requirements

What is a hero? What traits do many hero stories share? Why does our culture continue to create new versions of old myths? Why do all those Avengers movies seem the same? In this course, students will learn how the idea of a hero has evolved over time. Studies of archetypal heroes, tragic heroes and anti-heroes over a range of genres and time periods will lead to discussions about the relevance of these stories to our lives. Materials for this course will include 3-4 novels, 3-4 movies and a number of short pieces. Students will have regular reading assignments, write two multi-drafted papers, and complete a final project. Overall, the hero theme and subsequent studies will become the lens with which students will continue to develop their analytic and critical reading and writing.

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**Course:** Advanced English: Literature & Science of Conservation

**Prerequisite:** Great Books or equivalent 10<sup>th</sup> grade course (in addition to Biology, and Algebra II, which may be taken concurrently)

**Length:** Semester-long class offered in the second semester

**Special Note:** This course will meet for two periods per day during the second semester. Students enrolled will earn a credit of Advanced English and a science elective credit. Therefore, this is a student's English class and science class for one semester. You must register for both parts of the course and should anticipate the workload reflecting the fact that this is the equivalent of two courses in your schedule.

*"From the beginning, American writing has concerned itself with the story of people and the natural world. 'Environmental writing' takes as its subject the collision between people and the rest of the world, and asks searching questions: Is it necessary? What are its effects? Might there be a better way?" — Bill McKibben*

*"Many people have commented with surprise on the fact that a work of science should have a large popular sale. But this notion that "science" is something apart from everyday life is one that I should like to challenge. The materials of science are the materials of life itself. Science is part of the reality of living; it is the what, the how, and the why of everything in our experience. It is impossible to understand man without understanding his environment." — Rachel Carson*

This co-requisite course will explore the literature and science of conservation. Students will investigate the complexity of environmental issues of our world by reading and discussing the works of American environmental writing from the 19th century to contemporary times and through frequent experiments and field exercises. Students will learn that the natural world and the human-built world are not stand-alone entities, but rather one interconnected system. Students will also develop an appreciation for the role environmental literature and science have played in shaping our nation's environmental

and ecological conscience. While we will be reading some awesome literature, we will also be getting outside often. Outdoor field work on campus and at off-site locations will be occur weekly and be major components of the course. Students do not need to have prior outdoor knowledge or skills; however, they should be ready to participate under a variety of different weather conditions. Remember, there is no such thing as bad weather, only bad gear!

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**Course:** Advanced English: Media Studies

**Prerequisite:** Great Books or equivalent 10<sup>th</sup> grade course

**Length:** Semester-long class

**Special Note:** This satisfies 1 credit of advanced coursework from the English graduation requirements

Media Studies delves into the role that media has played throughout history, and how it impacts day-to-day society. Through readings, viewings, discussions, and writings, this course will cover the psychology, business, and ethics behind how current events and social issues are portrayed in print, film, and social media. There will be a short test and cumulative project at the end of each unit. These assessments will build into a portfolio that informs a final project and critique that will fill the role of a final exam. Building upon a historical foundation of the media studies, students will have the opportunity to explore specific areas of interest to which they are drawn. The goal of this course is to help us think about the ways in which media informs societal beliefs.

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**Course:** Advanced English: Short Works

**Prerequisite:** Great Books or equivalent 10<sup>th</sup> grade course

**Length:** Semester-long class

**Special Note:** This satisfies 1 credit of advanced coursework from the English graduation requirements

500-page novels aren't your thing? Me neither. This course will instead survey great short works. From heavy hitters like Ernest Hemingway and James Joyce to a less traditional assortment of comic writing, creative nonfiction, and flash fiction, our reading selection will remain broad in an attempt to represent a multiplicity of perspectives and sub-genres. Our goals will be to get a better sense of how short works are crafted, to pursue meaning where we can, and to understand how a collection of short works functions as a whole. Major assignments will include two papers, a project, and a final exam.

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**Course:** Advanced English: Speculative Fiction

**Prerequisite:** Great Books or equivalent 10<sup>th</sup> grade course

**Length:** Semester-long class

**Special Note:** This satisfies 1 credit of advanced coursework from the English graduation requirements

Speculative Fiction is writing that deals with the genres known as Science Fiction and Fantasy. Speculative Fiction certainly sounds academic, but at its heart, it's all about the impossible, the improbable, and the magical. Science Fiction author Robert Sawyer argues that Science Fiction deals with things that might possibly happen (or, in the case of the

sub-genre of Science Fiction known as alternate history, things that possibly could have happened); fantasy deals with things that never could happen. In either case, both of these genres allow for the human condition to be explored in powerful and wonderful ways. I've grown up reading both genres, and I'm really looking forward to sharing with you some of the seminal novels, films, and short stories that define them.

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**Course:** AP English Language & Composition

**Prerequisite:** Great Books or equivalent 10<sup>th</sup> grade course; see 'Who Should Sign Up for an Advanced Placement Class?' and 'Expectations about Advanced Placement Classes' at start of this guide.

**Length:** Year-long class

**Special Note:** This satisfies 2 credits of advanced coursework from the English graduation requirements.

AP English Language & Composition is designed to mirror a college-level composition class. Its primary goal is to help students "write effectively and confidently in the college course across the curriculum and in their professional and public lives" (The College Board, *AP English Course Description*, May 2007, May 2008, p. 6). In this course, students will strive to become critical readers, analytical writers, and successful communicators. While the objectives and requirements listed in the *AP English Course Description* guide the organization of this course, multi-week thematic units center on the discussion and analysis of an American cultural myth in order to encourage students to think critically about their beliefs and their world. Selections for each unit are composed of written and visual texts including (but not limited to) essays, political writing, autobiographies, social-science writing, criticism, cartoons, posters and advertisements. Each unit will be anchored by a multi-drafted piece of writing on which students will receive peer and teacher feedback. This writing is evaluated based on effective and appropriate use of a variety of vocabulary and sentence structure, logical organization, development and support of ideas and claims, effective use of rhetoric (including tone, voice and emphasis), and an understanding of purpose and audience (The College Board *AP English Course Description*, May 2007, May 2008. p. 8).

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**Course:** AP English Literature & Composition

**Prerequisite:** Great Books or equivalent 10<sup>th</sup> grade course; see 'Who Should Sign Up for an Advanced Placement Class?' and 'Expectations about Advanced Placement Classes' at start of this guide.

**Length:** Year-long class

**Special Note:** This satisfies 2 credits of advanced coursework from the English graduation requirements.

In this course, we will read selected works of American, British, and Global literature. Beyond exposing ourselves to a number of excellent (and enjoyable) pieces of writing, the focus of this course is to understand how structure and style work to create and enhance meaning. Writing will be a major part of the course, as will be close reading. In-class AP-style essays, informal personal responses, and take-home essays will be practiced regularly. The primary goal will be to develop the necessary skills and knowledge in order to perform well on the AP exam at the end of the year.

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**Course:** Introduction to Creative Writing

**Prerequisite:** None

**Length:** Semester-long class offered in the first semester

Introduction to Creative Writing is an entry-level course designed to help students learn to incorporate writing in their lives and to expose them to a workshop environment. Reading and writing activities will cover the basic elements of the four main genres of creative writing: fiction, poetry, drama, and nonfiction. Students will study the techniques of each genre through handouts, selections in the text, and the creation of their own pieces. There will be a short test and cumulative project at the end of each unit over the specific writings and practices we've covered. In lieu of a final exam, students will create a portfolio containing polished writing samples, a personal writing metaphor, and a self-evaluation. At the end of this semester, students will be familiar with themselves as both writers and critics.

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**Course:** Advanced Creative Writing: Drama

**Prerequisite:** Introduction to Creative Writing (or instructor permission)

**Length:** Semester-long class in the second semester

**Special Note:** This satisfies 1 credit of advanced coursework from the English graduation requirements

Creative Writing: Drama is an advanced elective course centered on the workshop environment. It is expected that students in this class already harbor a genuine interest in writing drama. While we will cover concepts of dramatic mechanics (conflict, story structure, dialogue, character, etc.) and major authors in the genre, students will spend the majority of the class establishing personal writing practices and developing their own aesthetics. In short, there will be reading, writing and much discussing of students' own work.

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## Social Studies

**Course:** World History

**Prerequisite:** None

**Length:** Year-long class

**Special Note:** This (or AP World History) is the standard 9<sup>th</sup> grade social studies class.

This course is a broad study of human history. The course will touch on the major developments of human civilization across the globe. Roughly equal attention will be paid to each region and period covered, giving students a wider perspective of the events and peoples that shaped our world. Particular focus will be on the development of historical thinking and writing skills, which will prepare students for future history courses at University and beyond.

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**Course:** AP World History: Modern

**Prerequisite:** See ‘Who Should Sign Up for an Advanced Placement Class?’ and ‘Expectations about Advanced Placement Classes’ at the start of this guide.

**Length:** Year-long class

**Special Note:** This (or the regular World History course) is usually taken as a 9<sup>th</sup> grader. Other students may take this course as an elective.

The AP World History: Modern course is a global study of human history, concentrating on the period between 1200 C.E. and the present. Given such a breadth of time and geography, the course is organized to focus on developing students’ skills of historical analysis using a thematic approach. It is taught at the level of a college survey course, and it follows the guidelines provided by College Board’s Advanced Placement program. As such, the academic expectations, amount of reading and writing, and testing are significantly greater than in the regular World History class.

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**Course:** U.S. History

**Prerequisite:** World History, AP World History, or equivalent 9<sup>th</sup> grade course

**Length:** Year-long class

**Special Note:** This (or AP U.S. History) is usually taken as a 10<sup>th</sup> grader.

If we want to understand our country and ourselves, we need to know the character of the land and why people in this country act as they do. Therefore, this course covers the major political, social, economic, diplomatic, and military events that shaped life in the United States. The class will focus on more modern topics. The first semester will begin with an investigation of some of the foundational ideas of the country (by looking at the Declaration of Independence, Constitution, and the Reconstruction Amendments), then move to the ‘Gilded Age’ following the Civil War and will end with the Second World War. The second semester will begin with the changes in American life in the 1950s and will end with an overview of the U.S. in the early twenty-first century. The focus on more modern topics will allow for two primary goals to be met. First, we’ll see more clearly where the factors directly affecting our lives today came from. Second, there will be room for more small-group or individual investigation of topics of special interest. The course requires students to learn specific factual material, using primary and secondary sources, then analyze and synthesize that information through taking tests, writing essays, writing

papers, and completing projects.

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**Course:** AP United States History

**Prerequisite:** See ‘Who Should Sign Up for an Advanced Placement Class?’ and ‘Expectations about Advanced Placement Classes’ at start of this guide.

**Length:** Year-long class

**Special Note:** This (or U.S. History) is usually taken as a 10<sup>th</sup> grader.

The AP U.S. History course covers the historical development of the U.S. from colonial times up to the 21<sup>st</sup> century. Students have to study and comprehend many specific historical events from this time span, as well as understand and connect them through the seven themes of U.S. history called out by the College Board: identity, work, exchange, and technology, peopling, power and politics, environment and geography, culture, belief and ideas, and America in the world. The AP U.S. History course follows the guidelines and requirements provided by the College Board’s Advanced Placement program, and it is taught with the academic expectations and rigor of a college survey course. Consequently, the amount of reading, testing, and writing is significantly more than the regular U.S. History course.

