

2023-2024
Fishers High School
Course Description Guide



"Have Pride. Show Character. Build Tradition."



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Fishers, IN 46038
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A MESSAGE FROM THE PRINCIPAL

Fishers High School Students and Parents:

The 2023-2024 academic year brings new challenges and opportunities for Fishers High School (FHS) students and families. This Course Description Guide provides important information regarding our 200+ course offerings. The academic experience at FHS can prepare every student for success; this success depends heavily on the decisions made regarding a student's educational program. A typical graduate will experience 24-28 courses during their four-year high school career. Careful consideration should be given in making selections that will best prepare students for life after graduation.



This guide is designed to assist students in developing the best possible course of study. Students can make the most of their high school experience by choosing a variety of subjects and challenging coursework. Students, as you develop your plan, consider course offerings that will best help you achieve your goals. We encourage FHS students to explore their interests and dream big!

Students and parents are urged to consult with school officials whenever questions arise. Each student should use a team consisting of faculty and parents in establishing immediate and long-range plans. A close relationship among team members is essential, and by working together, we will enable our students to achieve their goals in high school, college, and career. Good luck in this very important process!

Go Tigers!

Jason Urban
Principal



FHS MISSION & BELIEFS

FHS MISSION STATEMENT

All FHS students will Have Pride, Show Character, and Build Tradition.

FHS BELIEF STATEMENT

We, the students and staff of Fishers High school, believe in an inclusive and diverse school community, by embracing **ALL** people, regardless of ability, age, ancestry, appearance, citizenship status, color, culture, gender identity, religious background, socioeconomic status, sex, sexual orientation, or wellness.

We celebrate what unites us and what makes you unique.

CORE VALUES

Respect, Integrity, Perseverance, and Community

HSE SCHOOLS MISSION STATEMENT

Hamilton Southeastern, as an innovative school community, provides and educational opportunity for each student to achieve maximum potential to become a responsible citizen and influence an ever-changing world community.

STATEMENT OF NONDISCRIMINATION

The Hamilton Southeastern School District is an equal opportunity employer and does not discriminate on the basis of age, race, color, religion, sex, national origin, or handicapping condition. No person is excluded from participation in, denied the benefits of, or otherwise subjected to unlawful discrimination on such a basis in any educational program or student activity. If you have experienced discrimination in such educational programs or activities, written inquiries about procedures are available. Consideration of complaints alleging such discrimination should be directed to:

Office of the Superintendent of Schools, 13485 Cumberland Road, Fishers, IN 46038



SCHEDULING RESOURCES

**Fishers High School
Course Description Guide
School Year 2023-2024**

INFORMATION, POLICIES & PROCEDURES

CLASS SCHEDULES

Counselors will meet with students early in the second semester to assist in selecting classes for the next year. The FHS Course Description Guide is accessible online for student reference. Students should work with their parents and their counselor to select their courses carefully. The selections made will play a critical role in the student's future options in further education and in career choices. Questions regarding schedules should be directed to the student's counselor.

SCHEDULE CHANGE REQUEST PROCEDURE

Students and parents should carefully consider all course requests prior to meeting with their school counselor to schedule courses for an upcoming school year. Students leaving for summer vacation should consider course requests made at the time of scheduling as **final** for the entire 2023-2024 school year.

Generally speaking, schedule-change requests are not granted. This policy exists for many reasons, especially given the scope of our master schedule. Schedule changes after **May 31** will only be administratively granted under the following circumstances:

- Administrative error in schedule (i.e. original student requests were not entered correctly)
- Out of necessity to balance class sizes
- Student failed a second semester class or summer school class in a required subject
- Students with 7 academic classes may drop one for a study hall during the **first eight days** of the semester with a parent's written request and provided that class is not a dual-credit, or AP course.
- Documented physical or mental condition requires a modification in the schedule
- Exceptional learners considerations
- Student is academically misplaced in the course (ex. has not completed prerequisites)
- Administrative discretion (*note: this is for exceptionally rare cases*)

Students may not change their schedules due to instructor preference or the order of classes. Approval of all schedule change requests is subject to consideration involving minimum and maximum class size. Except under very special circumstances, any student who withdraws from a class after the second week will receive a "WF" ("Withdrawal Failure") as a semester grade for that class.

Year-long and semester classes are included in this policy. Students enrolled in dual-credit courses, in which college credit may be granted, must research and consider the application of credit at other universities carefully prior to scheduling. Changes in college entrance status will not be considered in granting schedule change requests.

AUDITING / RE-TAKING COURSES

If a student receives a grade lower than a C- in an advanced, honors, or AP course, that student should continue to progress through the natural sequence of courses. If the student is interested in replacing that grade to qualify for the Academic Honors Diploma, the student may—with administrator approval—take the regular version of the class, if applicable, they have previously taken at the Honors level (earning a D+ or lower) with both grades being recorded on the transcript. The second grade, if a C- or higher, can be used for the Honors Diploma requirements.

CREDITS FOR JUNIOR-HIGH ADVANCED COURSES

The following policies are for all Hamilton Southeastern Schools students who have taken the following **MATH** courses prior to entering high school: **ALGEBRA 1**, **HONORS ALGEBRA**, and **HONORS GEOMETRY**.

- The courses listed above are not required to appear on the high school transcript.
- If a student earns a C- or lower in junior high, then they must retake the course in high school. A retake grade will replace the grade earned as an 8th grader.
- If a student earns a C or higher, the grade and credit will appear on the transcript and figure into the GPA unless the parent requests the course be removed from the transcript before the end of 11th grade.
- If the student earns a B- or higher, the student may not retake the course. The grade and credit can be removed from the transcript before the end of 11th grade.
- If the student earns a B- or higher, the student will be placed in a subsequent course in the math sequence.

The following policies are for all Hamilton Southeastern Schools students who have taken the following **HONORS PREP WORLD LANGUAGE** courses prior to entering high school: **SPANISH 1**, **FRENCH 1**, and **GERMAN 1**.

- The courses listed above are not required to appear on the high school transcript.
- If a student earns a C- or lower in junior high, then they must retake the course in high school (or start in Level 1 of a new language). A retake grade will replace the grade earned as an 8th grader.
- If a student earns a C or higher, the grade and credit will appear on the transcript and figure into the GPA unless the parent requests the course be removed from the transcript before the end of 11th grade.
- If the student earns a C or higher, the student may not retake the Level 1 course in that language. They may take a Level 1 course in a different language.
- If the student earns a B-, C+, or C they will progress to Level 2.
- If the student earns a B or higher, the student will progress to Honors Level 2.

OPT-OUT OF CORE 40 PROCESS

Indiana's Core 40 curriculum provides the academic foundation all students need to succeed in college and the workforce. To graduate with less than Core 40, the following formal opt-out process must be completed:

- The student, the student's parent/guardian, and the student's counselor (or another staff member who assists the students with course selection) must meet to discuss the student's progress.
- The student's Graduation Plan is reviewed.
- The student's parent/guardian determines whether the student will achieve greater educational benefits by completing the general curriculum or the Core 40 curriculum.

If the decision is made to opt-out of Core 40, the student is required to complete the course and credit requirement for the general diploma, and the career/academic sequence the student will pursue is determined.

FHS MASTER COURSE LIST

BUSINESS, MARKETING & COMPUTER SCIENCE			
Principles of Business Mgmt.	4562	9, 10, 11, 12	Year
Accounting Fundamentals	4524	10, 11, 12	Year
Fundamentals of Marketing	5914	10, 11, 12	Year
Sports & Entertainment Market.	5984	11, 12	Semester
Principles of Entrepreneurship	5966	10, 11, 12	Year
Personal Financial Resp.	4540	10, 11, 12	Semester
Economics	1514	11, 12	Semester
AP/IB Microeconomics	1566	11, 12	Semester
AP/IB Macroeconomics	1564	11, 12	Semester
ACP Business Administration	6142	11, 12	Semester
Digital Apps & Responsibility	4528	9, 10, 11, 12	Semester
Business Math	4512	11, 12	Year
Preparing for College & Career	5394	11, 12	Year
Interactive Media	5232	10, 11, 12	Year
Merchandising	5962	11, 12	Year
Intro to Computer Science	4803	9, 10	Semester
AP Computer Science Principles	4568	9, 10, 11, 12	Year
Website & Database Devel.	7185	9, 10, 11, 12	Year
AP Computer Science A	4570	10, 11, 12	Year
CS III: Cybersecurity	5253	11, 12	Year
CS III: Software Development	5249	11, 12	Year
FAMILY & CONSUMER SCIENCES (FACS)			
Nutrition & Wellness	5342	9, 10, 11, 12	Semester
Principles of Teaching	7161	9, 10, 11, 12	Year
Child & Adolescent Develop.	7157	9, 10, 11, 12	Year
Interpersonal Relations	5364	9, 10, 11, 12	Semester
Intro to Fashion & Textiles	5380	9, 10, 11, 12	Semester
Advanced Fashion & Textiles	5380	10, 11, 12	Semester
Intro Housing & Interior Design	5350	10, 11, 12	(Either)
Adult Roles & Responsibilities	5330	11, 12	Semester
Consumer Economics	5334	11, 12	Semester
Housing/Interior Design Careers	5460	11, 12	Year
Fashion/Textiles Careers	5420	10, 11, 12	Semester
ENGLISH / LANGUAGE ARTS			
English 9	1002	9	Year
Honors English 9	1002	9	Year
English 9 (ENL)	1002	9	Year
English 10	1004	10	Year
Honors English 10	1004	10	Year
English 10 (ENL)	1004	10	Year

English 11 (ENL)	1006	11	Year
English 12 (ENL)	1008	12	Year
IB English, Year 1	1130	11	Year
IB English, Year 2	1130	12	Year
AP English Lang. & Comp.	1056	11, 12	Year
AP English Lit. & Comp.	1058	11, 12	Year
AP Seminar	0552	11, 12	Year
AP Research	0551	11, 12	Year
ACP Composition	1124	12	Semester
ACP Speech	1124	11, 12	Semester
ACP Literature	1124	12	Semester
ACP Discovering Literature	1124	11, 12	Semester
English 12 (Ivy Tech)	1008	12	Year
Composition	1090	11, 12	Semester
Creative Writing	1092	11, 12	Semester
Debate	1070	10, 11, 12	Semester
Critical Thinking & Argum.	1074	10, 11, 12	Semester
Film Literature	1034	11, 12	(Either)
Graphic Novels	1036	11, 12	Semester
Science Fiction	1036	11, 12	Semester
True Crime	1036	11, 12	Semester
Teen Issues in YA Lit.	1048	11, 12	Semester
War Literature	1048	11, 12	Semester
Life in Literature & Sport	1048	11, 12	Semester
Own Voices	1048	11, 12	Semester
Speech I	1076	9, 10, 11, 12	Semester
Advanced Speech	1078	10, 11, 12	(Either)
Journalism	1080	9, 10, 11, 12	Semester
College-Entrance Prep	0532	11, 12	Year
Newspaper Prod. I, II, II	1086	10, 11, 12	Year
Yearbook Prod. I, II, III	1086	10, 11, 12	Year
MATHEMATICS			
Algebra	2520	9, 10, 11, 12	Year
Algebra Enrichment	2516	9, 10, 11, 12	Year
Geometry	2532	9, 10, 11, 12	Year
Honors Geometry	2532	9, 10	Year
Algebra II	2522	10, 11, 12	Year
Honors Algebra II	2522	9, 10, 11	Year
Analytical Algebra	2524	9, 10, 11, 12	Year
Pre-Calculus / Trigonometry	2564/2566	10, 11, 12	Year
Honors Pre-Calc / Trig	2564	10, 11	Year
Quantitative Reasoning	2550	11, 12	Semester
Probability & Statistics	2546	11, 12	Semester

AP Statistics	2570	10, 11, 12	Year
College Algebra (Ivy Tech)	2544	12	Year
ACP Business Calculus	2544	11, 12	Year
ACP Finite Math	2544	11, 12	Year
AP Calculus AB	2562	11, 12	Year
AP Calculus BC	2572	11, 12	Year
Multivariable Calculus	2544	12	Semester
Differential Equations	2544	12	Semester
IB Math: Analysis & Appr. HL	2590	11, 12	Year
IB Math: Analysis & Appr. SL	2588	11, 12	Year
IB Math: Appl. & Interp. HL	2594	11, 12	Year
IB Math: Appl. & Interp. SL	2592	11, 12	Year

PERFORMING ARTS

Dance Performance	4146	9, 10, 11, 12	Semester
HS Student Media: Intro	1086	9, 10, 11, 12	Year
HS Student Media: Announce.	1086	10, 11, 12	Year
H Student Media: Video/Sound	1086	10, 11, 12	Year
Concert Orchestra (Beginning)	4166	9, 10, 11, 12	Year
Philharmonic Orchestra (Int.)	4172	10, 11, 12	Year
Chamber Orchestra (Int.)	4172	9, 10, 11, 12	Year
Symphony Orchestra (Adv.)	4174	9, 10, 11, 12	Year
Concert Band	4160	9	Year
Symphonic Band RED	4168	9	Year
Symphonic Band SILVER	4168	10, 11, 12	Year
Symphonic Band GOLD	4168	10, 11, 12	Year
Wind Symphony or Ensemble	4170	9, 10, 11, 12	Year
Jazz Ensemble	4164	10, 11, 12	Year
Percussion Ensemble	4162	9, 10, 11, 12	Year
Piano/Keyboard: Beginning	4204	9, 10, 11, 12	Year
Piano/Keyboard: Intermediate	4204	10, 11, 12	Year
AP/IB Music Theory	4210	10, 11, 12	Year
IB/DC Music History & Appr.	4260	11, 12	Semester
Sotto Vocé (Beginning Choir)	4182	9, 10, 11, 12	Year
Statesmen (Beginning Choir)	4182	9, 10, 11, 12	Year
Cantus (Intermediate Choir)	4186	9, 10, 11, 12	Year
Cantabile (Intermediate Choir)	4186	9, 10, 11, 12	Year
Sound (Advanced Choir)	4188	9, 10, 11, 12	Year
Electrum (Advanced Choir)	4188	9, 10, 11, 12	Year
Tech Theatre I and II	4244	9, 10, 11, 12	Semester
Theatre I & II	4242	9, 10, 11, 12	Semester
Adv. Theatre I & II	4242	10, 11, 12	Semester
Advanced Acting	4254	11, 12	Year
Theatre Direction	4248	10, 11, 12	Semester
IB Film, SL	4272	11, 12	Year

PHYSICAL EDUCATION & HEALTH

Health & Wellness Education	3506	9, 10, 11, 12	Semester
Sports Medicine I	3500	10, 11, 12	Semester

Sports Medicine II	3500	10, 11, 12	Semester
Physical Education (P.E.) I	3542	9, 10	Semester
Physical Education (P.E.) II	3544	9, 10	Semester
Officiating 101	3560	11, 12	Semester
Coed Recreational Games	3560	10, 11, 12	Semester
Weight Training	3560	10, 11, 12	Semester
Adv. Phys. Cond. (APC)	3560	9, 10, 11, 12	Semester

SCIENCE

Biology I	3024	9, 10, 11, 12	Year
Honors Biology I	3024	9, 10, 11, 12	Year
Earth & Space Science	3044	9, 10, 11	Year
Integrated Chemistry Physics	3108	10, 11, 12	Year
Chemistry I	3064	10, 11, 12	Year
Honors Chemistry I	3064	10, 11, 12	Year
Physics I	3084	10, 11, 12	Year
Anatomy & Physiology	5276	10, 11, 12	Year
Zoology	3092	10, 11, 12	Semester
Human Genetics	3092	10, 11, 12	Semester
Microbiology	3092	10, 11, 12	Semester
Forensic Science	3092	11, 12	Year
Intro to Neuroscience	3092	11, 12	Semester
Oceanography	3092	10, 11, 12	Semester
Organic Chemistry	3092	11, 12	Semester
Astronomy I	3092	10, 11, 12	Semester
Astronomy II	3092	10, 11, 12	Semester
Meteorology	3092	10, 11, 12	Semester
Geology	3092	10, 11, 12	Semester
Material Science	3092	11, 12	Year
IB / DC Anatomy/Physiology	3090	11, 12	Year
AP Biology / IB Biology Y2	3020/3032	11, 12	Year
ACP Biology	3090	11, 12	Year
ACP/IB Chemistry	3072	11, 12	Year
AP Chemistry	3060	11, 12	Year
AP Environmental Science	3012	11, 12	Year
AP Physics I / IB Physics Y1	3080	10, 11, 12	Year
AP Physics 2 / IB Physics Y2	3081	11, 12	Year
AP Physics C	3088	11, 12	Year
PLTW: Principles of Biomed	5218	9, 10, 11	Year
PLW: Human Body Systems	5216	10, 11, 12	Year
PLTW: Medical Interventions	5217	11, 12	Year
PLTW: Biomed. Innovations	5219	11, 12	Year
PLTW: Intro to Engineering	4802	9, 10, 11, 12	Year
PLTW: Princ. of Engineering	5644	10, 11, 12	Year
PLTW: Digital Electronics	5538	11, 12	Year
Robotics Design & Innovation	4728	10, 11, 12	Year
Civil Engineering / Architec.	5650	11, 12	Year
Aerospace Engineering	5518	11, 12	Year
Comp Integrated Manufact.	5534	11, 12	Year

Engineering Design & Devel.	5698	12	Year
Principles of Agriculture	7117	9, 10, 11, 12	Year
Animal Science	5008	10, 11, 12	Year
ALS: Animals	5070	10, 11, 12	Year
Horticulture Science	5132	10, 11, 12	Year
Natural Resources	5180	10, 11, 12	Year
Plant & Soil Science	5072	10, 11, 12	Year
Supervised Ag Experience	5228	10, 11, 12	Year
Agriculture Management	5002	11, 12	Year
SOCIAL STUDIES			
Geography & History of World	1570	9, 10	Year
World History	1548	9, 10, 11, 12	Year
AP World History: Modern	1612	9, 10, 11, 12	Year
AP Human Geography	1572	10, 11, 12	Semester
Law Education	1526	10, 11, 12	Semester
Current Issues	1512	10, 11, 12	Semester
U.S. History	1542	11	Year
AP U.S. History	1562	10, 11	Year
AP/IB European History	1556	10, 11, 12	Year
Global Studies	1538	11, 12	Semester
Comparative Religions	1550	11, 12	Semester
Constitutional Law	1538	10, 11, 12	Semester
IB World Religions SL	1588	11, 12	Semester
Sociology (or DC Sociology)	1534/1574	11, 12	Semester
Psychology	1532	11, 12	Semester
AP/IB SL Psychology	1558	11, 12	Year
IB Psychology HL	1604	12	Year
U.S. Government	1540	11, 12	Semester
ACP U.S. Government	1574	11, 12	Semester
ACP Gov / We The People	1574	11, 12	Semester
AP US Government & Politics	1560	11, 12	Semester
AP African American Studies	0590	10, 11, 12	Year
Indiana Studies	1518	9, 10, 11, 12	Semester
Ethnic Studies	1516	10, 11, 12	Semester
African Studies	1500	9, 10, 11, 12	Semester
International Relations	1520	10, 11, 12	Semester
IB Global Politics SL	1578	10, 11, 12	Year
Race/America: African Amer.	1538	10, 11, 12	Semester
Sports Psychology	1550	10, 11, 12	Semester
VISUAL ARTS			
Drawing I	4060	9, 10, 11, 12	Semester
Intro to 2D Art	4002	9, 10, 11, 12	Semester
Intro to 3D Art	4006	9, 10, 11, 12	Semester
Printmaking	4066	9, 10, 11, 12	Semester

Peer Art Education	0520	9, 10, 11, 12	Semester
Intro/Digital Art Photography	4062	9, 10, 11, 12	Semester
Digital Photography I & II	4062	10, 11, 12	Semester
Drawing II	4060	10, 11, 12	Semester
Drawing III & IV	4060	11, 12	Semester
Vis Comm: Graphic Design 1	4086	10, 11, 12	Semester
Vis Comm: Graphic Design 2	4086	10, 11, 12	Semester
Painting I & II	4064	10, 11, 12	Semester
Painting III	4064	11, 12	Semester
IB Visual Arts SL (or HL)	4090/4092	11, 12	Year
AP Drawing	4048	11, 12	Year
AP 2-D Art & Design	4050	11, 12	Year
AP 3-D Art & Design	4052	11, 12	Year
Ceramics I	4040	9, 10, 11, 12	Semester
Ceramics II & III	4040	10, 11, 12	Semester
Jewelry I & II: Metalsmithing	4042	10, 11, 12	Semester
Sculpture I & II	4044	10, 11, 12	Semester
AP Art History	4025	10, 11, 12	Year
WORLD LANGUAGES			
French I / IB ab initio	2020/2310	9, 10, 11, 12	Year
French II (Reg or Honors)	2022	9, 10, 11, 12	Year
French II (Reg or Honors)	2022	9, 10, 11, 12	Year
French III (Reg or Honors)	2024	10, 11, 12	Year
French IV (Reg or Honors)	2026	11, 12	Year
AP/IB French V	2032	11, 12	Year
Spanish I	2120	9, 10, 11, 12	Year
Spanish II (Reg or Honors)	2122	9, 10, 11, 12	Year
Spanish III (Reg or Honors)	2124	10, 11, 12	Year
Spanish IV (Reg or Honors)	2126	11, 12	Year
AP/IB or AP Spanish V	2132	11, 12	Year
Adv CC Spanish	2126	12	Year
German I	2040	9, 10, 11, 12	Year
German II (Reg or Honors)	2042	9, 10, 11, 12	Year
German III (Reg or Honors)	2044	10, 11, 12	Year
German IV (Reg or Honors)	2046	11, 12	Year
AP/IB German V	2052	11, 12	Year
American Sign Language 1	2156	10, 11, 12	Year
American Sign Language 2	2158	11, 12	Year
American Sign Language 3	2158	12	Year
Lang. Heritage Speakers I/II	2190/2192	9, 10, 11, 12	Year
MULTIDISCIPLINARY			
Basic Skills Development	0500	9, 10, 11, 12	(Either)
Peer Tutoring I & II	0520	10, 11, 12	Semester
Theory of Knowledge	0560	11, 12	Year
Cadet Teaching I & II	0502	12	(Either)
Internship (Career Expl.)	0530	12	(Either)

NEXT YEAR'S GRADE

9 10 11 12

LAST NAME

FIRST NAME

STUDENT EMAIL

FHS COURSE WORKSHEET

SEMESTER 1 CHOICES	SEMESTER 2 CHOICES	ALTERNATIVE CHOICES
Course _____	Course _____	Alternative Course 1 _____
Course _____	Course _____	Alternative Course 2 _____
Course _____	Course _____	<u>Summer Courses (optional)</u> Students may take up to two summer classes for free at Indiana Online. <i>Students are responsible for their own course registration at indianaonline.org</i>
Course _____	Course _____	
Course _____	Course _____	Students and parents should carefully consider all course requests for the upcoming year prior to their scheduling meeting w/ their school counselor. <b style="color: red;">No schedule changes will be approved after May 31.
Course _____	Course _____	
Course _____	Course _____	

Diploma option: ___ Core 40 ___ Academic Honors ___ Technical Honors ___ IB ___ AP Capstone

X _____
STUDENT'S SIGNATURE

X _____
DATE

X _____
PARENT'S SIGNATURE

X _____
DATE

HAVE PRIDE · SHOW CHARACTER · BUILD TRADITION

FHS FOUR-YEAR PLANNING GUIDE

Name: _____ Student ID: _____ Grad Year: _____

Goals/Vision: _____

Career Choices: _____

College / Vocational Choices: _____

Interested in the military? No / Yes: _____ Interested in sports in college? No / Yes: _____

Diploma Type: Core 40 / Core 40 with Academic Honors / Core 40 with Technical Honors / IB / AP Cap / General

Some four year plan reminders:

*Health and PE credits should be done by the end of sophomore year. One PE needs to be live (taken at FHS).

*Additional Academic Honors (AHD) requirements: 8 credits of math, 2 credits of fine arts, 6 credits of world language

*AHD also requires AP, IB, or dual-credit courses: need 4 AP/IB credits WITH the exam or 6 college credits from dual-credit courses.

FRESHMAN			
SEMESTER 1	Credit	SEMESTER 2	Credit
ENG		ENG	
MTH		MTH	
SCI		SCI	
SST		SST	
FLG		FLG	
PE		PE	
		Summer before Fresh. year	Credit
		Total Credits:	

SOPHOMORE			
SEMESTER 1	Credit	SEMESTER 2	Credit
ENG		ENG	
MTH		MTH	
SCI		SCI	
FLG		FLG	
HEALTH			
		Summer before Soph. year	Credit
		Total Credits:	

JUNIOR			
SEMESTER 1	Credit	SEMESTER 2	Credit
ENG		ENG	
MTH		MTH	
SCI		SCI	
SST		SST	
		Summer before Junior year	Credit
		Total Credits:	

SENIOR			
SEMESTER 1	Credit	SEMESTER 2	Credit
ENG		ENG	
MTH / QR			
		Summer before Senior year	Credit
		Total Credits:	

Name: _____

Graduation Year: _____

Diploma Type:
 _____ AHD / THD / AP Capstone / IB
 _____ Core 40 Diploma
 _____ General Diploma / Cert. of Comp.

