

Signature School

# Program of Studies

2011-2012

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# Rationale

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This document serves three purposes. First, as a public charter school, Signature School is directly accountable to Indiana taxpayers for meeting the educational goals laid out in our charter. To that end, our Program of Studies is available for public scrutiny on the internet and in hard-copy form to anyone who asks for it. Second, these pages are a working compendium of the policies, guidelines, course sequences, and diploma requirements put together as a reference for faculty, staff, and parents. Third, and most importantly, students will use this document to help them plan and meet their educational goals.

Every policy, course sequence, and procedure outlined in this Program of Studies is predicated on Signature School's mission:

***The mission of the Signature School is to meet the needs of self-motivated learners in a progressive environment driven by global concerns. We emphasize rigor and excellence in academics, the arts, integrated technologies, and community service.***

In order to fulfill this mission, we have designed curricular and extra-curricular offerings that provide intellectually rich experiences culminating in widely recognized academic credentials for every student. Some students will work toward an International Baccalaureate (IB) Diploma; some will amass an impressive record of Advanced Placement (AP) exam scores and IB certificates; all will strive to earn the Indiana Academic Honors diploma.

Offering serious academic opportunities to high school students of Southwestern Indiana is an extraordinary and rewarding task. All of our faculty and staff have received specialized training from the International Baccalaureate Organization or from the College Board for Advanced Placement, and in many cases from both. We work to stay fully accredited by both organizations so that we may offer students what most leaders in education consider the best high school curricula in the country.

## Curriculum Overview

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In keeping with our promise to prepare students to thrive in an environment increasingly driven by global concerns, all Signature students take Multicultural America (a one-semester course), AP World History, and at least one year of Global Studies taught as IB European History SL (one year), IB European History HL (two years), or IB Environmental Systems and Societies SL (two years for IB full-Diploma students only). Furthermore, Signature students take four years of a world language unless they have been admitted to the Fine and Performing Arts Sequence or have otherwise received a Curriculum Committee waiver. These students take three years of a world language.

Students who successfully complete the ninth and tenth grade course sequence may choose to enter eleventh grade as International Baccalaureate Diploma candidates. The IB program is an academically rigorous, internationally recognized course of study that offers a wide array of university-level training for students seeking to

- **ask challenging questions**
- **learn how to learn**
- **develop a strong sense of their own identity and culture**
- **develop the ability to communicate with and understand people from other countries and cultures.**

Students who choose not to pursue the full IB Diploma will work toward earning IB certificates or Advanced Placement (AP) credit by examination in particular areas of study. Some of these students may also seek approval to follow the Fine and Performing Arts sequence.

To fulfill our commitment to hold ourselves publically accountable for offering a meritorious educational alternative, most upper-level course work at Signature involves some form of external assessment, whether AP or IB.

# Graduation Requirements and Expectations

Beginning in the spring of 2009, all Indiana students who are prospective members of the high school graduating class of 2012 must take and pass End-of-Course Assessments (ECAs) in English 10 (AP Language and Composition) and Algebra 1 in order to receive a high school diploma.

Graduation from Signature School is contingent on a student's passing these ECAs, fulfilling the school's Community Service requirement and taking and passing both Multicultural America (MAM) and one of the courses that satisfies the global studies requirement (IB European History or IB Ecosystems and Societies if the student is an IB Diploma candidate), in addition to completing coursework required by the state of Indiana.

Signature School encourages all students to graduate with, at a minimum, an Indiana Academic Honors Diploma. Academic Honors Diplomas are awarded to students who do not receive below a C in any of the course requirements and who maintain a B (3.0) average. Students who receive a grade of D or F in a required course are automatically re-enrolled in the class so that they may stay on track to earn the Academic Honors Diploma. Students who have good reason to be exempted from automatic re-enrollment may request a hearing before the Curriculum Committee and the classroom teacher to establish a plan for regaining Academic Honors status. Request forms are available in the Counselor's office or [online](#) and **must be submitted within ten days of final grade publication.**

The Academic Honors requirements are outlined in the table below. One credit accrues for one semester of a course. Students take a minimum of 47 credits.

Subject	Credits	Comments
<b>English</b>	8 credits	
<b>Mathematics</b>	2 credits: Algebra 1 2 credits: Geometry 2 credits: Algebra 2 2 credits: 2 additional credits in advanced math	Students must be enrolled in a math course or a physics course during their junior or senior years.
<b>Science</b>	2 credits: Biology 2 credits: Chemistry 1 or Physics 1 2 credits: any Core 40 science course	
<b>Social Studies</b>	2 credits: U.S. History 1 credit: U.S. Government 1 credit: Economics 2 credits: World History	
<b>World Languages</b>	6-8 credits: World Language	Students may concentrate in one language or take 2 two-year sequences.
<b>Fine Arts</b>	2 credits	
<b>Physical Education</b>	2 credits	
<b>Health and Wellness</b>	1 credit	
<b>Electives</b>	6-8 credits	
<p><b>Complete at least one of the following:</b></p> <ul style="list-style-type: none"> <li>▪ Two International Baccalaureate courses and corresponding IB exams</li> <li>▪ Two Advanced Placement courses and corresponding AP exams</li> <li>▪ Academic, transferable dual high school/college courses resulting in 6 college credits</li> <li>▪ One Advanced Placement course and corresponding AP exam and academic transferable dual high school/college course(s) resulting in 3 college credits</li> <li>▪ Score 1200 or higher combined SAT math and critical reading</li> <li>▪ Score a 26 composite ACT</li> </ul>		

# Grades

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The school-wide grading scale is: 90-100 A, 80-89 B, 70-79 C, 60-69 D, below 60 F. Teachers report their grades in smaller increments (94-100 A, 90-93 A-), but “plusses” and “minuses” do not affect a student’s GPA. Parents and students have continual access to student grades through the online grade book, PowerSchool. Nevertheless, hard copies of grade reports are sent home twice a year, once at mid-term in December and then again at year’s end.

A student who earns a D or below in a course required for graduation with Academic Honors will automatically be re-enrolled in the class the following year. Students who are at immediate risk of not graduating or students who want to take advantage of the International Baccalaureate program but are unable to because they must repeat a class or classes may request a hearing before the Curriculum Committee and the classroom teacher involved to establish a plan for regaining Academic Honors status. Request forms (Request from Exemption from Automatic Re-Enrollment to Regain Academic Honors Status) are available in the counselor’s office or [online](#) and **must be submitted to the counselor’s office within ten days of final grade publication.**

In the event that a student retakes a class to earn a higher grade, the original record will appear along with the new grade, but the GPA will be figured using only the new grade.

All IB and AP courses culminate in external assessment. **No student will be excluded from participating in testing because of monetary constraints.** Students who take these tests after a one-year course (most AP courses and all IB courses designated as "SL" or "SL2") will enjoy one year of a weighted grade, and students who take these tests after a two-year sequence (IB Environmental Systems and Societies, AP Biology if taken as a two-year course, and all IB courses designated as "HL") will enjoy two years of a weighted grade. (See course descriptions for information about particular courses.) Courses not taken at Signature School or AP or IB courses that do not culminate in AP or IB testing will not be weighted.

Grades are weighted in the following manner: an A earns 5 points, a B 4 points, a C 3 points, a D 2 points, and an F 0 points. The weighted GPA is figured by multiplying the **Potential Credit** earned by the **Grade Points** for each class. These numbers (**Grade Points \* Potential Credit**) for each class are added together, and that number is divided by the **Sum** of Potential Credits earned. Here is a sample schedule for a first-semester sophomore to model how the GPA is figured:

Course	Grade	Grade Points	Potential Credit	Grade Points*Potential Credit
AP Language	B	4	1	4
Spanish 2	A	4	1	4
AP World History	A	5	1	5
Chemistry	B	3	1	3
Alg 2 w/Trig	B	3	1	3
Health	B	3	1	3
<b>Sum</b>			6	22
<b>GPA = 22 ÷ 6 = 3.67</b> , rounded to the nearest hundredth				

## Enrolling in Classes

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In the spring semester, students choose at least seven classes to fill their schedules for the coming academic year. Students wishing to register for a study hall should complete and submit a Request for Study Hall form, available in the counselor's office or online.

Students may request changes to their schedules by submitting a completed [Drop/Add Course](#) form to the counselor by the end of the school day on the second Friday of the new semester. After the second Friday, the only schedule changes will be those initiated by a faculty member, the counselor, or the principal.

There are special circumstances (impending graduation, need for a course not offered by Signature) under which a student may enroll in a course offered through another institution. Students wanting to earn a credit from an institution other than Signature School must submit an [Alternate Credit Permission](#) form to the counselor who will present the request to the Curriculum Committee. This procedure helps to ensure the integrity of the Signature School diploma. Students who take a course at an institution other than Signature should bear in mind that the resulting grade is not weighted.

## Pre-IB at Signature School

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Ninth and tenth graders at Signature School complete a course of study that prepares them for the two-year International Baccalaureate Program. The table below lists the course options for pre-IB students. Generally, ninth graders choose subjects in Groups 1-6 and take P.E for a total of seven classes. However, ninth graders enrolled in Instrumental Music before school must fill in their schedules so that they take a total of eight classes.

Tenth graders, having fulfilled the fine and performing arts requirement, choose subjects in Groups 1-5, take Multicultural America for one semester, health for the other semester, and may choose from an elective in Group 6 or in "Electives" for a total of seven classes. Tenth graders enrolled in Instrumental Music take eight classes.