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**Course:** Advanced Social Studies: Ancient Greece – Myth and Reality

**Prerequisite:** World or AP World History, U.S. or AP U.S. History

**Length:** Semester-long class

**Special Note:** This satisfies 1 credit of advanced coursework from the social studies graduation requirements

Ancient Greece is a study in contradictions: they honored gods who kidnapped women, they valued the study of nature and saw truth in mathematics, they defeated the most powerful empire of the age, and they in turn were defeated by a general who loved their myths. The class will consider these contradictions and how they have influenced modern attitudes toward democracy, law, truth, and drama. Students will focus on primary sources and projects using discussion for information discovery and sharing.

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**Course:** Advanced Social Studies: The Cold War – An International History

**Prerequisite:** U.S. History, AP U.S. History, or equivalent 10<sup>th</sup> grade course

**Length:** Semester-long class

**Special Note:** This satisfies 1 credit of advanced coursework from the social studies graduation requirements

The Cold War ranged from 1945 to 1991, involving a great deal of the world. The threat of nuclear war, the orientation of society, entertainment, and politics around ideology, the use of covert political operations, and the use of outright military force pervaded this age. While the conflict centered around the United States and the Soviet Union, the course will also look at how other countries both viewed the standoff and were affected by it. Topics for this class will include the “hot wars” (Korea, Vietnam, Afghanistan), decolonization and the effect of the Cold War on the “Third World,” the Red Scare and how the Cold War affected entertainment, and the effects the Cold War had on politics and society within the US, USSR, and other countries from Latin America, Africa, the Middle East, and Asia. As

sources, the class will use primary and secondary texts, as well as excerpts from appropriate literature, film, and TV.

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**Course:** Advanced Social Studies: Economics

**Prerequisite:** U.S. History, AP U.S. History, or equivalent 10<sup>th</sup> grade course

**Length:** Semester-long class

**Special Note:** This satisfies 1 credit of advanced coursework from the social studies graduation requirements

The class is a survey of the basic terms and concepts in microeconomics and macroeconomics. The primary reading is from a formal introductory text. Supplemental reading and studies include primary sources, articles, and current issues.

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**Course:** Advanced Social Studies: Law in America

**Prerequisite:** U.S. History, AP U.S. History, or equivalent 10<sup>th</sup> grade course

**Length:** Semester-long class

**Special Note:** This satisfies 1 credit of advanced coursework from the Social Studies graduation requirements

This semester-long course will introduce students to numerous topics within the American legal system, including constitutional law, criminal law and procedure, tort law, and contracts law. Students will read challenging cases and articles in order to develop a better understanding of how the American legal system seeks to balance different interests in an effort to maximize fairness and justice. In doing so, students will be able to form their own opinions about the effectiveness of the justice system and consider possible legal reforms to help meet the justice system's goals. Students will also write a research paper and perform an oral argument during the course of the semester.

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**Course:** Advanced Social Studies: Modern Africa

**Prerequisite:** U.S. History, AP U.S. History, or equivalent 10<sup>th</sup> grade course

**Length:** Semester-long class

**Special Note:** This satisfies 1 credit of advanced coursework from the social studies graduation requirements

This course will span recent African history from the period just prior to modern colonization to the present (~1850 to 2019). Among several others, the main topics discussed will be imperialism in Africa, decolonization and independence, and the post-independence period. For each of these we will overview the history generally and then focus in on the case studies that best illustrate the impacts of the systems at play and the experiences of individuals. We will be approaching these topics from multiple perspectives and historical schools of thinking. We'll look at the ways in which African history has been impacted by assumptions and biases and the ways that historians today work to improve our understanding of these histories. Students will be using a variety of texts, videos, and other sources throughout the course, including primary sources whenever possible.

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**Course:** Advanced Social Studies: Sociology

**Prerequisite:** U.S. History, AP U.S. History, or equivalent 10<sup>th</sup> grade course

**Length:** Semester-long class

**Special Note:** This satisfies 1 credit of advanced coursework from the social studies graduation requirements

Sociology is the study of people in groups. This class investigates how the structures of society affect human behavior and interaction. The course takes a Social Issues perspective as students learn to use sociological frameworks and specific theoretical perspectives to creatively and deeply analyze the United States.

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**Course:** Advanced Social Studies: World Religions

**Prerequisite:** U.S. History, AP U.S. History, or equivalent 10<sup>th</sup> grade course

**Length:** Semester-long class

**Special Note:** This satisfies 1 credit of advanced coursework from the social studies graduation requirements

This course entails both a general study and comparison of several of the world's major religions. Major units of study will include Judaism, Christianity, Islam, Hinduism, and Buddhism. Other traditions, including those of indigenous cultures from around the world, will also be investigated. The course seeks to expose students to the core history, beliefs, tenets, and practices of these faiths, and then search for shared themes to be further explored in the comparative portion of the course. Along the way we will use various texts, videos, and special guests to gain our best possible understanding of the world's religions.

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**Course:** AP Psychology

**Prerequisite:** See 'Who Should Sign Up for an Advanced Placement Class?' and 'Expectations about Advanced Placement Classes' at the start of this guide.

**Length:** Year-long class

**Special Note:** This satisfies 2 credits of advanced coursework from the social studies graduation requirements

Psychology is the systematic, scientific study of behaviors and mental processes. In this year-long course, students will be exposed to major thinkers, famous experimental studies, key concepts, and methods related to the field of psychology. This course follows the guidelines of the College Board's Advanced Placement program and is consequently taught at an increased pace and with the heightened expectations of a college course.

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**Course:** AP United States Government & Politics

**Prerequisite:** See 'Who Should Sign Up for an Advanced Placement Class?' and 'Expectations about Advanced Placement Classes' at start of this guide.

**Length:** Semester-long class

**Special Note:** This satisfies 1 credit of advanced coursework from the social studies graduation requirements

This AP Government & Politics: United States course addresses numerous topics including the history and content of the Constitution, the details of the legislative, executive, and

judicial branches, and the interaction of all three. It also covers other subjects such as federalism, elections and campaigns, political parties, civil liberties, interest groups, and the relationship between the media and politics. This course follows the guidelines of the College Board's Advanced Placement program and is consequently taught at an increased pace and with the heightened expectations of a college course.

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## Mathematics

**Course:** Algebra I

**Prerequisite:** None

**Length:** Year-long class

This course will strongly emphasize number sense, working with fractions and decimals daily. Throughout the course, students will increase their ability to work with challenging algebraic equations and to interpret data. They will work with increasingly complex problems and applications of the mathematical ideas they are learning. Students are expected to start building a deeper understanding of the algebraic concepts and to start looking at why problems are set up the way they are, not simply memorizing a single approach to a problem. They will begin to truly see mathematics in the world around them. Different tools, such as graphing calculators and Desmos, allow for exploring mathematical ideas in a way not practical by hand. By the end of the year, students should be more comfortable with their ability to manipulate numbers and solve mathematical equations.

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**Course:** Geometry

**Prerequisite:** Algebra I

**Length:** Year-long class (also offered during Summer Sessions 1 & 2)

**Special Note:** With mentor and teacher approval, this course can be taken concurrently with Algebra II with Trigonometry.

Geometry is the oldest and most studied field of mathematics largely due to its intuitive base. It is about shapes and figures and their relationships to one another. This course builds on the topics discussed in Algebra I and explores in detail the many different geometric figures and the complexity that can be pulled out of these seemingly simple figures. The purpose of this course is to explore these different figures, make conjectures about them, and then experiment with the conjectures using inductive and deductive approaches. This course focuses on hands-on activities in the development and testing of these conjectures. These hands-on activities may make use of different types of technology, ranging from paper and pencil to the graphing calculator, GeoGebra, and Desmos. By the end of this course, students will have an understanding of geometry as a coherent system of interrelated ideas and a thorough sense of how these ideas are developed, tested, and verified. Students who complete Geometry should advance to Algebra II or Algebra II with Trigonometry, based on recommendations from their current math teacher and a discussion with their mentor.

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**Course:** Algebra II

**Prerequisite:** Geometry

**Length:** Year-long class

**Special Note:** This course is intended for students who do not plan on taking an AP Calculus course. This class cannot be taken concurrently with Geometry.

This year-long course builds on the foundation laid in Algebra I and Geometry. Students are expected to think deeply about the foundation of the subject, instead of just memorizing facts. Students will learn about the importance of functions in mathematics and their applications with real-world examples. Students will practice skills in preparation for standardized tests like the SAT and ACT and to ensure success in their future college courses. Topics in the class include:

- Relations and Functions
- Linear and Absolute Value Equations and Inequalities
- Matrices
- Quadratic Equations and Functions
- Polynomials
- Algebraic Fractions
- Logarithmic and Exponential Functions
- Conic Sections (without Transformations)
- Arithmetic and Geometric Sequences
- Counting Principles, Probability, and Statistics

It is strongly recommended that students who complete Algebra II advance to Functions & Trigonometry paired with either Finite Math A, Finite Math B, or Probability & Statistics. If a student has an additional year of high school, they may be eligible to take AP Statistics based on a teacher recommendation.

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**Course:** Algebra II with Trigonometry

**Prerequisite:** Geometry with a grade of B- or higher

**Length:** Year-long class

**Special Note:** This course is intended for students who plan on taking an AP Calculus course. If students do not have a B- or higher in their previous mathematics course, they should speak with a mathematics teacher and their mentor to decide if this is the best course for them. With mentor and teacher approval, this course can be taken concurrently with Geometry.

In this year-long course, students will learn about the importance of functions in mathematics and apply them to real-world examples. The course develops advanced algebraic skills such as systems of equations, sequences and series, probability, advanced polynomials, rational functions, complex numbers, quadratics, logarithmic and exponential functions, and conic sections. In addition, students will study trigonometric functions using the Unit Circle, triangle trigonometry, and graphs of sinusoidal functions.

Students are expected to think deeply about the foundation of the subject, instead of just memorizing facts. Technology, in the form of graphing calculators and computer graphing applications, is an integral part of the course. Students are encouraged to purchase a TI-83 or 84 calculator (plus or silver editions). Traditional paper and pencil skills are also taught

to reinforce understanding of concepts and ensure students are not dependent on their calculators. Nearly every exam will include a calculator and a non-calculator portion.

Students who complete Algebra II with Trigonometry are eligible to take Precalculus and/or AP Statistics the following year.

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**Course:** Functions & Trigonometry

**Prerequisite:** Algebra II

**Length:** Semester-long class

**Special Note:** This course is intended for students who do not plan on taking an AP mathematics course. This course is NOT recommended for students who have already taken Precalculus.

This course will focus on building students' mathematical skills. Students are expected to think deeply about the foundation of the subject, instead of just memorizing facts. This course covers topics from algebra and trigonometry at a level and emphasis appropriate for students who are preparing for mathematics courses at the college level. This is the recommended course after students complete Algebra II and is intended for students who are not pursuing AP mathematics courses. Students will practice skills required for solid scores on standardized tests like the SAT and ACT and success in their future college courses. Topics in the class include Parent Functions and Transformations, Triangle Trigonometry, The Unit Circle, Basic Trigonometric Curves, and Law of Sines and Law of Cosines. Students will need a scientific calculator.