21st Cent. Scholar?
 _____ Yes

Credits Earned: _____ / _____ / _____ / _____
GPA: _____ / _____ / _____ / _____
Weighted GPA: _____ / _____ / _____ / _____

Core 40 Requirements

Business / Technology (1 credit)

Language Arts (8 credits)

English 9 _____

English 10 _____

Upper Level _____

Must complete one Column A course

Science (6 credits)

Biology _____

Chem / Physics / ICP _____

Addl. Science _____

Social Studies (6 credits)

World Hist / Geo & HoW _____

US History _____

Government _____

Economics _____

Mathematics (6 credits)

Algebra 1 _____

Geometry _____

Algebra 2 _____

**Math/QR course must be taken every year:*

9th 10th 11th 12th

Directed Electives (5 credits)
World languages, fine arts, & career/tech

Health (1) / Physical Education (2)

Health _____ Phys. Ed. _____ (L)

Other Required Electives (7 credit)

Academic Honors

**GPA 3.0 or higher
 *No grade lower than C-
 Complete Core 40 & the following:

Additional Math

World Language
3 years of one language OR 2 years each from two different language

Fine Arts

- Complete ONE of the following:**
- 4 AP Cr + Ex _____
 - 4 IB Cr + Ex _____
 - 6 Dual Credits _____
 - 2 AP + 3 Dual _____
 - SAT (1250: M560 E590)
 - ACT (26)

Technical Honors

**GPA 3.0 or higher
 *No grade lower than C-
 Complete Core 40 & the following:

College & Career Pathway

Notes / Reminders: _____

- Complete ONE of the following:**
- State-approved, industry-recog. Certification or credential
 - 6 pathway dual credits from approved dual-credit list
- Complete ONE of the following:**
- Any option listed above for AHD
 - WorkKeys, Accuplacer, or Compass min. Qualifying scores



GRADUATION REQUIREMENTS

**Fishers High School
Course Description Guide
School Year 2023-2024**

Fishers High School
CORE 40 DIPLOMA REQUIREMENTS



REQUIREMENTS		CREDITS
English / Language Arts (8 Credits)	English 9 or Honors English 9	2
	English 10 or Honors English 10	2
	<i>Students MUST earn at least 1 credit in a course from Group A</i> GROUP A: AP Lit & Comp; AP Lang & Comp; AP Seminar; AP Research; IB English HL (Year 1 or 2); ACP Comp; ACP Lit; Composition; English 12 GROUP B: Speech; ACP Speech; ACP Discovering Lit; Creative Writing; Debate; Critical Thinking; Genres in Lit; Themes in Lit; Journalism (or Adv.)	4
Social Studies (6 Credits)	World History or AP World History or Geography & History of the World	2
	U.S. History or AP U.S. History	2
	Government	1
	Economics	1
Mathematics (6 Credits)	Algebra I	2
	Geometry	2
	Algebra II	2
Science (6 Credits)	Biology or Honors Biology	2
	Chemistry I or Physics or Integrated Chemistry Physics (ICP)	2
	<i>Students must earn two additional credits: Chemistry; Physics; Earth Space Science; Integrated Chemistry Physics (ICP); any Advanced Science course; any AP / dual-credit science course</i>	2
P.E. & Health (3 Credits)	Health	1
	Physical Education (2 semesters; 1 must be in-person at FHS)	2
Directed Electives (5 Credits)	<i>Students must choose five credits from any of the following disciplines:</i> <ul style="list-style-type: none"> • World Languages • Fine Arts • Career & Technical Education 	5
Business / Tech. (1 Credits)	<i>Students can earn one credit from the following:</i> Principles of Business Management, Personal Financial Responsibility, Accounting Fundamentals, Marketing Fundamentals, DAR, ACP Business Admin, or any Computer Science course	1
Required Elective Courses		7
Credits Required for Graduation		42

Fishers High School
CORE 40 DIPLOMA w/ ACADEMIC HONORS



REQUIREMENTS		CREDITS
English / Language Arts (8 Credits)	English 9 or Honors English 9	2
	English 10 or Honors English 10	2
	<i>Students MUST earn at least 1 credit in a course from Group A</i> GROUP A: AP Lit & Comp; AP Lang & Comp; AP Seminar; AP Research; IB English HL (Year 1 or 2); ACP Comp; ACP Lit; Composition; English 12 GROUP B: Speech; ACP Speech; ACP Discovering Lit; Creative Writing; Debate; Critical Thinking; Genres in Lit; Themes in Lit; Journalism (or Adv.)	4
Social Studies (6 Credits)	World History or AP World History or Geography & History of the World	2
	U.S. History or AP U.S. History	2
	Government	1
	Economics	1
Mathematics (8 Credits)	Algebra I	2
	Geometry	2
	Algebra II	2
	Pre-Calculus/Trigonometry, Statistics, AP/IB Statistics, AP Calculus AB/BC	2
Science (6 Credits)	Biology or Honors Biology	2
	Chemistry I or Physics or Integrated Chemistry Physics (ICP)	2
	<i>Students must earn two additional credits:</i> Chemistry; Physics; Earth Space Science; Integrated Chemistry Physics (ICP); any Advanced Science course; any AP / dual-credit science course	2
P.E. & Health (3 Credits)	Health	1
	Physical Education (2 semesters; 1 must be in-person at FHS)	2
World Lang.	<i>Students must chooses one of the following pathways:</i> <ul style="list-style-type: none"> 3 years of one language; OR 2 years of one language, and 2 years of another 	6-8
Business / Tech. requirement		1
Fine Arts requirement		2
Required Elective Courses		7
Credits Required for Graduation		47

Fishers High School
CORE 40 DIPLOMA w/ TECHNICAL HONORS



REQUIREMENTS		CREDITS
English / Language Arts (8 Credits)	English 9 or Honors English 9	2
	English 10 or Honors English 10	2
	<i>Students MUST earn at least 1 credit in a course from Group A</i>	4
	GROUP A: AP Lit & Comp; AP Lang & Comp; AP Seminar; AP Research; IB English HL (Year 1 or 2); ACP Comp; ACP Lit; Composition; English 12	
GROUP B: Speech; ACP Speech; ACP Discovering Lit; Creative Writing; Debate; Critical Thinking; Genres in Lit; Themes in Lit; Journalism (or Adv.)		
Social Studies (6 Credits)	World History or AP World History or Geography & History of the World	2
	U.S. History or AP U.S. History	2
	Government	1
	Economics	1
Mathematics (6 Credits)	Algebra I	2
	Geometry	2
	Algebra II	2
Science (6 Credits)	Biology or Honors Biology	2
	Chemistry I or Physics or Integrated Chemistry Physics (ICP)	2
	<i>Students must earn two additional credits: Chemistry; Physics; Earth Space Science; Integrated Chemistry Physics (ICP); any Advanced Science course; any AP / dual-credit science course</i>	2
P.E. & Health (3 Credits)	Health	1
	Physical Education (2 semesters; 1 must be in-person at FHS)	2
Directed Electives	<i>Students must choose five credits from any of the following disciplines:</i> <ul style="list-style-type: none"> World Languages / Fine Arts / Career & Technical Education 	5
Business / Tech. requirement		1
Career-Technical Program		8-10
Required Elective Courses (<i>Career Academic Sequence recommended</i>)		2-4
Credits Required for Graduation		47

Fishers High School

GENERAL DIPLOMA REQUIREMENTS



REQUIREMENTS		CREDITS
English / Language Arts (8 Credits)	English 9 or Honors English 9	2
	English 10 or Honors English 10	2
	<i>Students MUST earn at least 1 credit in a course from Group A</i> GROUP A: AP Lit & Comp; AP Lang & Comp; AP Seminar; AP Research; IB English HL (Year 1 or 2); ACP Comp; ACP Lit; Composition; English 12 GROUP B: Speech; ACP Speech; ACP Discovering Lit; Creative Writing; Debate; Critical Thinking; Genres in Lit; Themes in Lit; Journalism (or Adv.)	4
Social Studies (4 Credits)	U.S. History or AP U.S. History	2
	Government	1
	Economics	1
Mathematics ** (6 Credits)	Algebra I	2
	Other Mathematics course (year-long course)	2
	Other Mathematics course (year-long course)	2
Science *** (4 Credits)	Biology or Honors Biology	2
	Other Science course (Physical science or Earth science)	2
P.E. & Health (3 Credits)	Health	1
	Physical Education (2 semesters; 1 must be in-person at FHS)	2
Career Academic Sequence ****		5
Business / Tech. (1 Credits)	<i>Students can earn one credit from the following:</i> Principles of Business Management, Personal Financial Responsibility, Accounting Fundamentals, Marketing Fundamentals, DAR, ACP Business Admin, or any Computer Science course	1
Flex Credits *****		5
Required Elective Courses		6
Credits Required for Graduation		42

NOTES: ADDITIONAL DIPLOMA REQUIREMENTS

ADDITIONAL CORE 40 DIPLOMA REQUIREMENTS

* Courses taken for high-school credit junior high will count towards Core 40 or Academic Honors Diploma requirements.

** Students are required to earn 6 credits of math in grades 9-12 and must enroll in a math or quantitative reasoning course each year of high school. Approved IN DOE Quantitative Reasoning courses are listed and periodically updated at www.doe.in.gov

ADDITIONAL CORE 40 w/ ACADEMIC HONORS REQUIREMENTS

In addition to the "Additional Core 40 Diploma Requirements" listed above, the following criteria must also be met:

- Earn a grade of C- or above in courses that will count towards the diploma
- Have a grade point average of 3.0 or above
- Earn a minimum of 47 credits
- Complete **ONE** of the following:
 - A. 4 credits in Advanced Placement courses AND the corresponding AP exams
 - B. 4 credits in IB courses AND the corresponding IB exams
 - C. 6 verifiable, transcribed college credits in dual-credit courses from the approved dual-credit list.
 - D. Earn TWO of the following:
 - A minimum of 3, verifiable, transcribed college credits in dual-credit courses from the approved list
 - 2 credits in AP courses AND the corresponding AP exams
 - 2 credits in IB standard-level courses AND the corresponding IB exams
 - E. Earn a 1250 SAT (minimum Math score of 560, minimum Reading/Writing score of 590)
 - F. Score a 26 composite ACT (must include the writing portion of the ACT)

ADDITIONAL CORE 40 w/ TECHNICAL HONORS REQUIREMENTS

In addition to the "Additional Core 40 Diploma Requirements" listed above, the following criteria must also be met:

- Earn a grade of C- or above in courses that will count towards the diploma
- Have a grade point average of 3.0 or above
- Earn a minimum of 47 credits
- Earn 6 credits in college & career preparation courses in a state-approved College & Career Pathway
- Complete **ONE** of the following:
 - A. Any one of the options (A-F) of the Academic Honors list (see above)
 - B. Earn the following scores on WorkKeys: Reading for Info (Level 6); Applied Math (Level 6); Locating Info (Level 5)
 - C. Earn the following scores on Accuplacer: Writing 80, Reading 90, Math 75
 - D. Earn the following minimum scores on Compass: Algebra 66, Writing 70, Reading 80

ADDITIONAL GENERAL DIPLOMA REQUIREMENTS

*** The 4 credits in Science must include content from more than one of the scientific disciplines: Earth/Space Science, Biological Sciences, Physical Sciences, and Environmental Science.

**** Career Academic Sequence: selecting courses in an attempt to take advantage of career exploration & prep opportunities

***** To earn 5 Flex Credits, a student must complete **ONE** of the following:

- Additional courses to extend the Career & Academic Sequence
- Courses involving workplace learning, such as Co-ops or Internships
- High School / college dual-credit courses
- Additional courses in: Language Arts, Social Studies, Mathematics, Science, World Languages, or Fine Arts



Indiana Graduation Pathways

See full explanation on IN Doe Website: <https://www.in.gov/doe/students/graduation-pathways/>

To account for the rapidly changing, global economy, every K-12 student needs to be given the tools to succeed in some form of quality post-secondary education and training, including an industry-recognized certificate program, an associate's degree program, or a bachelor's degree program.

These recommendations seek to ensure that every Hoosier student graduates from high school with (1) broad awareness of and engagement with individual career interests and associated career options, (2) a strong foundation of academic and technical skills, and (3) the ability to demonstrate employability skills that lead directly to meaningful opportunities for postsecondary education, training, and gainful employment.

Students must satisfy ALL THREE of the following Graduation Pathway Requirements::

Graduation Pathway Requirements	Graduation Pathway Options
1) High School Diploma	Students must meet the statutorily-defined diploma credit and curricular requirements (<i>can be found on previous pages of this FHS Course Description Guide</i>).
2) Learn and Demonstrate Employability Skills¹ (Students must complete <i>at least ONE</i> of the following)	Students must learn employability skills standards through locally-developed programs. Employability skills are demonstrated by one of the following: <ul style="list-style-type: none"> • Project-Based Learning Experience, OR • Service-Based Learning Experience, OR • Work-Based Learning Experience²
3) Postsecondary-Ready Competencies³ (Students must complete <i>at least ONE</i> of the following)	<ul style="list-style-type: none"> • Honors Diploma: Fulfill all requirements of either the Academic or Technical Honors diploma; • ACT: College-ready benchmarks; • SAT: College-ready benchmarks; • ASVAB: earn at least a minimum AFQT score to qualify for placement into one of the branches of the US military; • State- and Industry-recognized Credential or Certification; • State-, Federal-, or Industry-recognized Apprenticeship; • Career-Technical Education Concentrator: must earn a C average or higher in at least two non-duplicative advanced courses (courses beyond intro level) within a particular program or program of study • AP/IB/Dual Credit courses or CLEP Exams: must earn a C average or higher in at least three courses; students must earn dual credit to qualify. • Locally created pathway that meets the framework from and earns the approval of the State Board of Education

Additional Notes for Graduation Pathways

¹ Learn and Demonstrate Employability Skills:

Employability skills standards may include Indiana’s Employability Skills Benchmarks and other comparable character development benchmarks. Demonstrations of employability skills are experiences that enable students to apply essential academic, technical, and professional skills and find engagement and relevance in their academic careers through such means as project-based learning, work-based learning, or service learning experiences. Demonstrations of employability skills can occur over the course of a student’s high school career. Any demonstration needs to be validated locally by:

- Student work product **AND**
- School validation.

² Learn and Demonstrate Employability Skills: Graduation Pathway Options:

- **Project-Based Learning** allows students to gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge. The project is framed by a meaningful problem to solve or a question to answer, at the appropriate level of challenge. Students engage in a rigorous, extended process of asking questions, finding resources, and applying information. Students often make their project work public by explaining, displaying, and/or presenting it to people beyond the classroom. Demonstrations include:
 - Completion of a course capstone,
 - Completion of a research project,
 - Completion of Cambridge International Global Perspective & Research,
 - Completion of the AP Capstone Assessment, **OR**
 - Other (with approval by the State Board of Education).
- **Service-Based Learning** integrates meaningful service to enrich and apply academic knowledge, teach civic and personal responsibility (and other employability skills), and strengthen communities. Demonstrations include:
 - Participation in a meaningful volunteer or civic engagement experience,
 - Engagement in a school-based activity, such as a co-curricular or extracurricular activity or sport for at least one academic year, **OR**
- **Work-Based Learning** is a strategy to reinforce academic, technical, and social skills learned in the classroom through collaborative activities with employer partners. WBL experiences allow students to apply classroom theories to practical problems, to explore career options, and pursue personal and professional goals:
 - Completion of a course capstone,
 - Completion of an internship,
 - Obtaining the Governor’s Work Ethic Certificate,
 - Employment outside of the school day, **OR**
 - Other (with approval by the State Board of Education).

³ Postsecondary-Ready Competencies: Graduation Pathway Options:

National college-ready benchmarks are set by the College Board and ACT. The minimum scores on these tests cannot be set lower than the national college-ready benchmarks: Year to year, the scores are fluid and subject to change. Currently, benchmarks are listed as:

- SAT: 480 in English and 530 in Math.
- ACT: 18 in English, 22 in Reading, 22 in Math, and 23 in Science.

Apprenticeships are defined as intensive work-based learning experiences that provide a combination of on-the-job training & formal classroom instruction. They are intended to support progression skill acquisition & lead to postsecondary credentials. Co-Ops link academic programs with structured work experiences through which participants acquire professional & technical skills. Participants earn academic credit for work carried out over a limited period under the supervision of a mentor.

College-Level Exam Program (CLEP): a score of 50 on at least 3 subject area exams can satisfy this pathway. At least 1 AP/IB/DC or CLEP exam must be in a core content area and/or be part of a defined curricular sequence. Students must take any corresponding AP, CI, or IB exams for these courses. A score of 3+ on AP exam, 4+ on IB exam, or E+ may satisfy this.



SPECIAL PROGRAMS

**Fishers High School
Course Description Guide
School Year 2023-2024**

ADVANCED PLACEMENT (AP)[®] PROGRAM

WHAT IS THE AP PROGRAM?

Fishers High School is proud to offer 31 Advanced Placement (AP) courses. These courses are **college-level courses** and the curriculum is designed and monitored by The College Board. Students in these courses are expected to participate in the Advanced Placement testing program in May of each year. Students in these courses have the opportunity, based on their exam results, to potentially earn college credit for coursework completed in high school. **We believe that all college-bound students should complete at least one AP course prior to graduation from FHS.** We encourage enrollment in subject areas of highest interest. To the right, you will see a full list of our AP course offerings at FHS. Please consult the appropriate department course listings for a full description of these courses.

WHY TAKE AN AP COURSE?



BOOST YOUR GPA

Taking an AP course and exam can boost your GPA. Talk with your counselor to learn more about the GPA benefit!

GET A TASTE OF COLLEGE

Get familiar with college-level work while enjoying the supports of a high school. Boost your confidence w/ this level of work!



DEVELOP COLLEGE SKILLS

Time management, reading endurance, critical thinking, scholarly writing... These courses help you develop these skills!

STAND OUT TO COLLEGES

"AP" on your transcript shows colleges that you're motivated, & taking the exam shows your interest in taking college-level work.



EARN CREDIT, SAVE MONEY

Your exam score could earn you college credit, and earning credit can open up time on your schedule or even let you grad. early

COMPUTER SCIENCE

AP Computer Science Principles
AP Computer Science A

ENGLISH / LANGUAGE ARTS

AP English Language & Composition
AP English Literature & Composition
AP Seminar
AP Research

FINE ARTS

AP 2-D Art & Design
AP 3-D Art & Design
AP Drawing
AP Art History
AP Music Theory

MATHEMATICS

AP Calculus AB
AP Calculus BC
AP Statistics

SCIENCE

AP Biology
AP Chemistry
AP Environmental Science
AP Physics 1
AP Physics 2
AP Physics C

SOCIAL STUDIES

AP World History: Modern
AP United States History
AP African American Studies
AP Psychology
AP European History
AP Human Geography
AP US Government & Politics
AP Macroeconomics
AP Microeconomics

WORLD LANGUAGES

AP French Language & Composition
AP German Language & Composition
AP Spanish Language & Culture

AP Capstone Program & Diploma

AP Capstone is a diploma program from the College Board. It is built around two year-long AP courses: AP Seminar & AP Research.

Rather than teaching subject-specific content, these courses develop students' skills in research, analysis, evidence-based arguments, collaboration, writing, and presenting. Students who complete the program can earn a prestigious diploma/distinction, valued by institutions across the United States.

Capstone Requirements & Key Coursework

In order to earn the AP Capstone Diploma, students must complete the following program requirements:

- AP Seminar (earn score of 3 or higher)
- AP Research (earn score of 3 or higher)
- Four additional AP exams (scores of 3+)

** students can also earn an AP Capstone Certificate with the successful completion of Seminar & Research but not the four additional AP exams.*

Benefits of Capstone

Participating in AP Capstone can help students:

- Stand out to colleges on your applications.
- Develop key academic skills they'll use in college and beyond.
- Become self-confident, independent thinkers and problem solvers.
- Earn college credit; many colleges offer credit for qualifying scores.
- Earn a prestigious distinction and recognition at graduation

FHS Capstone Pathway

The following sequence of courses is strongly encouraged for students considering the AP Capstone Program:

9th Grade	AP World History, OR AP Computer Science Principles
10th Grade	AP Statistics, AP US History, and Honors English 10
11th Grade	AP Seminar , AP Psychology, and AP English Language & Comp.
12th Grade	AP Research + Flex Schedule

** students are also strongly encouraged to take a Speech course*

The logo for the AP Capstone Diploma. It features the letters 'AP' in a large, stylized font, with the 'A' in dark blue and the 'P' in light green. Below this, the word 'Capstone' is written in a dark blue serif font, followed by a trademark symbol. Underneath 'Capstone' is a horizontal light green line, and below that, the word 'Diploma' is written in a dark blue serif font. The entire logo is enclosed in a double-line border, with the inner line being light green and the outer line being dark blue.

DUAL-CREDIT COURSEWORK

Fishers High School offers many opportunities for students to earn both high school and college credits simultaneously. These dual-credit courses are taught primarily by qualified & vetted high school faculty, with a few courses being taught by college faculty. Each college/university has specific requirements that students must meet in order to qualify to earn the college credit. A more detailed description of each course can be found within the related department section in the FHS Course Description Guide.

INDIANA UNIVERSITY: ADVANCED COLLEGE PROJECT (ACP)

Course Name	College Course Number	College Credits	Course Length	Flex Qualifying?
ACP Business Administration	BUS X100	3	Semester	Yes
ACP Composition (Reading, Writing, & Inquiry)	ENG W131	3	Semester	Yes
ACP Speech (Public Oral Comm. & Public Speaking)	P155 / S121	3	Semester	Yes
ACP Literature	ENG L202	3	Semester	Yes
ACP Discovering Literature	ENG L111	3	Semester	Yes
ACP Calculus (Brief Survey of Calculus)	MATH M119	3	Year	Yes
ACP Finite Mathematics	MATH M118	3	Year	Yes
ACP Calculus 1 (AP Calculus AB)	M211	4	Year	Yes
ACP Biology (Humans & the Biological World)	BIO L100	5	Year	Yes
ACP Chemistry (Elementary Chemistry / Lab)	CHEM C101/C121	3 & 2	Year	Yes
ACP Government (Intro to American Politics)	POLS Y103	3	Year	Yes

BALL STATE UNIVERSITY

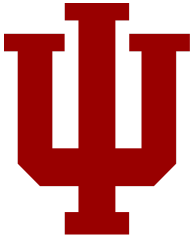
Course Name	College Course Number	College Credits	Course Length	Flex Qualifying?
Multivariable Calculus (Calculus 3)	MATH 267	4	Semester	Yes
Differential Equations	MATH 374	3	Semester	Yes
Music History & Appreciation *	MUHI 100	3	Semester	Yes
Adv CC Spanish (Intermediate Spanish 2)	SPAN 202	3	Year	Yes
Adv CC Principles of Sociology	SOC 100	3	Semester	Yes
Adv CC Fundamentals of Human Anatomy / Physiology	ANAT 201 PHYS 2015	3 / 5	Year	Yes

IVY TECH COMMUNITY COLLEGE

Course Name	College Course Number	College Credits	Course Length	Flex Qualifying?
Fundamentals of Marketing	MKTG 101	3	Year	Yes
Principles of Entrepreneurship	ENTR 101, 202	6	Year	Yes
Digital Applications & Responsibility	CINS 101	3	Semester	Yes
English 12 / English Composition	ENGL 111	3	Year	Yes
Principles of Teaching	EDUC 101	3	Year	No
Child & Adolescent Development	EDUC 121	3	Year	No
College Algebra	M136	3	Year	Yes
Emergency Medical Technician	HSPS 125 PARM 102 <i>Vincennes</i> EMTB 212	3 7.5 6	Year	Yes
Health Care Careers, CNA Prep	HLHS 100 HLHS 107	3 5	Year	Yes
Health Career Exploration	HLHS 100 HLHS 101	3 3	Year	Yes
Health Science II: Medical Assisting	HLHS 100/101/102	9	Year	Yes
Early Childhood Education Careers	ECED 100/101/103	9	Year	Yes
Principles of Agriculture	AGRI 101	3	Year	No
Animal Science	AGRI 103	3	Year	No
Advanced Life Science: Animals	AGRI 107	3	Year	No

VINCENNES UNIVERSITY

Course Name	College Course Number	College Credits	Course Length	Flex Qualifying?
Music/Sound Production	MCOM 102 MDIA 120	7	Year	Yes



INDIANA COLLEGE CORE

The **Indiana College Core** is a block of 30 credit hours of general education college-level coursework that transfers *seamlessly* among all Indiana public colleges & universities. **Fishers High School** is proud to be the first high school in Indiana to develop this College Core partnership with Indiana University - Bloomington.

The College Core is a great program for students who are planning on entering college at **any** Indiana public institution, especially those who aren't sure which major to declare. Because the Core is 30-credit hours of general education courses, it will transfer into and support students on their way to most degrees.

The Indiana College Core offers significant cost savings for students & families.

< \$750

**FOR 30 CREDIT HOURS
THROUGH DUAL-CREDIT**

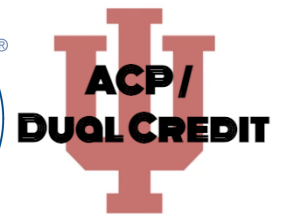
*Estimated SAVINGS
on Tuition & Fees*



\$11,334

Students can earn the **Indiana College Core** through dual-credit in high school for thousands less than earning the same credits at a 2-year or 4-year institution.

Students can choose from a variety of college-level courses @ FHS:



A full menu of qualifying FHS courses can be seen on the next page.

15 of the 30 required credits must be taken through ACP (IU). Non-ACP courses must be transferred to IU Bloomington in order to apply toward College Core.

INDIANA COLLEGE CORE - COURSEWORK PROGRAM

To complete the Indiana College Core program, students must complete the criteria listed in *EACH* subject area (or box) below. More information on these courses can be found in our FHS Course Description Guide. (* = one-semester course)

ENGLISH COMPOSITION (3 credits)

Students must complete ONE of these courses:

- ACP Composition * (ENG W131)
- AP English Lang. & Comp. * (min. AP score of 4)
- English 12 Ivy Tech * (IT ENG 111)
- IB English Year 2 * (min. IB score of 5)

MATHEMATICAL MODELING (3-4 credits)

Students must complete ONE of these courses:

- ACP Finite Math * (MATH M118 Finite)
- ACP Business Calculus * (MATH M119)
- AP Calculus AB * (w/ min. AP score of 4)
- AP Calculus BC * (w/ min. AP score of 4)

SOCIAL & HISTORICAL (6 credits)

Students must complete TWO of these courses:

- ACP Business Administration * (BUS X100)
- ACP US Government * (POLS Y103)
- AP US Government & Politics * (min AP score of 4)
- IB Global Politics SL * (min. IB score of 5)
- AP US History * (min. AP score of 4)
- AP Comparative Gov * (min. AP score of 4)
- AP Human Geography * (min. AP score of 4)
- AP Macroeconomics (min. AP score of 4)
- AP Microeconomics (min. AP score of 4)
- AP Environmental Science (min. AP score of 3)
- AP Art History (min. AP score of 4)

NATURAL & MATHEMATICAL (5-6 credits)

Students must complete ONE of these courses:

- ACP Chemistry * (CHEM C101/121)
- ACP Biology * (BIOL L100)
- Dual-Credit Physiology * (BSU PHYS 125)
- IB Biology HL * (min. IB score of 5)
- AP Chemistry * (min. AP score of 4)
- AP Biology * (min. AP score of 3)
- AP Environmental Science * (min exam score 4)
- AP Physics 1 * (min. AP score of 5)
- AP Physics 2 * (min. AP score of 5)
- AP Physics C * (min. AP score of 5)
- AP Psychology * (min. AP score of 4)

ARTS & HUMANITIES (6 credits)

Students must complete TWO of these courses:

- ACP Discovering Literature * (ENG L111)
- ACP Literature * (ENG L202)
- AP/IB Music Theory * (min. AP score of 3)
- IB English Year 2 * (min. IB score of 5)
- DC Music Hist. & Apprec. * (BSU MUHI 100)

Students must **ALSO** complete ONE of these:

- ACP Finite Math * (MATH M118)
- ACP Business Calculus ** (MATH M119)
- AP Calculus AB * (min. AP score of 4)
- AP Calculus BC * (min. AP score of 4)
- AP Computer Science A ** (min. score 3)
- AP CS Principles * (min. score 3)
- Digital Apps. & Resp. * (Ivy Tech CINS101)

NOTE: A course used to satisfy the **Mathematical Modeling** requirement will **NOT** also count toward the **Natural & Mathematical Sciences** requirement.

WORLD LANGUAGES & CULTURES (3 credits)

Students must complete ONE of these courses:

- AP/IB Spanish Lang. & Culture * (min. AP score of 4)
- AP/IB French Lang. & Culture * (min. AP score of 4)
- AP/IB German Lang. & Culture * (min AP score of 4)
- Adv CC Spanish * (BSU SP202)
- AP Art History * (min. AP score of 4)

SPEAKING & LISTENING (3 credits)

Students must complete the following course:

- ACP Speech * (COLL P155 Public Speaking)

INTERNATIONAL BACCALAUREATE (IB) DIPLOMA

The International Baccalaureate (IB) Diploma is a rigorous, pre-university course of studies, leading to examinations, which meet the needs of motivated secondary school students between the ages of 16 and 19 years. Designed as a comprehensive two-year curriculum enabling graduates to fulfill requirements of various national and international education systems, the diploma model is based on the pattern of no single country but incorporates the best elements of many. The program offers special features in addition to the traditional strengths of a liberal arts curriculum.

Theory of Knowledge (TOK) is a required interdisciplinary course intended to stimulate critical reflection upon the knowledge and experience gained inside and outside the classroom. TOK challenges students to question assumptions about knowledge, to be aware of subjective and ideological biases, and to develop a personal mode of thought, using analysis of evidence expressed in rational argument. A key element in the IB's educational philosophy, TOK seeks to develop a coherent approach to learning which transcends and unifies the academic subjects and encourages appreciation of other cultural perspectives.

Creativity, Action, Service (CAS) is a key requirement of the diploma curriculum. Students are required to earn hours among these elements in order to develop awareness, concern, and the ability to work cooperatively with others. Students actively work with and for the communities in which they live.

The Extended Essay is another requirement for diploma candidates who must undertake original research and write an essay of 4000 words. Universities particularly favor this component of IB, as it replicates students' real-life experiences on the collegiate level.

Coursework for International Baccalaureate involves a two-year program that contains six academic areas. Subjects are studied concurrently, and students are exposed to the two great traditions of learning: the humanities and the sciences. Diploma candidates are required to select one subject from each of the six subject groups. At least three and not more than four are taken at **Higher Level (HL)**, the others are **Standard Level (SL)**. HL courses represent 240 teaching hours; SL courses cover 150 hours. By arranging work in this fashion, students are able to explore some subjects in depth and some more broadly over the two-year period.