Pre-IB students should be aware of course sequencing when choosing electives. For example:

- **students wishing to test in IB Music SL their junior year should sign up for AP Music Theory as an elective in their sophomore year;**
- **ninth graders enrolled in Algebra 1 need to "double up" in mathematics if they plan to become IB Diploma candidates and to take AP Calculus in high school;**
- **students with a strong interest in science should consider including physics and/or AP Physics early in their four-year plan in order to make room in their schedules for fulfilling IB Diploma requirements.**

## Pre-IB Course Sequence

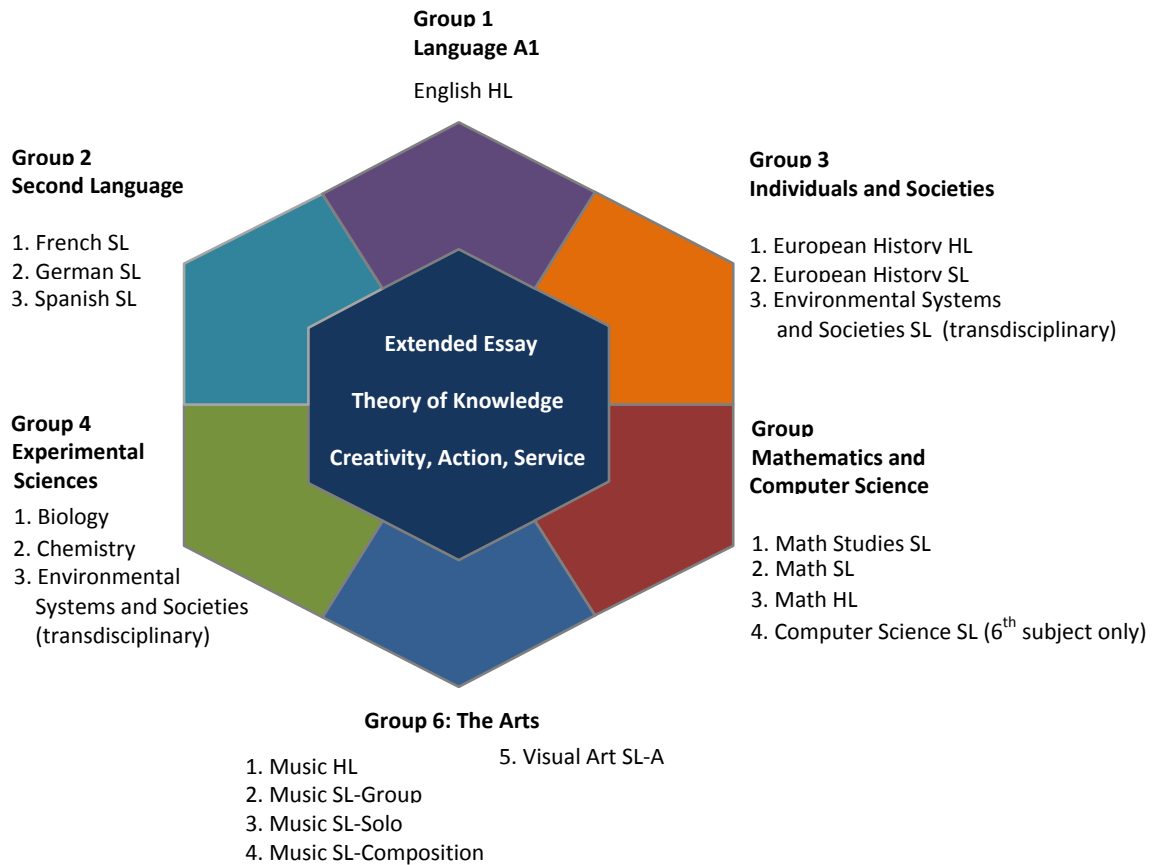
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade
<b>Group 1: Language</b>	English 9	AP Language and Composition
<b>Group 2: World Language</b>	French 1 or 2	French 2 or 3
	German 1 or 2	German 2 or 3
	Spanish 1 or 2	Spanish 2 or 3
<b>Group 3: Individuals and Societies</b>	US History	AP World History & Multicultural America (1 sem.)
<b>Group 4: Experimental Sciences</b>	Biology	Chemistry
	Physics 9 (prereq: Algebra 1)	
<b>Group 5: Mathematics</b>	Algebra 1	Geometry w/Advanced Alg Topics
	Honors Geometry w/Advanced Alg Topics	Algebra 2 w/Trig
<b>Group 6: The Arts</b>	Fine Arts Connections	Pre-IB Music Theory (P)
	Signature Singers (P) 9 <sup>th</sup> /10 <sup>th</sup>	Pre-IB Dance (P)
	Instrumental Music, 7:30-8:30 (students take 8 classes; see "Electives" below) 9 <sup>th</sup> /10 <sup>th</sup>	Piano Lab (P)
	Visual Art 1 (P) 9 <sup>th</sup> /10 <sup>th</sup>	Visual Art 2, prereq: Visual Art 1
<b>Health and P.E.</b>	P.E.	Health (1 semester)
<b>Electives (only for 9<sup>th</sup> Graders in Instrumental Music and for 10<sup>th</sup> Graders)</b>	Choice from Group 6 above 9 <sup>th</sup> /10 <sup>th</sup>	
	A second world language (P) 9 <sup>th</sup> /10 <sup>th</sup>	
	A second math (P) 9 <sup>th</sup> /10 <sup>th</sup>	
	A second science (P)	Physics AP Physics, prereq: Physics 9 and Algebra 2 w/Trig or (P)
<b>Other Requirements</b>	25 hours of Community Service	25 hours of Community Service

(P): permission required; 9<sup>th</sup>/10<sup>th</sup>: indicates a course that may be taken in the 9<sup>th</sup> or the 10<sup>th</sup> grade

## 11<sup>th</sup> and 12<sup>th</sup> Grade Study at Signature

All incoming eleventh graders who have successfully completed the pre-IB program or who have completed comparable coursework at another school are encouraged to commit to the two-year IB course of study. In addition to proving proficiency in six subjects through external and internal assessments, IB students submit a 4000-word extended essay, complete 150 hours of creativity/action/service (CAS), and enroll in a 100-hour, two-year, flexibly scheduled, interdisciplinary course, Theory of Knowledge (TOK).

The hexagon below graphically summarizes the IB educational program. Students take courses in Groups 1-5 and choose a sixth course, either from Group 6 or from any of the other five groups. Courses are offered at the Higher Level (HL) or the Standard Level (SL). At least three, and not more than four, of the courses must be HL. Note that Environmental Systems and Societies SL is both a Group 3 and a Group 4 course. Students taking this course may choose two other IB courses from any of the six groups for their fifth and sixth subjects.



IB students must plan their schedules carefully to complete the diploma and to fulfill Indiana graduation requirements. Some SL courses (European History SL, Math Studies, Math SL, and Computer Science SL) are one year. Some are one year if the student has the appropriate background (Music SL and Art SL). All HL courses and some SL courses (Environmental Systems and Societies, Chemistry SL, and all Group 2 courses) require a two-year commitment. **Students should also be aware that while European History HL/SL counts for an economics credit, Environmental Systems and Societies does not.** Students who take Environmental Systems and Societies must also enroll in European History SL as seniors or must request to fulfill the economics requirement through online or off-campus coursework by submitting the [Alternate Credit Permission Form](#) to the counselor's office.

Students who choose not to pursue the full IB Diploma take IB and AP courses, fulfill the Indiana Academic Honors Diploma requirements, fulfill Signature's requirements of four years of a world language and Global Studies (taken as IB European History SL, or IB European History HL, a two-year course), submit an extended independent research project to their senior English teacher, and complete a total of 50 hours of Community Service.

Signature School students may also pursue an Indiana Academic Honors Diploma with an endorsement in the Fine and Performing Arts sequence. Upon admission to the program, these students may be exempted from the fourth year of a world language to free periods required for the endorsement. The following table lists the course sequence options for all eleventh and twelfth graders.