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**Course:** Finite Mathematics

**Prerequisite:** Algebra II or Algebra II with Trigonometry

**Length:** Semester-long class

This course covers a wide variety of real-world problems that can be modeled and solved by quantitative means. In science and industry, mathematical models are the major tools for analyzing and solving problems: What is a cost-efficient route for a garbage truck? How are flights scheduled to maximize profits? How can the future value of a stock be found? How long can renewable resources last? These are only a few of the problems we will learn to solve. By doing mathematics on practical problems, students gain the tools needed to understand and use the power of mathematics in the modern world. Topics covered will include graph theory, election theory, apportionment, and finance. Students will need a scientific calculator.

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**Course:** Probability & Statistics

**Prerequisite:** Algebra II or Algebra II with Trigonometry

**Length:** Semester-long class offered in the second semester

This semester-long class will cover some of the topics addressed in AP Statistics but will not go as deep as the AP Statistics curriculum does. The class will spend approximately half of the semester working on probability and half learning about descriptive statistics. The probability section will cover basic probability, conditional probability, probability decision trees, and the many ways you use probability in everyday life. The statistics



portion of the class will concentrate on how to use statistics to describe large sets of data, interpreting statistics, and understanding and creating visual displays of data. In addition, the class will spend a good deal of time on experimental design and how one correctly and creatively designs surveys and observational studies. Students in this class may, with the recommendation of the teacher, take AP Statistics the following year.

---

**Course:** Precalculus

**Prerequisite:** Algebra II with Trigonometry with a grade of B- or higher

**Length:** Year-long class (also offered during Summer Sessions 1 & 2)

**Special note:** Teacher approval required if Algebra II with Trigonometry was not taken the year immediately prior to Precalculus

Algebra is the generalization of arithmetic, and calculus is the study of the dynamics of functions. Precalculus bridges the gap between the two, both in terms of content and approach. The course reviews topics from advanced algebra, focusing on graphing and functions. Students also study trigonometric functions, polar functions, and conics – all tools that help to better describe the world in mathematical terms. The course also includes a review of exponential and logarithmic functions. Precalculus is not a required course; students who elect this course should understand that it is demanding. Precalculus goes beyond the ability to deal successfully with equations and formulas. It requires a commitment to understanding and explaining the rationale of the topics covered.

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**Course:** AP Calculus AB

**Prerequisite:** Precalculus; see ‘Who Should Sign Up for an Advanced Placement Class?’ and ‘Expectations about Advanced Placement Classes’ at start of this guide.

**Length:** Year-long class

AP Calculus AB is a college-level course. The text used is a college-level text, and students are expected to work at a rapid pace. The curriculum followed is the curriculum outlined by the organization that administers the Advanced Placement exam in May. Technology, in the form of graphing calculators, is an integral part of the course. Students are encouraged to purchase a TI-83 or 84 calculator (plus or silver editions). Students are required to think “outside the box” in AP Calculus AB, putting many different ideas together in order to solve a problem.

The course begins with a short review of pertinent material covered in Precalculus. The first semester is used to discover how the derivative of an equation is found and how that derivative is used. There are many applications of the derivative, and the students are exposed to a variety of these situations. In the second semester, students work with integrals. Again, they are expected to use their knowledge to solve a wide range of applications.

The course is a rigorous one, but it is one that, with effort, can be successfully completed. It prepares students for a college-level calculus class, and in many instances, a student can place out of a college class with a good score on the AP exam in May.

The class’s major topics include:

- Limits and their properties

- Differential Calculus
  - Applications of Derivatives
  - Integral Calculus
  - Applications of Integration
  - Differential Equations
- 

**Course:** AP Calculus BC

**Prerequisite:** Any student having completed AP Calculus AB and wanting more advanced mathematics may take this course.

**Length:** Year-long class

This course will begin with a review of AP Calculus AB material. This course will then cover integration techniques (including partial fractions and integration by parts), improper integrals, Euler's method, volume of solids of revolution, arc length, area of surfaces of revolution, review of sequences and series, tests for convergence, Taylor & Maclaurin polynomials & approximations, power series, Taylor & Maclaurin series, review of parametric equations & polar coordinates, arc length in parametric & polar coordinates, review of polar graphs, area in polar coordinates, logistic functions, review of trigonometric functions & identities, and solving integrals using trigonometric substitutions. This course will also cover in-depth examples and real-world applications of said material. Students will also explore an introduction to additional topics in mathematics including, but not limited to, game theory, differential equations, and linear algebra. Students should take this course if they are interested in more mathematics after AP Calculus AB and if they are interested in exploring advanced mathematics in preparation for a technical or math-heavy degree at the college level.

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**Course:** Multivariate Calculus & Differential Equations

**Prerequisite:** AP Calculus BC

**Length:** Year-long class

Multivariate Calculus and Differential Equations will cover a number of other topics beyond the AP Calculus BC curriculum, including calculating volumes by using shells, surfaces of revolution, and centers of mass and centroids. The course also explores topics that are studied in a typical college-level third semester calculus course, including vectors and vector valued functions, differentiation in several variables, optimization in several variables, multiple integration, and line and surface integrals. The course concludes with an introduction to differential equations. Topics may include solving exact first-order equations, solving second-order homogeneous and non-homogeneous linear equation, and exploring applications to various scientific fields.

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**Course:** AP Statistics

**Prerequisite:** Algebra II with Trigonometry; others with teacher and mentor approval; see 'Who Should Sign Up for an Advanced Placement Class?' and 'Expectations about Advanced Placement Classes' at start of this guide.

**Length:** Year-long class

The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The students use computer statistics programs as well as a graphing calculator in this course; technology is an important part of mathematics at this level. The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes:

1. Exploring data: describing patterns and departures from patterns
2. Sampling and experimentation: planning and conducting a study
3. Anticipating patterns: exploring random phenomena using probability and simulation
4. Statistical inference: estimating population parameters and testing hypotheses

This course is a rigorous one, but it is one that can be completed successfully with work.

## Science

**Course:** Biology

**Prerequisite:** None

**Length:** Year-long class

**Special Note:** This is the standard 9<sup>th</sup> grade science course.

This course serves as an introduction to biology. Students learn about cellular and molecular biology, genetics, evolution, ecology, and some of the systems of the human body. In addition to learning factual information in each of these areas, students are expected to explore the interactions and interrelationships of the different fields. This is accomplished through frequent experiments, paper-and-pencil activities, and in-class discussions. The course emphasizes biology as a dynamic and growing field of study by including in discussions and activities areas where knowledge is changing and expanding. It is important for students to understand that biology is not simply a finished subject found only in a textbook.

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**Course:** Anatomy & Physiology

**Prerequisite:** Biology

**Length:** Year-long class

This course explores the anatomy and physiology of the human body. Students study the major structures within the body on both a macro- and micro-scale, learning to identify those major structures using appropriate vocabulary. Students build an understanding of how the various parts are arranged and interconnected. Students also study how the different systems within the body work, in addition to learning what signals are used and what pathways are followed. While studying the structures and functions of the healthy body, students also learn what happens when there is a malfunction or disease. By the end of the course, it is expected that students have an increased appreciation for and be able to discuss the structures and functions of the human body in an informed manner.

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**Course:** Environmental Science: Human Impact

**Prerequisite:** Biology, Chemistry, and Algebra II (can be taken concurrently)

**Length:** One-semester class offered in the fall semester; may be taken alone or continued in the spring semester with the co-requisite course Environmental Studies: Literature & Science of Conservation.

Environmental Science: Human Impact is an interdisciplinary science course that builds on foundational knowledge of biology and chemistry. Students will be able to evaluate the complexity of environmental problems our world is facing today through a scientific lens, preparing them to make informed, sustainable decisions from scientific and societal information. The course will focus broadly on demographics, agriculture, solid waste management, energy resources, and climate change. Students will become versed in systems-thinking and gain an understanding of the interconnectedness of our world. Students will also study interactions at scale—from a single individual to 7.6 billion people—and at varying levels—from local to global. Much of the learning in this course will occur through frequent experiments, computer simulations, and outdoor field work. Outdoor field work on campus and at off-site locations will occur weekly and be major

components of the course. Students do not need to have prior outdoor knowledge or skills; however, they should be ready to participate under a variety of different weather conditions. Remember, there is no such thing as bad weather, only bad gear!

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**Course:** Environmental Studies: Literature & Science of Conservation

**Prerequisite:** Biology, Chemistry, and Algebra II, which can be taken concurrently (in addition to Great Books or Equivalent 10th Grade Course)

**Length:** Semester-long class offered in the second semester; may be taken alone or as a continuation of the first semester of Environmental Science: Human Impact

**Special Note:** This course will meet for two periods per day during the second semester. Students enrolled will earn a credit of Advanced English and a science elective credit. Therefore, this is a student's English class and science class for one semester. You must register for both parts of the course and should anticipate the workload reflecting the fact that this is the equivalent of two courses in your schedule.

*“From the beginning American writing has concerned itself with the story of people and the natural world. ‘Environmental writing’ takes as its subject the collision between people and the rest of the world, and asks searching questions: Is it necessary? What are its effects? Might there be a better way?” — Bill McKibben*

*“Many people have commented with surprise on the fact that a work of science should have a large popular sale. But this notion that “science” is something apart from everyday life, is one that I should like to challenge. The materials of science are the materials of life itself. Science is part of the reality of living; it is the what, the how, and the why of everything in our experience. It is impossible to understand man without understanding his environment.” —Rachel Carson*

This co-requisite course will explore the literature and science of conservation. Students will investigate the complexity of environmental issues of our world by reading and discussing the works of American environmental writing from the 19th century to contemporary times and through frequent experiments and field exercises. Students will learn that the natural world and the human-built world are not stand-alone entities, but rather one interconnected system. Students will also develop an appreciation for the role environmental literature and science have played in shaping our nation's environmental and ecological conscience. While we will be reading some awesome literature, we will also be getting outside often. Outdoor field work on campus and at off-site locations will be occur weekly and be major components of the course. Students do not need to have prior outdoor knowledge or skills; however, they should be ready to participate under a variety of different weather conditions. Remember, there is no such thing as bad weather, only bad gear!

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**Course:** Zoology: Invertebrates

**Prerequisite:** Biology

**Length:** Semester-long class offered in the first semester

**Special Note:** Students that enroll in this course should be comfortable with dissection and working in the laboratory setting.

Zoology is a laboratory science emphasizing the process of scientific investigation through the study of living things. The course is specifically designed to study the major phyla of the invertebrate animals: Porifera, Cnidaria, Platyhelminthes, Nematoda, Mollusca, Annelida, Arthropoda, and Echinodermata. Invertebrates account for 95% of the animal diversity on our planet. We will explore this amazing degree of diversity through lecture, animal dissections, behavioral labs with living organisms, and guest speakers/field trip. The overall goal of this course is to foster a deeper appreciation for non-vertebrate organisms and to encourage a hands-on approach to science.