All IB courses can be taken as individual IB Certificate offerings or as part of the full IB Diploma; each option offers potential college credit.

INTERNATIONAL BACCALAUREATE (IB) CERTIFICATE

Students may also opt to take **individual / specific IB courses only, with the aim of earning individual course IB Certificates** for each course. **All courses offered with the diploma are also available for certificates**, though integrated Core components (the most highly-respected components recognized by university programs) are omitted. Certificate coursework for IB still involves Higher Level (HL) and Standard Level (SL) course options. HL courses represent 240 teaching hours; SL courses cover 150 hours.



COURSE PATHWAYS FOR INTERNATIONAL BACCALAUREATE (IB)

The following list of FHS courses represents the course pathways available within each discipline to meet IB Programme requirements successfully. Please contact **IB Coordinator Jennifer Gabbard** (jgabbard@hse.k12.in.us) with any questions. (HL = Higher Level; SL = Standard Level)

GROUP 1 – LANGUAGE A (HL only)	GROUP 5 – MATHEMATICS (HL or SL)
Grade 9 English 9 Honors Grade 10 English 10 Honors Grade 11 IB English HL, year 1 Grade 12 IB English HL, year 2	<p style="text-align: center;">Options 1 & 2: Math Analysis & Approaches (AA)</p> Grade 9 Honors Algebra II Grade 10 Honors Pre-Calculus Grade 11 IB Math AA, Year 1 Grade 12 IB Math AA, Year 2
GROUP 2 – LANGUAGE B (HL or SL)	<i>Intended for students who wish to pursue post-secondary studies in mathematics or subjects that have a large mathematical content (i.e. engineering). Focused on developing mathematical arguments and exploring real and abstract applications.</i>
Grade 9 Spanish, French, or German II Honors Grade 10 Spanish, French, or German III Honors Grade 11 Spanish, French, or German IV Honors Grade 12 Spanish, French, or German AP/IB V	<p style="text-align: center;">Options 3 & 4: Math Applications & Interpretations (Apps)</p>
French Ab Initio <i>An alternate path available for students with no French language courses prior to their junior year.</i>	Grade 9 Honors Geometry Grade 10 Honors Algebra II Grade 11 IB Math Apps, Year 1 Grade 12 IB Math Apps, Year 2
Grade 11 French I Ab Initio / Honors II Grade 12 French III Honors	<i>Designed for students who enjoy describing the real world and solving practical problems using mathematics, including exploration of mathematical models using technology.</i>
GROUP 3 – INDIVIDUALS & SOCIETIES	**Core topics across <u>all</u> IB math pathways engage students in a detailed study of numbers & algebra, functions, geometry & trigonometry, statistics & probability, and calculus.
Grade 9 AP World History Grade 10 AP US History <p style="text-align: center;">Option 1: History of Europe HL</p> Grade 11 AP/IB European History Grade 12 Govt. & IB History HL <p style="text-align: center;">Option 2: IB Psychology HL</p> Grade 11 AP/IB Psychology SL Grade 12 IB Psychology HL <p style="text-align: center;">Option 3: IB Psychology SL</p> Grade 11/12 AP/IB Psychology SL <p style="text-align: center;">Option 4: Economics SL</p> Grade 11/12 AP/IB Microeconomics & AP/IB Macroecon. <p style="text-align: center;">Option 5: IB World Religion SL</p> Grade 11/12 Comparative Religions & IB World Religion <p style="text-align: center;">Option 6: IB Global Politics SL</p> Grade 11/12 IB Global Politics SL	GROUP 6 – FINE ARTS
GROUP 4 – EXPERIMENTAL SCIENCES	**For Group 6, students choose one of the fine arts pathways OR omit Group 6 and take an extra choice from Groups 2, 3, or 4**
Grade 9 Honors Biology Grade 10 Honors Chemistry <p style="text-align: center;">Option 1: Biology HL</p> Grade 11 Dual Credit Anatomy/Physiology Grade 12 IB Biology HL <p style="text-align: center;">Option 2: Chemistry SL</p> Grade 11/12 IB/ACP Chemistry SL <p style="text-align: center;">Option 3: Physics HL</p> Grade 11 AP/IB Physics 1 Grade 12 AP/IB Physics 2 <p style="text-align: center;">Option 4: Physics SL</p> Grade 11 AP/IB Physics 1 Grade 12 AP/IB Physics 2	Music HL or SL
<p style="text-align: center;">Option 1: History of Europe HL</p>	Grade 9 & 10 Band, Choir, or Orchestra Grade 11 Band, Choir, or Orchestra & Music Theory (HL) Grade 12 Band, Choir, or Orch & Music History (SL & HL)
<p style="text-align: center;">Option 2: IB Psychology HL</p>	Film Study SL
<p style="text-align: center;">Option 3: IB Psychology SL</p>	Grade 11/12 IB Film Study SL
<p style="text-align: center;">Option 4: Economics SL</p>	Theatre HL or SL
<p style="text-align: center;">Option 5: IB World Religion SL</p>	Grade 11 Theatre Arts I & II Grade 12 Theatre Arts II & IV and Tech Theatre
<p style="text-align: center;">Option 6: IB Global Politics SL</p>	Art HL or SL
GROUP 4 – EXPERIMENTAL SCIENCES	Grade 9 & 10 <i>At least two of: Drawing I or II, Painting I or II, Intro to 2D or 3D, Ceramics, or Sculpture</i>
Grade 9 Honors Biology	Grade 11 IB Visual Art, Year 1 Grade 12 IB Visual Art, Year 2
<p style="text-align: center;">Option 1: Biology HL</p>	THEORY OF KNOWLEDGE
Grade 11 Dual Credit Anatomy/Physiology	** All IB Diploma students must take two semesters of TOK in the order below. TOK is optional for other students. **
Grade 12 IB Biology HL	Grade 11 Spring semester Grade 12 Fall semester
<p style="text-align: center;">Option 2: Chemistry SL</p>	
Grade 11/12 IB/ACP Chemistry SL	
<p style="text-align: center;">Option 3: Physics HL</p>	
Grade 11 AP/IB Physics 1	
Grade 12 AP/IB Physics 2	
<p style="text-align: center;">Option 4: Physics SL</p>	
Grade 11 AP/IB Physics 1	
Grade 12 AP/IB Physics 2	

SENIOR FLEX SCHEDULE (2023-2024)

GOALS & PURPOSE

We encourage students to take a rigorous schedule of courses during their senior year. Current research indicates that a student who does so is more successful at the college and university level. We also encourage seniors to prepare for more than the academic challenges coming in their post-secondary school lives. One of the greatest of these challenges for high school seniors is handling new freedoms and choices open to them after graduation.

To help seniors at FHS prepare for the next stage of their lives, seniors have the option to experience some of this flexibility while still in the supportive environment of the high school setting. Seniors who take a rigorous schedule—equivalent to a full semester of college credit—will be given the option of reducing their course load by 1-3 classes. During the flex periods, seniors will make choices about the use of discretionary time, but they will be required to maintain academic proficiency, follow established procedures, and manage flex time well.

If students choose to stay on school grounds during flex times, they have the option to use the learning commons in the College & Career Academy or another supervised area of the school. If they leave the school grounds, they must check in and out according to established procedures.

TO QUALIFY FOR SENIOR FLEX SCHEDULE

- Students must meet all graduation qualifications.
- Students must take four or more International Baccalaureate, Advanced Placement, and/or Dual Credit courses (those that qualify) during the semester in which they have a flex schedule.
- Students must maintain academic proficiency in these courses. Failure to maintain a C- or higher in these courses will result in assignment to study halls. Grades will be checked at the 9-weeks and midterm grading periods.
- Students must follow all school policies and procedures or risk forfeit of this privilege.
- Parents must sign an agreement allowing students with a flex schedule to leave school grounds.

SCHEDULING

- Seniors interested in a flex schedule should fill out the Intent to Apply form. Their guidance counselors will discuss this option with them at their scheduling appointment.
- The FHS school master schedule has been developed to accommodate the needs of all students at FHS. Guidance counselors will not change schedules of individual seniors in order to qualify for a flex schedule, nor will counselors consolidate flex periods to allow for late arrival or early dismissal. For example, counselors will NOT:
 - Move a class from first semester to second semester in order to create the flex option
 - Move a class from one period to another period to allow late arrival, early dismissal, or grouped flex periods.

The Senior Flex Schedule is not required, nor is it a right. Students should work carefully with parents and their guidance counselors to determine if this schedule is in their best interest. School officials may revoke this privilege at any time if the student does not follow school policies or if the student is unable to handle the discretionary time or academic load.

QUALIFYING COURSES FOR SENIOR FLEX SCHEDULE

COURSE TITLE	LENGTH	NOTES
Fundamentals of Marketing	Year	DC - Ivy Tech
Entrepreneurship	Year	DC - Ivy Tech
Digital App & Responsibility	Semester	DC - Ivy Tech
AP Computer Science A	Year	
AP CS Principles	Year	
ACP Business Administration	Semester	DC - IU
AP Literature & Comp.	Year	
English 12 Ivy Tech	Year	DC - Ivy Tech
AP Language & Comp.	Year	
AP Seminar	Year	
AP Research	Year	
IB English, Year 2	Year	
IB Film Studies SL	Year	
ACP Composition	Semester	DC - IU
ACP Speech	Semester	DC - IU
ACP Literature	Semester	DC - IU
ACP Discovering Literature	Semester	DC - IU
College Algebra	Year	DC - Ivy Tech
ACP Calculus	Year	DC - IU
ACP Finite Math	Year	DC - IU
AP/IB Calculus AB	Year	
AP/IB Calculus BC	Year	
AP Statistics	Year	
IB Math Analysis & Appr. HL	Year	
IB Math: Analysis & App. SL	Year	
IB Math: Appl. & Interp. HL	Year	
IB Math: Appl. & Interp. SL	Year	
Differential Equations	Semester	DC - BSU
Multivariable Calculus	Semester	DC - BSU
AP/IB Music Theory	Year	
Adv CC / IB Music History	Semester	DC - BSU
IB Theatre HL	Year	
DC Anatomy & Physiology	Year	DC - BSU
AP Biology	Year	
ACP Biology	Year	DC - IU
IB Biology HL	Year	
AP Environmental Science	Year	
AP Chemistry	Year	

COURSE TITLE	LENGTH	NOTES
ACP/IB Chemistry	Year	DC - IU
AP Physics 1	Year	
AP Physics 2	Year	
AP Physics C	Year	
AP Human Geography	Semester	
AP European History	Year	
IB World Religions	Semester	
AP Comparative Government	Semester	
AP US Government & Politics	Semester	
ACP Government	Semester	DC - IU (& WTP)
IB Global Politics SL	Year	
AP/IB Microeconomics	Semester	
AP/IB Macroeconomics	Semester	
DC Sociology	Semester	DC - BSU
AP/IB Psychology SL	Year	
IB Psychology HL	Year	
AP African American Studies	Year	
Theory of Knowledge	Semester	
Vis Com / Fund. of Imaging	Year	DC - Ivy Tech
Vis Com / Comp. Graphics	Year	DC - Ivy Tech
AP Art History	Year	
AP Studio Art / IB Studio Art	Year	2D, 3D, Drawing
AP/IB French V	Year	
AP/IB Spanish V	Year	
AP/IB German V	Year	
AP Spanish V	Year	
Adv CC Spanish	Year	
Health Careers Exploration	Year	counts as 1
Certified Nursing Assistant	Year	counts as 1
EMT	Year	counts as 1
Music/Sound Production	Year	counts as 1
Early Childhood Education	Year	counts as 1
Health Science II: Medical Asst	Year	counts as 1
Medical Terminology	Year	counts as 1
Welding I	Year	@ HSE; counts as 1
Automotive Technology	Year	Ivy Tech; counts 2
Building Construction Tech.	Year	Ivy Tech; counts 2
Computing & Cybersecurity	Year	Ivy Tech; counts 2

Next Level Programs of Study (NLPS)



Indiana Office of
**Career & Technical
Education**

GOVERNOR'S WORKFORCE CABINET

The Governor's "Next Level Agenda" for the State of Indiana puts a priority on developing a skilled and ready workforce. As part of that agenda, the Governor's Workforce Cabinet has developed **Next Level Programs of Study (NLPS)** that equip high school students with the skills—and in many cases, the credentials/certifications—they will need in future careers. Students interested in exploring

and gaining valuable career skills should consider a Next Level Program of Study. Completing a Next Level Program of Study fulfills the "Post-Secondary Ready" requirement for Graduation Pathways.

A Next Level Program requires completion of three or four year-long courses. Some courses can be taken concurrently. Listed below are NLPS currently available (and some in development) at FHS. For course descriptions, including Dual Credit and certification opportunities, go to the respective department's section of the FHS Course Description Guide. To enroll in a NLPS, students should consult w/ their guidance counselor.

BUSINESS & MARKETING

Business Administration

Principles of Business Management (4562)
Management Fundamentals (7143) ^^
Accounting Fundamentals (4524)

Accounting

Principles of Business Management (4562)
Accounting Fundamentals (4524)
Advanced Accounting (4522) ^^

Finance & Investment

Principles of Business Management (4562)
Personal Finance & Banking (7150) ^^
Finance & Investment (5258) ^^

Marketing & Sales

Principles of Business Management (4562)
Accounting Fundamentals (4524)
Finance & Investment (5258) ^^

AGRICULTURE

Agriscience: Plants or Animals

Principles of Agriculture (7117)
Animal Science (5008) **OR** Plant & Soil Science (5170)
Food Science (5102) ^^ OR Adv. Life Science, Animals (5070)

Accounting

Principles of Agriculture (7117)
Horticulture Science (5132)
Greenhouse & Soilless Production (7114) ^^

^^ course in development; not available in 2023-2024

Next Level Programs of Study (Continued)

ADVANCED MANUFACTURING

Welding Technology

Principles of Welding Technology (@ HSE) (7110)
 Shielded Metal Arc Welding (@ JEL) (7111)
 Gas Welding Processes (@ JEL) (7101)

ARTS, AV TECH, & COMMUNICATION

Radio & Television Broadcasting

Principles of Broadcasting (7139) ^^
 Audio & Visual Production Essentials (0421) ^^
 Mass Media Production (0422)

HEALTH SCIENCES

Biomedical Sciences & Technology

Principles of Biomedical Sciences - PLTW (5218)
 Human Body Systems - PLTW (5216)
 Medical Interventions - PLTW (5217)

Emergency Medical Services

Principles of Healthcare (7168)
 Medical Terminology (5274)
 Emergency Medical Tech. (7165)

Medical Assistant

Principles of Healthcare (7168)
 Medical Terminology (5274)
 Certified Clinical Medical Assistant (CCMA) (7164)

Pre-Nursing

Principles of Healthcare (7168)
 Medical Terminology (5274)
 Healthcare Specialist: CNA (7166)

STEM: ENGINEERING

Engineering (Various)

Introduction to Engineering Design (4802)
 Principles of Engineering (5644)
 Digital Electronics (5538) **OR** Civil Engineering & Architecture (@ HSE) (5650) **OR** Aerospace Engineering (@ HSE) (5518)

EDUCATION CAREERS

Teaching Profession

Principles of Teaching (7161)
 Child & Adolescent Development (7157)
 Education Capstone ^^

^^ course in development; not available in 2023-2024



Interested in one of these fields?

Business	Electrical
Technology – IT	Veterinary Medicine
Medicine	Physical Therapy
Skilled Trades (Mechanical)	Social Media
Political Science	Graphic Design
Public Relations	Social Work
Science	Information Technology
Construction	Marketing
Engineering	Health Care

We've already got partnerships established in the local community!

**OR YOU CAN CREATE YOUR OWN PLACEMENT
& GET IT APPROVED**

Career Exploration Internship

PROGRAM OVERVIEW

Career Exploration Internship is designed to provide opportunities for students to explore careers that require additional degrees or certification following high school. The emphasis of that experience is on applying skills developed through instruction and on learning new career competencies at a local internship site. The internship is tailored to the unique needs and interests of the student and is considered a high school capstone experience toward fulfillment of the student's future plans. Internships may be paid or unpaid and will include a series of meetings or seminars with the internship coordinator. Internship placements can be competitive and limited. Grades and attendance will be used to decipher who is placed where. Adding Career Exploration to your schedule starts with a conversation with your counselor during the scheduling process.

REQUIREMENTS

- Senior (grade 12)
- Good attendance record
- Transportation to work
- Strong work ethic

SCHEDULE

The schedule for interns is flexible. Students who have 3 periods of Internship will be required to get 20 hours of experience every 2 week period.

With questions or interests, contact:

Mike Espich, Internship Coordinator (FHS)
mespich@hse.k12.in.us

THE PURSUIT INSTITUTE



Course Guide

2023-2024



To view the entire Course Guide for The Pursuit Institute, scan the QR code, or go to this link:

shorturl.at/dfB38

CTE CLASS OFFERINGS AT FISHERS HIGH SCHOOL

7165 / 5274 / 7168 Emergency Medical Technician

One year, 3 hours per day Prerequisite: Senior or 17 years old by Nov. 1

Dual Credit: Ivy Tech (10.5 credits) HSPS 125 (3 credits for fall semester) and PARM 102 (7.5 credits for spring semester)

Ivy Tech HSPS 125 *Emergency Medical Responder*: 3 credits

· Ivy Tech PARM 102 *Emergency Medical Technician*: 7.5 credits

· Vincennes EMTB 212 *Emergency Medical Technician Basic*: 6 credits

Certifications: Awareness, Community Emergency Response ... Vincennes (6 credits) EMTB 212

Students will be able to perform the skills needed in a time of emergency that could save someone's life. During the fall semester, students will perform skills such as airway management, splinting of fractured bones, actions to take in a respiratory emergency, adult, child and infant CPR, and vital signs. During the spring semester, students will continue to add to their skillset in emergency first aid, analyzing different types of emergency situations, transporting patients, etc. Students will gain leadership skills developed through HOSA participation. Upon successful completion of the EMT class, students will be qualified to take the EMT national registry certification exam. To obtain the necessary clinical hours and patient contact, students must provide their own transportation to clinical sites. Clinic hours may be obtained weekday evenings or on the weekend, therefore, parents may provide that transportation, if necessary.

7166 / 5274 / 7168 Health Care Careers, CNA Prep

One year, 3 hours per day

Dual Credit: Ivy Tech (8 credits) HLHS 100, HLHS 107

Ivy Tech HLHS 100 *Introduction to Health Careers*: 3 Credits

· Ivy Tech HLHS 107 *CNA Prep*: 5 credits

o Must pass state exam to receive credits in HLHS 107

Certifications: Certified Nursing Assistant (CNA) BLS, CPR, AED ... Social Security Number required for background check and clinical experience

This program prepares students for a nursing assistant position in health care facilities and also provides an exploration of the various careers in the healthcare industry. Students will provide nursing assistant services to patients in a long-term care facility as part of their clinical training. Students will gain leadership skills developed through HOSA participation. Students can earn a CNA certificate if a qualifying test is passed.

7168 / 5274 Health Career Exploration

1 year, 2 hours per day Recommended Grade Level: Grades 10, 11, 12

Dual Credit: Ivy Tech (6 credits) HLHS 100, HLHS 101

Ivy Tech HLHS 100 *Introduction to Health Careers*: 3 credits

· Ivy Tech HLHS 101 *Medical Terminology*: 3 credits

o Accuplacer Requirements

§ Reading 76

§ Sentence Skills 80

Students will perform skills related to a range of health career topics: patient nursing care, vital signs, dental care, animal care, medical laboratory, public health, an introduction to health care systems, anatomy, physiology, and medical terminology. Students will gain leadership skills developed through HOSA participation. Students will participate in lab experiences related to your career objectives. Upon successful completion of this course, students will understand the application process for admission into a post-secondary program of their choice or the next health science program to take through career and technical training offered at Fishers High School, Hamilton Southeastern High School, or J. Everett Light Career Center.

7164 / 7168 / 5274 Medical Assisting (not at FHS in 2023-2024; students will travel to HSE HS)

Receive the college-level education needed to prepare to take the national exam to become a Certified Clinical Medical Assistant

Dual Credit: Ivy Tech (2-hour class, 3 credits) HLHS100 / Ivy Tech (3-hour class, 9 credits) HLHS 100, HLHS101*, HLHS102*

Certifications: AHA BLS CPR Certification for Healthcare Providers; NCHSE (National Consortium for Health Science Education) Certification, Certified Medical Assisting (CCMA) national certification

Experience what it means to work in a physician's office and apply skills learned when volunteering in clinical experiences. Students will perform administrative and clinical skills, such as performing vital signs, assisting with a physical exam, CPR/first aid, giving injections, drawing blood, surgical preparation and sterilization processes. Students will develop leadership skills through participation in HOSA.

7139 Music/Sound Production

One-year program, 2 hours per day

Dual Credit: Vincennes (7 credits) MCOM 102, MDIA 120

Certifications: Avid Audio/Music Pro Tools

This class combines the skills of digital audio recording and mixing with a student's love for music. Students will have an opportunity to help create music and mixes with instruments and software currently used in the recording industry. Students will also learn techniques for engineering and mixing live music performances. Projects will help students acquire skills in music composition, sound editing, sound mixing, and movie soundtrack creation. The class will organize, market, and produce a live concert as a semester project.

7306 Music/Sound Production II

One-year program, 2 hours per day

Certifications: Avid Audio/Music Pro Tools

Music-Sound Production 3-4 is offered to students completing MSP 1-2 who qualify based on instructor criteria. Students involved in the 2nd year of MSP will use the skills they acquire in the 1st-year class and work toward personal goals as they prepare for a potential career in the music industry. The instructor and the student will determine a course of independent study and production projects that will best serve the student. The culminating activity of the 2nd-year MSP class is a Capstone Project, which will be agreed upon by the instructor and the student. The goal of the Capstone Project is to showcase the overall music producing skills of the student for possible use with a job or college application, scholarship, or internship.

7161 / 7157 / 7162 Education Careers

One or two years, 3 hours per day

Recommended Prerequisite Child Development or Adv. Child Development

Dual Credit: Ivy Tech (1st year, 9 credits) ECED 101*, EDED 100*, ECED 103*

Certifications: Early Childhood Education Certificate (2nd year, 3 credits) ECED 105*

Certifications: CDA (if exam is passed) ... Social Security Number required for background check

Develop a working knowledge of licensing regulations, nutrition, health, safety, and sanitation. Learn to plan, develop, teach, and supervise activities enhancing the pre-school age child's physical, emotional, social, and intellectual development. Obtain hands-on experience by volunteering in our on-site licensed child-care center and participating in an internship at a local child-care center or elementary school. In addition, second year students work towards CDA (Child Development Associate).

7110 / 7111 Welding I (only available at HSE)

One years, 2 hours per day (The second-year course will be available at JEL)

Dual Credit: Ivy Tech (1st year, 3 credits) WELD 108 Certifications: American Welding Society

This class is designed to develop skills in stick, mig, and tig welding. Students will also use plasma arc cutters and band/cutoff saws. Job Opportunities: Welding Shops, Manufacturing Plants



DEPARTMENTAL PROGRAMS OF STUDY

**Fishers High School
Course Description Guide
School Year 2023-2024**

BUSINESS, MARKETING, AND COMPUTER SCIENCE

The Business, Marketing, and Computer Science Department offers a wide range of classes to meet the needs of all students whether they are college-bound or planning to enter the workforce upon graduation. The courses are focused on relevant concepts and provide students with a seamless transition to higher education business programs and provide measurable job skills imperative in the world of work.

Business Graduation Requirement

Students will be able to choose from the following menu of Business, Marketing and Information Technology courses to fulfill their business graduation requirement.

Courses	Grade	Length	Dual Credit	Pathway
Principles of Business Mgmt.	9, 10, 11, 12	Year		All pathways
Accounting Fundamentals	10, 11, 12	Year		Business Track
Fundamentals of Marketing	10, 11, 12	Year	Ivy Tech	General Interest; Business Track
Sports & Entertainment Marketing	11, 12	Semester		Special Interest
Entrepreneurship	10, 11, 12	Year	Ivy Tech	General Interest; Business Track
Personal Financial Responsibility	10, 11, 12	Semester		All pathways
ACP Business Administration	11, 12	Semester	IU	General Interest; Business Track
Preparing College/Careers	11, 12	Year	Ivy Tech	Non-Business Track
Merchandising	11, 12	Year		Business Track
Digital Applications & Resp.	9, 10, 11, 12	Semester	Ivy Tech	Non-Business; General Interest
Career Internship	12	Semester		All pathways
Computer Science				
Intro to Computer Science	9, 10	Semester		All pathways
AP Computer Science Principles	9, 10, 11, 12	Year		All pathways
Website & Database Development	9, 10, 11, 12	Year		Comp. Science Track
AP Computer Science A	11, 12	Year		Comp. Science Track
Comp. Science III: Software Dev.	11, 12	Year		Comp. Science Track
Comp. Science III: Cybersecurity	11, 12	Year		Comp. Science Track

What Class Should I Take in Business?

NON-BUSINESS TRACK: For students not necessarily interested in business. Instead, this is for students wanting to earn the credit necessary for satisfying graduation requirements.

Grade	Course Title	College Credit?	Requirements
9, 10, 11, 12	Principles of Business Management	No	No experience needed
10, 11, 12	Personal Financial Responsibility	No	No experience needed
9, 10, 11, 12	Digital Applications and Responsibility	Ivy Tech	No experience needed
10, 11, 12	Entrepreneurship	Ivy Tech	No experience needed

GENERAL INTEREST IN BUSINESS: For students who want to explore the field of business a bit; for students trying to decide if business is something they might be interested in down the road.

Grade	Course Title	College Credit?	Requirements
9, 10, 11, 12	Principles of Business Management	No	No experience needed
10, 11, 12	Entrepreneurship	Ivy Tech	No experience needed
10, 11, 12	Fundamentals of Marketing	Ivy Tech	No experience needed
11, 12	ACP Business Administration	IU	Required 2.7 GPA
11, 12	AP Microeconomics / AP Macroeconomics	<i>AP exam**</i>	Recommended 3.4 GPA

BUSINESS TRACK: For students who wish to pursue a business major or minor in college.

Grade	Course Title	College Credit?	Requirements
9, 10, 11, 12	Principles of Business Management	No	No experience needed
10, 11, 12	Entrepreneurship	Ivy Tech	No experience needed
10, 11, 12	Fundamentals of Marketing	Ivy Tech	No experience needed
10, 11, 12	Accounting Fundamentals	No	No experience needed
11, 12	ACP Business Administration	IU	Required 2.7 GPA
11, 12	AP Microeconomics / AP Macroeconomics	<i>AP exam**</i>	Recommended 3.4 GPA
11, 12	Sports & Entertainment Marketing	No	No experience needed

What Class Should I Take in Computer Science?

NON-COMPUTER SCIENCE TRACK: For students either looking to satisfy their business graduation requirement or for students wanting to just explore the world of computer science.

Grade	Course Title	College Credit?	Requirements
9, 10	Intro to Computer Science	No	No experience needed
9, 10, 11, 12	AP Computer Science Principles	<i>AP exam**</i>	No experience; comfort w/ Algebra

COMPUTER SCIENCE TRACK (w/out previous programming experience): For students who are interested in computer science but don't have any programming experience

Grade	Course Title	Requirements
9th	AP Computer Science Principles	No experience needed
10th	Website & Database Development	Must have taken Geometry and a previous CS course.
11th	AP Computer Science A (Java)	Good grades in Website/Database Dev. & Algebra 2
12th	CS III: Software Development	Good grade in AP Computer Science A

COMPUTER SCIENCE TRACK (with programming experience): This track is designed for students who are already knowledgeable in programming and would not be challenged in an introductory CS course.