# 11<sup>th</sup> and 12<sup>th</sup> Grade Course Sequence

	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>Group 1: Language</b>	IB English HL1 (AP Literature credit possible)	IB English HL2 (AP Literature credit possible)
<b>Group 2: World Language</b>	French 3/4	IB French SL (French 4 or 5)
	German 3/4	IB German SL (German 4 or 5) or ACP German
	Spanish 3/4	IB Spanish SL (Spanish 4 or 5) or AP Spanish
<b>Group 3: Individuals and Societies</b>	AP Gov 11 <sup>th</sup> /12 <sup>th</sup> , 1 sem	
	IB European History HL1 (AP Euro Hist option)	IB European History HL2 with Econ IB European History SL with Econ (AP Com Pol option)
	IB Env Sys and Soc SL1 (AP Environmental option) Note: IB students also take Econ, 1 sem, or they may take IB European History SL as seniors	IB Env Sys and Soc SL2
<b>Group 4: Experimental Sciences</b>	IB Biology HL1 (AP Biology 1)	IB Biology HL2 (AP Biology 2)
	IB Chemistry SL1 (AP Chemistry option)	IB Chemistry SL2
	IB Env Sys and Soc SL1 (see note in Group 3)	IB Env Sys and Soc SL2
	Physics 11 <sup>th</sup> /12 <sup>th</sup>	
	AP Physics 11 <sup>th</sup> /12 <sup>th</sup> , prereq: physics	
<b>Group 5: Mathematics and Computer Science</b>	Algebra 2 w/Trig	IB Math Studies SL or IB Math SL
	IB Math Studies SL	IB Math SL
	IB Math SL	AP Calculus BC (IB Math HL1)
	IB Math HL1 (AP Calculus BC)	IB Math HL2
	IB Computer Science SL 11 <sup>th</sup> /12 <sup>th</sup> Note: does not count as a math credit	
<b>Group 6: The Arts</b>	IB Music SL with prereq: AP Music Theory and if SLG coreq: Singers or Instrumental Music	
	AP Music Theory (IB Music HL1/SLS1/SLG1/SLC1)	IB Music HL2/SLS2/SLG2/SLC2 (Note: SLG students take Singers or Instrumental Music concurrently)
	IB Art SL1 (AP Drawing/2D/3D option)	IB Art SL2
	IB Dance HL1/SL1	IB Dance HL2/SL2
	Musical Theatre 1 (after school)	Musical Theatre 2 (after school)
	Instrumental Music, 7:30-8:30 11 <sup>th</sup> /12 <sup>th</sup> Note: 8 <sup>th</sup> class	
	Piano Lab 11 <sup>th</sup> /12 <sup>th</sup>	
	Signature Singers 11 <sup>th</sup> /12 <sup>th</sup>	
	Visual Art 1 11 <sup>th</sup> /12 <sup>th</sup>	
	Visual Art 2 11 <sup>th</sup> /12 <sup>th</sup> , prereq: Visual Art 1	
	AP Drawing 11 <sup>th</sup> /12 <sup>th</sup>	
	AP 2D Design Portfolio 11 <sup>th</sup> /12 <sup>th</sup>	
	AP 3D Design Portfolio 11 <sup>th</sup> /12 <sup>th</sup>	
<b>Other Requirements</b>	Non-IB Diploma only: 25 hours community service	Non-IB Diploma only: 25 hours community service
	IB Diploma only: Theory of Knowledge (flexibly scheduled both in and outside the school day)	IB Diploma only: Theory of Knowledge (flexibly scheduled both in and outside the school day)
	IB Diploma only: 4000 word Extended Essay Non-IB Diploma only: independent research project submitted to senior English teacher	
	IB Diploma only: 150 hours Creativity, Action, Service	

Course titles in parentheses are alternate course titles or descriptive titles; 11<sup>th</sup>/12<sup>th</sup> designates a course taken in either 11<sup>th</sup> grade or 12<sup>th</sup> grade.

# Course Descriptions and Flow Charts

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Course descriptions and course sequencing for each subject group follow in the pages below to help students and parents make informed enrollment decisions.

## Group 1: English



**English 9H** This course covers writing, grammar, Greek and Latin word roots, and British, American, and world lit selections. Coursework focuses on interpreting and analyzing literary works and writing scholarly, insightful essays that follow English language rules and conventions. Class lessons adhere to the Indiana Academic Standards for English and Language Arts and prepare students for AP/IB writing assignments throughout high school.

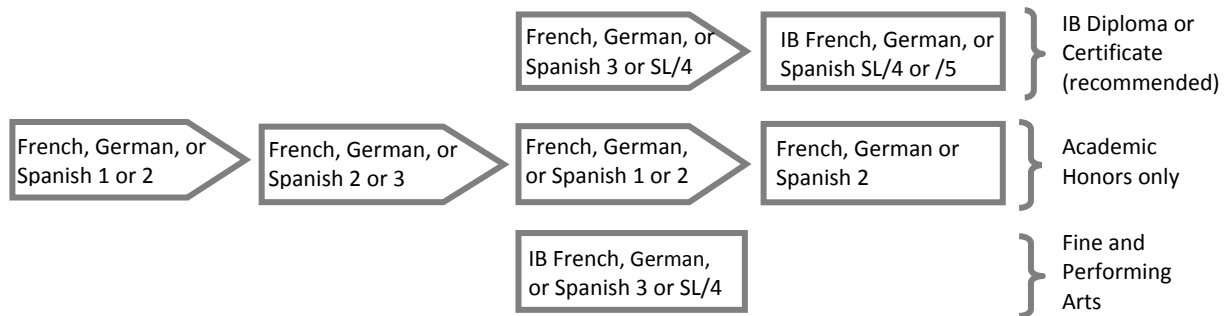
**AP Language and Composition** The primary objective of this class is to prepare students for the Advanced Placement Language test and for eleventh and twelfth grade IB English. Students in AP Language will be expected to read and respond to a variety of literary genres, demonstrating the following: an ability to engage in independent literary criticism which reveals a personal and original response to literature; an ability to express ideas with clarity, coherence, precision, and fluency in both written and oral communication; a thorough knowledge of individual works studied as well as relationships between works studied; an ability to engage in independent textual commentary on both familiar and unfamiliar pieces of writing in timed and un-timed conditions; an appreciation of structure, technique, and style as employed by authors and their effects on the reader; an ability to structure ideas and arguments, orally and in writing, and to support them with precise and relevant examples. Students will study SAT vocabulary to prepare them for standardized tests. Class activities will be aligned with the Indiana Academic Standards for English and Language Arts as well as with Advanced Placement objectives.

**IB English HL** Signature juniors and seniors follow the International Baccalaureate curriculum, with courses stressing critical reading, writing, reflection, and discussion. Curriculum centers on analysis and effective use of language in poetry and prose, both fiction and nonfiction. Students master IB and AP skills centering on composition, critical thinking, and original research and analysis. Students who successfully complete the junior and senior courses may receive college credit through AP and/or IB testing (or through bridge credit). Goals include enjoying and understanding literature, honing literary analysis skills, gaining confidence and skill in writing and grammar, and supporting ideas with textual references. The course and reading selections are for mature readers. All students submit an independent research project during the second year of the course.

**Creative Writing** This is a one-semester course in which students create poetry, fiction, and nonfiction selections for publication. It is open to juniors and seniors and provides one elective credit. **This course is offered only as student interest and need dictate.**

## Group 2: Second Language

Students who graduate from Signature School must have four years of a world language which culminate in external testing. We strongly encourage all students to work to achieve the advanced level of speaking, listening, writing, and reading in accordance with the American Council for the Teaching of Foreign Languages guidelines. Many universities now recommend or even require this advanced level. Fine Arts endorsement candidates must have at least three consecutive years of language at Signature School. Exceptions to this policy must be approved by the Curriculum Committee.



**French 1** Students in French 1 should have had little or no prior experience with the language. The focus in the first year is on developing active everyday vocabulary and mastering the most frequent and basic grammatical structures in French. The course is taught entirely in French, and students are not allowed to speak English in class. We use the textbook *Bon Voyage! 1* as well as numerous outside materials. By the end of French 1, students should have mastered basic conversational French and will be moving to more complex grammatical structures and the past tenses.

**French 2** Prerequisite: French 1 or equivalent. Students at this level should be comfortable expressing themselves in basic French and functioning in an immersion environment. This course is designed to expose students to a wider range of vocabulary and the more complex grammatical structures in French in preparation for IB-level French in their third year. We use the textbook *Bon Voyage! 2* as well as numerous other outside materials and *The Little Prince*, which students read at the end of their second year. Students moving on to IB French SL will also be required to read a novel over the summer.

**French 3/4** The goals of this course are to increase the student's ability to understand, read, speak and write the language with grammatical accuracy and at appropriate and varied registers, as well as to develop an understanding of the cultures of the countries where the language is spoken. Students will become acquainted with Francophone literature, arts and sciences, social trends and world problems related to the French-speaking world. Students will broaden and deepen their vocabularies and will continue to develop oral and aural skills through regular classroom discussions, debates, presentations, etc. Additionally, brief cultural readings and supplemental authentic materials will help students to broaden their horizons, enhance their oral and aural skills, and become educated citizens of a global community. Practice for the IB testing program is introduced at this level.

**IB French SL** This course emphasizes the use of higher level thinking skills such as discussion, debates, interpretation and analysis. Different types of texts (descriptive, informative, narrative and argumentative) are studied in preparation for the IB external assessment requirement. A deeper understanding of cultures is gleaned from a panorama of the arts, history, geography, societal beliefs and traditions embedded in those world citizens labeled Francophone. Selections from literature, music, art and printed/oral media provide the setting in which students demonstrate advanced grammar, use of idiomatic phrases and cultural understanding. Practice for IB internal and external assessments is continued during this course. Students who successfully complete the course may receive college credit through IB testing.

**German 1** This course strives to offer an exciting and up-to-date approach to learning German in a total immersion setting. Featuring a contemporary design, this program presents an abundance of proficiency-based situational and communicative activities to help students live the language and culture, by: including interesting, realistic dialogues and conversations; using a stimulating mix of cooperative learning, group, paired, role-playing, and TPR (Total Physical Response) activities to enhance communicative competence; featuring cross-curricular activities covering such topics as mathematics, geography, and history; providing a colorful story-line approach, filmed on diverse locations for a thorough and varied cultural coverage of the German-speaking countries; giving a solid understanding of the language within its cultural context and a carefully controlled vocabulary of topics for fast language acquisition; emphasizing the daily experiences of young adults through illustrations, photos, and thematic readings; exposing to authentic German realia via the correlation of each topic with cultural knowledge through Internet research skills.

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**German 2** Building on the knowledge attained in German 1, this course offers an up-to-date approach to the teaching of German through an abundance of proficiency-based situational and communicative activities to help the students live the language and the culture. Based primarily on full immersion activities, it: emphasizes dialogues and conversations in situational and communicative activities; uses a stimulating mix of cooperative learning, group, paired, role-playing, and TPR (Total Physical Response) activities to enhance communicative competence; features cross-curricular activities covering such topics as geography, and history; includes the viewing of videos with a story line approach, filmed on location in Germany, which integrates with the textbook in terms of active vocabulary and language structure; provides coverage of all German-speaking countries, helping students understand the language within its cultural context; highlights through thematic readings the daily experiences of German young adults. The goals are to: understand and interpret written and spoken language on a variety of topics; acquire information and recognize the distinctive viewpoints that are only available through the knowledge of the German language; demonstrate an appreciation for the nature of language through the comparison of English to German; and provide an understanding of the concept of culture by contrasting the German and the American way of life.