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**Course:** Zoology: Vertebrates

**Prerequisite:** Biology

**Length:** Semester-long class offered in the second semester

**Special Note:** Students that enroll in this course should be comfortable with dissection and working in the laboratory setting.

Zoology is a laboratory science emphasizing the process of scientific investigation through the study of living things. The course is specifically designed to study Phylum Chordata and the major classes of vertebrate organisms. We will use the overarching themes of evolution, animal design, and comparative body systems to explore the differences between vertebrate organisms. Lecture, animal dissection, outdoor field days, guest speakers, and field trips will be used. Students will also be required to study and learn local Indiana species identification. The overall goal of this course is to foster a deeper appreciation of vertebrate organisms and the evolution of their specific adaptations.

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**Course:** AP Biology

**Prerequisite:** Biology and Chemistry; see ‘Who Should Sign Up for an Advanced Placement Class?’ and ‘Expectations about Advanced Placement Classes’ at start of this guide.

**Length:** Year-long class

**Special Note:** While not required, taking the Anatomy & Physiology or Zoology classes prior to AP Biology is encouraged.

This course is a college-level course designed to challenge students to extend their knowledge of biological theory and processes. Students will increase their factual knowledge of biology. The course will provide students an understanding of the larger concepts and underlying themes of biology, and in addition present biology as a dynamic process. The themes covered will include evolution, energy transfer, continuity and change, regulation, interdependence in nature, structure vs. function, science as a process, and science in technology and society. In general, the course content will follow that set by the College Board for an AP Biology course.

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**Course:** Chemistry

**Prerequisite:** Biology and Algebra I

**Length:** Year-long class

**Special Note:** This is the standard 10<sup>th</sup> grade science course

This is a first-year, laboratory-based course designed to give students an opportunity to explore a variety of topics in general chemistry. Chemistry is the study of matter, its structure, properties, and composition, and the changes that matter undergoes. In this course, students will study the fundamental principles of chemistry, which allows them to study all the major subdivisions of chemistry in greater depth in future courses.

The laboratory portion of this course reinforces concepts and processes discussed in class and provides a hands-on experience that directly connects with the lecture/textbook material. During the lab, students will use LabPro units attached to their computers to collect and analyze various types of numerical data. Students will usually work in pairs during the lab.

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**Course:** AP Chemistry

**Prerequisite:** Chemistry; see ‘Who Should Sign Up for an Advanced Placement Class?’ and ‘Expectations about Advanced Placement Classes’ at start of this guide.

**Length:** Year-long class

This course is equivalent to a first-year college general Chemistry course. It will build upon the chemistry principles studied in a first-year Chemistry course and explore new topics. The following topics will be covered: measurement, atoms, chemical bonding, chemical reactions, states of matter, solutions, equilibrium, acids/bases, thermodynamics, reaction rates (kinetics), electrochemistry, organic chemistry, and coordination chemistry. There will be greater emphasis on the mathematical formulations associated with these chemical principles than in a first-year Chemistry course.

Students may work independently or in pairs in the laboratory, and the laboratory activities will reinforce concepts and processes discussed in class. The nature and variety of laboratory experiments will also be more detailed than in a first-year Chemistry course. During the lab, students will use LabPro units attached to their computers to collect and analyze various types of numerical data.

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**Course:** Astronomy

**Prerequisite:** Biology and Chemistry

**Length:** Year-long class

The course offers a broad survey of modern understanding of the cosmos and how astronomers have built that understanding. It assumes no prior knowledge of astronomy or physics, but it does occasionally use basic algebra. It emphasizes process as well as facts and is a solid introduction to how science is done. Because astronomy is an observational science, the student will use computerized laboratory exercises to collect and analyze data. From ancient views of the solar system to the existence of extra-solar planets, from the birth and death of stars to black holes, from globular clusters to near and ancient galaxies,

from familiar cosmic geometries to exotic ones, the course helps students understand their place in the universe.

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**Course:** Physics

**Prerequisite:** Algebra I, Geometry, Algebra II (Algebra II can be taken concurrently)

**Length:** Year-long class

This course covers topics such as Newtonian mechanics, electricity, magnetism, energy, optics, waves, and selected topics in modern physics. Students will explore these topics both qualitatively and quantitatively through hands-on experiences and class discussion. A willingness to engage oneself in deeply scientific thought and analytical challenge makes this a rewarding course.

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**Course:** AP Physics C: Mechanics and AP Physics C: Electricity and Magnetism

**Prerequisite:** Physics; AP Calculus is a co-requisite or prerequisite; see ‘Who Should Sign Up for an Advanced Placement Class?’ and ‘Expectations about Advanced Placement Classes’ at start of this guide.

**Length:** These are two semester-long classes, offered in sequence as a year-long class.

The goal of this course is to provide an introductory college-level understanding of calculus-based mechanics, electricity, and magnetism. This will be done through student-driven discussions, problem solving, and laboratory experiments.

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## World Languages

**Course:** French 1

**Prerequisite:** None

**Length:** Year-long class

This is an introductory French language and culture course and is designed for students who have had little or no previous French study. The course includes work in the three modes of communication (interpersonal, interpretive, and presentational) as well as an introduction to French and Francophone cultures. Students will be introduced to the rules of French pronunciation and to the basic structure of the language, including present-tense regular and irregular verbs, gender of nouns and adjective agreement, the use of articles (indefinite, definite, etc.), simple comparisons, basic question forms, and the past and “near future” tenses. Topics of study will include describing people and places, school, food and restaurants, clothing, air and train travel, summer and winter sports, and the weather.

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**Course:** French 2

**Prerequisite:** French 1 or by placement

**Length:** Year-long class

French 2 is a language and culture course that is designed for students who have had one year of high school French. The program includes work in the three modes of communication (interpersonal, interpretive, and presentational) as well as a deeper overview of French and Francophone cultures. After a review of first-year content, students will be introduced to new grammatical structures, including reflexive and reciprocal verbs, direct and indirect object pronouns, the two past tenses (passé composé and imparfait), the simple future, the conditional, and relative pronouns. Topics of study will include daily routines, the arts, health and medicine, technology, banking and postal services, cooking, driving and public transportation, the city, and the country.

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**Course:** French 3

**Prerequisite:** French 2 or by placement

**Length:** Year-long class

French 3 is a language and culture course that is designed for students who have completed two years of high school French. The program includes a cultural component as well as work in the three modes of communication (interpersonal, interpretive, and presentational) with a special emphasis on reading comprehension and vocabulary acquisition. The class is conducted mostly in French. Students will review previously learned grammar structures and be introduced to more advanced structures, including the subjunctive, demonstrative pronouns, interrogative pronouns, possessive pronouns, indefinite expressions, the past conditional tense, and the past perfect tense. Topics of study will include work, travel, leisure activities, housing, technology, French history, nature, and health.

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**Course:** French 4

**Prerequisite:** French 3 or by placement

**Length:** Year-long class

French 4 is a language and culture course that is designed for students who have completed three years of high school French. The program includes a cultural component as well as work in the modes of communication (interpersonal, interpretive, and presentational), with a special emphasis on essay writing and vocabulary acquisition. Students at this level are expected to have already learned the rules of French grammar, including the formation and use of all verb tenses and the proper use of articles, pronouns, prepositions, adjectives, and adverbs. Basic structures will be reviewed as needed, but only the most complex grammatical structures will be taught formally. The course is conducted entirely in French. The main goals of this course are to expand students' vocabulary and ability to read authentic French literary and non-literary texts, refine their use of French grammar, increase their ability to write formally and speak extemporaneously on a variety of topics, and to improve their understanding of spoken French in a variety of contexts.

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**Course:** AP French Language & Culture

**Prerequisite:** French 4 or consent of instructor; see 'Who Should Sign Up for an Advanced Placement Class?' and 'Expectations about Advanced Placement Classes' at start of this guide.

**Length:** Year-long class

The AP French Language & Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The course is structured around six themes: beauty and aesthetics, contemporary life, families and communities, global challenges, personal and public identities, and science and technology. Students are expected to engage in spoken and written interpersonal communication; synthesize information from a variety of authentic print and audiovisual resources; and plan, produce, and present spoken and written presentational communications. To best facilitate the acquisition of language, the course is taught entirely in French.

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**Course:** Spanish 1

**Prerequisite:** None

**Length:** Year-long class

This is an introductory Spanish language and culture course and is designed for students who have had little or no previous Spanish study. With culture as the foundation, the students will work with the three primary modes of communication: interpretive, interpersonal, and presentational. Within these various modes, students will listen, view, and read a variety of authentic materials from the Hispanic world and will learn to decipher meaning and communicate their thoughts and opinions on a variety of topics. Students will be strongly encouraged to speak and write to communicate to other audiences within and beyond the walls of the classroom. Students will also be encouraged to seek out words and

phrases that are purposeful and interesting as a means to personalize their learning experience.

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**Course:** Spanish 2

**Prerequisite:** Spanish 1 or by placement

**Length:** Year-long class

This course is designed for students who have completed one year of Spanish instruction at the high school level or equivalent. Continuing with culture as the foundation, the students will continue their work with the three primary modes of communication: interpretive, interpersonal, and presentational. Students will continue to enrich their vocabulary and utilize it in more complex written and spoken contexts with a variety of audiences. Instruction will primarily occur in Spanish in order to help students acclimate to higher levels of language instruction and further develop their interpretive skills. A wide variety of texts and authentic resources will be utilized as springboards for discussion and interpretation. Students will also be encouraged to seek out words and phrases that are purposeful and interesting as a means to personalize their learning experience.

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**Course:** Spanish 3

**Prerequisite:** Spanish 2 or by placement

**Length:** Year-long class

This course is designed for students who have successfully completed two years of Spanish instruction at the high school level or equivalent. Utilizing multiple authentic cultural resources, the students will continue their work with the three primary modes of communication: interpretive, interpersonal, and presentational. Students will continue to enrich their vocabulary and utilize it in more complex written and spoken contexts with a variety of audiences. Instruction will primarily occur in Spanish and student production is expected to occur in the target language as well. A wide variety of texts, media, and audio/video resources will be utilized as springboards for discussion, interpretation, and analysis. Students will also be encouraged to seek out words and phrases that are purposeful and interesting as a means to personalize their learning experience as they explore the Spanish-speaking world and its wonders in more depth.

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**Course:** Spanish 4

**Prerequisite:** Spanish 3 or by placement

**Length:** Year-long class

Spanish 4 is a language and culture course that is designed for students who have successfully completed three years of high school Spanish, the equivalent, or who have placed into this level through examination. Utilizing multiple authentic cultural resources, the students will continue their work with the three primary modes of communication: interpretive, interpersonal, and presentational. This course will continue to review the basic grammatical structures and will teach the more complex structures formally. The main goals of this course are to expand students' vocabulary and to refine their skills in reading and understanding in authentic contexts. Students will read Hispanic literary and non-fiction texts, increase their formal writing, speak on a variety of topics, and improve their

understanding of spoken Spanish. In order for students to be immersed in meaningful language, this course is conducted almost exclusively in Spanish to provide authentic input.

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**Course:** AP Spanish Language & Culture

**Prerequisite:** Spanish 4 or permission of instructor; see ‘Who Should Sign Up for an Advanced Placement Class?’ and ‘Expectations about Advanced Placement Classes’ at start of this guide.