Grade	Course Title	Requirements
9th	Website & Database Development	May be enrolled w/ teacher approval
10th	AP Computer Science A (Java)	Good grades in Website/Database Dev. & Algebra 2
11th	CS III: Software Development	Good grade in AP Computer Science A
12th	CS III: Cybersecurity	Good grade in AP Computer Science A

Business and Marketing Courses

4562 PRINCIPLES OF BUSINESS MANAGEMENT (9, 10, 11, 12) Principles of Business introduces students to the world of business, including the concepts, functions, and skills required for meeting the challenges of operating a business in the twenty-first century on a local, national, and international scale. The course covers business management, entrepreneurship, marketing fundamentals, and business ethics and law. The course develops business vocabulary and provides an overview of business and the role that business plays in economic, social, and political environments. The application & importance of etiquette will be introduced. **Participation in DECA (an association of marketing students) is strongly recommended.** This course meets the Business graduation requirement.

4524 ACCOUNTING FUNDAMENTALS (10, 11, 12) The course introduces the language of business using Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting. Emphasis is placed on accounting principles as they relate to manual financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision-making. You should like Math & working w/ numbers. **This course meets the Business graduation requirement.**

5914 FUNDAMENTALS OF MARKETING (10, 11, 12) This two-semester course provides a basic introduction to the scope and importance of marketing in the global economy. Emphasis is placed on oral and written communications, math applications, problem-solving, and critical thinking skills as they relate to advertising/promotion/selling, distribution, financing, marketing-information management, pricing, and product/service management. **This course is dual-credit through Ivy Tech. Participation in DECA (an association of marketing students) is strongly recommended.** This course meets the Business graduation requirement.

5984 * SPORTS AND ENTERTAINMENT MARKETING (11, 12) - This one-semester course gives students a chance to apply the principles learned in Fundamentals of Marketing to the specific industries of sports and entertainment. The sports and entertainment marketing industry is growing exponentially and is becoming increasingly popular as a postsecondary major. Students will experience projects that involve sports teams, athletes, branding, sponsorships, endorsements, and event planning. The layout of the class is similar to Fundamentals of Marketing, in terms of projects, problem-solving, and presentation skills. **Participation in DECA (an association of marketing students) is strongly recommended.** Requirements: Fundamentals of Marketing.

5966 PRINCIPLES OF ENTREPRENEURSHIP (Ivy Tech) (10, 11, 12) - This two-semester course enables students to apply the entrepreneurial process to their own business ideas. Students will identify and evaluate ideas while learning the steps and competencies required to launch a successful new venture. Students are challenged to consider the appropriateness of an entrepreneurial career for themselves by conducting a personal inventory. This course also focuses on building an entrepreneurial mindset and approach to navigating life and building a startup. Entrepreneurship is an iterative, challenging process that requires individuals to dig in like never before. This course will give students the tools that will be a foundation for building a strong and healthy business. Strong individuals and teams create strong companies. **Participation in DECA is not required but strongly recommended.** This course is dual-credit through Ivy Tech and the cost of the course is \$0 for students.

4540 * PERSONAL FINANCIAL RESPONSIBILITY (10, 11, 12) This one semester course addresses the management of individual financial decisions and activities in preparation for the realities of life experience. Designed to develop skills, strategies and awareness in such matters, this course explores topics such as credit, debt, insurance, saving, investing, and budgeting. **This course meets the Business graduation requirement.**

* 1-semester course

** can be taken 1 or 2 semesters

single-weighted course

double-weighted course

1566 * ## AP/IB MICROECONOMICS (11, 12) This one semester, college level class will focus on the study of microeconomics. Students will gain a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both as consumers and producers within the larger economic system. The role of government will be studied as to how it tries to promote efficiency and equity in the economy. Market structures and their influence on the economy will be studied. On the average, students could expect to spend five hours during a calendar week studying outside of class. This course satisfies the Indiana Economics requirement and is the first semester of the IB Economics course sequence. **Recommendation for AP or non-ACP credit: 3.4 GPA and strong grades in Social Studies classes. AP Exam registration will take place in September & October. Standard AP fees apply. ***IB Credit, either for an individual certificate or as part of the full Diploma, requires both semesters of AP/IB Economics.*** Due to the integrated nature of IB curriculum and objectives. Any associated fees will be shared by instructors in advance.**

1564 * ## AP/IB MACROECONOMICS (11, 12) This one semester, college level elective course will give students a thorough understanding of the principles of economics that apply to an economic system as a whole. This course places particular emphasis on the study of national income and price determination, and also develops students' familiarity with economic performance measures, economic growth, and international economics. Learning methods will include lecture, reading, class discussions, simulations, and group projects. Students may earn college credit by scoring sufficiently high on the AP examination administered through the College Board in the spring. This course satisfies the Indiana Economics requirement and is the second semester of the IB Economics course sequence. **Recommendation for AP or non-ACP credit: 3.4 GPA and strong grades in Social Studies classes. Standard AP fees apply. ***IB Credit, either for an individual certificate or as part of the full Diploma, requires both semesters of AP/IB Economics.*** Due to the integrated nature of IB curriculum and objectives. Any associated fees will be shared by instructors in advance.**

1514 * ECONOMICS (11, 12) This required course is designed to give each student an understanding of basic economic concepts and principles and their relationship to the free enterprise system. This includes a study of the production, distribution, and consumption of goods and services. Students will explore supply and demand, business organization, money and banking, trade and transportation, and the distribution of wealth and income. Macroeconomic and microeconomic concepts are explored along with the vocabulary of economics.

6142 * ## ADVANCED BUSINESS COLLEGE CREDIT / ACP BUSINESS ADMINISTRATION (11, 12) This course gives students the opportunity to earn 3 hours of IU college credit in X100 that are transferable to most other universities. This course introduces students to a wide range of management issues. If students are considering majoring in Business in college, this course is a fantastic choice to assist them in that decision. Students will learn about the ins-and-outs of business, ownership, management, marketing and many other important aspects of business administration. **IU requirements for admission to this course: GPA 2.7 or higher on a 4.0 scale within a college preparatory curriculum. This course will require the purchase of a college-level textbook. Additionally, if students choose to take the course for IU credit, the tuition cost will be \$25/credit hour, for a total of \$75. Participation in DECA (an association of marketing) is strongly recommended.**

4528 * DIGITAL APPLICATIONS AND RESPONSIBILITY (9, 10, 11, 12) The student will be introduced to the physical components and operation of computers. Technology is used to build students' decision-making and problem-solving skills focusing on Word Processing/MS Word, spreadsheets/MS Excel, databases/MS Access and presentation software/MS PowerPoint. **This is a dual credit course through Ivy Tech. Students must meet all Ivy Tech prerequisites to qualify for Ivy Tech dual credit. This course meets Business graduation requirements.**

4512 BUSINESS MATH (11, 12) Business Math is a business course designed to equip students with life application mathematics by developing and practicing essential skills. We will emphasize a solid understanding of core math operations (addition, subtraction, multiplication, division, and basic fractions) and how they apply in real-world situations. We will also focus on personal banking and financial budgeting (checkbooks, household budgets), math for public settings (i.e. percentages, estimation, rounding used in restaurants, grocery stores, personal purchases), and applying general math principals using realistic tools to provide the necessary foundation for students as they enter adulthood and prepare for employment. **Requirement: Successful completion of Algebra.**

5394 PREPARING FOR COLLEGE AND CAREERS/COLLEGE READINESS CENTER: (11, 12) The focus throughout the course is on critical thinking. This includes how to take in, question, and use information to solve problems, make good decisions, and plan and set goals, both in the long term and short term. These problem-solving skills are applied to practicing general study techniques such as active listening, note taking, test taking, memory techniques, and reading. The course will also review the 16 national career clusters. Students will gain an awareness of the type of occupational preparation or training needed for various occupations and careers. Throughout this course students will prepare for and take the Accuplacer assessment to measure college/career readiness. The goal for students is to be college ready without having to take remediation course work at the college level. **In the second semester, students can earn dual credit, free of charge, for IVYT 120 through Ivy Tech. This course meets the Business graduation requirement.**

5232 INTERACTIVE MEDIA (10, 11, 12) This course prepares students for careers in business and industry working with interactive media products and services; which includes the entertainment industries. This course emphasizes the development of digitally generated or computer-enhanced products using multimedia technologies. Some of the projects students will work on include video/audio production, digital imaging, animation (Text, 2D and 3D characters), and website design, development, and management. **Requirement: Digital Applications and Responsibility (DAR)**

5962 MERCHANDISING (11, 12) Merchandising is a specialized two-semester marketing course providing instruction of marketing practices that support the sale of products to retail consumers. The merchandising course will also function as a school-based enterprise. Students will work collaboratively to organize and maintain all aspects of the business. Students will be responsible for effective team communication, using problem solving skills and critical thinking skills as they relate to product design for all apparel and merchandise, marketing and promotion, tracking of inventory and purchases, keeping record of accurate financial statements, as well as managing product distribution. Project-based learning will be a core competency of the Merchandising course, as students will engage in real-world application of the business principles they have learned in their prerequisite courses.

To be considered as a candidate for FHS Merchandising, interested students must fulfill the following requirements:

- Required Prerequisites. Must have taken TWO of the following courses:
 - Accounting, Digital Applications, Entrepreneurship, Principles of Marketing I, Intro to Business, Marketing II, Sports and Entertainment Marketing, Personal Financial Responsibility, ACP Business Administration, Web Design I, AP Computer Science "A", Computer Science I: Programming, Cybersecurity.
- Interested students must interview w/ the instructor the semester prior to the start date of Merchandising course.
- Participation in DECA (an association of marketing students) is strongly recommended.

* 1-semester course

** can be taken 1 or 2 semesters

single-weighted course

double-weighted course

Computer Science Courses

4803 * INTRODUCTION TO COMPUTER SCIENCE (9, 10) A one-semester course designed to give a first experience with several computer science topics. Students work together on activities to develop problem-solving skills and learn how a computer “thinks” using algorithms. Students create content for web pages using basic html and add design to their web pages using style sheets. Students learn basic concepts of computer programming to code visual scenes that include animation and user interaction leading to a final project where students program their own game. **No programming or computer science experience is needed. This course meets the Business graduation requirement.**

4568 ## AP COMPUTER SCIENCE PRINCIPLES (9 with recommendation, 10, 11 ,12) This is a full year course designed to introduce students to a broad range of computer science topics. Students explore the impact of computer science on society by studying the internet, image encoding, compression, JavaScript programming, data analytics, Big Data and cybersecurity. Students have a chance to express their creativity while demonstrating their understanding of computer science concepts. Students who have a computer science background should take this course if they want to broaden their CS experience. Students who do not have a computer science background should take this course to get an understanding of CS topics that can be helpful in many careers such as business, engineering, science and the arts. Students will submit one project to College Board and prepare to take the “AP Computer Science Principles” test in May. **No computer science experience is needed. Students must have strong Algebra skills and strong written communication skills. This course meets the Business graduation requirement and counts as a science elective.** AP Exam registration will take place in September & October. Standard AP fees apply.

7185 WEBSITE & DATABASE DEVELOPMENT (9 with recommendation, 10, 11 ,12) A full-year course in computer programming and related computer science topics. Students will learn and practice fundamental programming concepts including variables, looping, control structures, data structures, and functions. In the first semester, students will begin JavaScript & web design, utilizing HTML and CSS to build programming skills and apply them in a web environment. In the second semester, students will learn Python and programming concepts that are applicable to any programming language. Students will also be introduced to the basic concepts of databases including types of databases, database design, tables, queries, reports, and applications. Students will also be introduced to BIG Data and data mining. Students will also develop business application using database software such as Microsoft Access. **Requirement: AP Computer Science Principles (or teacher recommendation). This course meets the Business graduation requirement.**

4570 ## AP COMPUTER SCIENCE A – ADVANCED COMPUTER SCIENCE USING JAVA (10, 11, 12) AP Computer Science A is a full year course on the development of computer programs to solve problems. This leads to other computer science topics including development and analysis of algorithms, development and use of data structures, and the study of standard algorithms and typical applications. In addition, an understanding of the basic hardware and software components of computer systems and the responsible use of these systems are integral parts of the course. Students will prepare to take the “AP Computer Science A” test in May. This course consists of extensive coding experience. **Requirement: completion of Algebra II. Strongly encouraged to have completed either AP CSP or Website Development. Recommendation: strong grade (“B” or better).** AP Exam registration will take place in September & October. Standard AP fees apply.

* 1-semester course

** can be taken 1 or 2 semesters

single-weighted course

double-weighted course

5253 COMPUTER SCIENCE III: CYBERSECURITY (11, 12) Protecting digital information is an important requirement for individuals, corporations and governments to function safely and effectively in a digital society. The Cybersecurity course will give students the knowledge and skills needed to understand the complex technical and societal issues involved with information security. Students will explore and discuss current and historical cybersecurity events to understand why they happened and how they could have been prevented. Topics covered will include Ethics/Digital Citizenship, Cryptography, Software Security, Physical Security, Web Security, Networking Fundamentals and Basic Systems Administration. **Requirement: Successful completion of Website Development AP CS Principles (B or better recommended).** *This class will be offered at HSE; students can also take a Cybersecurity course through the Pursuit Institute.*

5249 COMPUTER SCIENCE III: SOFTWARE DEVELOPMENT CAPSTONE (11, 12) This course focuses on gaining knowledge and acquiring competencies in the processes, techniques, and tools to develop production quality software. The course framework aligns with professional standards and situates software development within the context of a software project, providing focus on requirements development and management, project scheduling, project success metrics, code design, development and review principles, testing procedures, release and revision processes, and project archival. An additional topic provides exposure to career opportunities within the software development field. The final product of this capstone experience is a working software product that adheres to industry standards. **Requirement: Successful completion of AP CS Principles or another programming class (B or better recommended).**

ENGLISH / LANGUAGE ARTS

The Fishers High School English program is a four-year progression that enables students to become engaged, thinking persons in a complex, dynamic world. The curriculum offers various opportunities for students to increase their language potential in courses that are challenging but commensurate with their abilities. All English courses emphasize the acquisition and development of the skills of disciplined reading, discussion and oral presentation as well as mastery of the various forms, modes, and strategies of written composition. From the wealth of ideas explored in the study of literature, the student can recognize and empathize with the human experience and gain an understanding of the enduring power of the human mind and spirit.

Freshman and sophomore courses concentrate on the essential competencies in the skills of language, reading, and composition. The junior and senior years not only refine and reinforce the skills introduced earlier but also lead the student into the more advanced skills of the language arts. In the senior year, students can concentrate, in depth, on various genres, themes and topics of English through a variety of specialized courses as well as the sequential fourth year courses.

In the English program, students acquire the habits of scholarship, grow in written and spoken self-expression, and develop responsiveness to important works of literature, which gives them an effective pattern for examining ideas and a solid basis for successful pursuit of higher education and careers. Emphasis is upon application of literacy skills in new contexts.

Underclassmen English Coursework

1002 ENGLISH 9 (9) English 9 is separated into two semester-long courses: One focuses on literature and the other on writing. Each course begins with a grammar review as the foundation for effective communication. During the literature semester, students will read a wide variety of fiction including at least one novel study and a short story unit. Additionally, they will examine poetry and drama in shorter, more focused units. The literature semester challenges students to understand and apply literary terminology when speaking and writing about literature. Throughout this semester, students will improve reading comprehension while analyzing authors' stylistic techniques and purposes. The writing semester consists of four units: story-telling, rhetorical analysis, argumentation/media literacy, and persuasive speaking. Through drafting, editing, peer reviewing, revising, and reflecting on their work, students will work toward mastery of ELA standards.

1002 # HONORS ENGLISH 9 (9) Honors English 9 is separated into two semester-long components: one incorporates primarily literary analysis, and the other language and writing application. The literature semester focuses on active reading and literary analysis. Students will examine texts of varying genres, study vocabulary in context, analyze the basic components of grammar, and write a literary analysis essay demonstrating mastery of skills. Critical reading is integral to analytical compositions, along with emphasis on effective syntax, accurate and logical expression, and expansion of ideas. The writing semester focuses on language analysis, composition, research, and speaking. Students will examine "mentor texts" of varying genres and modes by analyzing the author's language choices as a means to understand purpose and impact. Students will apply these rhetorical skills to craft their own writing effectively for a variety of purposes and audiences, writing multiple drafts of several compositions. Understanding and application of grammatical concepts, vocabulary in context, research skills, source documentation, and media literacy all contribute to student development in this course. Additionally, this course has been vertically aligned with our International Baccalaureate (IB) and Advanced Placement (AP) English courses in an effort to lay important foundational work for future enrollment and success in upper grades; students should anticipate rigorous assessments and expectations. **Recommendation: a "B" average in 8th grade Advanced English OR an "A" average in 8th grade regular English.**

* 1-semester course

** can be taken 1 or 2 semesters

single-weighted course

double-weighted course

1002 ENGLISH 9 (ENL) This course is designed for students with limited English proficiency levels 1-4. The ninth grade language arts standards will be addressed. This course will meet the English 9 credit requirements. **Requirement: Recommendation of counselor or previous ENL instructor.**

1004 ENGLISH 10 (10) This course requires students to apply skills from English 9 to a new host of nonfiction and literary texts. The course will utilize the Pre-AP English 2 course framework. As readers, students develop a vigilant awareness of how the poet, playwright, novelist, and writer of nonfiction alike can masterfully manipulate language to serve their unique purposes. As writers, students compose more nuanced analytical essays without losing sight of the importance of well-crafted sentences and a sense of cohesion. Each unit in English 10 / Pre-AP English 2 culminates in a writing task that reflects similar tasks they will eventually encounter on standardized writing exams, in AP English courses, and in college classes. **Requirement: Students must pass and complete English 9 (exceptions possible; students can be concurrently enrolled in English 9 due to previous failure w/ admin. approval)**

#1004 HONORS ENGLISH 10 (10) This course invites students to learn, grow, and succeed through focused content and targeted assessments for learning. This course will utilize the Pre-AP English 2 course framework and will be supplemented with rigorous texts. Emphasis is placed on higher-order questions, critical examination of the art and craft of writing, and analysis of universal themes and archetypes. The course focuses deeply on a limited number of concepts and skills with relevance for further high school coursework and college & career success. Annotation of text as a means of explication is emphasized. Grammar and usage is taught in the context of language for developing rhetorical style, and speaking and listening skills are incorporated throughout the course. Additionally, this course has been vertically aligned with our International Baccalaureate (IB) and Advanced Placement (AP) English courses in an effort to lay important foundation work for future enrollment and success in upper grades; students should anticipate rigorous assessments and guided practice with IB/AP-style multiple choice tests, writings, and analysis. **Recommendation:** successful completion of Honors English 9 (or English 9 with a teacher recommendation).

1004 ENGLISH 10 (ENL) This course is designed for students with limited English proficiency levels 1-4. The class will read a selection of texts from around the world. The course is designed to meet ELLs at their proficiency level while meeting 10th grade English/Language Arts standards. **Requirement: Recommendation of counselor or previous ENL instructor.**

2188 (9, 10, 11, 12) ENGLISH AS A NEW LANGUAGE - This course for Limited-English Proficient (LEP) students is geared toward the enhancement of listening, speaking, reading and writing skills while exposing students to American literature, culture, government and history. **Requirement: Referral based on Home Language Survey, language assessment, and counselor recommendation. While not an English credit, this may serve as W.L. Credit for non-native speakers.**

1006 English 11 (ENL) This course is designed for students with limited English proficiency levels 1-4. The eleventh-grade language arts standards will be addressed. This course will meet the English 11 credit requirements. **Requirement: Recommendation of counselor or previous ENL Instructor**

1008 English 12 (ENL) This course is designed for students with limited English proficiency levels 1-4. The twelfth-grade language arts standards will be addressed. This course will meet the English 12 credit requirements. **Requirement: Recommendation of counselor or previous ENL Instructor**

Upperclassmen English Coursework

While underclassmen have a more traditional structure in meeting their credit requirements, the upperclassmen have more courses and options to obtain their final four English credits.

In scheduling courses, all upperclassmen students **must select at least one column A course** (a composition-focused course) **during the course of their junior/senior years**. A student may mix and match as best suits their needs and interest, but teacher recommendation combined with collegiate goals should guide a student's decision.

- We advise all college bound seniors to have at least one writing course their senior year as entering college after a gap in focused, compositional coursework may prove challenging.
- Electives change based on year and semester, so please speak with your guidance counselor to see what courses are available to you over the next two years.
- A good way to start is to consider how you want your senior year to look – are you interested in participating in the 4 dual credit course schedule? Are you going to a two or four year college?

Column A – Composition focused

Column B

IB English HL, year 1

IB English HL, year 2*

AP Literature & Comp*

AP Language & Comp*

AP Research *

AP Seminar * – semester 2 only

ACP Composition (IU Dual Credit)

ACP Literature (IU Dual Credit)**

English 12 (Ivy Tech Dual Credit)

Composition

ACP speech (IU Dual Credit)

ACP Discovering Literature (IU Dual Credit)**

English 12 (Ivy Tech Dual Credit 12)

Speech

Genres in Literature (all courses)

Themes in Literature (all courses)

Film Literature* (if taken both semesters as IB)

Creative Writing

Debate

Critical Thinking and Argumentation

Journalism

**possible college credit*

***please see description for requirements*

1008 ENGLISH 12 IVY TECH (ENGL 111) combines the curricula from both Ivy Tech's composition course and the Fishers High School English 12 class. The yearlong course trains students to write for college and career, with a particular focus on analytical thinking and writing. Through the pre-writing, drafting, and revision process, students will develop styles for a variety of rhetorical purposes, including narration, analysis, and persuasion. For narration, students will participate in a workplace readiness unit where they write a resume and conduct primary and secondary research to compose a career narrative. For analysis and persuasion, students will dissect the claims and assumptions embedded in arguments, and then use those claims to inform their own arguments about other texts. In the spring semester, the course concludes with an extended research paper. To receive credit from Ivy Tech for the course, students must earn at least a C- and meet the minimum requirements provided by Ivy Tech: at least a 2.6 GPA or a passing score on a relevant standardized assessment (PSAT, for instance).

* 1-semester course

** can be taken 1 or 2 semesters

single-weighted course

double-weighted course

IB Courses (Diploma OR Certificate)

1130 ## IB LANGUAGE A: LITERATURE HL, Year 1 (11): This course is a pre-university literature course in the student's native or best language. Language A1: Literature promotes an appreciation of literature and knowledge of the student's own culture, along with that of other societies, and develops the student's power of expression, both in oral and written communication. The course emphasizes the skills involved in writing and speaking in a variety of styles and situations and offers students the opportunity to read works in various genres by at least 6 different authors. Works are chosen from a broad list of prescribed authors and works representing different literary periods, genres, and regions in the target language, as well as literature in translation. **Students will be eligible to earn an IB English HL Certificate upon completion of this course plus IB English Year 2 as a senior. Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance.**

- Summer reading and associated assignments are required and can be found on the FHS website in May.
- Diploma Requirement: Enrollment in IB diploma program
- Certificate Requirement: "B" average in Honors English 9 and Honors English 10.

1130 ## IB LANGUAGE A: LITERATURE HL, Year 2 (12) This course is a pre-university literature course in the student's native or best language and is a continuation of IB Language A1 HL Year 1. Language A1: Literature promotes an appreciation of literature and knowledge of the student's own culture, along with that of other societies, and develops the student's power of expression, both in oral and written communication. The course emphasizes the skills involved in writing and speaking in a variety of styles and situations and offers students the opportunity to read works in various genres by at least 7 different authors. Works are chosen from a broad list of prescribed authors and works representing different literary periods, genres, and regions in the target language, as well as literature in translation. **Students will be eligible to earn an IB English HL Certificate upon completion of this course as well as the IB English HL exam in May. Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance.**

- Summer reading and associated assignments are required; can be found on the FHS website in May.
- Diploma/Certificate Requirement: Successful completion of IB English year 1.
- This course fulfills column A requirement

Advanced Placement (AP) Courses

1056 ## AP ENGLISH LANGUAGE AND COMPOSITION (11, 12) –The AP English Language and Composition course cultivates the reading and writing skills that students need for college success and for intellectually responsible civic engagement. Readings are selected not only to hone these skills, but also to lend a strong awareness of the ideas that have shaped Western society, beginning with Ancient Greece. The course guides students in becoming curious, critical, and responsive readers of diverse texts and becoming flexible, reflective writers of texts addressed to diverse audiences for diverse purposes. The reading and writing students do in the course should deepen and expand their understanding of how written language functions rhetorically: to communicate writers' intentions and elicit readers' responses in particular situations. Having taken APUSH does not prohibit a student from taking AmEx APLAC. **AP Exam registration will take place in September & October. Standard AP fees apply.**

- Junior Requirement: "B-" average in Honors English 10 or "B+/A-" average in English 10.
- Senior Requirement: "C" average in alt. AP course

1058 ## AP LITERATURE AND COMPOSITION (11, 12) AP Literature and Composition (AP Lit) offers students the opportunity to engage in close textual analysis and critical interpretation of imaginative, challenging works in several genres from a range of time periods. Through the close reading of selected texts, students will deepen their understanding of the way writers use language to provide both meaning and pleasure for smaller-scale elements like figurative language, imagery, symbolism, and tone. Critical analysis skills, oral presentations, and interpretive writing will be emphasized. This class offers students the opportunity to pursue and receive credit for college-level work by taking the AP exam in May. If the student successfully completes this exam, they may qualify for up to one year's college credit in English at the college of choice. **AP Exam registration will take place in September. Standard AP fees apply.**

- Junior Requirement: "B-" average in Honors English 10 or "B+/A-" average in English 10.

AP CAPSTONE COURSES

AP Capstone is an innovative diploma program that provides students with an opportunity to engage in rigorous scholarly practice of the core academic skills necessary for successful college completion. AP Capstone is built on the foundation of two courses — **AP Seminar** and **AP Research** — and is designed to complement and enhance the in-depth, discipline-specific study provided through AP courses. It cultivates curious, independent, and collaborative scholars and prepares them to make logical, evidence-based decisions.

Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing will receive the AP Capstone Diploma. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams will receive the AP Seminar and Research Certificate. AP Seminar may also be taken as a stand-alone option.

Capstone courses taken in the first semester will count as elective credit. The second semester of each Capstone course will count as English credit.

0552 ## AP SEMINAR (CAPSTONE) (11, 12) This Advanced Placement course provides students with opportunities to think critically and creatively, research, explore, pose solutions, develop arguments, collaborate, and communicate using various media. Students explore real-world issues through a cross curricular lens, consider multiple points of view to develop deep understanding of complex issues, and connect these issues to their own lives. This course complements other AP Courses and exams through scholarly practice and academic intensity. The learning goals include: thinking critically and creatively to construct meaning or gain understanding, planning and conducting a study or investigation, problem finding and problem solving, planning and producing communication in various forms, collaborating to solve a problem or accomplish a goal, and synthesizing and making cross curricular connections. **AP Exam registration will take place in September & October. Standard AP fees apply.**

- This course is the first of two required for students to earn the prestigious AP Capstone Diploma.
- **The first semester of this course counts as an elective credit. The second semester of this course will count as an English credit.**

0551 ## AP RESEARCH (CAPSTONE) (11, 12) AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a yearlong mentored, research-based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methods; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. The course culminates in an academic thesis paper of approximately 5,000 words and a presentation, performance, or exhibition with an oral defense. **AP Exam registration will take place in September & October. Standard AP fees apply.**

- Requirement: Students must have completed the AP Seminar course
- **The first semester of this course counts as an elective credit. The second semester of this course will count as an English credit.**
- **Students are strongly encouraged to take at least one flex period to couple with this Research course. The flex period and Research course will be used in tandem at the teacher's request, and students will meet for a block research period some days.**

Advanced College Project (ACP) and Dual Credit Courses

1124 ## * ADVANCED ENGLISH/LANGUAGE ARTS – DISCOVERING LITERATURE (ACP/IU L111) (11, 12) This is a one-semester college course which introduces students both to various forms of literacy expression and different modes of literary study and appreciation. It is intended to help support students in preparation for taking ACP W131 or ACP L202. Focusing on the intersection of literature and culture, the course considers what, how, and why we read literature. This course explores literary expression through thematically grouped readings, class discussions, and a sequence of focused writing assignments. The three focus units of study are: World Building, Identity in Literature, and Communities in Literature. **As of 2022, tuition is free; students are expected to purchase course textbooks.** IU requirements for admission to this course: GPA 2.7 or higher on a 4.0 scale within a college preparatory curriculum. IU's policy with regard to submission of assignments will supersede the FHS English Department policy on late assignments.