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**IB German SL (IU ACP 200, 250 in year 2)** This is the follow-up course for students who have successfully completed all elementary levels. The course aims to teach students to communicate in German and at the same time develop a structural awareness of the German language. Since the goals of communicative and grammatical competence are ultimately inseparable, the students are guided toward using German as accurately as possible. By the end of the year the pupils will be able to read authentic texts and understand video segments on a variety of topics. The ability to communicate thoughts in German--both orally and in writing--will be increased, and the knowledge of German grammar will be strengthened. Sensitivity to some of the issues and problems of life in contemporary German-speaking countries will be developed. A variety of texts and contexts will deepen the comprehension of the German-speaking cultures during this semester. The course places an emphasis on students becoming autonomous learners. Regular discussion and practice of grammatical structures serve to monitor the students' spoken and written output, as well as to develop further useful language learning strategies.

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**Spanish 1** The beginning level class initiates students on an adventure in a variety of world cultures while focusing on the Spanish language. The four basic language skills (speaking, listening, reading and writing) will be developed in the target language. Students will be immersed in Hispanic cultures through virtual trips, taped interviews and the use of authentic materials. The curriculum includes a variety of technological resources to support various learning styles. Class lessons meet the Academic Standards for the World Language in the state of Indiana.

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**Spanish 2** Students continue to develop their Spanish language skills through the use of a variety of learning techniques which include paired and group conversations, oral presentations, listening and reading comprehension exercises, dictation and games. Insight into Hispanic cultures continues via videos from different countries and short readings covering history, geography, current events, art and architecture. All class activities align with the Indiana Academic Standards for World Language.

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**Spanish 3/4** The goals of this course are to increase the student's ability to understand, read, speak and write the language with grammatical accuracy and at appropriate and varied registers, as well as to develop an understanding of the cultures of the countries where the language is spoken. Students will become acquainted with Hispanic literature, arts and sciences, social trends and world problems related to the Latino world. Students will broaden and deepen their vocabularies and will continue to develop oral and aural skills through regular classroom discussions, debates, presentations, etc. Additionally, brief cultural readings and supplemental authentic materials will help students to broaden their horizons, enhance their oral and aural skills, and become educated citizens of a global community. Practice for the IB/AP testing program is introduced at this level.

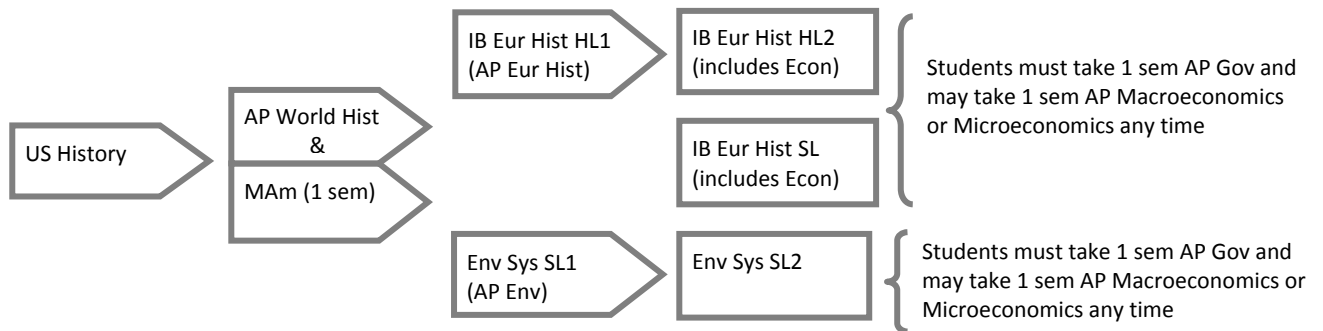
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**IB Spanish SL** This course emphasizes the use of higher level thinking skills such as discussion, debates, interpretation and analysis. Different types of texts (descriptive, informative, narrative and argumentative) are studied in preparation for the IB external assessment requirement. A deeper understanding of cultures is gleaned from a panorama of the arts, history, geography, societal beliefs and traditions embedded in those world citizens labeled Hispanics. Selections from literature, music, art and printed/oral media provide the setting in which students demonstrate advanced grammar, use of idiomatic phrases and cultural understanding. Practice for IB/AP internal and external assessments is continued during this course. Students who successfully complete the course may receive college credit through IB/AP testing.

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## Group 3: Individuals and Societies

All pre-IB students take US History, AP World History and Multicultural America. Eleventh and twelfth graders take AP Government (one semester), and IB students who do not take IB European History HL or SL must take either AP Microeconomics or AP Macroeconomics as well as in AP Government.



**U.S. History** This required freshman two-semester course builds upon concepts developed in previous studies (8<sup>th</sup> grade) and emphasizes national development from the late 19<sup>th</sup> century into the 21<sup>st</sup> century. After a review of the fundamental ideas in the early development of our nation, students study the key events, people, groups, and movements of the late 19<sup>th</sup>, 20<sup>th</sup>, and early 21<sup>st</sup> centuries as they relate to life in Indiana and the United States. Specifically, those are The Development of the Industrial United States: 1870-1900, Emergence of the Modern United States: 1897-1920, The Modern United States in Prosperity and Depression: 1920-1940, The United States and World War II: 1939-1945, Postwar United States: 1945-1960, The United States in Troubled Times: 1960-1980, and The Contemporary United States: 1980 to the present. Students will also conduct historical research that includes forming research questions, developing a thesis, investigating a variety of primary and secondary sources, and presenting their findings with documentation.

**AP World History** AP World History is a college-level social history survey course designed to teach students to think analytically and communicate concisely and logically. Beginning with the human transition to agriculture, we chronologically explore major world traditions, encounters, transitions, and societal relationships in East and South Asia, Africa, Europe and the Americas. Students should expect to devote considerable time to reading, study, and analytical essay writing. Students will modify the basic Five-Paragraph/Thesis-Statement Essay to master three AP essay formats: compare & contrast, change & continuity over time, and DBQ (document based question). Required readings consist of college level text, scholarly articles, primary source documents, and one student-selected outside reading book. This class prepares students for success in the AP World History Exam.

**Multicultural America** This is a one-semester course designed to continue the study of the United States begun in the freshman year by focusing on the diversity of the U.S. The course looks at the historical significance of immigration, the “melting pot” concept, historical events from different perspectives, the American culture today, the many coexisting subcultures and the issues facing each, as well as the predictions for the future. Topics for discussion include historical events, political issues, civil rights, human rights, prejudice, discrimination, intolerance, hate crimes, economic issues, religious discrimination, ageism, sexism, ableism, classism, homophobia, etc.

**Psychology** This is a one-semester, introductory level course. Topics include historical perspectives as they relate to current approaches to studying human and animal behavior, physiological psychology, personality development, learning theories, development over the lifespan, and abnormal psychology. Other topics will be investigated as time and interest permit.

**IB History of Europe HL (AP European History)** This two-year course, for students in the 11<sup>th</sup> and 12<sup>th</sup> grade, results from the guiding assumption that the events, cultures, and conflicts of the contemporary world are always evolving out of the long, complex histories of diverse peoples, ideas, institutions, social mores, economic exchanges, and struggles for political power. The purpose of this course is to make learners aware that historical accounts differ over time and space because they are impregnated with the historian’s perception, bias, and power of persuasion. Ultimately, this course aims for the learner to comprehend history from the viewpoint of different cultures, to reach an empathetic awareness of people of other places and other times, and to communicate historical erudition while developing a lasting appreciation of the discipline of history. Students achieve these goals by evaluating the reliability of diverse documents, placing the derived information in the wider historical con-text, and synthesizing the contents with the knowledge they have acquired in the process. An attentive, analytical scrutiny of social conflict, political transformations, and global interconnections demands the continuous consultation of primary sources, of historical maps, of artistic productions both visual and auditory, and of time-sensitive media. Students will consult these resources readily available at Modern History Sourcebook, You Tube, The National Gallery of Art, and other such sites in order to achieve an accurate depiction of the times, places and characters that affected and shaped the social and cultural development of all modern cultures. This course also satisfies the Indiana State requirement for a semester of economics.

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**IB European History SL/AP Comparative Politics/Global Awareness (ACP COI100)** Through reading, writing, simulations and discussions, 12 grade students will evaluate global issues and question how these will impact their future. The learners will: assess the connections between humankind and its physical, social, economic, and political environment; examine the relationship of culture and human behavior by comparing diverse social traditions and mores to discover cultural and social diversity; investigate power and interdependence in global development; evaluate international organizations; analyze alternatives for the interpretation of data; synthesize acquired knowledge to propose novel outcomes; experience the global village firsthand through contacts with local communities, institutions of higher education, the Chamber of Commerce, and businesses; deepen the love of learning which will motivate a life-long commitment to engage in global issues. Three hours of college credit COI100 through Indiana University Advanced Placement are attainable upon completion of this two-semester course (in addition to the Advanced Placement exam credits). This course also satisfies the Indiana State requirement for a semester of economics.