**Length:** Year-long class

The AP Spanish Language & Culture course emphasizes communication (understanding and being understood by others) by applying the interpersonal, interpretive, and presentational modes of communication in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The course is structured around six themes: beauty and aesthetics, contemporary life, families and communities, global challenges, personal and public identities, and science and technology. Students are expected to engage in spoken and written interpersonal communication; synthesize information from a variety of authentic print and audiovisual resources; and plan, produce, and present spoken and written presentational communication. To best facilitate the study of language and culture, the course is taught entirely in Spanish.

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**Course:** AP Spanish Literature & Culture

**Prerequisite:** AP Spanish Language & Culture or permission of instructor; see ‘Who Should Sign Up for an Advanced Placement Class?’ and ‘Expectations about Advanced Placement Classes’ at start of this guide.

**Length:** Year-long class

The AP Spanish Literature & Culture course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, testimonies, and essays) from Peninsular and Latin American Spanish as well as Hispanic literature of the United States. The readings span from medieval to modern times, allowing students to examine the universality of literature and make comparisons and connections through historical and contemporary cultural contexts. Students will explore the interdisciplinary connections between literary works and other artistic forms of expression such as music, painting, architecture, and film. Students will focus on mastering and applying the terminology that textual analysis of literature requires and producing the analysis and interpretation of texts in both oral and written expression of academic Spanish. All of the works from the required reading list for the AP Spanish Literature and Culture exam are read in full text form. All instruction, discussion, and writing are in Spanish in order to support the development of students’ language proficiency necessary for success in the AP Spanish Literature & Culture course and exam and beyond.

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**Course:** Academic English

**Prerequisite:** None

**Length:** Year-long class

This course is designed for students whose English language skills need refinement. The focus will be on vocabulary building, academic writing, and targeted listening and speaking exercises to enhance linguistic accuracy and support student success in an English-speaking academic environment. All students for whom English is not their native language are welcome in this class.

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## Fine & Performing Arts

**Course:** Yearbook

**Prerequisite:** None

**Length:** Semester-long class offered in the first semester

Yearbook is a semester-long course that focuses on the study and practice of journalistic writing and photojournalism. Students in this class will be responsible for the production, publication, and marketing of the school yearbook. All aspects of yearbook production will be covered including graphic design, copywriting and editing, photographic composition, interviewing techniques, ad sales, and organizational and management skills. Students may take yearbook as a year-long class and will have the opportunity to focus more on digital design during the second semester.

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**Course:** Yearbook / Digital Design

**Prerequisite:** None

**Length:** Semester-long class offered in the second semester

This course will study and practice the use of journalistic writing and photojournalism with a focus on the digital design aspect of journalism. Students will be responsible for completing *Elements*, the school yearbook. In addition, students will dive into the collection, creation, and presentation of audio, video, and photographic images. Students will learn the best practice in all three areas of digital media. Projects in this class will include the use of digital video and still cameras as well as photo editing software. The content created by this class will be published as part of the yearbook as well as on the school's website.

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**Course:** Choir

**Prerequisite:** None

**Length:** Year-long class

This course is designed for students in any grade who desire to participate in a vocal music ensemble. There is no prerequisite, although the ability to read music is strongly encouraged. Students will study music theory, learn vocal techniques and basic musicianship, sing in different languages, and study the cultural and historical context of the music. Performances will include traditional choir music as well as small groups (duets, trios, quartets). There are also accompanying opportunities in Choir for students who play guitar and piano. Students interested in this accompanying opportunity should obtain teacher approval and register for Choir.

---

**Course:** String Orchestra

**Prerequisite:** At least two years of string orchestra experience, or permission of instructor

**Length:** Year-long class

This course is designed for students in any grade who desire to participate in an instrumental music ensemble. Students must be able to play an orchestral string instrument and be able to read music. A variety of music styles will be studied and performed including

string orchestra, chamber music, solo, and symphony orchestra literature through collaboration with the Wind Ensemble class. Students at all skill levels will improve their music theory, music history, and performance skills through a differentiated curriculum.

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**Course:** Wind Ensemble

**Prerequisite:** At least two years of prior band experience, or permission of instructor

**Length:** Year-long class

This course is designed for students in any grade who desire to participate in an instrumental music ensemble. Students must be able to play a woodwind or brass instrument and be able to read music. A variety of music styles will be studied and performed, including traditional concert band music, jazz improvisation, chamber music, and symphony orchestra literature through collaboration with the String Orchestra and Percussion class. Students at all skill levels will improve their music theory, music history, and performance skills through a differentiated curriculum.

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**Course:** Advanced Musicianship (Wind Ensemble)

**Prerequisite:** Two years of high school Wind Ensemble and permission of instructor

**Length:** Year-long class

Advanced Musicianship is a semi-independent study and runs concurrently with Wind Ensemble. This course is designed specifically for students with a high level of musical knowledge, experience, and ambition. Students must be able to play a woodwind or brass instrument at an advanced level and also exhibit a high level of motivation. In addition to performance with the Wind Ensemble, students will study important solo literature and research famous composers and performers who were influential in the development or expansion of their instrument. Private lessons are strongly encouraged. Two years of prior high school wind ensemble experience and teacher recommendation is required.

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**Course:** Advanced Musicianship (Strings)

**Prerequisite:** Two years of high school String Orchestra and permission of instructor

**Length:** Year-long class

Advanced Musicianship is a semi-independent study and runs concurrent with String Orchestra. This course is designed specifically for students with a high level of musical knowledge, experience, and ambition. Students must be able to play an orchestral string instrument at an advanced level and also exhibit a high level of motivation. In addition to performance with the String Orchestra, students will study important solo literature and research famous composers and performers who were influential in the development or expansion of their instrument. Private lessons are strongly encouraged. Two years of prior high school orchestra experience and teacher recommendation are required.

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**Course:** Advanced Musicianship (Vocal)

**Prerequisite:** Two years of high school choir and permission of instructor

**Length:** Year-long class

Advanced Musicianship is a semi-independent study and runs concurrent with Choir. This

course is designed specifically for students with a high level of musical knowledge, experience, and ambition. Students must be able to sing at an advanced level and also exhibit a high level of motivation. In addition to performance with the Choir, students will study important solo literature and research famous composers and performers who were influential in the development or expansion of vocal performance. Private lessons are strongly encouraged. Two years of prior high school choir experience and teacher recommendation are required.

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**Course:** Introduction to Music Technology

**Prerequisite:** None

**Length:** Semester-long class offered in the first semester

Introduction to Music Technology is an introductory course in the principles of audio and sound recording. In addition to music theory (through basic chord progressions), students will study sound waves, acoustics and the audio spectrum, console and signal flow, equalization and compression, microphones and their placement, effects, digital audio formats, and MIDI basic concepts through collaborative and individual projects.

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**Course:** Introduction to Percussion

**Prerequisite:** None

**Length:** Semester-long class

This class is designed for students who wish to learn how to read and play music or who would like to enhance their skills as musicians. The class will gain its knowledge of music with the aid of pitched and non-pitched percussion instruments. This is truly a beginning/early intermediate class. Students who have two or more years of experience as a percussionist should enroll in Percussion Ensemble. Students who excel in Introduction to Percussion may register for Percussion Ensemble in subsequent semesters with teacher approval.

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**Course:** Percussion Ensemble

**Prerequisite:** At least two years of prior percussion experience, or permission of instructor

**Length:** Year-long class

This course is designed for students in any grade who desire to participate in an instrumental music ensemble. Students must be able to play a percussion instrument and be able to read music. A variety of music styles will be studied and performed, including traditional percussion ensemble music, jazz improvisation, chamber music, and band and orchestra literature through collaboration with the String Orchestra and Wind Ensemble classes. Students at all skill levels will improve their music theory, music history, and performance skills through a differentiated curriculum.

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**Course:** Acting for Everybody

**Prerequisite:** None (no prior theatrical knowledge or experience is needed for this introductory course)

**Length:** Semester-long class offered in the first semester



This course is an improvisation (improv) acting class, and improv is for everyone. Improv is a method that anyone can learn and practice and is considered to be the core of actor training. Improv teaches one to be present, listen, co-create, trust one's instincts, and develop teamwork. Improvisation also builds self-confidence and self-awareness. This course will be taught through improvisational games and exercises, as well as studying other improv performers. This class is not just for those wanting to be involved in theatre, but for anyone wanting to learn these skills that could benefit any career choice. At the end of the semester, there will be an improv performance.

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**Course:** Long-Form Improv

**Prerequisite:** Acting for Everyone

**Length:** Semester-long class offered in the second semester

In this course, students will dive deeper into the art of improvisation, furthering character development and plot lines while gaining confidence in their craft. Acting for Everyone is a prerequisite for this course.

---

**Course:** Film Production

**Prerequisite:** None (no prior theatrical knowledge or experience is needed for this introductory course)

**Length:** Semester-long class offered in the first semester

In this course, students will learn the art of filmmaking from start to finish. This project-driven course will allow students to write screenplays, study film history, learn about storytelling, explore cinematographic elements, hone video editing skills, employ special effects, and create short films.

---

**Course:** Theatre Production

**Prerequisite:** None

**Length:** Semester-long class offered in the second semester

This course is designed to deepen the understanding and appreciation of the theatre arts as a whole. The primary focus will be on how to produce and mount a theatrical production. Students will develop an understanding of theatre production vocabulary, as well as the many and varied roles required to deliver a quality production, from the design to the marketing that bring a story to life on stage. Students will learn set design, lighting design, sound design, and costuming and make-up skills. In lieu of a final exam, students will pitch a mock production.

---

**Course:** Introduction to Art

**Prerequisites:** None

**Length:** Semester-long class

This course is an introductory studio art course that develops skills, principles, and techniques in drawing and other 2- and 3-dimensional mediums. Students will develop an understanding of the elements of art, basic vocabulary for describing visual aspects of their work, as well as a general understanding of the roles art has played throughout history and

influences of the visual arts and culture. Demonstrations, slide lectures, group and individual critiques will be the primary tools utilized during class time to allow students to fully develop their technical understanding of 2 and 3-D space. This course will also introduce students to color theory and allow them to experiment with a variety of mediums.

---

**Course:** Introduction to Photography

**Prerequisite:** None

**Length:** Semester-long class

This class is an introduction to the fundamentals and principals of black and white photography. Throughout the semester students will learn to process their own film, how to operate a manual SLR camera, and also how to create a well composed and aesthetically pleasing image. The primary focus of the class will be on traditional black and white film, and students will be developing their own film and processing their own prints. Students will be supplied with a camera and film but will be responsible for their own developing.

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**Course:** Bookbinding I

**Prerequisite:** Introduction to Art

**Length:** Semester-long class offered in the first semester

This is a beginning course focusing on the technical aspects of building handmade books. Along with learning several traditional book formats, the students will develop an understanding of the history of the book as a fine art object. Students are instructed on the use of tools and materials. Projects are designed to encourage exploration and experimentation of the book structure.