- Recommendation for non-ACP credit: "C+" average in academic classes, "B-" average in English classes or "C+" with the recommendation of a junior English teacher.
- Scheduling: This course will only run during the spring semester.

1124 ## * ADVANCED ENGLISH/LANGUAGE ARTS - ACP COMPOSITION (READING, WRITING, AND INQUIRY) (ACP/I.U. W131) (12) W131 provides students an opportunity to examine a few issues under discussion in many different disciplinary fields and among the public and to cultivate the reading, writing and analytical skills students will need in the university and beyond. The course reading invites students not just to talk about the issues, but also to examine the different analytical frameworks and assumptions that various authors and we ourselves bring to such conversations. Authors will guide student inquiry into the issues, but students will also develop their own claims and analysis. IU requirements for admission to this course – GPA 2.7 or higher on a 4.0 scale within a college preparatory curriculum. **As of 2022, tuition is free; students are expected to purchase course textbooks.** IU's policy with regard to submission of assignments will supersede the FHS English Department policy on late assignments.

- Recommendation for non-ACP credit: "C+" average in academic classes, "B-" average in English classes or a "C+" with the recommendation of an English teacher.
- Scheduling: This course will run during both semesters.

1124 ## * ADVANCED ENGLISH/LANGUAGE ARTS – COLLEGE CREDIT LITERATURE (ACP/IU L202) (12) Unlike L202 is a one-semester course which emphasizes a close, thoughtful reading of representative literary texts of various genres drawn from a range of historical periods and countries. Objectives of the course include: familiarizing students with basic elements of literature, helping students appreciate the usefulness of comparing literary works with one another, making students aware of the multiple contexts in which a literary work may be placed, and familiarizing students with basic elements of arguing about literature. Another important goal is for students to develop the ability to read and write with precision, responsibility, and imagination through class discussion and the writing of several short, critical responses which incorporate the composition framework set forth by W131. **As of 2022, tuition is free; students are expected to purchase course textbooks.** IU requirements for admission to this course: GPA 2.7 or higher on a 4.0 scale within a college preparatory curriculum. IU's policy with regard to submission of assignments will supersede the FHS English Department policy on late assignments.

- Recommendation for non-ACP credit: "C+" average in academic classes, "B-" average in English classes or "C+" with the recommendation of a junior English teacher.
- Scheduling: This course will only run during the spring semester.
- **IU English Prerequisite: L202 students must meet IU's English composition requirement before enrolling in L202. L202 students must have:**

§ Successfully completed IU W131 (for credit) with a C- or better **or**

§ SAT Verbal score of 710 or higher, **or**

§ ACT English score of 32 or higher, **or**

§ AP English Language and Composition / AP English Literature and Composition score of 4 or 5

1124 ## * ADVANCED ENGLISH/LANGUAGE ARTS – COLLEGE CREDIT SPEECH (11, 12) This dual credit course offered through Indiana University focuses on the theory and practice of public speaking, training in thought processes necessary to organize speech content, and analysis of components of effective delivery and language. Course objectives include familiarizing students with the basic principles of effective and ethical public speaking, developing critical listening skills, and applying organizational and delivery techniques in writing and presenting a speech. Students may take this course for S121 credit through Indiana University or take the course for high school credit only. IU requirements for admission to this course – GPA 2.7 or higher on a 4.0 scale within a college preparatory curriculum. **As of 2022, Tuition is free.** IU’s policy with regard to submission of assignments will supersede the FHS English Department policy on late assignments.

- Recommendation for non-ACP credit: “C+” average in academic classes, “B-” average in English classes or “C+” with the recommendation of a junior English teacher. Requirement: B average in English courses.

Single Semester Courses as Optional Courses

1090 * COMPOSITION (11, 12) English Composition is a semester course focused on the question “What do I care about?” Students are encouraged to think, discuss, research, and write about their passions and interests in ways to persuade, inform, and inspire audiences. Students also practice Indiana Employability Skills through target reflections throughout the semester, a “get a job” unit from email to interview, and time management through project proposals. Students have frequent opportunities to write for different audiences and purposes using a process that includes: (1) prewriting, (2) drafting, (3) peer sharing, (4) revising (content, structure, or presentation), (5) editing (grammar, punctuation, spelling, usage), and (6) producing a final product. The course provides ample opportunities for students to offer and receive constructive feedback in pitch discussions and peer editing. Instruction in grammar, usage, and mechanics is integrated with writing so that students develop both a functional understanding of rhetoric as well as a common vocabulary for discussing writing. Besides various workplace planning documents and journaling, each student produces an argumentative paper, a manual, and a capstone project.

- This course fulfills column A requirement

1092 * CREATIVE WRITING (11, 12) Creative Writing is a one semester course which offers an in-depth study of the effective rhetorical strategies for writing fiction, with an emphasis on prose, poetry and drama. Students use the writing process to apply, investigate and create while demonstrating an awareness of language conventions, reading audience, writing purpose and genre technique. Students learn to recognize style in published author’s works, as well as discovering and establishing their own style. Projects include, but are not limited to, short story, poetry, memoir, and a one act play. **Recommendation: "C" average in English 10 or 11.**

1070 * DEBATE (10, 11, 12) This course is based on Indiana's Academic Standards for English/Language Arts and the Common Core State Standards for English/Language Arts, is the study and application of the basic principles of debate involving support for the basic types of arguments (induction, deduction, causation) and debate strategies (affirmative or negative argument construction and extension, case development, refutation or rebuttal of argument claims and evidence, and persuasive speaking). **DEBATE PROJECT:** Students complete a project, such as a mock debate or trial, participation in a forum, competition, or tournament, or an argument supporting or opposing different sides of a major issue, which demonstrates knowledge, application, and presentation progress in the Debate course content.

- Requirement: Speech or teacher recommendation.

1074 * CRITICAL THINKING AND ARGUMENTATION (10, 11, 12) Critical Thinking and Argumentation, a course based on the Indiana Academic Standards for English/Language Arts, is a study of deductive and inductive logic, including logical fallacies, and should challenge ideas and concepts, and rephrase ideas when appropriate. Active class participation is essential, including persistent questioning, rational discussion, and reasoned argumentation. Students make comments that reflect the development of logic (a line of reasoning), represent a clear point of view, and involve evidence of support (data, examples, anecdotes, documents, information from a variety of sources). Students use the same Standard English conventions for oral speech that they use in their writing.

1034 ** FILM LITERATURE (11, 12) – Film Literature, a one or two semester course, is a study of how literature is adapted for film or media and includes role playing as film directors for selected screen scenes. Students read about the history of film, the reflection or influence of film on the culture, and issues of interpretation, production and adaptation. Students examine the visual interpretation of literary techniques and auditory language in film and the limitations or special capacities of film versus text to present a literary work. Students analyze how films portray the human condition and the roles of men and women and the various ethnic or cultural minorities in the past and present.

Special Note: This course can be part of the International Baccalaureate (IB) program and functions as the first semester of the “IB Film” course. Non-IB students can still take this course for an English credit. As such, students may take it for one semester as an English credit, but for students who opt to expand it and take the full year version, the course may earn an IB Certificate as well as one Fine Arts credit for their work in the second semester. The course description for the second-semester course can be found in the “Performing Arts” section of the Course Description Guide. The year-long study involves a more in-depth study and creation of student-produced films. In addition to having an IB course on a student’s transcript, IB Certificates may earn university credit as well. Recommended: An overall “C” average or higher.

1036 * GENRES IN LITERATURE: GRAPHIC NOVELS (11, 12) – This course will examine storytelling through sequential art. From the early days of comic books to the birth of the graphic novel we will explore how this American literary art form travels from childhood entertainment to commentary about race, politics and marginalized voices. We will explore the important role that heroes and villains play in our life, while looking at pop culture's acceptance of the “Comic Book Nerd.”

1036 * GENRES IN LITERATURE: SCIENCE FICTION (11, 12) This course explores a wide range of classic and modern science-based fiction to foster a better understanding of the human challenges so central to science fiction. Students will engage with multiple genres; such as novels, short stories, documentaries, and films that explore the “what if” questions science fiction raises. Topics include Time Travel, Dystopias, Space Travel, Afrofuturism, Intelligent Machines, Monsters, and Aliens. Activities will frequently allow for students to pursue areas of their own interests regarding science fiction, including TV series, novels, anime, video games, and movies. This course is designed to engage all students, from the new to sci-fi as well as those who frequently watch or read science fiction.

1036 * GENRES IN LITERATURE: TRUE CRIME (11, 12) This course will dive into the world of criminal trials and the legal system in America. The course will aim to analyze how the justice system works and where the limitations are within the system. The students will play the role of critic while reading and analyzing modern cases. Students will interpret and analyze evidence, witness testimony, legal documents and arguments for and against defendants. Students will also review the role of media in criminal case trials. Students will create claims that are backed in argument and evidence drawn from the text.

* 1-semester course

** can be taken 1 or 2 semesters

single-weighted course

double-weighted course

1076 * SPEECH I (9, 10, 11, 12) This semester-long course is designed for students who want a more in-depth study of oral communication than is offered in the core English curriculum and is highly recommended for college bound students. The course focuses on the art of effective critical listening and the writing and performing of informative, persuasive, impromptu & interpretive speeches. Reading & analyzing a variety of lit. genres is a part of composing all performances.

1048 * THEMES IN LITERATURE: CONTEMPORARY TEEN ISSUES in YA LITERATURE (11,12) – This course will explore contemporary literature by authors like John Green and others who explore the universal themes and concerns that depict the teenage experience of the human condition. It is intended for students who enjoy YA fiction. This class will be student-driven and current-issues conscious. Literary devices and analysis will be used to ensure comprehension of texts and issues, while tactics such as discussion and debate may be used for a deeper exploration of issues.

1048 * THEMES IN LITERATURE: WAR LITERATURE (11,12) War Literature is a historical fiction study, exploring how literature has often used war-based settings and conflicts to present universal themes involving honor, fear, maturity, and loyalty. Our readings will be a blend of novels, stories, poems, biographies, documentaries, and other non-fiction writings that share common themes and offer differing insights. Both historical & modern war subjects will be analyzed.

1048 * THEMES IN LITERATURE: LIFE IN LITERATURE AND SPORT (11,12) This course will explore how writers use sports to address common themes in the human experience. This literature-based course uses high-interest readings that challenge readers to see the sports arena as more than simply entertainment; the social issues explored through sports are as diverse as the participants. Course Guiding Questions direct students to analyze unifying themes / motifs in sports literature. Additionally, students will study how the methods of delivery (novels, short stories, essays, and poetry) help the writer to convey his or her message. Students will apply the knowledge gained in the course to produce argumentative, informative, and narrative essays. Students will also select an area of research which addresses how writers answer one of the Course Guiding Questions.

1048 * THEMES IN LITERATURE: OWN VOICES (11, 12) – #OwnVoices is a term coined by writer Corinne Duyvis and refers to an author from a marginalized or under-represented group writing about their own experiences/from their own perspective, rather than someone from an outside perspective writing as a character from an underrepresented group. In Own Voices Literature, we will examine and study the roles that identity, diversity, and representation play in our understanding of literature through book study, short fiction, poetry, speeches, and other contemporary media forms. Text selections for this course span from the 19th century through present day. We will use Learning for Justice's anti-bias lens of Identity, Diversity, Justice, and Action to critically examine literature and our own perspectives, as well as to ensure that marginalized voices are heard, valued and respected.

1080 * JOURNALISM (9, 10, 11, 12) This is a one semester course with emphasis on journalistic writing. This course includes the process involved in: (1) reporting and writing news stories, (2) the legal and social responsibilities involved in newspaper publications, and (3) the ethics of accurate and fair reporting. This course includes extensive reading of models of excellent journalistic techniques. Students will also write original news, feature, sports, and opinion stories. This is a prerequisite course for Newspaper or Yearbook. Recommendation: "B" average in English. This course may count as an English elective credit for underclassmen or an English Column B elective credit for upperclassmen.

Non-English Credit Elective Courses

1078 ** ADVANCED SPEECH AND COMMUNICATION (10, 11, 12) Advanced Speech continues with the skills learned in Speech. Major emphasis is given to producing formal speeches and oral interpretation. The course focuses on leadership development, listening skills, oral interpretation, parliamentary procedures, research methods, and oral debate. Special attention is given to creating competitive speeches, interpretation and debate.

- This course does not meet the Speech requirement for the diploma options and counts as elective credit, not English credit. Requirement: Speech I or Theatre Arts I or with instructor's permission.

0532 * COLLEGE-ENTRANCE PREPARATION (11,12) College-Entrance Preparation is a class that helps to prepare college-bound students for the SAT, ACT, ACCUPLACER and/or Compass college readiness assessments. Based on student score reports, students will receive targeted instruction to strengthen their foundations in critical reading, writing, mathematics, and science sections of college admission and placement exams. Being ready for college means that a high school graduate has the English and mathematics knowledge and skills necessary to qualify for and succeed in entry-level, credit-bearing college courses without the need for remedial coursework. Recommended Grade Level: semester 1 – grade 11; semester 2 – grade 10

- Recommended Prerequisite: Algebra II (or concurrent enrollment in Algebra II)

Publications Courses

1086 ** STUDENT PUBLICATIONS/NEWSMAGAZINE/NEWSPAPER PRODUCTION I (10, 11, 12) This class is devoted to the continued use of journalism and photojournalism skills. Members of this class produce, *Tiger Topics N the RED*, a 16- to 40-page newsmagazine, and www.fishersnthered.com, a news site, covering student life and the school community. Students plan, publish, market, and distribute their school publications. After an application process, the publication's adviser will select staff members. A student may not enroll in this course unless first approved by the adviser after completion of an application process. Students named to editorial board/leadership team positions are required to fulfill commitments the entire school year. Students not fulfilling obligations to positions on the staff will be removed from the staff at the adviser's discretion. **Recommendation: Journalism. This course does not count as an English credit but will count as an elective credit. This course may count for Fine Arts Credit as a Directed Elective for the academic honors or technical honors diploma.**

1086 ** STUDENT PUBLICATIONS/NEWSMAGAZINE/NEWSPAPER PRODUCTION II (10, 11, 12) This class is devoted to an advanced and continued use of journalism skills. Members in this class produce the school newsmagazine, *Tiger Topics N the RED*, and news site, www.fishersnthered.com, which covers all aspects of school life and demands strong journalism skills. A staff application is required for this course, and students must be approved by the adviser prior to course enrollment. Students named to editorial board/leadership team positions are required to fulfill commitments the entire school year. Students who fail to meet obligations may be removed from the staff at the adviser's discretion. **Requirement: Newsmagazine/Newspaper I. This course does not count as an English credit but will count as an elective credit. This course may count for Fine Arts Credit as a Directed Elective for the academic honors or technical honors diploma.**

1086 ** STUDENT PUBLICATIONS/NEWMAGAZINE/NEWSPAPER PRODUCTION III (11, 12) This class is devoted to an advanced and continued use of journalism skills. The members in the class produce the school newsmagazine, *Tiger Topics N the RED*, and news site, www.fishersnthered.com, which covers all aspects of school life, and demands strong journalism skills. A staff application is required for this course, and students must be approved by the adviser prior to course enrollment. Students named to editorial board/leadership team positions are required to fulfill commitments the entire school year. Students who fail to meet obligations may be removed from the staff at the adviser's discretion.

Requirement: Newsmagazine/Newspaper II. This course does not count as an English credit but will count as an elective credit. This course may count for Fine Arts Credit as a Directed Elective for the academic honors or technical honors diploma.

1086 STUDENT PUBLICATIONS/YEARBOOK PRODUCTION I (10, 11, 12) This class is devoted to an advanced and continued study of journalistic writing and publications through the practical application of skills learned in Journalism and Photojournalism. Student Publications offers practical training in publishing the school yearbook. Students plan, publish, market, and distribute their school publication. The members of this class are the staff members of the school yearbook, *Tiger Tracks*, which produces the 300 + page yearbook for the school and community. The yearbook will focus on all aspects of school life through news, features, opinion, sports, advertising and photography coverage. A staff application is required to enroll in this course. Editorial board positions will be named each spring. Students named to editorial board/leadership team positions are required to fulfill commitments the entire school year. Students not fulfilling staff responsibilities may be removed from the staff at the discretion of the advisor. **Recommendation: Journalism. This course does not count as an English credit but will count as an elective credit. This course may count for Fine Arts Credit as a Directed Elective for the academic honors or technical honors diploma.**

1086 STUDENT PUBLICATIONS/YEARBOOK PRODUCTION II (10, 11, 12) This course is a continuance of the advanced study of yearbook procedure and technique with emphasis on individualized instruction. Editorial board positions are filled by these students. Students wishing to enroll in this course must fill out a staff application in the spring and gain the advisor's approval prior to enrollment. Students named to editorial board/leadership team positions are required to fulfill commitments the entire school year. Students not fulfilling staff responsibilities may be removed from the staff at the discretion of the advisor. **Requirement: Yearbook I. This course does not count as an English credit but will count as an elective credit. This course may count for Fine Arts Credit as a Directed Elective for the academic honors or technical honors diploma.**

1086 STUDENT PUBLICATIONS/YEARBOOK PRODUCTION III (11, 12) This course is a continuance of the advanced study of yearbook procedure and technique in writing, design, and photography with emphasis on individualized instruction. Students who are third year staff members take on more responsibility for the production and creation of the yearbook. Students are part of the editorial board and fill higher editorial positions. Students named to editorial board/leadership team positions are required to fulfill commitments the entire school year. Students wishing to enroll in this course must fill out a staff application in the spring and gain the advisor's approval prior to enrollment. Staff members and editors not fulfilling obligations for production as set forth by the advisor may be removed from the course. **Requirement: Yearbook I & II. This course does not count as an English credit but will count as an elective credit. This course may count for Fine Arts Credit as a Directed Elective for the academic honors or technical honors diploma.**

* 1-semester course

** can be taken 1 or 2 semesters

single-weighted course

double-weighted course

FAMILY & CONSUMER SCIENCES

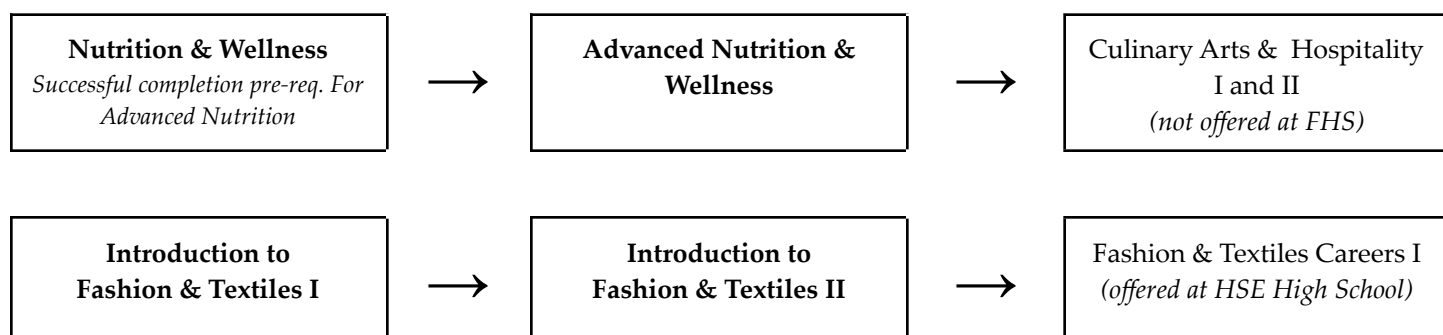
The mission of Family and Consumer Sciences education is to prepare students for family life, work life, and careers in family and consumer sciences by providing opportunities to develop the knowledge, attitudes, and behaviors needed for:

- Strengthening the well-being of individuals and families.
- Becoming responsible citizens and leaders in family, community, and work settings.
- Promoting optimal nutrition and wellness.
- Managing resources to meet the material needs of individuals and families.
- Balancing personal, home, family, and work lives.
- Using critical/creative thinking skills to address problems in diverse family, community & work environments
- Managing employment and career development successfully.
- Functioning effectively as providers and consumers of goods and services.
- Appreciating human worth and accepting responsibility for one's actions and success in family and work life.

Students interested in the following careers would benefit from taking FACS courses:

Early Childhood Educ.	Education Careers	Dietetics & Nutrition	Health Careers/Nursing	Interior Design / Archit.
Culinary Arts	Hospitality Mgmt.	Human/Social Services	Food Science	Fashion & Design

SEQUENTIAL ELECTIVES



SINGLETON ELECTIVES

Interpersonal Relationships	Introduction to Housing & Interiors <i>(Housing & Interior Design Careers @ HSE)</i>	Adult Roles & Responsibilities I, II
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* 1-semester course

** can be taken 1 or 2 semesters

single-weighted course

double-weighted course

Education and Training - **EDUCATION PROFESSIONS** - Next Level Programs of Student

The Education Professions Next Level Program of study is designed for students interested in pursuing a career in education or human services. Service Learning, Observation & Field Experience are completed throughout the year contained in the classroom setting and curriculum. Both courses offer dual credit when meeting course requirements.

7161 PRINCIPLES OF TEACHING (9, 10, 11, 12) - *Two semesters REQUIRED*

Topics Covered

- Explore Educational Careers
- Teaching Preparation
- Prof. Expectations & Teacher Cert Reqs
- Current Trends and Issues in Education
- Special & Inclusive education

Dual Credit Availability

****20 Hours Service Learning-Required****

*** This course is especially appropriate if you have an interest in human services and education-related careers***

**Post-Secondary course alignment:
Dual Credit – EDUC 101**

Projects and Activities

- Multiple Intelligence Stations
- Create an Educational Philosophy
- History of American Education
- Global Education
- Analyze Instructional Planning & Assessments
- School & Classroom Culture Map
- Classroom Behavior Management-Creating Norms (Relationships)
- Creating Inclusive Education
- **Service-Learning Field & Reflections (Built in)**

7157 CHILD & ADOLESCENT DEVELOPMENT (9, 10, 11, 12) - *Two semesters REQUIRED*

Topics Covered: This course examines the physical, social, emotional, cognitive, and moral development of the child from birth to adolescence.

- What can we learn by studying children?
- FERPA & Confidentiality
- Personal strengths & behaviors for adults working with children
- Culturally-appropriate positive guidance techniques that support diversity
- Societal issue impacts on students and families
- Community and school resources

Dual Credit Availability

****20 Hours Service Learning-Required****

*** This course is especially appropriate if you have an interest in human services and education-related careers***

**Post-Secondary course alignment:
Dual Credit – EDUC 121**

Projects and Activities

- Child development theorists
- Impact of birth defects on growth/develop.
- Demonstrate infant care skills
- Observe a preschool classroom
- Create Play-Doh / Slime (sensory/science)
- Toys & Games impact development
- Preschool healthy snack lab
- Create a fable
- Role play positive guidance techniques
- Design a developmentally-appropriate classroom
- Evaluate children's books
- Create a developmentally-appropriate lesson
- Service learning field & reflections

5342 * NUTRITION AND WELLNESS (9, 10, 11, 12) What is the difference between grilling and broiling? Why do I need more vegetables or fruits in my diet? What is powdered sugar? Discover the answers to these questions and more in this beginning Nutrition and Wellness class. Nutrition and Wellness is a course that enables students to realize the benefits of sound nutritional practices and apply them to their everyday lives. **Qualifies as one of the F&CS courses a student can take to waive the Health & Wellness graduation requirement. A student must take 3 of the qualifying F&CS courses to waive the Health & Wellness requirement.**

<p><u>Topics Covered</u></p> <ul style="list-style-type: none"> • Proper kitchen safety. • Following recipes using proper measuring and knife skills • Explore cooking methods, functions of ingredients and Food Preparation Terminology • Explore how to make healthy choices to live a healthy lifestyle. • Nutrients and Food Groups <p>**This class is a prerequisite for all other nutrition classes**</p>	<p><i>Foods Labs Occur 1/Week after the safety & sanitation unit</i></p> <p><u>Example Recipes:</u></p> <ul style="list-style-type: none"> • Oatmeal Dream Cookies • Homemade Yellow Cake • Vegetable Soup • Healthy Snacks • Omelet Roll • Chicken Stir Fry
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5340 * ADVANCED NUTRITION AND WELLNESS (10, 11, 12) Requirement

Successful Completion of Nutrition and Wellness Want to practice your new cooking skills? Like planning meals for family and friends? Nutrition and Wellness 2 is the class for you!

<p><u>Topics Covered</u></p> <ul style="list-style-type: none"> • Create and modify recipes for special diets • Discover nutritional needs throughout the lifespan. • Create a food budget and practice meal planning • Discover functions of ingredients used in baking <p><i>**This course is especially appropriate if you have an interest in culinary arts, hotel-restaurant management.**</i></p>	<p><u>Example Recipes</u></p> <ul style="list-style-type: none"> • Breakfast Casseroles • Ramen Noodle Challenge • Modified Cookies & Muffins • Choice Labs • Functions of Ingredients • White Sauce • Food Truck Project
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5364 * INTERPERSONAL RELATIONS (9, 10, 11, 12). Interpersonal Relationships address the knowledge, skills, attitudes, and behaviors all students need to participate in positive, caring, and respectful relationships in the family and with individuals at school, in the community, and in the workplace. **Qualifies as one of the F&CS courses a student can take to waive the Health & Wellness graduation requirement. A student must take 3 of the qualifying F&CS courses to waive the Health & Wellness requirement.**

<p><u>Topics Covered</u></p> <ul style="list-style-type: none"> • Components of healthy relationships • Roles and responsibilities in relationships • Functions & expectations of various relationships. • Building self-esteem and self-image • Effective communication skills and techniques. <p><i>** This course is especially appropriate if you have an interest in human services and education-related careers**</i></p>	<p><u>Example Projects and Activities</u></p> <ul style="list-style-type: none"> • Board Games and Communication • Team Building Games • Create a Values Billboard • Nonverbal Charades • Personal Conflict Stories • Friends Scrapbook • Dating Presentations
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5380 * INTRODUCTION TO FASHION AND TEXTILES (9, 10, 11, 12) This one semester course explores the influences on fashion as well as consumer rights and responsibilities in relation to apparel. Basic construction skills are taught, including selection and use of a pattern and the care and use of a sewing machine and other tools used in construction, as students create a variety of textile products.

<p><u>Topics Covered</u></p> <ul style="list-style-type: none"> ● Influences on Fashion ● Project Selection-Patterns, Body Measurements, Fabric Types, Considerations and Selection ● Machines and Equipment – Use and care of sewing machine and construction tools ● Construction Basics-Adjusting Patterns, Preparing Fabric, Laying Out a Pattern, Process of Construction ● Elements and Principles of Design: Color-Color Wheel, Schemes and Effects of Color <p>** Additional expenses will be incurred with this course as students select their own fabrics for some projects. No student will be denied enrollment due to financial reasons.**</p>	<p><u>Example Projects and Activities</u></p> <ul style="list-style-type: none"> ● Potholder (Material Provided) ● Magic Pillow Case ● Zipper Pouch ● PJ Pants ● Fashion Design-Barbie Draping Project ● Tote Bag <p>**Fulfills a fine arts requirement for the Core 40 Academic Honors Diploma.**</p>
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5380 * ADVANCED FASHION AND TEXTILES (10, 11, 12) A more in-depth & individualized look at textiles/fashion. examining current designers in today’s market, fashion throughout the decades, and career in the fashion industry.