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**IB Environmental Systems and Societies SL** This is a **two-year**, transdisciplinary IB standard level course that may fulfill both group 3 and 4 requirements. The course involves work from a textbook, a significant amount of lab or field work, various writing assignments and presentations, and possible community collaboration projects. Its focus is sustainability with significant emphasis on the interrelationships between the environment and human societies. Specific topics addressed in the course are: the ecosystem; human population, carrying capacity and resource use; conservation and biodiversity; pollution management; global warming; and environmental value systems. Assessment is composed of both internal and external components. The external assessment consists of two written papers and is worth 80% of the final assessment. Paper 1 is short-answer and data response questions. Paper 2 is composed of data analysis and structured essay questions. Practical laboratory work makes up 30 hours of the course. As an alternative, or in addition, students may take the Advanced Placement exam at the end of first year or the second year. Students may not enroll in year two without having received credit in year 1.

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**AP Government** AP US Government and Politics is a challenging course taught at the college level. This one semester class explores the constitutional underpinnings of the U.S. government and the political beliefs and behaviors that shape the institutions of the government today. Students examine the role and influence of political parties, interest groups, and the media, as well as delve into the inner workings and functions of the Congress, the Executive, the Judiciary, and the Bureaucracy in determining and driving policy agendas. Students are expected to strive to deepen their understanding of the policy-making process by developing and nurturing a keen interest in current events.

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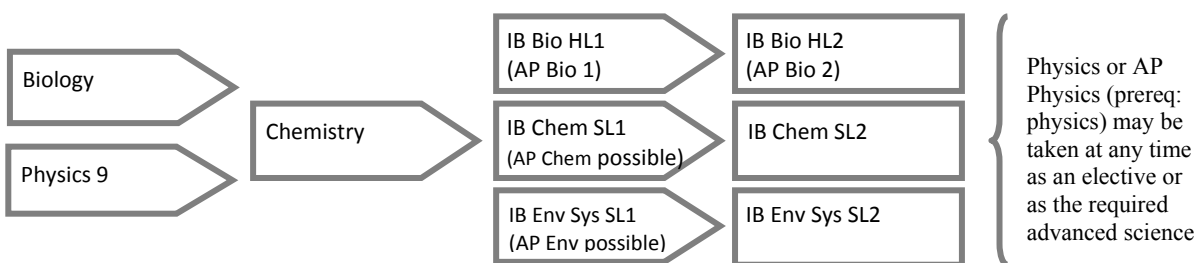
**AP Macroeconomics** This one-semester course is designed to give you a thorough understanding of the principles of economics that apply to an economic system as a whole. Such a course places particular emphasis on the study of national income and price determination, and also develops your familiarity with economic performance measures, economic growth, and international economics.

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**AP Microeconomics** This one-semester course is designed is to provide a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the larger economic system. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy.

## Group 4: Experimental Sciences

All students must take biology, chemistry or physics, and an advanced science. All sophomores must take chemistry in order to meet the prerequisite for IB coursework. Physics (for those who do not take Physics 9) or AP Physics (prereq: Physics 9 or physics) may be scheduled in at any point after Algebra 1. Students needing an advanced science to fulfill Indiana Academic Honors requirements may take the first year of IB Biology, IB Chemistry, or IB Environmental Science without taking the second year.



**Biology** This is an introductory class in general biology covering topics of biochemistry, cells, enzymes, respiration, photosynthesis, cell division, classical genetics, molecular genetics, biotechnology, evolution, classification, animal structure and function, and ecology. Learning objectives are provided for each chapter and are the basis of the tests. Each chapter will be coordinated with lab activities. The goal of the course is to introduce students to the major concepts in biology and the application of the method of science to living things. At the end of the course, students take Indiana's end-of-year assessment in biology. Passing this exam is a state requirement for graduation.

**IB Biology HL1** This is the first year of a two-year course which will prepare junior IB students for the IB Biology HL test given in May of the second year. This course may also be taken by juniors and seniors who are interested in advanced topics in biology, and/or would like to prepare for the AP Biology test. Topics include biochemistry, cells, metabolism, photosynthesis, cell respiration, cell division, classical genetics, molecular genetics, natural selection, and evolution. Junior students could continue on to the second year of the course before taking the AP test. They could also complete the IB certificate in HL Biology. Senior students could use the first year of this course as preparation for the AP test, if they are willing to do additional, independent preparation for the test. Twenty-five percent of class time will be spent in lab work. Labs will include microscope work, molecular model building, osmosis and diffusion, enzyme rate, pea seed respiration, photosynthesis, mitosis in onion root, crossing over in mold, mono-hybrid fruit fly cross, extraction of DNA, electrophoresis of DNA, transforming genes in bacteria, measuring gene frequencies in a population. Students for whom this is an introductory biology course will sit for Indiana's end-of-year assessment in biology. Passing this exam is a state requirement for graduation.

**IB Biology HL2** This is the second year of a two-year course, which will prepare senior IB students for the IB Biology HL test given in May of the second year. This course may also be taken by juniors or seniors who are interested in advanced topics in Biology. The topics will include digestion, circulation, respiration, immune system, excretion, hormones, reproduction, muscle function, plant structure and function, plant reproduction, populations, communities and ecosystems. Twenty-five percent of the class time will be spent on lab work. Labs will include photosynthesis in spinach leaves, collecting macro-invertebrates at Howell wetland, measuring the rate of enzyme catalyzed reactions, yeast respiration and sugars, effect of alcohol on cell membranes, a di-hybrid fruit fly cross, measuring gene frequencies, transpiration in plants, yeast population growth study.

**BioChem** The first quarter of this year-long course reviews general chemistry topics as they apply to human biochemistry. The topics covered include: measurements, periodic trends, radioactivity, chemical equations, stoichiometry, gases, solutions, and acid/base reactions. The second quarter of this course is an introduction to organic chemistry. Topics covered include: nomenclature and reactivity of saturated hydrocarbons, unsaturated hydrocarbons, and hydrocarbon derivatives. The third and fourth quarter topics include: processes and reactions of metabolism involving carbohydrates, lipids, and proteins. Special topics covered include vitamins and nucleic acids. **This course is offered according to student interest and need.**

**Chemistry Honors** The honors chemistry course is designed to both meet the Indiana state guidelines for chemistry and to provide the background necessary for success in the next level of Advanced Placement or International Baccalaureate science courses. Specific topics studied include: matter; basic foundations of chemistry; nomenclature; measurement and calculations; chemical composition; reactions; stoichiometry; energy; the atomic theory; chemical bonding; the study of gases, liquids, solids; the study of solutions; the study of acids and bases; and the study of pH. The class is divided into 75% lecture and 25% laboratory practice. Formal lab reports are required

**IB Chemistry SL1 (AP Chemistry)** This year-long course investigates general chemistry topics typically covered in first-year university-level chemistry. First semester topics include: measurements, atomic theory, stoichiometry, reactions, gases, thermochemistry, periodicity, bonding models, and solutions. Second semester topics include: kinetics, equilibrium, acid/base equilibrium, electrochemistry, nuclear chemistry, coordination chemistry, and an introduction to organic chemistry. At the end of this course, students may choose to take the AP Chemistry exam.

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**IB Chemistry SL2** This year-long course completes the IB curriculum by investigating three special topics, or options, from a list that includes: modern analytical chemistry, human biochemistry, chemistry in industry and technology, medicines and drugs, environmental chemistry, food chemistry, and further organic chemistry. This second year of the IB curriculum is laboratory intensive, with emphasis on experiment design, data collection, and experiment analysis.

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**AP Environmental Science** This course may be taken to earn one year of advanced science credit for non-IB students who have successfully completed either physics or biology and chemistry. Students who enroll in this course without having had biology must be sure to fit in biology to meet Indiana graduation requirements. The course involves work from a textbook, a significant amount of lab or field work, various writing assignments and presentations, and possible community collaboration projects. Its focus is sustainability with significant emphasis on the interrelationships between the environment and human societies. Specific topics addressed in the course are: the ecosystem; human population, carrying capacity and resource use; conservation and biodiversity; pollution management; global warming; and environmental value systems. Practical laboratory work makes up 25% of the course.

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**IB Environmental Systems and Societies SL** This is a **two-year**, transdisciplinary, IB standard level course that may fulfill both group 3 and 4 requirements. The course involves work from a textbook, a significant amount of lab or field work, various writing assignments and presentations, and possible community collaboration projects. Its focus is sustainability with significant emphasis on the interrelationships between the environment and human societies. Specific topics addressed in the course are: the ecosystem; human population, carrying capacity and resource use; conservation and biodiversity; pollution management; global warming; and environmental value systems. Assessment is composed of both internal and external components. The external assessment consists of two written papers and is worth 80% of the final assessment. Paper 1 is short-answer and data response questions. Paper 2 is composed of data analysis and structured essay questions. Practical laboratory work makes up 30 hours of the course. As an alternative, or in addition, students may take the Advanced Placement exam, recommended after completion of year one or two. Students must complete the first year of the course in order to enroll in the second year.

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**Physics 9** This course follows a classic physics curriculum that employs algebra and trigonometry to investigate basic physics concepts. Problem-solving skills are developed from both the conceptual and mathematical viewpoints. The first semester introduces the science of physics, the mathematical approach to physics, and vectors before a comprehensive study of mechanics is carried out. Topics include one- and two-dimensional motion, Newton's Laws, circular motion, work, and momentum. Topics in the second semester include fluids, thermodynamics, waves, sound, light, electricity, magnetism, and atomic physics.

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**Honors Physics** This course follows a classic physics curriculum that employs algebra and trigonometry to investigate basic physics concepts. Problem-solving skills are developed from both the conceptual and mathematical viewpoints. The first semester introduces the science of physics, the mathematical approach to physics, and vectors before a comprehensive study of mechanics is carried out. Topics include one- and two-dimensional motion, Newton's Laws, circular motion, work, and momentum. Topics in the second semester include fluids, thermodynamics, waves, sound, light, electricity, magnetism, and atomic physics.