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**Course:** Bookbinding II

**Prerequisite:** Bookbinding I; designed for juniors and seniors

**Length:** Semester-long class offered in the first semester

Students will further develop their bookbinding skills in this semester-long course. They will not only work on more complex binding techniques, and structures, but will also take a more in-depth look of the book as a form of art. Students of this course will create works that focus on the artistic and creative side of an artist book. Projects are meant to push students' understanding of the 3-D object and also give an introduction to interactive art forms.

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**Course:** Graphic Illustration

**Prerequisite:** Introduction to Art or Introduction to Photo

**Length:** Semester-long class

This class is designed to introduce students to a range of approaches in digital illustration using a tablet. Students will explore the fundamentals of design in this digital platform and gain an understanding in how to translate a visual idea into a digital sketch through the use of line and space. Specific projects will aim to teach students the basic technical

understanding of this digital platform as well as further develop their drawing skills. Each student will be provided with a tablet that they will then get to keep.

---

**Course:** Jewelry I

**Prerequisite:** Introduction to Art

**Length:** Semester-long class offered in the second semester

Discover your inner jeweler and explore the basics of metalsmithing and jewelry making while creating one-of-a-kind pieces. This class will teach the fundamentals of basic jewelry making, workshop safety, and tool identification. Explore the basic skills of metalsmithing and fabrication such as how to saw, file, texture, forge, rivet, and solder.

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**Course:** Printmaking I

**Prerequisite:** Introduction to Art

**Length:** Semester-long class offered in the first semester

This studio course is an introduction to the fundamentals of traditional printmaking. There will be an overview of a wide range of printmaking techniques, with a closer introduction to five different printmaking processes: monoprint, collagraph, linocut, woodcut, and etching/drypoint. The emphasis of the course is learning the principles of design and developing and mastering basic techniques, with attention to composition. This approach includes working from both objective reality and subjective imagination. Demonstrations and slide lectures, as well as group and individual critiques, will be utilized throughout the course.

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**Course:** Printmaking II: Alternative Processes

**Prerequisite:** Printmaking I

**Length:** Semester-long class offered in the first semester

The term *alternative process* refers to any non-traditional or non-commercial printing process. In this advanced studio art course, students will take a more in-depth look into the printmaking medium using non-traditional formats. Students will also investigate alternative methods and materials used in printmaking, as well as experiment with a variety of printing surfaces, including making their own paper.

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**Course:** Sculpture

**Prerequisite:** Introduction to Art

**Length:** Semester-long class offered in the first semester

This course is an investigation of the principles and techniques in sculpture and three-dimensional form. This course will also introduce students to structural theory and allow them to experiment with a variety of three-dimensional mediums including but not limited to paper, wood, wire, and clay. We will explore and examine the function of space, volume, mass, plane, and line. Sculptural issues will be explored through the solution of design problems.

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**Course:** Stained Glass

**Prerequisites:** Introduction to Art

**Length:** Semester-long class offered in the second semester

In this semester-long course, students will receive an introduction to the basic techniques of stained glass making, leaded and copper foil methods, as well as three-dimensional construction techniques. Students will practice drafting patterns, cutting glass, painting and staining, etching, grinding, and soldering the glass together. In addition to primarily focusing on stained glass, students will also receive instruction on glass blowing, hot glass shaping, fusing, and slumping techniques. This course will also study the history, iconography and significance contained in stained glass windows. Students will gain a new skill through the creation of their own works of glass art.

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**Course:** Textiles I

**Prerequisite:** Introduction to Art

**Length:** Semester-long class

This course introduces students to the variety of materials and processes involved in hand produced textiles. Throughout the semester students will explore the methods in which textiles are constructed, make their own textiles, and also learn the basics of how to sew. We will begin with the original fiber, spin it into yarn, weave it, knit it, crochet it, etc. There will also be a component of the course that is dedicated to learning how to use a sewing machine as well as how to hand sew fabric. Students will experiment with surface design on textiles using dyes, embroidery, and other approaches to fabric finishing.

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**Course:** Textiles II & III

**Prerequisite:** Textiles I

**Length:** Semester-long class

This course will continue to build upon many of the techniques students learned during Textiles I. Students will be encouraged to further develop and hone skills such as spinning yarn, dyeing with natural materials, weaving, knitting, as well as embroidering and sewing. Various new dyeing processes will be introduced as well as approaches to manipulating fiber and fabric.

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**Course:** Wearable Design

**Prerequisite:** Introduction to Art or Introduction to Photo

**Length:** Semester-long class

This course is geared toward students who are interested in both design and construction of a functional form. Using three keystone projects, students will begin with an original idea and then ultimately bring that initial design to life. Throughout the semester they will develop designs using Adobe Illustrator and then screen-print their design on an article of clothing, they will design and then create a pair of leather sneakers for themselves, and they also will digitally construct and then 3-D print a pair of sunglass frames.

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**Course:** Advanced Photography: Film – Antique Store Cameras

**Prerequisites:** Introduction to Photography

**Length:** Semester-long class

In this class, we will start the semester by shopping local antique stores, flea markets, camera shops, eBay and the Internet for old cameras. After the purchase we will learn how to use and fix the cameras. We will also research the cameras and learn about their history.

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**Course:** Advanced Drawing & Painting

**Prerequisite:** Introduction to Art

**Length:** Semester-long class

This course is designed for students with basic drawing skills who would like to further develop their technique. Throughout the semester, students will be building upon the basic fundamentals of drawing: line, value, form, gesture, and spatial illusions. Emphasis will be on understanding and applying these basic principles through a variety of projects and exercises using charcoal, pencil, watercolor, acrylic and oil paint.

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**Course:** Portfolio Development

**Prerequisite:** At least 3 prior studio classes; at least a B in prior art class

**Length:** Semester-long or year-long class

This course is a precursor to the senior year AP Drawing, Photography, or 3-D portfolio. It allows students to gain additional one-on-one attention with an instructor and also develop their skills beyond the introductory and advanced courses offered. Throughout the semester students will be exploring the Breadth portion of the final AP portfolio. Journaling will be a major component of the class as well. Goals for the semester are for students to develop understanding and experiment with a variety of materials, techniques, and concepts. Students also will regularly discuss and critique artwork with peers and the instructor.

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**Course:** AP Studio Art: Drawing

**Prerequisite:** Seniors only; see ‘Who Should Sign Up for an Advanced Placement Class?’ and ‘Expectations about Advanced Placement Classes’ at start of this guide

**Length:** Year-long class

Throughout the semester students will be exploring the three primary components of the AP portfolio; Quality, Concentration, and Breadth and create 24 well-executed works. Each piece should display a broad understanding and mastery of a variety of materials, techniques, and concepts and investigate art in all aspects (historical, cultural, and technical). Students will develop mastery in concept, composition; and execution of 2-D design and be able to discuss artwork through critiques with their peers and instructor.

As a survey course, the material is approached as an introduction to the discipline. The primary goals of this course are for students become versed in the visual language of art and simultaneously encourage further study in college. In preparation for the AP Exam students will be able to write essays and complete exams defining vocabulary from the

field of art history, fully identify specific works of art (title, artist, media, culture, artistic movement or period, and date), and analyze composition, symbolism and psychological function of those works of art.

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**Course:** AP Studio Art: 2-D Design

**Prerequisite:** Seniors only; see ‘Who Should Sign Up for an Advanced Placement Class?’ and ‘Expectations about Advanced Placement Classes’ at start of this guide

**Length:** Year-long class

This course is geared primarily for seniors who may possibly be thinking about a career in photography or the graphic arts. Throughout the year students will choose a selected portfolio that is appropriate for their personal goals in the art program. They will explore in depth the three primary components of the AP portfolio; Quality, Concentration, and Breadth and in April will select 24 of their strongest pieces to submit to the College Board. Students should investigate art in all aspects (historical, cultural, and technical) allowing them to make informed and critical decisions while creating their own works as well as develop mastery in concept, composition; and execution of printing and editing digitally. Throughout the semester the class will have regular critiques with their peers and instructor to guide them along the process.

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**Course:** AP Studio Art: 3-D Design

**Prerequisite:** Seniors only; see ‘Who Should Sign Up for an Advanced Placement Class?’ and ‘Expectations about Advanced Placement Classes’ at start of this guide

**Length:** Year-long class

The AP 3-D goals for students throughout the course of the year are to develop creative and systematic investigations into the formal and conceptual issues in 3-D design. By the end of the year, they should be able to demonstrate versatility with techniques, problem solving, and application of mediums within the development of their work.

Throughout the semester, students will be presented with a variety of problems, which they must solve three-dimensionally in creative and thoughtful ways. In addition to this, they will be challenged with a variety of media. Students will also investigate current and past three-dimensional artists and develop an understanding of the place of sculpture within the context of art history.

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## Physical Education & Health

**Course:** Physical Education

**Prerequisite:** None

**Length:** Semester-long class (also offered during Summer Session 1)

Students in this class will learn and develop many important skills, activities, and behaviors that promote physical fitness and wellness. University High School implements a comprehensive physical education program for all students to promote health and fitness by teaching skills in diverse physical activities and educating students in team dynamics, sportsmanship, cooperative effort, and the ability to think strategically. University High School believes it is important to develop a sound body as well as a sound mind.

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**Course:** Advanced Physical Education: Strength & Conditioning

**Prerequisite:** Physical Education or permission of instructor

**Length:** Semester-long class offered in the first semester

The course will focus on strength training and power in the weight room, with heavy emphasis on training the body for personal gain and sport-specific needs. The class will require a variety of warm-up exercises used to prepare for training, with focus on various phases of movement: acceleration, speed, and agility. The course will require the use of free weights, agility ladders, hurdles, foam rollers, harnesses, and resistance bands. This is a class for highly motivated students interested in serious advanced strength and conditioning. Participants will demonstrate various lifts and exercises that promote strength, cardiovascular exercise, and core training. Students will be given programs based on personal needs or sport specific programs.

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**Course:** Advanced Physical Education: Yoga & Mindfulness

**Prerequisite:** Physical Education or permission of instructor

**Length:** Semester-long class

Students will be introduced to self-care practices that have been proven to nourish the systems of the body, increase mental focus, and restore emotional balance. Through exploring the physical, mental, and emotional benefits of yoga and mindfulness practices, students will be encouraged to reflect on personal thought patterns and behaviors that cause stress and anxiety while learning tools that empower better emotional self-regulation. Various topics covered will aim to help students connect their inner and outer worlds and to become their own advocates for lifelong wellness.

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**Course:** Sports Management

**Prerequisite:** Physical Education or permission of instructor

**Length:** Semester-long class offered in the second semester

This course will focus on sports management, facility management, and sports operations. This course will use principles and concepts of organization, decision making strategies, communication, personnel management, management of fiscal and physical resources,

program evaluation, and legal issues in exercise related professions. This course is for students who are interested in athletics management, sports, and facility management.

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**Course:** Health

**Prerequisite:** None

**Length:** Semester-long class (also offered during Summer Session 1)

University High School believes that health awareness is very important for students. There is a direct link between our overall health and wellness and how we perform on a daily basis – in academics and extracurricular activities. This course covers material from the assigned textbook and current event issues in order to improve upon our health and to make better choices and decisions. The course covers a variety of topics – wellness, personal care and body systems, sex education, tobacco, alcohol, and drug education, and nutrition.