<p><u>Topics Covered:</u></p> <ul style="list-style-type: none"> ● Examining current designers in today’s market ● Fashion throughout the decades. ● Careers in the fashion industry. ● Refinement of apparel construction skills. <p>** Additional expenses will be incurred with this course as students select their own fabrics for some projects. No student will be denied enrollment due to financial reasons**</p>	<p><u>Example Projects and Activities</u></p> <ul style="list-style-type: none"> ● History of Fashion ● Fiber Brochure ● Clothing Design Project ● Quilting Project ● Designer Research <p>**Requirement: Introduction to Fashion and Textiles.**</p>
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5350 ** INTRODUCTION TO HOUSING AND INTERIOR DESIGN (10, 11, 12) A one or two semester course recommended for any student who is interested in a career or profession related to Interior Design, Architecture, and/or Construction Industry. This course is a project-based course which addresses selecting and planning living environments to meet the need and wants of individuals and families throughout the Family Life Cycle.

<p><u>Topics Covered:</u></p> <ul style="list-style-type: none"> ● Housing and human needs. ● Architectural Design (Drafting Techniques) ● Designing Interior Spaces / House plans ● Elements of Design ● Using Color Effectively ● Principles of Design ● Furniture Selection and Arrangement ● Window Treatments, Lighting, & Accessories <p>**Fulfills a fine arts requirement for the Core 40 Academic Honors Diploma.**</p>	<p><u>Example Projects and Activities</u></p> <ul style="list-style-type: none"> ● Create Your Ideal Room ● Elements of Design Scavenger Hunt ● 3D Model-Elements of Design ● Create Architectural Symbols ● Design a Floor Plan (Scale Drawings) ● Create a Color Psychology Wheel ● Design an Apartment
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5330 * ADULT ROLES AND RESPONSIBILITIES (11, 12) Who? What? Where? When? How? Are the questions you need to ask when looking for healthy relationships? Understand your personality and leadership style. Gain communication skills and a positive work ethic. Begin your journey through a successful life with this class. Get ready for YOUR independence day! **Qualifies as one of the F&CS courses a student can take to waive the Health & Wellness graduation requirement. A student must take 3 of the qualifying F&CS courses to waive the Health & Wellness requirement.**

Topics Covered

- Living independently,
- Analyzing personal standards, needs, and goals.
- Community roles and responsibilities of families and individuals.
- Tips for making effective consumer decisions like car shopping
- Healthy lifestyle choices,
- Housing options
- The ins and outs of financial institutions

5334 * CONSUMER ECONOMICS (11, 12) Consumer Economics is designed to prepare students to manage their resources in order to develop a satisfying lifestyle. Emphasis will be placed on the consumer in the marketplace. Skills in goal setting as well as obtaining knowledge on career choices will be covered. How do you plan for a vacation? What appliances do you need for your first apartment? What is a mortgage? These questions will be addressed in this course.

THE FOLLOWING COURSES IS OFFERED AT HAMILTON SOUTHEASTERN HS ONLY

Students in this program will be required to have a study hall/travel period

5460 HOUSING AND INTERIOR DESIGN CAREERS I, II (11, 12) Housing and Interior Design Careers is a project-based course that prepares students for occupations and higher educational programs of study related to careers in the Interior Design, Architecture, Construction Industries, and it relates to Commercial Design. Topics will include client-centered designs in the commercial environment using the Elements and Principles of Design as well as blue printing, space planning, rendering, drafting, and elevations. Other areas of study will include: technological, environmental, zoning, building codes, regulations and Universal Design and their impact on Commercial Properties. Extensive lab experience with CAD (computer-aided drafting) will be a required component of the course. This course can be taken for a second year. **Requirement: One semester of Introduction to Housing and Interior Design.**

5420 * FASHION AND TEXTILES CAREERS 1 (10, 11, 12) This course prepares students for a variety of careers in the fashion industry by building on the knowledge and skills learned in the introductory courses. This project-based course will expand the student's knowledge of the fashion industry, use of elements and principles of design and construction skills, and allow them to be used in real world applications. A job shadow experience as well as partnerships with the community and school organizations for project development will be an integral part of this course. Exploration of fashion design technology and the influence of social media on the fashion industry will be a core component. The course is one semester. **Prerequisites are Introduction to Fashion and Textiles Beginning and Advanced.** This course is only offered at Hamilton Southeastern High School. Student will need to travel to HSEHS to take this course.

* 1-semester course

** can be taken 1 or 2 semesters

single-weighted course

double-weighted course

MATHEMATICS

The mission of the Fishers High School Mathematics Department is to challenge students to become mathematically powerful in an ever-changing world. Students of mathematics will practice logical thinking strategies, utilize technology to promote analytical thinking, and they will master concepts to solve various problems for all disciplines.

Topics in the next course build significantly on the topics in the previous course. Therefore, the requirements of the course must be met to enter a particular course. If the requirements are not met and the student wishes to still take the course the parents will be required to sign a waiver form regarding the rigors of the course. Students who have passed a more difficult course may not go back and take a lower level course. **For a more detailed look at all of our courses listed, visit the Indiana Department of Education website, <http://www.doe.in.gov/standards/mathematics>**

2520 ALGEBRA I (9, 10, 11, 12) This course provides a formal development of algebraic skills and concepts. Topics include properties of real numbers, solution and evaluation of equations, including linear and quadratic, and inequalities, graphing of linear equations and systems of equations, use of exponents, and introductory topics from statistics and probability. **This course is a foundational course for all other math courses offered at Fishers High School, and passing Algebra I is a graduation requirement.**

2516 ALGEBRA ENRICHMENT (9, 10, 11, 12) Algebra Enrichment is a mathematics support course for Algebra I. The course provides students with additional time to build the foundations necessary for high school math courses, while concurrently having access to rigorous, grade-level appropriate courses. The five critical areas of algebra enrichment align with the critical areas of Algebra I: Relationships between quantities and reasoning with equations; linear and exponential relationships; descriptive statistics; expressions and equations; and quadratic functions and modeling. Algebra Enrichment is a lab course which allows for additional time and resources for students to continue to build on course work from Algebra I. **This course counts as a math course for the General Diploma only and as an elective for the Core 40, Core 40 with Honors, or Core 40 with Technical Honors Diplomas.**

2532 GEOMETRY (9, 10, 11, 12) This course covers primarily plane geometry with some solid geometry topics. It includes deductive and inductive reasoning; the ideas of logic are stressed. Properties and relationships of geometric figures including the study of angles, lines, planes, congruent and similar triangles, parallel lines, circles and their arcs and angles, trigonometric ratios, polygons, including similar polygons, and spheres, and three-dimensional relationships are all included. **Requirement: Successful completion of both semesters of Algebra I. This course may be taken at the same time as Algebra II.**

2532 # GEOMETRY, HONORS (9, 10) This course is offered to students recommended as most able in mathematics. The development of theorems will necessitate a working knowledge of measurement, congruence, similarity, parallelism, perpendicularity, transformations, probability, perimeter, area, volume, trigonometry, and application of algebraic concepts to geometry. This course differs from regular Geometry in that more topics are studied, concepts are investigated in greater depth, pacing is faster, and proofs and algebra are integrated throughout the entire course. Students considering this course should be active, inquisitive, and independent learners. **Requirement: "B" average in Algebra I. This course may be taken at the same time as Algebra II.**

* 1-semester course

** can be taken 1 or 2 semesters

single-weighted course

double-weighted course

2522 ALGEBRA II (10, 11, 12) This course extends knowledge of algebra. Topics include properties of real numbers, functions, graphing in two dimensions, inequalities, properties of exponents, systems of equations, rational exponents, radicals, logarithms, polynomials and polynomial functions, complex numbers, sequences and series, probability, and rational functions. **Requirement: Successful completion of Algebra I. May be taken concurrently w/ Geometry.**

2522 # ALGEBRA II, HONORS (9, 10, 11) This course is offered to students recommended as most able in mathematics. The content of the course includes all topics in Algebra II, presented from a more abstract and theoretical standpoint. Additional topics may include, linear programming, conic sections, and statistics. **Requirement: Successful completion of Honors Algebra 1 at the junior high level. Recommendation: A minimum grade of A- in both semesters of Honors Algebra 1.** This course may be taken at the same time as Geometry.

2524 ANALYTICAL ALGEBRA II (9, 10, 11, 12) This course should focus on the application of mathematics in various disciplines including business, finance, science, career and technical education and social sciences. This course covers most of the traditional Algebra II standards, but the focus is on the application of algebraic concepts rather than theoretical concepts. Building on previous work with linear, quadratic, and exponential functions, Analytical Algebra II should extend to include polynomial, rational, radical, logarithmic, and other functions. Students should be able to model real-world problems with various functions using and translating between multiple representations. Additionally, students should be able to interpret key features of function models within a given context. **Requirement: Successful completion of Algebra I. This course fulfills the Algebra II requirement for all diplomas; if students use this course to fulfill this credit, the parent must sign a consent form notifying the parent and the student that enrollment in Analytical Algebra II may affect the student's ability to attend a particular post-secondary educational institution because Analytical Algebra II may not align with the academic requirements established by the post-secondary educational institution.**

2564/2566 PRE-CALCULUS/TRIGONOMETRY (10, 11, 12) This is a two-credit course series with one credit awarded for successful completion of each semester. In the fall semester Pre-Calculus course, students will continue to study the characteristics of functions in general while exploring polynomial, exponential and logarithmic functions in greater detail. **Students will not use a calculator most of this course.** Students will be introduced to parametric functions and extend their prior understanding of sequence and series. In the spring semester course, students are introduced to Trigonometry first through the geometry of triangles. A link is then made from triangular geometry to periodic functions and analytic geometry. Students will also advance their understanding of complex numbers using the polar coordinate system. This course is intended for students who expect math to be a major component of their future college and career experiences, and is designed to provide students with a strong foundation for higher level math courses. *It is assumed that students taking this course will be moving on to a college level calculus course that would be appropriate for Engineering, Science, or Business majors. The goal of this course is to prepare students to take Advanced Placement Calculus AB or Advanced College Project Calculus.* **Requirement: Successful completion of Algebra I, Algebra II, and Geometry. Recommendation: A minimum grade of B both semesters of Honors Algebra 2.**

2564 # PRE-CALCULUS/TRIGONOMETRY, HONORS (10, 11) This is a year long course offered to students recommended as most able in mathematics. In addition to all of the topics of Precalculus and Trigonometry, this course includes, but is not limited to, the concept of a limit, continuity, trigonometric form of complex numbers, and mathematical induction. All topics are approached from theory, applications are more in-depth, and the course is paced much faster than regular pre-calculus. The goal of this course is to prepare students to take Advanced Placement Calculus BC. **Requirement: Honors Algebra II. Recommendation: A minimum grade of B both semesters of Honors Algebra 2.**

2550 * QUANTITATIVE REASONING (11, 12) This is a one-semester course for students that plan to pursue degrees and careers in Arts & Humanities, Social & Behavioral Sciences, Health Sciences, Education, Sports Management, and other majors not related to Business or STEM fields. Through contemporary real-world applications, students will think and reason in numerical terms, scrutinize and use data to make informed judgments, and perform calculations and analyses in a range of applications and contexts. Topics include logic & critical thinking, analysis of growth, linear and exponential change, personal finance, graph theory, and voting & social choice. **Requirement: Successful completion of Algebra II.**

2546 * PROBABILITY AND STATISTICS (11, 12) This one semester course is an introductory college-level statistics and probability course geared toward students majoring in fields other than math or engineering. Students will apply statistical techniques through decision-making and the use of critical thinking skills. Topics include data sampling, data variation, experimental design, descriptive statistics, measure of central tendency and spread of data, probability of independent and mutually-exclusive events, contingency tables, and the probability distribution function for a discrete random variable. Also included are binomial, geometric, hypergeometric, uniform, normal, and Student t distributions, as well as the Central Limit Theorem. **Requirement: Successful completion of Algebra II.**

2570 ## AP STATISTICS (10, 11, 12) This course is designed to aid students in applying statistical techniques in the decision making process. Students will be prepared to take the AP statistics exam upon completion of both semesters of the course. In addition to all of the topics of regular Statistics, this course includes, but is not limited to, two sample hypothesis testing, correlation and regression analysis, variance analysis, and statistical process control. A comprehensive description of this course can be found on the College Board website at <http://apcentral.collegeboard.org/>. **Requirement: Honors Algebra II or regular Algebra II. The College Board recommends students should have PSAT scores of 550+ for math, and critical reading. Students will be required to have access to a graphing calculator. AP Exam registration will take place in September & October. Standard AP fees apply.**

2544 ADVANCED MATHEMATICS/COLLEGE ALGEBRA (IVY TECH M136) (12) This is year long, two semester, two credit course that would give a student a more in-depth study of the algebraic properties of expressions, and a variety of functions. Students will explore algebraic properties, variation, quadratic equations, systems of equations, inequalities, exponential, logarithmic, and polynomial functions. Students who enroll may apply to earn three (3) hours of college credit in Mathematics (M136), through Ivy Tech. Students must meet the Ivy Tech prerequisite requirements in order to earn college credit. Transferring credits will vary depending on university requirements. **This course will count as the Pre-Calculus requirement for admission to Indiana University. This course is not designed for students who have successfully completed Pre-Calculus. Requirement: Successful completion of Algebra II.**

***NOTE FOR ALL OF THE FOLLOWING MATH COURSES:**

Students will be given a math placement exam in Pre-Calculus. The placement exam and the student's PSAT score will be used to determine which of the following math course(s) the student will find the most success. Should a student wish to enroll into one of the following math course(s) other than the recommendation given to the student and the guidance counselor, parents will be required to sign a waiver regarding the course rigor.

2544 ## ADVANCED MATHEMATICS: ACP CALCULUS (BRIEF SURVEY OF CALCULUS) (ACP M119) (11, 12) This is a college course which will focus on preparation for majors in business and the social sciences. Topics include mathematical modeling, applications of functions using the first and second derivative, and using the definite integral. As part of Indiana University Advance College Project, students who enroll may apply to earn three (3) hours of college credit in Mathematics (M119), through IU Students will be billed at discounted university fees in late fall. Credits are transferable to most colleges and universities throughout the country. Go to <http://acp.indiana.edu/> for more information. Students enrolled through IU will receive dual credit, both high school and IU credit. **Students choosing to take this course, whether for college credit or not, will receive honors grade weight for first semester and dual credit grade weight for the second semester of the course.** IU requirements for admission to this course – GPA 2.7 or higher on a 4.0 scale. Tuition will be determined by IU and will be communicated to students at the beginning of the semester. **Requirement: Successful completion of Pre-Calculus. Students will be required to have access to a graphing calculator.**

2544 ## ADVANCED MATHEMATICS/FINITE MATH (ACP M118) (11, 12) This is a college course which will focus on probability models, counting, sets, partitions, tree diagrams, linear models, matrix algebra, Markov chains, interest, mortgage, and financial decision making. As part of Indiana University Advance College Project, students who enroll may apply to earn three (3) hours of college credit in Mathematics (M118), through Indiana University, Bloomington. Students will be billed at discounted university fees in late fall. Credits are transferable to most colleges and universities throughout the country. Go to <http://acp.indiana.edu/> for more information. Students enrolled through IU will receive dual credit, both high school and IU credit. **Students choosing to take this course, whether for college credit or not, will receive honors grade weight for the first semester and dual credit grade weight for the second semester of the course.** This course may be taken at the same time as Calculus. IU requirements for admission to this course – GPA 2.7 or higher on a 4.0 scale within a college preparatory curriculum. Tuition will be determined by IU and will be communicated to students at the beginning of the semester. If applying to Indiana University for an undergraduate program, this course does not count towards the seven required semesters of mathematics for admission. **Requirement: Successful completion of Pre-Calculus / Trigonometry.**

2562 ## AP CALCULUS AB (11, 12) This is a year-long rigorous college level course that covers both differential and integral calculus. A comprehensive course description can be found directly on the College Board’s AP Central website at <https://apcentral.collegeboard.org/pdf/ap-calculus-ab-and-bc-course-and-exam-description.pdf>. Successful completion of the AP exam *may* allow students to test out of **one** semester of college calculus and earn college credit depending on the university’s requirement. AB calculus is the **first** semester of a year-long college calculus course. As part of Indiana University Advance College Project, students who enroll may apply to earn four (4) hours of college credit in Mathematics (M211), through Indiana University, Bloomington. Students will be billed at discounted university fees in late fall. Tuition will be determined by IU and will be communicated to students at the beginning of the semester. Go to <http://acp.indiana.edu/> for more information. Students enrolled through IU may receive dual credit, both high school and IU credit. IU requirements for admission to this course – GPA 2.7 or higher on a 4.0 scale within a college preparatory curriculum. **Recommendation: An "A" average over the full year of Pre-Calculus and Trigonometry. Students will be required to have access to a graphing calculator. AP Exam registration will take place in September & October.**

2572 ## AP CALCULUS BC (11, 12) This is a year-long rigorous college level course that covers both differential and integral calculus with extended theory and applications. A comprehensive description can be found on the College Board’s AP Central website at this address: <https://apcentral.collegeboard.org/>. Upon successful completion of the AP exam, students may be able to test out of **two** semesters of college calculus and earn college credit depending on the university’s requirement. **Requirement: Honors Pre-Calculus. Students will be required to have access to a graphing calculator. AP Exam registration will take place in September & October. Standard AP fees apply.**

2544 * ## MULTIVARIABLE CALCULUS AND ITS APPLICATIONS (12) Topics include three-dimensional vector calculus, Gauss’s theorem, Green’s theorem, and Stoke’s theorem. This course includes the use of graphing calculators and computer software. This one semester course is offered as distance learning through Ball State University. Students will participate during the school day, in the math department chairperson’s classroom. **Requirement: Successful completion of AP Calculus BC. The cost of this course is appx. \$350 plus textbooks.** For more information about BSU Dual Credit, visit the website here: <https://www.bsu.edu/academics/collegesanddepartments/dual-credit>

2544 * ## DIFFERENTIAL EQUATIONS (12) Introduction to nth-order ordinary differential equations, equations of order one, elementary applications, linear equations with constant coefficients, nonhomogeneous equations, undetermined coefficients, variation of parameters, linear systems of equations, and the Laplace transform. This course includes the use of standard computer software. This one semester course is offered as distance learning through Ball State University. Students will participate during the school day, in the math department chairperson’s classroom. **Requirement: Successful completion of Multivariable Calculus. The cost of this course is appx. \$350 plus textbooks.**

* 1-semester course ** can be taken 1 or 2 semesters # single-weighted course ## double-weighted course

IB MATH COURSES

All IB courses can be taken as individual IB Certificate offerings or as part of the full IB Diploma.

2590 ## IB MATHEMATICS: ANALYSIS AND APPROACHES, HIGHER LEVEL (MATH AA HL)

The two-year IB Mathematics: Analysis and Approaches (HL) course is intended for students who wish to pursue studies in mathematics at university or subjects that have a large mathematical content. Students will explore topics in greater depth and go *beyond* the Indiana state standards of both Calculus and Statistics. Students planning to study engineering, high-level physics, or mathematics are encouraged to enroll. IB Math AA is for students who enjoy developing mathematical arguments, problem solving, and exploring real and abstract applications, with and without technology. Core topics provide students the opportunity to engage in detailed study of numbers and algebra, functions, geometry and trigonometry, statistics and probability, and calculus. See more info at: <https://www.ibo.org/>. **Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance. Requirement: Successful completion of Honors Pre-Calculus.**

2588 ## IB MATHEMATICS: ANALYSIS AND APPROACHES, STANDARD LEVEL (MATH AA SL)

The two-year IB Mathematics: Analysis and Approaches (SL) course is intended for students who wish to pursue studies in mathematics at university or subjects that have a large mathematical content. Students will explore topics in greater depth and go *beyond* the Indiana state standards of mathematics in both Calculus and Statistics. Students planning to study engineering, high-level physics, or mathematics are encouraged to enroll. IB Math AA is for students who enjoy developing mathematical arguments, problem solving, and exploring real and abstract applications, with and without technology. Core topics provide students the opportunity to engage in detailed study of numbers and algebra, functions, geometry and trigonometry, statistics and probability, and calculus. See more info at: <https://www.ibo.org/>. **Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance. Requirement: Successful completion of Pre-Calculus.**

2594 ## IB MATHEMATICS: APPLICATIONS AND INTERPRETATIONS, HIGHER LEVEL (MATH APPS HL)

The two-year IB Mathematics: Applications and Interpretations (HL) course is designed for students who enjoy describing the real world and solving practical problems using mathematics, those who are interested in harnessing the power of technology alongside exploring mathematical models, and who enjoy the more practical side of mathematics. Students will meet the Indiana state standards of mathematics in both Calculus and Statistics. This course will prepare students for future studies in computer science, chemistry, economics, psychology, and business administration. Students will develop independence in their mathematical learning by investigation and mathematical modeling. Core topics provide students the opportunity to engage in detailed study of numbers and algebra, functions, geometry and trigonometry, statistics and probability, and calculus. More information can be found at: <https://www.ibo.org/>. **Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance. Requirement: Successful completion of Honors Algebra II.**

2592 ## IB MATHEMATICS: APPLICATIONS AND INTERPRETATIONS, STANDARD LEVEL (MATH APPS SL)

The two-year IB Mathematics: Applications and Interpretations (SL) course is designed for students who enjoy describing the real world and solving practical problems using mathematics, those who are interested in harnessing the power of technology alongside exploring mathematical models, and who enjoy the more practical side of mathematics. This course will prepare students for future studies in computer science, chemistry, economics, psychology, business administration, humanities, and liberal arts fields. Core topics provide students the opportunity to engage in detailed study of numbers and algebra, functions, geometry and trigonometry, statistics and probability, and calculus. More information can be found at: <https://www.ibo.org/>. **Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance. Requirement: Successful completion of Algebra II.**

* 1-semester course

** can be taken 1 or 2 semesters

single-weighted course

double-weighted course

PERFORMING ARTS

4146 ** DANCE PERFORMANCE - GUARD (9, 10, 11, 12) This course is open to all students and is designed to provide students with an outlet for musical expression and performance through flag, rifle, saber, and dance. **This course is co-curricular and members will be expected to participate in Fall Marching Band and other possible opportunities outside of the school day that support and extend classroom learning.** Activities utilize a wide variety of materials and experiences and are designed to develop techniques appropriate for both individual and group activities. If taken in the second semester, this course is designed to develop techniques appropriate with Color guard skills and choreography. Students will need proper dance attire and shoes, but no student will be turned away due to financial reasons.

1086 HS STUDENT MEDIA / INTRODUCTION (9, 10, 11, 12) This yearlong class will offer students the opportunity to experience all aspects of crafting a television program from an introductory level. Students will learn all aspects of television production, from history to writing telecasts, understanding and utilizing the latest technology for production and post-production, and learning and demonstrating on-camera performance skills. This class offers a unique opportunity to explore all phases of the modern, successful telecommunication arena through hands-on participation. The final products may include student-generated announcements for the building, special projects and possibly expansion to a variety of community programs. **Requirement: Application. This course does not count as an English credit.**

1086 HS STUDENT MEDIA / ANNOUNCEMENTS (10, 11, 12) This course is the second year study of television production which offers students the opportunity to experience all aspects of crafting a television program from an intermediate level. Students will begin to fine-tune and perfect television production skills learned in the first year of study. The final products may include student-generated announcements for the building, special projects and possibly expansion to a variety of community programs, all from a more advanced level than the previous course. **Requirement: Successful completion of Introduction to Mass Media and an audition. This course does not count as an English credit.**

1086 HS STUDENT MEDIA / VIDEO AND SOUND (10, 11, 12) A continuation of Intro of Mass Media; students in this class will learn the planning, shooting, editing and post producing video and sound. Projects include exercises in script writing, technical & creative skills application, equipment usage and production techniques. **Requirement: Intro to Mass Media. This course does not count as an English credit.**



* 1-semester course

** can be taken 1 or 2 semesters

single-weighted course

double-weighted course

ORCHESTRA COURSES

4166-11 CONCERT ORCHESTRA (BEG ORCH) (9) Concert Orchestra is an entry-level high school orchestra that builds on what students learned in their junior high orchestras or equivalent music study. Students participate in a string orchestra while working on fundamentals of playing their instruments. There are required performances/concerts outside of the school day and may be additional rehearsals scheduled as well. **Prerequisite: Prior orchestra experience is preferred; audition and/or teacher recommendation.**

4166-21 STRING ORCHESTRA (BEG ORCH ADV) (9) String Orchestra is an advanced freshman-level high school orchestra that builds on what students learned in their junior high orchestras or equivalent music study. Students participate in a string orchestra while working on fundamentals of playing their instruments. There are required performances/concerts outside of the school day and may be additional rehearsals scheduled as well. **Prerequisite: Prior orchestra experience is preferred; audition and/or teacher recommendation.**

4172 PHILHARMONIC ORCHESTRA (INT ORCH) (10, 11, 12) Philharmonic Orchestra follows Concert Orchestra; placement in this place is by audition or teacher recommendation. Students participate in a string orchestra (with possible opportunities for a full orchestra setting) while working on fundamentals of playing their instruments and introducing more advanced techniques. There are required performances/concerts outside of the school day and may be additional rehearsals scheduled, as well. **Prerequisite: at least one year of high school orchestra experience, audition and/or teacher recommendation.**

4172 CHAMBER ORCHESTRA (INT ORCH) (10, 11, 12) Chamber Orchestra is the next-to-top level orchestral ensemble at FHS; placement in this place is by audition. Students participate in a string orchestra (with possible opportunities for a full orchestra setting) while working on fundamentals of playing their instruments and refining advanced techniques. There are required performances/concerts outside of the school day and may be additional rehearsals scheduled, as well. **Prerequisite: prior orchestra experience, audition, and/or teacher recommendation.**

4174 SYMPHONY ORCHESTRA (ADV ORCH) (9, 10, 11, 12) Advanced Orchestra is the top-level orchestral ensemble at FHS; placement in this place is by audition only. Students participate in a string and full orchestra and work on fundamentals of playing their instruments and utilizing advanced techniques. Emphasis on advanced techniques and advanced repertoire in this class. There are required performances/concerts outside of the school day and will be additional rehearsals scheduled, as well. **Prerequisite: Audition ONLY and teacher recommendation.**

BAND COURSES

4160 CONCERT BAND – Concert Band (9) This entry-level freshman band is open to all wind instrumentalists and percussionists who have at least 1-3 years experience on their instrument. Participation is by audition or recommendation from the student's previous band director. Students rehearse and perform a wide variety of music during the year, including several concerts. Students are required to participate in performances such as concerts and contests, outside of the school day. Away/overnight trips are possible. All trip costs may be defrayed through fundraising opportunities. **Requirement: Audition.**

4168 SYMPHONIC BAND RED (9) This intermediate freshman-level band is open to all wind instrumentalists and percussionists who have at least 1-3 years experience on their instrument. Participation is by audition or recommendation from the student's previous band director. Students rehearse and perform a wide variety of music during the year, including several concerts. Students are required to participate in performances such as concerts and contests, outside of the school day. Away/overnight trips are possible. All trip costs may be defrayed through fundraising opportunities. **Requirement: Audition.**

4168 – SYMPHONIC BAND SILVER (10, 11, 12) This intermediate large performing ensemble is open to all instrumentalists who have completed either Beginning Concert Band or Intermediate Concert Band 1. Participation is by audition only. Students rehearse and perform, with expression and technical accuracy, a wide variety of music during the year, including several concerts. Students are required to participate in performances such as concerts and contests, outside of the school day. Evaluation of music and music performances is included. Some overnight trips are possible. All additional costs may be defrayed through fundraising opportunities. **Requirement: Audition.**

4168 SYMPHONIC BAND GOLD (10, 11, 12) This intermediate large performing ensemble is open to all instrumentalists who have completed either Beginning Concert Band or Intermediate Concert Band 1. Participation is by audition only. Students rehearse and perform, with expression and technical accuracy, a wide variety of music during the year, including several concerts. Students are required to participate in performances such as concerts and contests, outside of the school day. Evaluation of music and music performances is included. Some overnight trips are possible. All additional costs may be defrayed through fundraising opportunities. **Requirement: Audition.**

4170 – WIND SYMPHONY (9, 10, 11, 12) This advanced concert band is open to all instrumentalists. Participation is by audition only. Students perform a wide variety of music during the year, performing several concerts. Band repertoire will be of the highest caliber. In order to be considered for this ensemble, students should demonstrate refinement in the areas of (1) intonation, (2) balance and blend, (3) breathing, (4) tone production, (5) tone quality, (6) technique, (7) rhythm, (8) sight-reading, and (9) critical listening skills. Mastery of advanced technique must be evident. Evaluation of music and music performances is included. Students also have the opportunity to experience live performances by professionals during and outside of the school day. Away/overnight trips are possible. All costs are defrayed through fundraising opportunities. **Requirement: Audition.**

4170 – WIND ENSEMBLE (10, 11, 12) This advanced concert band is the most advanced wind band at Fishers High School, and is open to all instrumentalists. Participation is by audition only. Students perform a wide variety of music during the year, performing several concerts. Band repertoire will be of the highest caliber. In order to be considered for this ensemble, students should demonstrate refinement in the areas of (1) intonation, (2) balance and blend, (3) breathing, (4) tone production, (5) tone quality, (6) technique, (7) rhythm, (8) sight-reading, and (9) critical listening skills. Mastery of advanced technique must be evident. Evaluation of music and music performances is included. Students also have the opportunity to experience live performances by professionals during and outside of the school day. Away/overnight trips are possible. All costs are defrayed through fundraising opportunities. **Requirement: Audition.**

4164 JAZZ ENSEMBLE (10, 11, 12) - This class is a traditional "big band" and is open to students who play saxophone, trumpet, trombone, piano, string bass, drums, or guitar who have adequate experience on their instrument and are interested in performing jazz & popular music. Music for this ensemble will be selected from Jazz, Rock, Funk, and Latin/Salsa contemporary repertoire. In addition to playing music students will also study improvisation, composition, and Jazz history. Because the music is different each year, the ensemble class may be taken repeatedly. This is a full year class that will meet occasionally outside of the school day for rehearsals, sectionals, and performances. Throughout the year Jazz Ensemble students will perform at area Jazz Festivals as well as civic and school functions. **Requirement: Limited enrollment is by audition, or recommendation of the director.**

4162 INSTRUMENTAL ENSEMBLE / PERCUSSION ENSEMBLE (9, 10, 11, 12) This class is designed to encourage cultural, historical, theoretical and performance of the percussive arts. Students will work in chamber groups, large ensembles, multi-cultural ensembles and be able to transfer learned skills in the community of Fishers High School and a competitive format. This course would be an auditioned course and would also be required to be enrolled in a concert band class. Students would rehearse for performances during class as well before performances. This class would perform in ensemble competition (4) weekends of the year in the Spring semester (Feb-March). In addition, this ensemble would perform a concert in both the Fall and Spring semesters. **Requirement:** Placement in this class is limited and by audition and recommendation of the director. **Concurrent enrollment in a concert band class.**

OTHER MUSIC COURSES

4204 PIANO AND ELECTRONIC KEYBOARD - BEGINNING (9, 10, 11, 12) This course is open to all students who desire to learn basic piano/keyboard skills. Students will learn to use proper keyboard fingerings, to read simple melody lines, to play major and minor scales, and to harmonize basic melodies with simple chords. Students (1) perform w/ proper posture, hand position, fingering, rhythm, & articulation; (2) compose & improvise melodic & harmonic material; (3) create & perform simple accompaniments; (4) listen to, analyze, sight-read, & study the literature performed; (5) study the elements of music as exemplified in variety of style; & (6) make interpretive decisions.