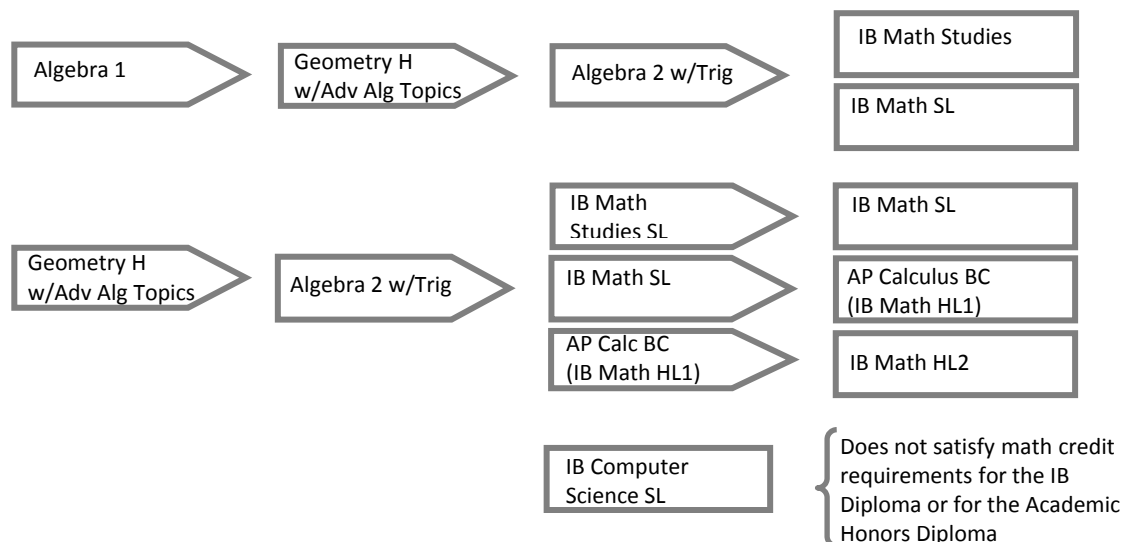
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**AP Physics** This course follows a classic physics curriculum that employs algebra and trigonometry to investigate basic physics concepts. Problem-solving skills are enhanced from both the conceptual and mathematical viewpoints. The first semester introduces the science of physics, the mathematical approach to physics, and vectors before a comprehensive study of mechanics is carried out. Topics include one- and two-dimensional motion, Newton's Laws, circular motion/gravitation, work, rotational motion, momentum, fluids, and thermodynamics. Topics in the second semester include waves/vibrations, sound, optics, lenses, field forces, DC circuits, magnetism, electromagnetic induction, relativity, and nuclear energy, and elementary particles. Students take the AP Physics exam in May.

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## Group 5: Mathematics and Computer Science

All students must be ready for Algebra 1 or Honors Geometry with Advanced Algebra topics in ninth grade. Students who take Algebra 1 as ninth graders will have to “double up” in tenth grade if they wish to take AP Calculus in high school. Students must successfully complete one course beyond Algebra 2 with Trigonometry to qualify for Academic Honors.



**Algebra 1** This is the entry-level math course at Signature School for students who did not earn a credit in Algebra 1 as eighth graders. The course follows Indiana standards and gives students opportunities to continue their work with real number operations and to begin their formal study of linear equations and inequalities, relations and functions, graphing linear equations and inequalities, solving pairs of linear equations and inequalities, performing operations with polynomials, including factoring, and simplifying algebraic fractions. Students also explore quadratic, cubic, and radical equations and work on mathematical problem solving. The class prepares students to pass Indiana’s end-of-course assessment in Algebra 1, a requirement for graduation.

**Geometry H with Advanced Algebra Topics** Pre-requisite: A passing score on the Algebra 1 Core 40 End-of Course Assessment. Geometry students understand the relationship between geometric ideas and their representation with coordinate systems. They find lengths and midpoints of line segments, equations of lines, and discover the properties of parallel and perpendicular lines. They study polygons and their characteristics, transformations, congruence, similarity, symmetry and tessellations. Students begin their study of right triangle trigonometry, and they develop the theorems related to circles and polyhedra. Formal and informal proof and classical constructions are interwoven throughout the course. Students also further their study of algebra by working with advanced topics such as polynomial functions and relations.

**Algebra 2 with Trigonometry** This course prepares students to begin their study of calculus topics. Students become conversant in relations and functions, linear and absolute value equations and inequalities, quadratic equations and functions, the conic sections, the binomial theorem, and the ramifications of the Fundamental Theorem of Algebra. They further their understanding of algebraic fractions and polynomials, and they begin their study of logarithmic and exponential functions, sequences and series, and counting principals and probability. Finally, students continue their work in trigonometry with trigonometric functions, identities, and equations.

**IB Math Studies** The aims of this course are to enable students to develop mathematical knowledge, concepts and principles, develop logical, critical and creative thinking, and to employ and refine their powers of abstraction and generalization as they prepare for the IB Math Studies test at the end of the year. The course concentrates on mathematics that can be applied to contexts related as far as possible to other subjects being studied, to common real-world occurrences and to topics that relate to home, work and leisure situations. The course includes project work, a feature unique within this group of courses: students must produce a project, a piece of written work based on personal research, guided and supervised by the teacher. Topics will be focused around functions, geometry, trigonometry, set theory and probability, statistics, financial mathematics, and introductory differential calculus. IB Math Studies is designed for students whose main interests lie outside the field of mathematics and who do not anticipate needing math to achieve further qualifications.

**AP Calculus BC** Prerequisite: Algebra 2 with Trig or IB Math SL. Students study limits and continuity, differential calculus and some of its applications, and integral calculus and some of its applications. Students also study techniques of integration, improper integrals, sequences and series, and polar, parametric and vector-valued functions and equations. At the end of the course, students take the AP Calculus BC exam or the AP Calculus AB exam, according to need. Note that this is the first year of the IB Math HL two-year sequence.

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**IB Math SL** This is a one-year course that prepares students for the IB Math SL exam. In addition to studying matrices, vectors, probability, statistics, normal and binomial distributions, and topics from differential and integral calculus, students independently explore at least two mathematically rich ideas and communicate their findings as part of the portfolio requirements described in the IB Math SL guide. The course is designed for students who already possess knowledge of basic mathematical concepts, and who are equipped with the skills needed to apply simple mathematical techniques correctly. The majority of these students will expect to need a sound mathematical background as they prepare for future studies in subjects such as chemistry, economics, psychology and business administration.

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**IB Math HL** This two-year course is designed for students with a good background in mathematics who are competent in a range of analytical and technical skills. The majority of these students will be expecting to include mathematics as a major component of their university studies, either as a subject in its own right or within courses such as physics, engineering and technology. Others may take this subject because they have a strong interest in mathematics and enjoy meeting its challenges and engaging with its problems. Students embarking on this course should expect to develop insight into mathematical form and structure, and should be intellectually equipped to appreciate the links between concepts in different topic areas. The internally assessed component, the portfolio, offers students a framework for developing independence in their mathematical learning through engaging in mathematical investigation and mathematical modelling. At the end of the first year, students will take either the AP Calculus AB exam or the AP Calculus BC exam (see the course description for AP Calculus BC above). Because the topics of the IB Math HL course are much broader than the topics in AP Calculus BC, and include in-depth study of vector geometry, matrices, probability, statistics (including hypothesis testing), and probability distributions, the course is demanding. Students wishing to study mathematics in a less rigorous environment should therefore opt for one of the standard level courses, mathematics SL or mathematical studies SL.

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**AP Statistics** 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: exploring data, sampling and experimentation, anticipating patterns by exploring random phenomena using probability and simulation, and statistical inference. Students who successfully complete the course and exam may receive credit, advanced placement, or both for a one-semester introductory college statistics course.

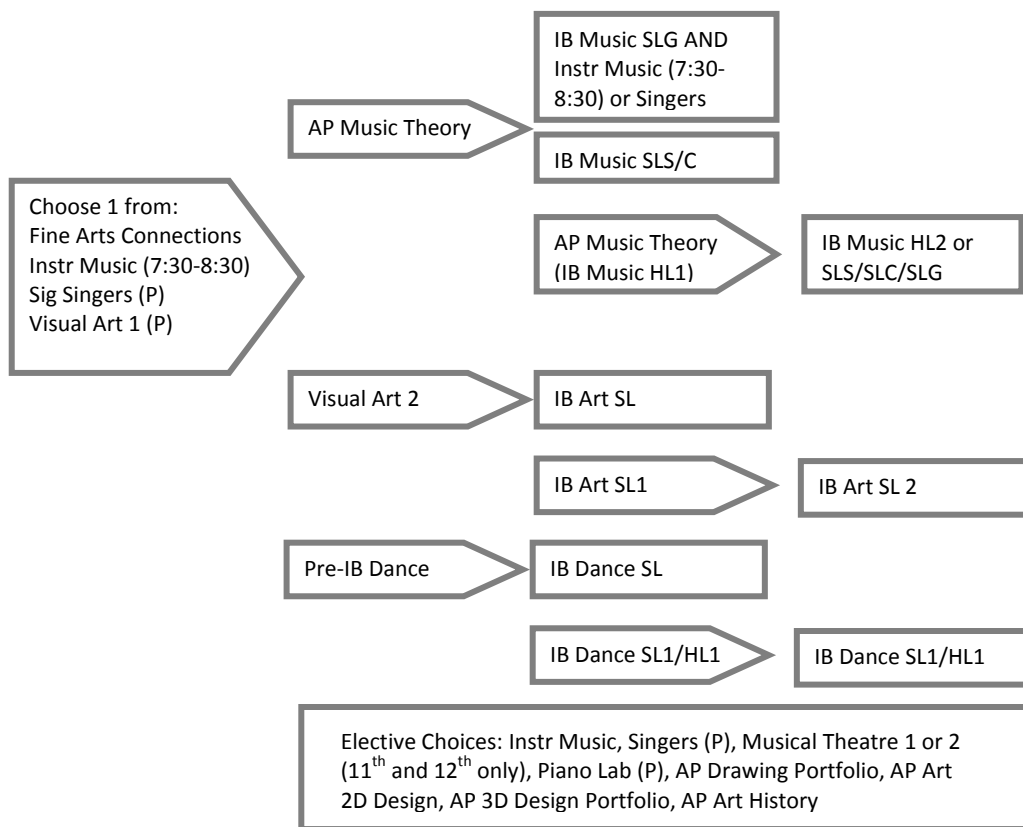
**This course is offered only as student interest and need dictate.**