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## Technology Courses

**Course:** Introduction to Computer Science

**Prerequisite:** None

**Length:** Semester-long class offered in the second semester

Introduction to Computer Science is designed to introduce students to the breadth of the field of computer science through an exploration of engaging and accessible topics. Rather than focusing the entire course on learning particular software tools or programming languages, the course is designed to focus the conceptual ideas of computing and help students understand why certain tools or languages might be utilized to solve particular problems. The goal of this class is to develop in students the computational thinking practices of algorithm development, problem solving, and programming within the context of problems that are relevant to the lives of today's students. Students will also be introduced to topics such as interface design, limits of computers, and societal and ethical issues.

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**Course:** IT Concepts: Networks, macOS, Hardware & Logic

**Prerequisite:** None

**Length:** Semester-long class offered in the first semester

This course will increase students' knowledge and awareness of the technology they use every day. Students will learn about basic networking, macOS basics and troubleshooting, and computer hardware, and they will be introduced to logical structures, laying a foundation for programming. This course will also discuss current and emerging technology topics, breakthroughs, and advances. This course is meant to be introductory in scope and provides information beneficial to anyone using technology on a daily basis.

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**Course:** IT Help Support

**Prerequisite:** IT Concepts or Apple Help Desk

**Length:** Semester-long class

**Special Note:** This class counts as one-half credit.

Students in IT Help Support help the IT department by addressing problems that arise and by providing training to students and staff as necessary. One of the objectives is to give students insight into the life of an IT professional. It is designed to be self-directed with faculty in a supervisory role. As the workload for IT Help Support ebbs and flows, students will have down time to be used as a study hall. Therefore, this course is a 0.5 credit course. This course is offered both semesters and may be taken more than once.

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**Course:** 3-D Modeling & Animation

**Prerequisite:** None

**Length:** Semester-long class

3-D Modeling & Animation will introduce students to a vast array of the industry standard techniques used to create digital media in the art and science industries today. Topics covered in this course are modeling, sculpting, texturing, rigging, kinematics/inverse

kinematics, animation, camera/lighting setup, and rendering. Students will learn a variety of modeling techniques during this course. Some of them include assembly modeling, freeform modeling, box modeling, environment modeling, and character modeling. The goal of this course is to develop the technical skills needed to create digital media to express one's ideas. Students will create a short animated film at the end.

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**Course:** AP Computer Science A

**Prerequisite:** Algebra II; see 'Who Should Sign Up for an Advanced Placement Class?' and 'Expectations about Advanced Placement Classes' at start of this guide.

**Length:** Year-long class

**Special Note:** Basic computer proficiency and literacy are needed.

AP Computer Science A is an introductory course in computer science. Because the development of computer programs to solve problems is a skill fundamental to the study of computer science, a large part of the course is built around the development of computer programs or parts of programs that correctly solve a given problem. A major objective of the class will be for students to be able to code fluently in an object-oriented paradigm using the programming language Java.

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## Other Courses

**Course:** Accounting

**Prerequisite:** None

**Length:** Semester-long class offered in the first semester

Accounting is the language of business. This course is an interesting and fun introductory look at the world of accounting. We will learn fundamental accounting concepts including analyzing, interpreting, and recording business transactions, commonly known as bookkeeping. We will also learn to prepare and analyze financial statements, bank reconciliations, and payroll transactions. There will also be some basic personal finance topics covered, including check-writing, credit, and budgeting. By the end of the course, the student should have some idea if they have any interest in possibly pursuing accounting and should have gained some knowledge to help them with their personal finances.

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**Course:** Personal Finance

**Prerequisite:** None

**Length:** Semester-long class offered in the first semester

Would you like to know how to create a personal budget? Would you like to know what a credit score is and what affects your credit score? Would you like to know how credit and debit cards work? Should you buy or lease a car? Should you rent or buy a house? What do all the items on your auto insurance page mean? What is the purpose of the third fork to the left of your plate at dinner?

If any of these questions interest you or you would like to know more about personal finance, this class is probably for you. This is open to anyone, although it might be more beneficial to juniors and seniors.

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**Course:** Leadership Through Service

**Prerequisite:** For sophomores, juniors, and seniors; freshmen need instructor approval

**Length:** Semester-long class offered in the first semester

This is a semester-long class designed for students who want to explore their community, develop leadership skills, and understand the role of service. The class will use a seminar format and include a blend of academic study and service learning. The teacher of the class will primarily act as facilitator; the class in large part will be taught by the students themselves. Classes will have a heavy emphasis on participation. Discussion and hands-on activities will be an important part of each class. In addition, the class will invite leaders in the community to share their stories with the students. A primary goal of the class is for students to learn how to become an effective leader in the University High School community and outside of school. In the fall semester, students will learn how to lead a group of peers. This may be in developing a service project in collaboration with a community partner as a part of Year of Service or developing a service project/club that does not operate in conjunction with the Year of Service but occurs during the fall semester.

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**Course:** Survey of World Literature & Film

**Prerequisite:** None

**Length:** Semester-long class

Literature and film are celebrated, studied, and enjoyed in all cultures around the world. In this course, students will explore and engage in the reading and study of a variety of texts (novels and short stories), films, and musical selections representing all corners of the globe. Students will analyze and explore how the issues of colonization, gender roles, familial relationships, education, and genocide shape and affect cultures through the study of varied literary and cinematic works. While gaining insight into new cultures and their contributions to film and literature, students will also refine and sharpen their writing and analysis skills while gaining a deeper multicultural awareness. Some countries of study will include: Sudan, Nigeria, South Africa, Kenya, Rwanda, Laos, Vietnam, Saudi Arabia, and Iran.

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**Course:** Research Scholars

**Prerequisite:** Outstanding performance in a particular academic discipline and approval of the faculty of a given department

**Length:** Usually semester-long, with an option for year-long

**Special Note:** Open to senior students

Students who are accepted for this program will spend considerable time and effort to develop, research, and write an extensive thesis; they will also give an oral presentation of findings. Students will develop the initial idea for the project in the spring of their junior year, work on it over the summer, and continue the work through the first semester of their senior year. They will earn one credit upon its successful completion. Participation in this program will give a student significant experience in managing a complex independent research project, as well as the satisfaction of pursuing a topic of one's own choosing. It will give a student considerable training for college honors/thesis programs, and it will enhance applications for college admission.

A junior student who is interested in pursuing this program for his or her senior year should speak to the Dean of Academic Affairs for more information.

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## January Term 2020 Course Offerings

**Course:** The 1990s

**Instructors:** Mike Spiegel and Franklin Oliver

**Approximate Cost:** Under \$100

This class will cover the decade or so of Americana between the fall of the Berlin Wall and 9/11, focusing on the historical and the cultural, but particularly the relationship between them. Some of the historical topics we cover may include everything from the Iraq War and the Clinton Scandal to the OJ Simpson trial and Y2K. Culturally, we may cover fashion, music, television, film, literature, and others.

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**Course:** Art Inspired by Math

**Instructors:** Kathleen Armato and Jamie Owens

**Cost:** \$200

In this class, we will take mathematical concepts and turn them into art projects. There are obvious mathematical concepts, such as types of symmetry and ratio in perspective drawing, but this class will go beyond the obvious and ask you to do things like:

- Design artwork based on the famous Pythagorean Theorem
- Study fractals and then create a work of art incorporating fractals
- Use a mathematical principle to create similar shapes
- Study the spiral of square roots and then incorporate the concept into a piece of art
- Study the mathematics of three-dimensional solids and create three-dimensional art

Art can inspire math, and math can inspire art. Through searching for a visual way to represent a mathematical concept, mathematical understanding is deepened. And understanding math can lead to innovation in art. If you enjoy both math and art, this is the class for you!

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**Course:** The Art of Cake Decorating & More

**Instructors:** Meredith Hogan and Jannie Kim

**Cost:** \$500

This class will cover the basics of baking cakes, cookies, cupcakes, and making cake pops. Students will investigate various recipes, textures, densities, and flavor profiles. This class will also discuss how to decorate cakes, cookies, cupcakes, and cake pops. Students will learn how to make a variety of frostings, including royal icing, buttercream (American, Italian, French, Swiss), ganache, cream cheese, whipped cream, glazed, gum paste (flower paste), and fondant (rolled and poured). They will learn decoration techniques and how to work with a variety of tools to create decorations such as flowers, patterns, or other unique designs. By the end of this course, students will be able to design, bake, and decorate cakes, cookies, cupcakes, and cake pops.

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**Course:** The Art of Protest

**Instructors:** Anna Seldner and Meredith VanRooy

**Cost:** \$350

In this class, we will explore how people from across the world and in a variety of historical contexts have fought against oppression, injustice, inequality, and violence. We will learn how people have reacted, as well as what they have created, as a result of resistance against oppressive governments, policies, and cultural norms. We will focus on some of the art, music, literature, and social media movements that have been created as a vehicle for protest. One area of focus will be on Latin American artists and songwriters from a variety of Hispanic countries. There is a planned overnight trip to Chicago to visit the National Museum of Mexican Art that will provide students the opportunity to see some works of art that are rooted in protest.

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**Course:** Doing Science: Biochemistry & Microbiology

**Instructors:** Kristin Chun

**Cost:** \$200 – \$400

This class will focus on the aspects of science that courses offered during the regular school year don't have time to explore. We'll investigate how science and technology influence society and how they're portrayed in popular culture. Students will also learn about the scientific process by learning basic microbiology, chemistry, and biochemical techniques and then using these to design and conduct their own experiments. Because yeast are non-pathogenic, simple to culture, and reproduce rapidly, they're an ideal organism for students to safely use for experiments they will design and conduct. To involve students fully in the process, they will be responsible for preparing the reagents for their experiments, including making solutions, growth media, and some of the equipment. Students will be allowed to make their own mistakes, but they'll have the opportunity to discover them and repeat or revise their process to improve. They will begin with a series of experiments that will guide them through doing genetic crosses with yeast mutants. They will then learn how to amplify DNA with PCR (polymerase chain reaction) to make new mutants, either using traditional genetic methods or using CRISPR. With these basic techniques in hand, students will then research questions they can address with these or similar techniques. For example, a student could test how sensitive a PCR assay would be for detecting a contaminating microbe. Our studies will include reading articles, books or excerpts, and essays; watching relevant films, television programs, and talks/lectures; writing essays and reports; and keeping a laboratory notebook. This class is open to all students – you just need an interest in science!

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**Course:** Hollywood, Then and Now

**Instructors:** Jake Thurman and Callie Hartz

**Cost:** ~\$1,200 – \$1,500

This course will be part film history and part film production. It will compare and contrast Hollywood's "Golden Age" of the studio system (roughly, the 1920s up to '50s) with the era spanning from the birth of the modern blockbuster to the present (~1975 to 2020). We will be comparing and contrasting these eras in terms of the business itself, the types of films being produced, the cultural and social impacts of film on American society, and the ways in which the art and business of film illustrate larger ideas about how art, politics,

economics, and society all coexist. Students will be exposed to films from these various eras, and the comparison will extend both to the ways in which films were conceived/produced and to the themes and content of the films themselves. Additionally, students will be given a deeper insight into what happens on a film set and the various roles and processes that are essential to filmmaking. During the final week of the course we will travel to Los Angeles and explore Hollywood ourselves. Highlights of the trip will include guided tours of major studios, exploration of historic sites, speaking with people working in the film industry today, and (hopefully) the brand-new Academy Museum of Motion Pictures that is set to open later this year.