4204 PIANO AND ELECTRONIC KEYBOARD - INTERMEDIATE (10, 11, 12) Intermediate Class Piano provides continuing instruction for students who have successfully completed Beginning Class Piano or have had previous instruction in piano and wish to further their knowledge of piano skills. Students will extend the concepts learned in Beginning Piano. Students will continue to develop: sight-reading skills, their knowledge of major and minor scales, aural identification of piano literature, styles, composers, and performers. **Requirement: Beginning Piano or teacher rec.**

4210 ## AP/IB MUSIC THEORY (10, 11, 12) This **year-long** course is designed for advanced music students interested in pursuing formal music training in college. This class will focus on mastering advanced musical concepts and skills including score analysis, composing, aural skills, and sight singing. High levels of musicianship and previous music reading skills are, therefore, highly recommended. The material covered this rigorous course will prepare students to enter and possibly test out of required college theory classes. After completing this course, students will have the option of taking the AP Music Theory Exam. **It can also function as one of the requirements for an individual IB Music Certificate or as part of the full IB Diploma Programme.** Performance on this test will determine the placement of future music majors in the required music theory curriculum of music schools around the nation. **AP Exam registration will take place in September. Standard AP fees apply.**

4260 * IB/ADVANCED FINE ARTS COLLEGE CREDIT/MUSIC HISTORY AND APPRECIATION (11, 12)** Students taking this course receive instruction designed to explore music and major musical style periods through understanding music in relation to both Western and Non-Western history and culture. Activities include but are not limited to: (1) listening to, analyzing, and describing music; (2) evaluating music and music performances; and (3) understanding relationships between music and the other arts, as well as disciplines outside of the arts. **This course can function as one of the requirements for an individual IB Music Certificate or as part of the full IB Diploma Programme.** In addition, this course gives students the option to enroll in the Ball State University course MUHI 100 in which they may earn 3 hours of college credit. MUHI meets a core requirement for non-music majors at Ball State. If students elect to take the course for college credit, they will pay tuition to Ball State. The tuition amount will be determined by Ball State and will be communicated to students at the beginning of the semester (the tuition has been \$250 in the past for this course which is a significant savings from taking a course on campus as a college student). The credit may be transferable to other universities. Each university determines their own transfer policy.

CHOIR COURSES

4182 BEGINNING CHORUS / SOTTO VOCÉ (9, 10, 11, 12) This class is open to any **female** student that is interested in singing for enjoyment. Students taking Beginning Chorus develop musicianship and specific performance skills through ensemble and solo singing. Beginning Chorus provides instruction in creating, performing, conducting, listening to, and analyzing, in addition to focusing on the specific subject matter. Students develop the ability to understand and convey the composer's intent in order to connect the performer with the audience. Students have the opportunity to experience live performances by professionals during and outside of the school day. A limited number of public performances may serve as a culmination of daily rehearsal and music goals. Students must participate in performance opportunities, outside of the school day, that support and extend learning in the classroom. This choir experience stresses the study of vocal technique, sight reading, and the fundamentals of music while performing on a limited basis. A varied repertoire of concert, sacred, pop, jazz, contemporary, and musical theatre vocal literature will be studied and presented. **Each member must pay a costume rental fee, but no student is denied membership because of financial reasons.**

4182 BEGINNING CHORUS / STATESMEN (9, 10, 11, 12) This class is open to any **male** student that is interested in singing for enjoyment. Students taking Beginning Chorus develop musicianship and specific performance skills through ensemble and solo singing. Beginning Chorus provides instruction in creating, performing, conducting, listening to, and analyzing, in addition to focusing on the specific subject matter. Students develop the ability to understand and convey the composer's intent in order to connect the performer with the audience. Students have the opportunity to experience live performances by professionals during and outside of the school day. A limited number of public performances may serve as a culmination of daily rehearsal and music goals. Students must participate in performance opportunities, outside of the school day, that support and extend learning in the classroom. This choir experience stresses the study of vocal technique, sight reading, and the fundamentals of music while performing on a limited basis. A varied repertoire of concert, sacred, pop, jazz, contemporary, and musical theatre vocal literature will be studied and presented. **Each member must pay a costume rental fee, but no student is denied membership because of financial reasons.**

4186 INTERMEDIATE CHORUS / CANTUS (9, 10, 11, 12) This class is open to any female student by audition only. This select ensemble performs choral literature of varying styles, historical periods and cultures, to the highest degree of proficiency possible. This course provides instructions in creating, performing, conducting, listening to, and analyzing, in addition to focusing on the specific subject matter. Students develop the ability to understand and convey the composer's intent in order to connect the performer with the audience. Additional emphasis is placed on sight-reading, critical listening skills, and vocal techniques. Any performance opportunities outside the classroom, either as a solo or as a group participant, will be at the discretion of the directors. A varied repertoire of concert, sacred, pop, jazz, contemporary, and musical theatre vocal literature will be studied and presented. **Requirement: Audition. Each member must pay a contribution fee, but no student is denied membership because of financial reasons.**

4186 INTERMEDIATE CHORUS / CANTABILE (9, 10, 11, 12) This class is open to any student by audition only. This select ensemble performs choral literature of varying styles, historical periods and cultures, to the highest degree of proficiency possible. This course provides instructions in creating, performing, conducting, listening to, and analyzing, in addition to focusing on the specific subject matter. Students develop the ability to understand and convey the composer's intent in order to connect the performer with the audience. Additional emphasis is placed on sight-reading, critical listening skills, and vocal techniques. Any performance opportunities outside the classroom, either as a solo or as a group participant, will be at the discretion of the directors. A varied repertoire of concert, sacred, pop, jazz, contemporary, and musical theatre vocal literature will be studied and presented. **Requirement: Audition. Each member must pay a contribution fee, but no student is denied membership because of financial reasons.**

* 1-semester course

** can be taken 1 or 2 semesters

single-weighted course

double-weighted course

4188 ADVANCED CHORUS / SOUND (9, 10, 11, 12) This class is open to any **female** student by audition only. This select ensemble performs choral literature of varying styles, historical periods and cultures, to the highest degree of proficiency possible, specializing in the stylistic performance of American popular music and that of the musical, complimented by choreography as well as concert choir repertoire spanning all musical periods from the Renaissance to Contemporary. Students develop musicianship and specific performance skills through ensemble and solo singing. Instruction is designed so that students are able to connect, examine, imagine, define, try, extend, refine, and integrate music study into other subject areas. This course provides instruction in creating, performing, conducting, listening to, and analyzing, in addition to focusing on the specific subject matter. Students have the opportunity to work with professional clinicians during and outside of the school day. Mastery of basic choral technique must be evident. Areas of refinement include madrigal singing, a cappella singing, show choir, vocal jazz, vocal performance, sight-reading, and critical thinking skills. **As a major performance ensemble, members are expected to attend practices once a week and all extra rehearsals and performances for which academic credit is given. Requirement: Extensive Audition. Each member must pay a contribution fee, but no student is denied membership because of financial reasons.**

4188 ADVANCED CHORUS / ELECTRUM (9, 10, 11, 12) This class is open to any student by audition only. This select ensemble performs choral literature of varying styles, historical periods and cultures, to the highest degree of proficiency possible, specializing in the stylistic performance of American popular music and that of the musical, complimented by choreography as well as concert choir repertoire spanning all musical periods from the Renaissance to Contemporary. Students develop musicianship and specific performance skills through ensemble and solo singing. Instruction is designed so that students are able to connect, examine, imagine, define, try, extend, refine, and integrate music study into other subject areas. This course provides instruction in creating, performing, conducting, listening to, and analyzing, in addition to focusing on the specific subject matter. Students have the opportunity to work with professional clinicians during and outside of the school day. Mastery of basic choral technique must be evident. Areas of refinement include madrigal singing, a cappella singing, show choir, vocal jazz, vocal performance, sight-reading, and critical thinking skills. **As a major performance ensemble, members are expected to attend practices once a week and all extra rehearsals and performances for which academic credit is given. Requirement: Extensive Audition. Each member must pay a contribution fee, but no student is denied membership because of financial reasons.**

THEATRE COURSES

4244 * TECHNICAL THEATRE (9, 10, 11, 12) Technical Theatre instruction combines the theories of design & stage craft w/ the construction & operation of the various elements of tech theatre. Students are provided with opportunities to: (1) develop stagecraft skills; (2) learn various techniques in scenery, lighting, sound, properties, costumes, and makeup; (3) practice theatre safety; and (4) learn effective stage management, business plans, and promotional techniques. Students continue to analyze and evaluate scripts & live theatre performances so that they learn to determine appropriate technical requirements for a variety of theatrical works.

4244 * TECHNICAL THEATRE II (9, 10, 11, 12) This course is broken into three units; advanced construction, sound systems and lighting design. Students will gain the basic knowledge of live sound reinforcement, to include the microphone, amplifiers, speakers, signal path and the sound mixer. The students will have hands-on experience with the auditorium's sound equipment. The unit on lighting teaches the students about theatre lighting instruments. This includes how to hang and focus the fixture, color and lighting composition, basic electricity, and light board operation. **Requirement: Technical Theatre.**

4242 * THEATRE I (9, 10, 11, 12) This one-semester course offers students an introduction to the many facets of theatre including theatre history (Greek to Elizabethan), and introduction to acting techniques. Students are introduced to activities to improve command of body and voice while building confidence in these abilities. Students develop skills enabling them to speak and write clearly and expressively. They also refine their abilities to collaborate on performances, as they learn to constructively evaluate their own and others' efforts.

*** 1-semester course ** can be taken 1 or 2 semesters # single-weighted course ## double-weighted course**

4242 * THEATRE II (9, 10, 11, 12) This one-semester course builds upon the skills developed in Theatre I. Students will study theatre history (Spanish Golden Age to Modern Theatre), two-person scene work, along with advanced partner acting techniques using the works of Meisner. Students develop skills that enable them to create a deeper understanding of scene work and how to become a good scene partner. They also refine their abilities to collaborate on performances, as they learn to constructively evaluate their own and others' efforts. **Prerequisite: Completion of Theatre 1 (w/ recommendation of "B" average).**

4242 * ADVANCED THEATRE I (10, 11, 12) This one-semester course builds sequentially on skills learned in Theatre I and II. This course focuses on theory of theatre from the viewpoint of our modern theatre theorists Stanislavski, Brecht, Artaud, and Beckett. Along with learning how to devise an original work of theatre and create a deeper understanding of the creative process, this course also allows students to expand upon their ability to make artistic decisions and evaluations by discussing and critiquing live performances. **Prerequisite: Completion of Theatre 1 and 2 (w/ recommendation of "B" average).**

4242 * ADVANCED THEATRE II (10, 11, 12) This one-semester course builds sequentially on skills learned in Theatre I, Theatre II, and Advanced Theatre I. This course will continue to explore the historical tradition and the repertoire of the theatre. Areas of study include Eastern Theatre History, and Stage Combat, along with learning into directorial techniques and creating an understanding of the theatrical production process. **Prerequisite: Completion of Theatre 1, Theatre 2, and Adv. Theatre 1 (w/ recommendation of "B" average).**

4254 ** ADVANCED ACTING (11, 12) This **year-long** course will allow students to build on the knowledge from prior theatre courses in the classroom. In this acting-intensive course, students will analyze scripts, workshop acting performances and learn about many different methods and approaches to acting including Shakespeare, Pinter, Peter Brooks, Grotowski, Uta Hengan, and advanced devised theatre. Students will also create a professional digital portfolio and audition-ready monologue for their repertoire. **Prerequisite: Completion of Theatre 1 & 2, and Adv. Theatre 1 & 2 (w/ recommendation of "B" average). Teacher approval is also required. Can be taken 1 or two semesters.**

4248 * THEATRE DIRECTION (10, 11, 12) This one-semester course will build upon the skills from previous theatre classes. This class will teach students the introductory elements of directing, setting up a prompt book, scheduling and management, and how to work with peers in a management position. Students in this course work together to create a full student-run One Act performance, which will be viewed publicly and sponsored by Theatre Fishers. **Prerequisite: Completion of Theatre 1, Theatre 2, and Tech Theatre 1 (w/ recommendation of "B" average).**

4272 ## IB FILM, STANDARD LEVEL (11, 12) This course serves as the second semester of the IB Film curriculum, following the introductory class "Film Literature" with more in-depth study and creation of student-produced films. The IB Film course aims to develop students as proficient interpreters and makers of film texts. Through the study and analysis of film texts, and practical exercises in film production, students develop critical abilities and appreciation of artistic, cultural, historical, and global perspectives in film. They examine concepts, theories, practices, and ideas from multiple perspectives, challenging their own views to understand and value those of others. Students are challenged to acquire and develop critical thinking, reflective analysis and the imaginative synthesis through practical engagement in the art, craft, and study of film. This may be taken as an individual IB Certificate course, or as part of the IB Diploma Programme. Non-IB students can also take this course with teacher recommendation. In addition to the English credit earned through the first semester, **this second-semester course will grant a Fine Arts credit** and may earn an IB Certificate leading to university credit, as well. **Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Prerequisite course / Requirements: students must have successfully earned credit for the Film Literature course (see English section) with a B- or higher before taking this course.**

PHYSICAL EDUCATION & HEALTH

The mission of the Physical Education and Health Department at Fishers High School is to provide opportunities to develop skills, knowledge, and awareness for all students through basic required courses as well as a variety of elective course offerings. The overall aim is to help students develop lifelong habits that include meaningful exercise and activity. Also, to have an understanding that health and well-being is an individual and ongoing responsibility.

3506* HEALTH AND WELLNESS EDUCATION (9, 10, 11, 12) Health Education provides the basis for continued methods of developing knowledge, concepts, skills, behaviors, and attitudes related to student health and well-being. A variety of instructional strategies are used to further develop health literacy while using the skills-based approach. Students are provided with opportunities to explore the effect of health behaviors on an individual's quality of life. This course assists students in understanding that health is a lifetime commitment by analyzing individual risk factors and health decisions that promote health and prevent diseases.

<u>Topics Covered:</u>	<u>Example Projects and Activities</u>
(1) Making Healthy Decisions; (2) Personality, Self-Esteem, and Emotion; (3) Mental and Emotional Health, Suicide Prevention; (5) Family Relationships; (6) Building Healthy Peer Relationship; (7) Preventing Violence; (8) Food and Nutrition; (15) Alcohol; (16) Tobacco; (17) Preventing Drug Abuse; 18 Reproduction; (19) Pregnancy, Birth and Childhood; Domestic/Dating Violence; CPR/AED Instruction; Organ Donation; Human Sexuality; Life line law; Cyberbullying and the safe use of technology	<ul style="list-style-type: none">● Group presentations● Individual presentations● Perfect Family Project● The safe use of technology● Communication skills● Three final exam projects● Current Event Writing

3500 * ADVANCED HEALTH EDUCATION/SPORTS MEDICINE I (10, 11, 12). This course is designed for the student who is interested in the medical field, especially as it relates to sports and activity. Students in Sports Medicine One will:

- Explore different careers in the Sports Medicine field (Athletic Training, Physical Therapy, etc.)
- Create rules for and design an Athletic Training Room
- Create an appropriate training program for an athlete,
- Explore legal concerns potentially facing Sports Medicine Professionals
- Explore sports nutrition basics and brainstorm healthy meal options
- Discover the basic types of wounds and how to care for them
- Discover predictors of injury and psychological conditions related to sports and how to prevent them.

Requirement: Must have received a "C" or better in Health.

3500 * ADVANCED HEALTH EDUCATION/SPORTS MEDICINE II (10, 11, 12). Sports Medicine Two expands upon Sports Medicine One but can be taken in separate school years.

Each chapter, students will:

- Focus on the anatomy of a different region of the body (Ankle, Shoulder, etc.)
- Explore mechanisms of injury to that region
- Practice diagnosing injuries and ways to treat and prevent those injuries.
- Practice assessment of injuries through role playing situations.
- **Requirement: Must have received a "D" or better in Sports Medicine I.**

* 1-semester course

** can be taken 1 or 2 semesters

single-weighted course

double-weighted course

3542 * PHYSICAL EDUCATION I (9, 10) This course is required for the freshman year. Physical Education I places an emphasis on health-related fitness and developing the skills and habits necessary for a lifetime of activity. The evaluative portion of this course will be based primarily on growth during the duration of the semester covering five fitness areas. A large emphasis is also placed on class participation. Adaptations will be made when necessary for students whose physical and/or mental handicaps limit their participation in certain activities. **PE I will require completion by the end of Summer School prior to grade 10.**

<u>Activities Covered:</u>	<u>Example Assessments</u>
(1) health-related fitness activities which will include cardio respiratory endurance, muscular strength and endurance, flexibility, speed, and body composition); (2) aerobic exercise (3) team sports (4) individual and dual sports (5) outdoor pursuits (6) recreational games (7) swimming and aquatic activities (8) yoga	<ul style="list-style-type: none"> ● Weekly exercise logs ● Weekly times runs which will include the nine-minute run and mile ● Fitness tests each nine weeks ● Written and performance based skill final exam evaluations ● Participation and preparation

3544 * PHYSICAL EDUCATION II (9, 10) Physical Education II emphasizes a personal commitment to lifetime activity and fitness for enjoyment, challenge, self-expression, and social interaction. This course provides students with opportunities to achieve and maintain a health-enhancing level of physical fitness and increase their knowledge of fitness concepts with a large emphasis on aquatic activities. The evaluative portion of this course will be based primarily on growth during the duration of the semester covering five fitness areas A large emphasis is also placed on class participation. **PE II will require completion by the end of Summer School prior to grade 11.**

<u>Activities Covered:</u>	<u>Example Assessments</u>
(1) health-related fitness activities which will include cardio respiratory endurance, muscular strength and endurance, flexibility, speed, and body composition); (2) aerobic exercise (3) team sports (4) individual and dual sports (5) outdoor pursuits (6) recreational games (7) swimming and aquatic activities (8) yoga	<ul style="list-style-type: none"> ● Weekly exercise logs ● Weekly times runs which will include the nine-minute run and mile ● Fitness tests each nine weeks ● Written and performance based skill final exam evaluations ● Participation and preparation

3560 ** ELECTIVE PHYSICAL EDUCATION: OFFICIATING 101 (11, 12) Officiating 101 gives students the opportunity to learn the rules and officiating practices of three (3) different sports throughout each semester. Semester 1 students will be offered basketball and baseball/softball, with the option of adding either track & field or wrestling. Semester 2 students will be offered volleyball and soccer, with the option of adding football or baseball/softball.

<p><u>Course Information:</u></p> <ul style="list-style-type: none"> • Course fee (\$42). Underwritten by FC athletic department. • Final exam = students will officiate a live contest: JH or freshman level with an officiating mentor present. • Students wishing to complete the licensing process will incur a \$17 fee for NFHS insurance. • A provisional license will be earned through the course – authorization to work at the freshman level and below while in high school. • Employable at any MS/JH/HS in the state of Indiana. • Employable by any youth organization, CYO, AAU, club level sport organization in Indiana. • Connection to a local officials’ association • Students will receive a mentor (a veteran official from a local officials’ organization), assigned per sport of choice. 	<p><u>Classroom Sessions:</u></p> <ul style="list-style-type: none"> • Review of virtual play clips; application of rules at “live” speed for students. • Guest speakers – veteran officials and coaches offering leadership within the art of officiating. <p><u>Court/Field/Mat Sessions:</u></p> <ul style="list-style-type: none"> • Officiating experience w/ live competition (class participants or team sport class) • Work specific to positioning and mechanics w/ veteran officials.
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3560 ** ELECTIVE PHYSICAL EDUCATION: COED RECREATIONAL GAMES (10, 11, 12) This coeducational course is designed for the student who wishes to be involved in daily physical activity beyond the freshman year. The emphasis is placed on lifetime leisure activities including but not limited to: running, yoga, badminton, ping pong, volleyball, basketball, tennis, swimming, and soccer. Students will be required to dress each day in the FHS physical education uniform and participate in all activities. **Requirement: Physical Education I and II with a "C" average recommended. A maximum of 6 total credits can be earned in elective physical education courses.**

3560 ** ELECTIVE PHYSICAL EDUCATION: WEIGHT TRAINING (10, 11, 12) This course is designed for students not participating in IHSAA sponsored sports with limited exercise and workout experience and various fitness levels. The class is designed for students who want to improve their general strength and fitness. Students will be challenged but allowed to progress at a pace and intensity level appropriate to their conditioning level. **Requirement: Complete the 2-graduation required Physical Education credits with a recommended "C" average. A maximum of 8 total credits can be earned in elective physical education courses.**

<p><u>Beginning Weight Training Requirements:</u></p> <ul style="list-style-type: none"> • Students will learn weight training techniques and fundamentals • Students will complete a challenging workout in the weight room three to four days per week • Students will work on Cardiovascular Fitness using progressive running and aerobic exercise • Students will train to improve speed, agility and explosive power • Class is designed to improve strength and fitness • Student will be challenged to improve their fitness level 	<p><u>Assessments and Evaluation</u></p> <ul style="list-style-type: none"> • Bench Press • Power Clean • Vertical Jump • Pro Agility • 40 Yard Dash
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3560 ** ELECTIVE PHYSICAL EDUCATION: ADVANCED PHYSICAL CONDITIONING; APC (9, 10, 11, 12) This course is designed for Fishers HS male and female athletes involved in an IHSAA sponsored sport or one of the following FHS Club Sports: lacrosse, rugby, volleyball. This course is for the motivated student-athlete who is serious about improving his strength, explosive power, speed, and agility through a strenuous training program involving weight training, plyometric, speed development, and agility drills. Students will be evaluated on participation, proper dress, workout log upkeep, quizzes, and improvement over the course of the semester in strength (as measured by a 1-rep max of the bench press, squat, and power clean) and explosive power and speed (as measured by 40-yard dash time, 20-yard Pro-agility test, 20-yard acceleration test, and vertical jump). **Requirement: Complete the two graduation-required physical education credits through required PE courses and/or an alternate credit option.** A maximum of 8 total credits can be earned in elective physical education courses. It is recommended that FHS athletes complete the prerequisite physical education credits by the end of their freshman year so they can enter APC as a sophomore.

CIESC COURSES

Indiana Online Academy Physical Education and Health

Any Hamilton Southeastern Schools student may take Physical Education and Health credits through CIESC's On-line Academy. The student will pay for the cost of the course and the high school will recognize the course for Physical Education credit. The remaining required physical education credit must be earned by participating in a Fishers High School Physical Education class either during the school year or a summer school class held at Fishers High School or Hamilton Southeastern High School. For more information, contact your counselor. Students are encouraged to complete these credits by the end of the summer prior to grade 11.

ALTERNATE PHYSICAL EDUCATION CREDIT GRADES 9, 10, AND 11 STUDENTS ONLY

Hamilton Southeastern Schools is offering an alternate option for 9th, 10th, and 11th graders only to earn ONE of their two Physical Education credits.

<p><u>Alternate Physical Education Requirements:</u></p> <ul style="list-style-type: none"> ● Must enroll at the time of participation in sport or activity ● Past participation in a sport or activity is not eligible ● Must practice a min. of 3x per week for at least 1.5 hours each ● Must remain in good standing for the entire season ● Must actively participate for at least 80% of the season without injury ● Must be a participant in the sport; not available for team managers ● Must be supervised by a coach or director ● Activity must include competition ● Activity must take place exclusively outside the school day. Extracurricular activities only. ● Must enroll for the credit to qualify ● Enrollment does not guarantee credit will be earned 	<p><u>Assessments</u></p> <ul style="list-style-type: none"> ● Complete four Canvas quizzes by designated deadline ● Must complete the season in good standing ● Must attend all practices and competitions ● Must successfully complete a minimum of 80% of the season as required by each coach or director
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There are other requirements included for this credit option. For more information please ask your counselor how to locate the registration information on the FHS website. **The remaining required physical education credit must be earned by participating in a Fishers High School Physical Education class either during the school year or a summer school class held at Fishers High School.**

**SUMMER PHYSICAL EDUCATION OFFERED AT
FISHERS HIGH SCHOOL
May 30-June 19, 2023**

Course requirements: Summer School P.E. is physically demanding – a full semester of P.E. is condensed into 15 days. Due to the physical intensity of the course, which includes running a mile each day, some students find that taking the course during the school year to be a better fit. That being said, due to the condensed time frame of summer school, there will be no accommodations allowed for non-participation in any PE activity at any time, including swimming. Additionally, P.E. students should wear school appropriate shorts, T-shirts w/sleeves (dress code appropriate), socks and tennis shoes. Swimsuits need to be appropriate for school.