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**IB Computer Science** The International Baccalaureate Computer Science curriculum provides a rigorous framework for the exploration of problem solving using computers. Students are expected to master the JAVA programming language and appropriate software design techniques equivalent to the first programming course offered at many colleges. Each student will develop a Program Dossier to demonstrate mastery of the basic computer science techniques, including software design, coding, debugging, testing and documentation. Students will sit for the IB Computer Science exam in the spring.

## Group 6: Fine and Performing Arts

All students take two semesters of Fine Arts to earn two credits. Note that Instrumental Music is offered from 7:30-8:30 in the morning. Students who take this class will take a total of eight classes to fill their schedule. Note also that many courses require permission (P) to enroll.



### Fine Arts Endorsement Requirements

Entering eleventh graders on track for earning the Academic Honors Diploma may qualify to earn the Fine Arts Endorsement with emphasis on music, theatre, or art as follows.

**Emphasis on Music** For admission to the program, students must audition with a vocal or instrumental solo and take a placement test that includes music theory and keyboard proficiency. Students must complete eight fine arts credits as eleventh and twelfth graders. These credits include four performance credits in Singers or Instrumental Music and four classroom credits from the following: AP Music Theory (2 credits); Piano Lab (2 credits); IB Music SL (2 credits) with possible IB certificate; or a second language (2 credits), particularly encouraged for voice students.

**Emphasis on Musical Theatre** For admission to the program, students prepare an audition with a vocal solo and a monologue, take a dance placement test, and must have earned a minimum of two performance credits in their ninth and tenth grade years. Students admitted to the program must complete eight fine arts credits as eleventh and twelfth graders including Musical Theatre 1 and 2 and four classroom credits selected from the following: Piano Lab (2 credits); Signature Singers (2 credits); or AP Music Theory (2 credits).

**Emphasis on Musical Theatre and Music, the "Blend"** For admission to the program, students prepare an audition with a vocal or instrumental solo and a monologue, take a dance placement test and a placement test that includes music theory and keyboard proficiency, and must have earned a minimum of two performance credits in their ninth and tenth grade years. Students admitted to the program complete twelve fine arts credits as eleventh and twelfth graders. These credits include four performance credits in Singers or Instrumental Music and six classroom credits from the following: Musical Theatre 1 (2 credits); Musical Theatre 2 (2 credits) with a pre-requisite of Musical Theatre 1 or placement; AP Music Theory (2 credits); or Piano Lab (2 credits).

**Double Emphasis on Music and Art** Students in the Fine Arts Endorsement program may complete a double endorsement in art and music if they have taken art in their sophomore year and if they complete the music endorsement requirements (see above) and art endorsement requirements (see below).

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**Primary Emphasis on Music with a Secondary Emphasis on Art** Students in the Fine Arts Endorsement program may complete a music endorsement with a partial endorsement in art by completing the full music requirement plus six credits from the arts endorsement offerings (see below).

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**Emphasis on Art** For admission to the program students take a visual arts assessment and must have completed two credits in visual arts or must have taken Fine Arts Connections during their ninth or tenth grade years. Students admitted to the program complete at least eight credits in visual arts during their junior and senior years, and they must sit for an IB certificate in Visual Art (SLA or SLB) or take one AP exam in AP Drawing, AP 2D Design, AP 3D Design, or AP Art History. Seniors in the program exhibit ten to twenty works of art, matted and framed.

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**Fine Arts Connections** Since middle school students quite often have to choose between Visual Art, Choir or Band/Orchestra, many students come to high school thinking their talents are limited to that area. The focus of this course is to allow students to sample visual arts, music and theatre in a non-judgmental, project-oriented, cooperative atmosphere. Students are split throughout the year between the art and music room where they create, write and perform various projects. This introduces the various fine arts course offerings at Signature to students who may learn that they wish to pursue more advanced courses during their high school career while it creatively fulfills the Fine Arts requirement for those who won't. This course provides students an opportunity to develop both practical and perceptual skills through a variety of art and music experiences from which they will learn to create, realize, perform, recognize, speculate, analyze, identify, discriminate and hypothesize about the fine and performing arts and their connection to both community and world cultures. Students are afforded, through various projects, the opportunity to develop their knowledge, abilities and understanding of the fine and performing arts through performances and composition in addition to giving the Arts a historical and international framework. Finally, this course strives to assist students in developing their potential as musicians, actors and artists as they create and perform in group and solo settings.

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**Instrumental Music** This class is a combined mixed ensemble offering Full Orchestra, Full Wind Ensemble, String Ensemble, String Quartet, and Jazz Ensemble. The ensembles provide instruction and performing opportunities for all players. The basics of music theory and ensemble playing are a daily focus. A variety of musical styles will be offered to provide experience for each student's musical skills to be enhanced. The ensembles perform at concerts throughout the school year; some of these concerts may be off campus. Participation in scheduled concerts is a part of this course. The dates of all performances will be posted and announced as soon as they are scheduled and approved by the office. Students in this class are expected to have had at least three years of study on their instrument prior to enrolling in this high school level ensemble. Each student is encouraged take private lessons on their instrument.

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**Signature Singers** This is a two-semester course for grades 9-12 by audition only. The choir performs multiple concerts at the school and throughout the community. This group of students represents Signature School as a source of public relations and community service. Students are encouraged to develop and exhibit advanced performance skills at every opportunity. Members are expected to further develop singing technique and sight-singing skills that are necessary to create an ensemble of excellence. Recordings of the group are submitted to International Baccalaureate and the choir is adjudicated at both Solo/Ensemble contest and ISSMA Organizational Contest.

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**Musical Theatre 1** This class blends all aspects of performance into a complete package. Dance focuses on ballet, jazz, and tap technique as well as "picking up" combinations in an audition setting. Individual audition portfolios are created with prepared cuts of vocal music from various composers and styles and monologues from different genres of theater. Workshops with special guests are built into class time and touch upon movement, character building, creating a scene, and improvisation. This class is graded on preparation and participation with emphasis on making "big choices" and thinking outside of the box.

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**Musical Theatre 2** Building on basic auditioning techniques established in Musical Theatre 1, the individual audition portfolio is perfected and completed with resumes. Students are challenged with more advanced dance techniques and combinations. Class time will be spent learning how to rehearse scenes, basic directing skills, and understanding the business of the professional theatre world. Class work is still graded on preparation and participation with emphasis on making those "big choices" and being individually creative. When possible a senior showcase will be included in the final grade.

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**Piano Lab** Designed originally to introduce music students to the instrument upon which much of music theory is based, the piano class has emerged as a class for students who need practice time to enhance their private piano lessons, as a place for beginners to acquaint themselves with the instrument as an avocation, and as a reintroduction to an instrument they may have studied when young but quit before they achieved a level of competence. Piano Lab at Signature is customized. Each student sets goals with the teacher and is held accountable for meeting those goals. The teacher's role is that of motivator and guide. The success of the class relies on the self-motivation of the student. Assessment is through in-class recitals. Skill level permitting, the final may include public recitals. This course is highly recommended for all music and musical theater students and is a primary recommendation for Fine Arts Endorsement students.

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**IB Music HL1/AP Music Theory** This course seeks first to instill mastery of the rudiments and terminology of music, including hearing and notating pitches, intervals, scales and keys, chords, metric organization, and rhythmic patterns. While this course focuses primarily on the system of major-minor tonality, it also attempts to incorporate at least a brief introduction to modal, pentatonic, and other scales. Attention is given to the acquisition of correct notational skills. Speed and fluency with basic notational and chordal skills is emphasized. As time permits, the course endeavors to include current musical practices and the theory used in various world cultures. Building on this foundation, the course progresses to include more sophisticated and creative tasks, such as: melodic and harmonic dictation; composition of a bass line for a given melody, implying appropriate harmony; realization of a figured bass; realization of a Roman numeral progression; analysis of repertoire, including melody, harmony, rhythm, texture, and form; sight-singing; and composition.

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**IB Music HL2/SL** Prerequisite: AP Music Theory (above). This course provides students an opportunity to develop perceptual skills through an in-depth study of the historical perspectives of music throughout the world and a variety of musical experiences from which they will learn to recognize, speculate, analyze, identify, discriminate and hypothesize about their music. Students are afforded the opportunity to creatively develop their knowledge, abilities and understanding through performances and composition in addition to giving the music a historical and international framework. This course also builds upon the theory, aural and analysis skills studied in the Music Theory Course (prerequisite), applicable to listening to and performing musical literature. This course prepares students for the IB SL or HL exam in music. Finally, this course assists students in developing their potential as musicians and performers in group and solo settings.