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**Course:** Literature of the American Landscape

**Instructors:** Alicia LaMagdeleine and Nancy Webster

**Cost:** \$2,000 – \$2,500

*“We travel, some of us forever, to seek other states, other lives, other souls.”*

– Anaïs Nin

America is a pretty expansive place. Under the guise of Manifest Destiny, Americans have sought to cover it, conquer it, claim it as our own. For many Americans, the lure of what lay over the next ridge, in the next town, passed the next horizon, fueled trips that crisscrossed the States in intimate ways. From Lewis and Clark, to Steinbeck, to Kerouac and Didion, American writers have chronicled their trips across this country. The wanderlust of exploration and escapism pushed them out across the land and broadened many of their definitions of self, country and home.

This class will focus on the writing of several American travelers and the vast geographical and cultural differences around the country. The first two weeks will be spent in discussion and study of various books, poems, essays and other works that encapsulate different regions of the country. The final week will be spent traveling America from the ground-level aboard Amtrak trains. Class will continue in the lounge car as we take in the wide-open spaces of Big Sky country, majesty of the Cascade Mountains, and the awe of the red-rock Utah desert. The ever-changing American landscape will be our teacher as we chart our own journey across this country.

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**Course:** Modern France

**Instructors:** Shannon Swann and Christopher Hindsley

**Cost:** \$3,500

In this course, we will focus on understanding the modern era in France in its many facets, from the founding of the 3<sup>rd</sup> Republic in 1870 to the Gilets Jaunes (Yellow Vest) movement of today. We will learn about the development of France into a modern society, with a focus on the arts (music, art, fashion, and literature), technology, politics, economics, and social change. We will also learn how one of the most beautiful regions of France, Alsace, became a rallying point for generations of French people and why it remains so important today. Of course, we will also do plenty of role-playing to prepare for using our French skills in cafés, hotels, shops, and restaurants. Following our two weeks in the classroom, we will travel to France, where we will discover Paris, visit sites related to the world wars and other notable 20<sup>th</sup> century events, travel by high-speed train to Strasbourg, the capital

of Alsace, and experience for ourselves what makes today's France such a complex and fascinating society.

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**Course:** National Parks: History & Contemporary Issues

**Instructors:** Chris Bradley and Jamie MacDougall

**Cost:** ~\$1,500

This class will explore many of the topics that surround the national parks of the United States, focusing on the history of the parks and contemporary issues that deal with the parks. Among the issues we will examine are the use of the land in the parks, the social and economic effects on the people who live near the parks, and the effect of tourism in the parks. We will gather our knowledge from many sources, including books, films, lectures, discussions, internet sources, and guest speakers. Additionally, we will have several outdoor activities that will put us in the mindset to consider some of the issues raised. The biggest of these activities is a multi-day trip to Yosemite National Park. The course will include a good deal of writing through short response exercises and one longer paper.

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**Course:** Oceanic Studies

**Instructors:** Carolyn Bradley and Stacey Summitt-Mann

**Cost:** ~\$3,600

Oceanic Studies is an interdisciplinary science course that studies the world's oceans as a hyper-complex system. We will learn about the various ecosystems within the oceans, with a specific focus toward coral reef ecology. We will also study the physical and chemical composition of the ocean, examine currents as a major driving force of global events, and explore the effects of climate change. In addition to classroom instruction, the course will include working toward certification for SCUBA Open Water certification. From readings to classroom to swimming pool to a living coral reef, the class will be both academically and physically demanding.

In the sixth running of University High School's Oceanic Studies J-Term course, we will conclude the class with a week-long trip to the nation of Belize. The coast of Belize hosts the largest barrier reef in the western hemisphere and second largest reef on the planet. Students will complete their final open water dives, snorkel, and work with a local field station to further enrich their study of coral reef ecology.

Potential students must be able to swim 200 yards without stopping, be physically capable of certifying in open water SCUBA (claustrophobia or chronic asthma may be medically disqualifying), and be able to travel easily (very small planes and short hull ocean watercraft imply easy motion sickness susceptibility and could make this trip between challenging and miserable). Students must also be able to acquire an international passport and visa (if applicable) clearing them to travel to Belize on or by the dates posted.

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**Course:** Relationships 101: Friends, Family, and Dating  
**Instructors:** Tom FitzGibbon and Jill Woerner  
**Approximate Cost:** Under \$100

This class will investigate the joys, challenges, heartaches, controversies, and popular culture portrayals of relationships with family members, friends, and romantic partners. It will enable students to have numerous opportunities to think, write, and talk about their own experiences and consider how they can try to make them as positive and rewarding as possible in the future. We will spend approximately one week each focusing on family, friends, and dating and will read books and articles and watch films and television shows relating to each type of relationship, as we discuss how accurately those forms of media portray how we all interact with each other and how those portrayals might impact our own expectations for relationships. We will talk about challenging topics such as divorce, illness, grief, betrayal, and abuse as well as much more uplifting topics such as the process of making friends, dating as a teenager and as an adult, falling in love, being a child, and figuring out how to be a parent. We will also look at legal and controversial questions such as those relating to gay marriage, polygamy, child custody, and relationship-related crimes.

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**Course:** Robotics  
**Instructors:** Brandon Hogan and Peter LaLiberte  
**Cost:** \$100 – \$500

This class will focus on understanding of different disciplines with respect to the concepts associated with robotics. The course will be run in parallel with the FIRST robotics season, but students do not have to participate in the FIRST robotics competition to participate in this J-Term course. Students will get exposure to the areas of mechanical engineering, computer programming, wiring of electrical systems, business management, and machine learning/artificial intelligence as we progress through the course. The students will also be designing and fabricating their own parts for these robots throughout the month. By the end of the course the students will have built portions of a large-scale robot and/or a full smaller-scale robot that will be able to be used in robotics competitions later on during the semester.

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**Course:** Salt, Fat, Acid, Heat: The Science of Cooking  
**Instructors:** Erica Posthuma and Ellyn Walerstein  
**Cost:** \$500

Learn the science behind cooking and master the use of the four elements: salt, fat, acid, and heat. In this class you will learn basic scientific principles of food chemistry. The class will be structured around the four components of cooking, and students will learn how to manipulate and leverage these four elements in order to produce well-balanced and delicious food. Students will be expected to sample the dishes made in class. Students will be assessed in a variety of ways including quizzes, writings, projects, and the creation of their own cookbook. By explaining the hows and whys of good cooking, *Salt, Fat, Acid, Heat* will teach and inspire cooks how to confidently make better decisions in the kitchen and cook delicious meals. (Class may include some day trips.)

Required Text: Salt Fat Acid Heat: Mastering the Elements of Good Cooking by Samin Nosrat.

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**Course:** Soccer: The World's Most Beautiful Game

**Instructors:** Chris Morrison and Wes Priest

**Approximate Cost:** \$2,750 – \$3,000

This class will dissect what Pele once called “the world’s most beautiful game” — soccer. Soccer is so much more than just the world’s most popular sport. Wars have started and wars have temporarily stopped because of a match. Soccer is woven into the fabric of life in many countries, and the mood of a nation can change based on the outcome of a soccer match. The class will discover the origins of soccer, how it has changed over the years, and where it is headed. We will learn why billions of people around the globe appreciate the innocence of this simple game, as well as why they are sometimes disgusted with what has happened to the world governing body, FIFA. The class will learn about the MLS, the Premier League, the Bundesliga, France Ligue 1, Serie A, etc. — the similarities and the differences, and how a nation’s playing style is often a reflection of its culture. We will look at the analytics and the incredible money that shapes the modern game. The history of soccer in Indiana is also a rich one, and we will explore its past, present, and future. Assignments will include a number of reading assignments as well as written responses. The class will culminate with a trip to London to visit a variety of Premier League training sites and a match or two.

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**Course:** Student Internships

**Instructor:** Lade Akande

**Cost:** Variable (student needs to transport self and have appropriate clothing)

This offering is available to a junior or senior student who has completed an application to the program that has been accepted by the Academic Affairs Committee and the course instructor. Students should have a passion for or interest in learning more about a particular career, business, or organization. Students spend each day of January Term off campus, working with an individual or an organization.

Students are responsible for making their own arrangements, but they will receive the guidance and support of the director. Students submit a daily electronic journal entry at the end of each day. In addition, each student will articulate his or her personal experience and evaluate his or her work during the internship through a longer written piece and an oral presentation to the school.

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**Course:** Urban Legends: A Study of the Origin and Purpose of Creepy Indiana Urban Legends

**Instructors:** Brett Kriebel and Maggy Dean

**Cost:** ~\$100

What is an urban legend? Indiana has more than its fair share. Devil’s Road in Dubois County, the Crosley Monster of Jennings County... and many more. Where do these types of stories come from? Why do they often last for generations? What was their original

purpose? Are they a way for us to seek security in an uncertain world, a way to explain the unexplainable, do they affect our life choices? What common themes do they share? This class will first explore the history of myths and stories in general beginning with ancient Greece and then Indiana. Students will be given the opportunity to research and report on legends from individual cultures they are particularly curious about or interested in, then determine their relationship to urban legends of today. The class will include day trips to nearby sites.

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**Course:** Weaving (Weave No Child Behind)

**Instructors:** Tasha Barger and Luke Crawley

**Cost:** \$100 – \$300

Get ready for an unbeweavable experience! Throughout this J-Term course students will be given the opportunity to experiment with a variety of weaving processes. From creating a textile on a large loom to constructing a backpack using basket-making techniques and even creating a piece of jewelry using metal wire, students will gain a broad understanding of how weaving can be used with a variety of mediums. A portion of the course will be dedicated to the sourcing and prepping traditional materials for weaving such as wool, cotton, and alpaca. Students will dye their fiber using natural dyes as well as synthetic dyes, creating a unique color palette for their individual projects.

In addition to using traditional fiber, students will also experiment with reclaimed and unconventional materials such as recycled plastic filament, wire, reed, and even vintage textiles. Traditional basket-weaving and contemporary sculptural techniques will also be taught, allowing students to apply the weaving process to a three-dimensional form. This will primarily be a class in which students create original art using the processes taught in class. It will culminate with a final project, allowing students to construct a finished sculptural work of their own invention using the weaving techniques learned. As the class begins each day, you will be able to weave all your troubles behind!

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**Course:** Zero to Hero: Guitar for Absolute Beginners

**Instructors:** Daniel Knox

**Cost:** \$100 or less (for students with a guitar); \$300 or less (for students who need to purchase a guitar)

This course is intended for students with absolutely zero guitar experience but 100% interest. Students with previous experience playing the guitar should not enroll in this course. Again, this is a total beginner course. It will cover the basics of playing. Students enrolled in this course will receive an acoustic guitar. They will learn the basics of guitar playing, such as chords, scales, and strum patterns, as well as learn basic maintenance such as tuning and restringing. At the end of the course, students will be able to teach themselves to play any song! We will also survey important guitarists through history and potentially travel to see a concert or guitar factory.

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