**Visual Arts 1 and 2 (Introduction to 2D or 3D Art; Advanced 2D or 3D Art)** Students in Visual Arts 1 and 2 acquire a foundation in two- and three-dimensional areas of introductory studio art courses that encompasses art history, art criticism, aesthetics, and production and leads to the creation of portfolio quality works in the areas of art history, art criticism, aesthetics, production, and theory. Within this context, students: create works of art in drawing media (dry/wet), graphic design, digital design, photography, sculpture and ceramics; reflect upon the outcomes of those experiences; explore historical connections; write about the process; make presentations about their progress at regular intervals; work individually and in groups; find direct correlations to other disciplines; and explore career options in visual art. Students also utilize art museums, galleries, studios, and community resources in their studies.

**AP 3D Design Portfolio** In 3D Design Portfolio the student should demonstrate an understanding of design principles as they relate to depth and space. The course is intended to address a broad interpretation of sculptural issues. These may include mass, volume, form, plane, color/light and texture. Design involves purposeful decision making about using the elements and principles of art. The principles of design (unity/variety, balance, emphasis, contrast, rhythm, repetition, balance, variety, proportion/scale, and figure/ground relationship) can be applied to the visual elements (line, shape/form, color, value, texture, and space) in a three dimensional composition. Such elements and concepts may be articulated through additive, subtractive, and/or fabrication processes. A variety of approaches to representation, abstraction, and expression may be part of the student's portfolio. These might include traditional sculpture (figurative and non-figurative), architectural models, apparel, ceramics, three-dimensional fiber arts or metalwork and jewelry, among others.

**AP Art History** The AP offering in the Art History is designed to provide the same benefits to secondary school students as those provided by an introductory college course in art history: an understanding and knowledge of architecture, sculpture, painting, and other art forms within diverse historical and cultural contexts. It also provides an opportunity for schools to strengthen an area neglected in most curricula. In the course, students examine major forms of artistic expression from the past and the present from a variety of cultures. They learn to look at works of art critically, with intelligence and sensitivity, and to analyze what they see. An understanding of the elements of art, fundamental art historical terminology, and technical processes used in the production of art is basic to both college and AP courses. Art history increasingly emphasizes understanding works in a global context, considering such issues as patronage, gender, and the functions and effect of works of art. No prior experience in art history is assumed for those students who take the AP Art History Course. Students who have done well in other courses in the humanities, such as history and literature, or in any of the studio arts, are especially encouraged to enroll. The course *requires a high degree of commitment to academic work and to the purposes of a program designed to meet college standards.*

**IB Art SL** The exam for IB Visual Art encourages the candidates to articulate their inspirations and development over two years of study that encourages respect for cultural and aesthetic differences and promotes creative thinking and problem solving. The two areas of focus in IB Visual Art SL-A are 60%-studio (practical work) and 40%-investigative workbook (sketchbook-journal). The International Baccalaureate Visual Art program teaches the student candidate art theory and design, structure, and the aesthetic development of art work expressing personal and global inspirations. The first year of IB Art SL-A provides the students the option of a weighted grade by submitting an Advanced Placement Portfolio Exam. The second year of IB Art SL-A will be a weighted grade when the candidate completes the internal and external examination for an IB certificate or IB diploma. Internal assessment is based upon the review of Investigative Workbooks and external assessment consists of the Candidate's art exhibition assessed by an interview with an examiner accompanied by the Candidate Record Book, a collection of photographs of the candidates' work and a number of photocopied pages from their investigative workbooks.

**AP Drawing Portfolio** In the AP Drawing Portfolio, student mastery of drawing can be demonstrated through a wide range of approaches and media. Light and shade, line quality, rendering of form, composition, surface manipulation, and the illusion of depth are drawing issues that can be addressed through a variety of means, which could include painting, printmaking, mixed media, etc. Abstract, observational, and inventive works may be pursued. Drawing is considered "mark-making." The range of marks used to make drawings, the arrangement of the marks, and the materials used to make the marks are endless. Students in drawing engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. In addition, students: use organizational principles and functions to solve specific visual problems; apply media, techniques, and processes with sufficient skill to communicate intended meaning; and use a variety of media such as pencil, chalk, pastels, charcoal, and pen and ink. Students at this level produce works for their portfolios which demonstrate a sincere desire to explore a variety of ideas and problems. Students create drawings utilizing processes such as sketching, rendering, contour, gesture, and perspective drawing.

**AP 2D Design Portfolio** This portfolio is intended to address a very broad interpretation of two-dimensional (2D) design issues. This type of design involves purposeful decision-making about how to use the elements and principles of art in an integrative way. In the 2D Design Portfolio students should demonstrate an understanding of design principles as applied to a two-dimensional surface. The principles of design (unity/variety, balance, emphasis, contrast, rhythm, repetition, balance, variety, proportion/scale, and figure/ground relationship) can be articulated through the visual elements (line, shape/form, color, value, texture, and space). Any 2D process or medium may be used including but not limited to graphic design, digital imaging, photography, multimedia, collage, fabric design,

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weaving, illustration, painting, printmaking, etc. For this portfolio, students are asked to demonstrate proficiency in 2D design using a variety of art forms. Good design may be imitational (representational), non-objective (abstract), or expressive (emotional). Drawings may qualify for both the Drawing and 2D Design Portfolio, but they will be evaluated by the criteria of the 2D Portfolio for which they are submitted; therefore, the application of the principles of design and their qualities will be evaluated first. Any work that makes use of photographs, published images, or digital work can only be included in the 2D Design Portfolio and the works must show substantial development beyond duplication demonstrated through manipulation of the formal qualities, design and/or concept of the original work.

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**IB Dance SL/HL** Consistent with the educational philosophy of the IB, the Diploma Programme dance curriculum aims for a holistic approach to dance, and embraces a variety of dance traditions and dance cultures—past, present and looking towards the future. Performance, creative and analytical skills are mutually developed and valued whether the students are writing papers or creating and performing dances. The curriculum provides students with a liberal arts orientation to dance. This orientation facilitates the development of students who may become choreographers, dance scholars, performers or those, more broadly, who seek life enrichment through dance. The dance course has three components of study and assessment: composition and analysis, world dance studies, and performance. While prior dance experience is not mandatory at SL, it is recommended. At HL it is very strongly recommended. This is a two-year class at both the SL and HL levels. Students who enroll in Pre-IB Dance as sophomores may take the IB SL test as juniors.

## Other Required Courses

**Health** This course will cover topics of current concern in the fields of health and personal safety with an emphasis on class discussion and review of current studies and writings in the field. Emphasis will be on awareness of the risks to individuals due to lifestyle choices. Topics will include complications and risks of body piercing and tattoos, suicide awareness, stress management, drug, alcohol, and tobacco use, skin cancer, relationships, internet safety, sex education, and nutrition as well as other topics that may be pertinent to the current students.

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**Physical Education** This course emphasizes physical conditioning and total development of the individual through a wide variety of physical experiences. Students will participate in areas of physical fitness intended to condition the body and develop sound discipline. Activities include daily stretching and running, indoor soccer, weight training, football, floor hockey, volleyball, step aerobics, basketball, badminton, whiffleball and jump roping.

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**IB Theory of Knowledge (TOK)** This course is only open to IB diploma candidates. The aims of the TOK class are to engage students in reflection on, and in the questioning of, the bases of knowledge, so that they: develop an understanding of why critically examining knowledge claims is important; develop a critical capacity to evaluate beliefs and knowledge claims; make interdisciplinary connections; become aware of the interpretative nature of knowledge including personal and ideological biases; consider that knowledge may place responsibilities on the knower; understand the strengths and limitations of individual and cultural perspectives; develop a concern for rigor in formulating knowledge claims; and develop intellectual honesty. The second year of the course requires a 10-minute oral presentation and a 1600 word essay on title prescribed by the IB.

## Build Your Own Schedule

Use the information on Academic Honors, the Pre-IB Course Sequence Table, the eleventh and twelfth Grade Course Sequence Table, the course sequencing at the beginning of the course descriptions for each discipline, and the possible paths with particular emphasis on a special interest to build your own 4-year plan.

Minimum Requirements	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>	Credits
<b>Group 1: Language A1</b> 4 years required	English 9	AP Lang and Composition	IB English HL1	IB English HL2	
<b>Group 2: Second Language</b> 2 consecutive years required in 9 <sup>th</sup> and 10 <sup>th</sup> ; 4 years required for most					
<b>Group 3: Individuals and Societies</b> AP Gov and Economics (1 semester each) required for all students; IB Eur Hist SL (includes Econ) required for all but IB candidates testing in IB Env Sys.	US History	AP World			
		Multicultural America (1 semester)			
<b>Group 4: Experimental Sciences</b> One year of biology and chemistry required; 1 advanced level science required (Physics, IB Bio HL1, IB Env Sci 1, IB Chem SL1)		Chemistry			
<b>Group 5: Mathematics and Computer Science</b> One year beyond Algebra 2 with Trig, either Math Studies SL, Math SL, or AP Calculus BC (IB Math HL1) required					
<b>Group 6: The Arts</b> One year required					
<b>Other Requirements</b> TOK required for IB students. The course is flexibly scheduled over a two-year period. Most students will take seven classes in addition to TOK.	PE	Health (1 semester)			
<b>Elective</b>					
<b>Total Credits (1 semester classes count as 1 credit for a minimum of 47 credits)</b>					