SUMMER SCHOOL ATTENDANCE REQUIREMENT:

Regular attendance at summer school is critical. A student may miss up to 10 hours (2 days) of excused absence, if necessary. Any student who exceeds 10 hours (600 minutes) of excused absence will be removed from summer school with no credit given. **THERE ARE NO EXCEPTIONS MADE. WHEN A STUDENT EXCEEDS THE 10 HOURS OF EXCUSED ABSENCE THEY ARE WITHDRAWN FROM SUMMER SCHOOL.**

*****THERE WILL BE NO SCHOOL BUS TRANSPORTATION***

COURSE PATHWAYS FOR SCIENCE

SUGGESTED BIOLOGICAL SCIENCE COURSES**		MEDICAL/BIOLOGICAL PATHWAY Science/Technical/Professional Careers	
<p><i>Two Semester Courses</i></p> <p>Anatomy and Physiology Dual Credit Anat/Phys ## AP Biology## AP Environmental Sci ## IB Biology HL## Forensics</p> <p><i>One Semester Courses</i></p> <p>Human Genetics Intro to Neuroscience Microbiology Oceanography Zoology</p>	<p><i>PLTW Courses</i></p> <p>Principles of BiomedSci (PBS) Human Body Systems (HBS) Medical Interventions# (MI) Biomedical Innovations# (BI)</p> <p># Honors weight ##AP Weight</p>	<p>Grade 9</p> <p>Biology or Honors Biology and, if desired, PBS (PLTW)</p> <p>Grade 10</p> <p>Chemistry or Honors Chemistry and/or some level of physics based on math placement, and, if desired, HBS (PLTW) or Suggested Biological Science Courses**</p> <p>Grade 11</p> <p>Dual Credit Anatomy and Physiology, AP Biology, AP Chemistry and/or AP Physics (1 or C) or Suggested Biological Science Courses** or Medical Interventions (PLTW, weighted)</p> <p>Grade 12</p> <p>Dual Credit Anatomy and Physiology, AP Biology, AP Chemistry and/or AP Physics (1 or C) or Suggested Biological Science Courses** or Medical Interventions (PLTW, weighted) and/or Biomedical Innovations (only if completed all previous PLTW courses)</p>	
SUGGESTED PHYSICAL SCIENCE COURSES		ADVANCED PLACEMENT/DUAL CREDIT PATHWAY High Level Science Career	
<p><i>Two Semester Courses</i></p> <p>AP Chemistry## AP Physics 1## AP Physics 2## AP Physics C## Chemistry (or Honors) Chemistry II Earth Space Science IB/ACP Chemistry## ICP Physics</p> <p><i>One Semester Courses</i></p> <p>Astronomy Astronomy II Meteorology Organic Chemistry</p>	<p><i>PLTW Engineering Courses at FHS</i></p> <p>Introduction to Engineering Design (IED) Principles of Engineering (POE) Digital Electronics# (DE) Robotics Design and Innovation# (RDI)</p> <p><i>PLTW Engineering Courses at HSHS</i></p> <p>Aerospace Engineering# Biotechnical Engineering# Civil Engineering and Architecture# Computer Integrated Manufacturing#</p> <p>#Honors Weight ##AP Weight</p>	<p>Grade 9</p> <p>Biology or Honors Biology</p> <p>Grade 10</p> <p>Chemistry or Honors Chemistry and/or AP Physics 1</p> <p>Grade 11</p> <p>AP Biology, AP Chemistry, ACP Chemistry, AP Physics and/or Dual Credit Anatomy and Physiology</p> <p>Grade 12</p> <p>AP Biology, AP Chemistry, ACP Chemistry, AP Physics and/or Dual Credit Anatomy and Physiology</p>	
ENGINEERING PATHWAY Science/Technical/Engineering Careers		IB PATHWAY	
<p>Grade 9</p> <p>Biology or Honors Biology and IED</p> <p>Grade 10</p> <p>Chemistry or Honors Chemistry and POE</p> <p>Grade 11</p> <p>PLTW Elective Course and AP Physics 1 and/or Robotics</p> <p>Grade 12</p> <p>AP Physics C or AP Chemistry and/or Robotics and/or Digital Electronics</p>	<p>Grade 9</p> <p>Honors Biology</p> <p>Grade 10</p> <p>Honors Chemistry</p> <p>Grade 11</p> <p>Dual Credit Anatomy/Physiology</p> <p>Grade 12</p> <p>IB Biology HL</p> <p>Grade 11</p> <p>IB/ACP Chemistry SL</p> <p>Grade 11</p> <p>AP/IB Physics 1</p> <p>Grade 12</p> <p>AP/IB Physics 2</p> <p>Grade 11</p> <p>AP/IB Physics 1</p> <p>Grade 12</p> <p>AP/IB Physics 2</p>	<p>Option 1: Biology HL</p> <p>Option 2: Chemistry SL</p> <p>Option 3: Physics HL</p> <p>Option 4: Physics SL</p>	

HAVE PRIDE - SHOW CHARACTER - BUILD TRADITION



SCIENCE

The Science Department seeks to provide students with a science foundation that will allow students to function as responsible and contributing members of society by fostering an environment where students will expand their knowledge, skills, and experiences in the various science disciplines. In support of its mission, the Science Department is committed to provide students:

- a learning community which ensures students of varying age, ethnicity, culture, learning styles, and socio-economic status are equally served
- exceptional programs and courses that provide experiences that support research, rigor, and scholarship and will facilitate the making of informed decisions regarding issues concerning science, technology, and society
- an environment that promotes a lifetime of critical inquiry and learning as well as an awareness of the manner in which science and technology affect the quality of their world

INTRODUCTORY COURSES

3024 BIOLOGY I (9, 10, 11, 12) This is a study of scientific methods, chemistry of life, cellular biology, genetics, evolution, and ecology. Students will explore the characteristics of living things, the nature and structure of life on earth and the chemical principles that underlie the process of life. Students will gain insight into the diversity of life by participating in regular laboratory activities, coop. learning experiences, research activities & class discussions on various current topics.

3024 # BIOLOGY I HONORS (9, 10, 11, 12) This is an accelerated study of chemistry of life, cells, energetics, genetics/molecular genetics, evolution, and ecology with an emphasis on laboratory collaboration and critical thinking. Each unit encompasses lab work, projects, and inquiry based activities that complement the content areas. Honors Biology is designed for the student with a strong interest and background in science who, perhaps, will be pursuing further study in some area of life science in the future. **Requirement: Recommendation from 8th grade teacher. Credit will not be given for both Honors Biology and Biology.**

3044 EARTH AND SPACE SCIENCE (9, 10, 11) This course will provide students with the basic knowledge of earth and space science as it relates to them and their own range of experiences. The course will also develop the students' abilities to appreciate the basic concepts in earth and space science through discussion, technology, and hands-on laboratory experiences. Students will be exposed to geology, meteorology, and astronomy, as well as discussions and activities concerning natural disasters, environmental influences, and space exploration. **Seniors may take this course with counselor and/or teacher approval only.**

3108 INTEGRATED CHEMISTRY PHYSICS (ICP) (10, 11, 12) Integrated Chemistry Physics (ICP) is designed to serve as an introduction to future coursework in either chemistry and/or physics while ensuring a mastery of the basics of each discipline. Physics topics include motion, forces, work, and energy. Chemistry topics include the periodic table, atomic theory, atomic structure, and chemical reactions. Students may go on to earn additional physical science credits by taking physics and/or chemistry courses. **This course is not available for students who have previously earned credit in Chemistry or Physics. One semester of ICP cannot be used to make up for a failed semester of Chemistry or Physics.**

* 1-semester course ** can be taken 1 or 2 semesters # single-weighted course ## double-weighted course

3064 CHEMISTRY I (10, 11, 12) This course is designed as an introduction to all areas of chemistry, including the basic properties of elements and compounds, relationships between matter and energy, the structure and function of atoms, and their interactions in reactions. Students have the opportunity to learn about the history as well as theoretical and practical aspects of chemistry. Hands-on laboratory experience is paired with theoretical and mathematical solutions to chemical problems. **Requirement: Algebra I. Recommendation: "B" average in Algebra I.**

3064 # CHEMISTRY I - HONORS (10, 11, 12) This course is a fast-paced survey of the states of matter, the organization and properties of the elements, behavior and interaction of elements and compounds, and the relationships between energy and matter. Students will be expected to be very competent in algebraic manipulations. Higher-level thinking will be stressed through the use of laboratory investigations. Students will be expected to complete formal lab reports. Success in Honors Biology does not necessarily predict success in this course. This course stresses mathematical applications. **STRONG Recommendation: "A" average in Algebra I. Credit will not be given for both Honors Chemistry and Chemistry.**

3084 PHYSICS I (10, 11, 12) Physics is the study of matter and energy that is foundational to how our world & the Universe works. Physics explores the study of motion, energy, wave phenomenon, electricity, and optics. There is a strong emphasis on problem solving and lab activities. A basic understanding of physics is important to understanding other branches of science and essential for anyone considering a future in any type of science, engineering, computer programming, or the medical field (doctors & nurses). **Requirement: Algebra I, Geometry, and Algebra II (or concurrent enrollment in Algebra II). Sophomores choosing to take this course must have an "A-" average in Algebra I. Recommendation: Juniors and Seniors, completion of Algebra 1 with a "B" average.**

ADVANCED SCIENCE: SPECIAL TOPICS COURSES

5276 ANATOMY/PHYSIOLOGY (10, 11, 12) This two-semester course will offer a basic study of human anatomy and physiology. The Human Anatomy/Physiology course focuses on the relationship between structure and function of human body systems. Students can expect to create projects that demonstrate their understanding of different systems and how function relates to structure. Laboratory work could include microscopic study of tissues, dissection of specimens, bone study labs, and physiological labs. Students that object to dissection will be given an alternate assignment upon parental request. **Requirement: Biology or Honors Biology with "C" or better recommended.**

3092 * ADVANCED SCIENCE --SPECIAL TOPICS – ZOOLOGY (10, 11, 12) This one semester biology course will offer an in-depth study of Zoology. This course will involve a comparative study of animals' anatomy from each phylum and will focus on many body systems. There will also be a study of their behavior, habits, where and how they live, their relationship with one another and with their environment, their classification, endangered species and parasitic disease. Activities include dissection of various animals, microscope studies, and live animal observations. **Requirement: Biology I or Honors Biology I. Recommendation: "C" average in Biology I or Honors Biology I.**

3092 * ADVANCED SCIENCE – SPECIAL TOPICS – HUMAN GENETICS (10, 11, 12) This second year biology course will offer a one semester in-depth study of Genetics. Students will study gene inheritance and expression, cytogenetics, epigenetics, genetic engineering, bioethics, stem cells, GMO foods, forensics, blood inheritance, and gender issues. Activities include microscope work, DNA fingerprinting, development of pedigrees, karyotyping, PCR, electrophoresis, and bioethical discussions. Emphasis is placed on the students' practical use of the information, as they become responsible adults. **Requirement: Biology I or Honors Biology I. Recommendation: "C" average in Biology I or Honors Biology I.**

3092 * ADVANCED SCIENCE –SPECIAL TOPICS – MICROBIOLOGY (10, 11, 12) This one semester biology course will offer an in-depth study of Microbiology. In Microbiology, students will study microorganisms such as bacteria, fungi, viruses, and parasites. Other topics include microbe-based diseases and antimicrobial medicine. Lab activities include standard staining and culture techniques, microscope work, and antimicrobial testing. **Requirement: Biology I or Honors Biology I. Recommendation: "C" average in Bio.**

3092 ADVANCED SCIENCE – SPECIAL TOPICS– FORENSIC SCIENCE (11, 12) This year long course is intended for students with an interest in the application of the methods of science to legal matters. This course will provide an overview of general forensic science, considering history, current methods, and case studies. Students will be introduced to a sequential survey of topics in General Forensics, Crime Scene Investigation, Trace Evidence, Prints & Marks, Serology, and Ballistics with an underlying emphasis of legal admissibility and evidentiary value and scientific writing skills. **Requirement: Successful completion of Biology I or Honors Biology AND ICP or Chemistry I or Honors Chemistry. Recommendation: Grade of a B or higher in Biology I/Honors Biology AND a grade of an A in ICP or a grade of a B or higher in Chemistry I/Honors Chemistry.**

3092 * ADVANCED SCIENCE – SPECIAL TOPICS – INTRODUCTION TO NEUROSCIENCE (11, 12) This one semester course will be an intensive overview of the introductory topics in neuroscience. The course will examine the neural basis of behavior through molecular, cellular, developmental, cognitive, and behavioral lenses. Topics will include: neuronal membranes, synaptic transmission, chemical senses, central visual system, auditory system, spinal/brain control of movement, brain and behavior, emotion, sleep, mental illness, and memory. Students should prepare to learn a large library of new topics and information in a short period of time. The rigor will be that of a college course. Students will learn how to read and analyze scientific papers. Each topic will have an associated scientific paper for digestion. Project-based and student-led learning will be used. Students that object to dissection will be given an alternate assignment upon parental request.. **Required: Grade of B or higher in Biology I or Honors Biology and grade of B or higher in Chemistry I or Honors Chemistry. Recommended: One or more of the following: AP Psychology or an Anatomy and Physiology class.**

3092 * ADVANCED SCIENCE – SPECIAL TOPICS -- OCEANOGRAPHY (10, 11, 12) This course is designed to incorporate many facets of S.T.E.M while students learn about the ocean and how it relates to everyday life, global warming and future water shortages that are predicted to occur during their lifetime. The course will include aspects of algebra, chemistry, physics, earth science and biology. The course is divided into two main units, physical oceanography, and life in the ocean. Physical oceanography will look at the history of the oceans, and how water moves through waves, tides, and currents. It will also include hurricanes and tsunamis. The life in the ocean section will study coral reefs, sharks, whales and dolphins, and ocean ecology. The course will use hands-on and virtual labs, documentaries, and does require detailed data evaluation and graphing. **Requirement: A positive attitude and willingness to work along with any previous biology, chemistry or physics course with a C or higher.**

3092 * ADVANCED SCIENCE – SPECIAL TOPICS -- ORGANIC CHEMISTRY (11, 12) This course is intended for students with an interest in health fields, or biological or chemical sciences. It is a challenging introduction to college-level organic chemistry. The main focus will be the study of carbon containing compounds as well as their applications. Students will learn to identify important organic functional groups, classify compounds into families, identify and evaluate a variety of reactions and apply naming rules. In addition, students will be able to describe physical and chemical properties and write equations for reactions involving these molecules. Students will explore applications of organic chemistry including petroleum chemistry, polymers, flavors and fragrances and pharmaceuticals. **Requirement: An "A" in Biology I or a "B" in Honors Biology AND an "A" in Chemistry I or a "B" in Honors Chemistry.**

3092 * ADVANCED SCIENCE –SPECIAL TOPICS -- **ASTRONOMY I** (10, 11, 12) This astronomy course is a **one semester** study of basic principles of astronomy. Topics include: the history of modern astronomy, planetary development, the study of celestial bodies, constellations, current astronomy events, and space explorations. This course incorporates lab investigations, related videos, technology based projects, web quests, and model construction. **Requirement: Students must have earned a C or higher in all previous science courses.**



3092 * ADVANCED SCIENCE – SPECIAL TOPICS -- **ASTRONOMY II** (10, 11, 12) This astronomy course is a **one semester** study of principles of astronomy not covered in Astronomy I. Topics include going beyond our solar system to study celestial bodies, stellar evolution, the sun, galaxies, living and working in space, the history of space explorations, NASA's goal to travel to Mars, and current astronomy events. This course incorporates lab investigations, related videos, technology based projects, web quests, and model construction. **Requirement: Students must have earned a C or higher in Astronomy I.**

3092 * ADVANCED SCIENCE – SPECIAL TOPICS --**METEOROLOGY** (10, 11, 12) This course is **one semester** introduction to Meteorology. The central theme of the course is the understanding and application of meteorological principles: why we have weather, how we have weather, and learn to predict the weather. The units studied: Earth-Sun Relationships; Atmospheric Properties; Warming the Earth and the Atmosphere; Humidity, Condensation, and Clouds; Precipitation; Air Pressure and Winds; Atmospheric Circulations; Air Masses, Fronts, and Middle-Latitude Cyclones; Weather Forecasting, Thunderstorms and Tornadoes; Hurricanes; Air Pollution; & others. **Requirement: Students must have earned a C or higher in all previous science courses.**



3092 * ADVANCED SCIENCE: SPECIAL TOPICS – **GEOLOGY** (10, 11, 12) This course is designed to introduce students to the fundamentals of geology. Topics will include rocks, minerals, plate tectonics, earth resources, natural hazards, climate change, and other geological processes that occur within our everyday life. This course will tie in concepts from chemistry, physics, biology, earth science, and environmental science. Throughout the course, students will be exposed to the various topics of geology through laboratory activities and project based learning opportunities that will allow them to apply learning to the real world. **Requirement: Students must have earned a C or higher in all previous science courses.**

3092 ADVANCED SCIENCE: SPECIAL TOPICS – **MATERIAL SCIENCE** (11, 12) This yearlong course explores the development, testing, and uses of various materials (concrete, paints, laminates) using integrated project-based learning in the topics of chemistry and physics. This course fulfills a science course requirement for all diplomas, including Core 40 and Academic Honors Diploma. **Recommendation: 1 Life Science and 1 Physical Science course.**

3008 SCIENCE RESEARCH, INDEPENDENT STUDY (12) This two semester course provides students with unique opportunities for independent, in-depth study of one or more specific scientific problems. Students develop familiarity with laboratory procedures used in a given educational, research, or industrial setting or a variety of such settings. Students enrolled in this course will complete an end-of-course project such as a scientific research paper, or some other suitable presentation of their findings. This counts as a science credit for all diplomas. **Must have special administrative approval to take this course. Prerequisites: 1 Life Science and 1 Physical Science credit.**

ADVANCED PLACEMENT AND DUAL CREDIT

3090 ## ADV CC FUNDAMENTALS OF HUMAN ANATOMY / PHYSIOLOGY – IB BIOLOGY HL YEAR 1 (11, 12)

This two-semester course will offer an in-depth study of Human Anatomy/Physiology. Topics covered include: the skeletal and muscular system and their interactions promoting body support, protection and mobility; the nervous system; the cardiovascular system; the respiratory system; the urinary system; the immune system; and the digestive system, all of which contribute to the balance of day-to-day body activities. Laboratory work may include microscopic study of tissues, dissection of specimens, bone study labs, cardiovascular stress activities, and other physiological labs. This course is the first in the two-year program for IB Biology HL students. **Students will be expected to purchase or rent their textbooks prior to the beginning of class.** In addition, this course gives students the option to enroll in the Ball State University courses, ANAT 201 and PHYS 215 in which they may earn 8 hours of college credit. If students elect to take the course for college credit, the tuition amount will be \$25 per credit hour payable to Ball State upon registration in the fall or \$0 per credit hour plus free books and materials for students qualifying for free or reduced lunch. The BSU credit may be transferable to other colleges. Students that object to dissection will be given an alternate assignment upon parental request. **Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance. Requirement: An "A" in Biology I or a "B" in Honors Biology I AND an "A" in Chemistry I or a "B" in Honors Chemistry I. Strong Recommendation: Completion of Anatomy/Physiology (Course 5276) with a "B" average.**

3020 ## ADVANCED PLACEMENT BIOLOGY (11, 12) This course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year of college. The intent of the course is to expose students to higher-level biological principles, concepts and skills and allow them the opportunity to apply their knowledge to real-life applications. The AP Biology curriculum is designed around the four Big Ideas of biology: 1) The process of evolution drives the diversity and unity of life, 2) Biological systems utilize free energy and molecular building blocks to grow, reproduce and maintain homeostasis, 3) Living systems store, retrieve, transmit and respond to information essential to life processes and 4) Biological systems interact through complex properties. Many inquiry based laboratory experiences will be conducted that encompass the science practices of modeling, questioning, experimenting, analyzing, evaluating and connecting. Students that object to dissection will be given an alternate assignment upon parental request. **Requirement: Biology I or Honors Biology I and Chemistry I or Honors Chemistry I. Recommendation: Completion of Biology/Honors Biology and Chemistry/Honors Chemistry with a "B" average. AP Exam registration will take place in September & October. Standard AP fees apply.**

3032 ## IB BIOLOGY HL YEAR 2 (12) The intent of the course is to expose students to higher-level biological principles, concepts and skills and allow them the opportunity to apply their knowledge to real-life applications. This course focuses on four major themes: structure and function, universality versus diversity, equilibrium within systems, and evolution. Topics discussed in the course include: cell biology, molecular biology, genetics, ecology, conservation, evolution, biodiversity, plant biology, and metabolism. Many inquiry based experiments will be conducted. Students are expected to design and carry out independent research as part of the IB internal assessment. Students who object to dissection will be given an alternate assignment upon parental request. In addition, students will have exposure to research and information from scientists around the globe. This course is the second year of IB Biology HL sequence. An IB certificate is available for this course for seniors who have also taken Advances Science College Credit Anatomy & Physiology and who take the IB Exam in May. **Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance. Requirement: Honors Anatomy and Physiology, and Chemistry I or Honors Chemistry I. Recommendation: Completion of Honors Anatomy and Physiology and Chemistry/Honors Chemistry with a "B" average.**

* 1-semester course ** can be taken 1 or 2 semesters # single-weighted course ## double-weighted course

3090 ## ADVANCED SCIENCE COLLEGE CREDIT – ACP BIOLOGY (HUMANS AND THE BIOLOGICAL WORLD) (BIO L100) (11, 12) This course is designed to be the equivalent of a college introductory biology course. The intent of the course is to expose students to higher-level biological principles, concepts and skills and allow them the opportunity to apply their knowledge to real-life applications. The curriculum is designed around several major concepts important to modern biology: biochemistry and metabolism, cellular biology, molecular genetics, evolution and ecology. Many inquiry based laboratory experiences will be conducted that encompass the science practices of modeling, questioning, experimenting, analyzing, evaluating and connecting. Students that object to dissection will be given an alternate assignment upon parental request. It is not a course that satisfies biology requirements for biology majors. See your counselor for more information and the discounted I.U. tuition costs for this course. Tuition will be determined by IU and will be communicated to students at the beginning of the semester. IU's policy with regard to submission of assignments will supersede the FHS Science Department policy on late assignments. Upon successful completion of this course (including a mandatory cumulative final exam), students will earn five (5) credit hours through Indiana University. **Requirement: Biology I or Honors Bio & Chemistry I or Honors Chem. Recommendation: Completion of Biology/Honors Biology and Chem/Honors Chem w/ a "B" average.**

3072 ## ADVANCED SCIENCE COLLEGE CREDIT -- IB CHEMISTRY –IU CHEM C101/121 ELEMENTARY CHEMISTRY (11, 12) This course is designed to be a continuation of Chemistry I, with the further depth associated with a college-level course; it is geared toward students who intend to pursue science or science-related fields as a college major. Students study eleven core topics: stoichiometry, atomic theory, periodicity, bonding, states of matter, energetics, kinetics, equilibrium, acids and bases, oxidation and reduction, and organic chemistry. Individual and group research on special topics will highlight the second semester of this course. This course gives students the option to enroll in the Indiana University course C101/C121 in which they may earn 5 hours (1 semester) of college credit. The credit is also transferable to many other colleges, and usually satisfies programs that only require 2 semesters of chemistry. It is not a course that satisfies chemistry requirements for science majors. See your counselor for more information and the discounted I.U. tuition costs for this course. This course will fulfill the requirement for IB Chemistry SL. IU requirements for admission to this course – GPA 2.7 or higher on a 4.0 scale. Tuition will be determined by IU and will be communicated to students at the beginning of the semester. IU's policy with regard to submission of assignments will supersede the FHS Science Department policy on late assignments. An IB certificate is also available for this course for juniors and seniors taking the IB exam in May. **Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance.** **Requirement: Biology or Honors Biology, Chemistry I or Honors Chemistry and Algebra II. Recommendation: Completion of Chemistry I w/ an "A" average or Honors Chemistry with a "B" avg. & Algebra II with a "B" avg.**

3060 ## ADVANCED PLACEMENT CHEMISTRY – AP (11, 12) The AP Chemistry course is designed to be the equivalent of the college introductory chemistry course usually taken by science majors during their first year of college. Topics covered in the course include atomic theory, chemical bonding, nuclear chemistry, states of matter, reactions, stoichiometry, thermodynamics, kinetics, electrochemistry, equilibrium, and organic chemistry. Lecture, laboratory activities, problem solving, and student research activities are all components of this course. **Requirement: Chem I or Honors Chem; Algebra II. STRONG Recommendation: "A" in Chem 1 or "B" in Honors Chem, Algebra II.**

3012 ## ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE (11, 12) The AP Environmental Science course is a rigorous, interdisciplinary science class designed to be the equivalent of a one-semester, introductory college environmental science course. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. **Requirement: Biology I or Honors Biology I, AND either Chemistry I or Honors Chemistry I or ICP. Recommendation: "B" average in both prerequisites. AP Exam registration will take place in September & October. Standard AP fees apply.**

3080 ## ADVANCED PLACEMENT PHYSICS 1 / IB PHYSICS YEAR 1 (10, 11, 12) This course is designed to be the equivalent of a non-calculus based college physics course. The course is designed as a first year physics course that emphasizes both computational and conceptual physics. Major topics include motion, projectile motion, forces, momentum, energy, work, and power. It covers physics in greater depth and breadth with frequent connections between each topic and with ties to the big ideas in physics. Detailed laboratory work is emphasized throughout and requires individual student designed labs, research papers and experimental projects. The willingness to complete assignments outside of class and a solid foundation in algebra is recommended. IB students must take both AP-1 and AP-2 to take either the SL or HL exam. **Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance. Requirement: Concurrent enrollment in Algebra II. Recommendation: "B" average in Honors Chemistry or completion of Physics 1. AP Exam registration will take place in September & October. Standard AP fees apply.**

3081 ## ADVANCED PLACEMENT PHYSICS 2 / IB PHYSICS YEAR 2 (11, 12) This course is designed to be the equivalent of a non-calculus based college physics course that follows AP-1 Physics. The course is designed as a second year physics course to follow AP-1 that continues to emphasize both computational and conceptual physics. Major topics include waves, harmonic motion, light and optics, thermodynamics, electricity and magnetism, and nuclear physics. It covers physics in greater depth and breadth with frequent connections between each topic and with ties to the big ideas in physics. Detailed laboratory work is emphasized throughout and requires individual student designed labs, research papers and experimental projects. The willingness to complete assignments outside of class and a solid foundation in algebra is recommended. IB students must take both AP-1 and AP-2 to take either the SL or HL exam. **Requirement: Concurrent enrollment in pre-calculus. Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance. Recommendation: "B" average in Physics AP-1. AP Exam registration will take place in September & October. Standard AP fees apply.**

3088 ## ADVANCED PLACEMENT PHYSICS C (11, 12) is designed as a second year calculus based physics course based on content established by the College Board for the Mechanics and Electricity and Magnetism tests. The mechanics semester provides instruction in: kinematics, Newton's laws of motion, work-energy-power, systems of particles and linear momentum, circular motion and rotation, and oscillations and gravitation. The electricity and magnetism semester provides instruction in: electrostatics, conductors-capacitors-dielectrics, electric circuits, magnetic fields, and electromagnetism. Methods of calculus are used wherever appropriate in formulating physical principles and in applying them to physical problems. Strong emphasis is placed on solving a variety of challenging problems; some requiring calculus as well as student based experimental design and execution. **Requirement: Completion of Physics I, or AP-1 Physics, or teacher approval AND completion or concurrent enrollment in AP Calculus AB or Calculus BC. AP Exam registration will take place in September & October. Standard AP fees apply.**

NOTE ABOUT IB PHYSICS SL OR HL: Students may receive an IB certificate in IB Physics SL upon completion of AP Year 1 and AP Year 2 and after taking the IB Physics SL Exam in May. Students may receive an IB certificate in IB Physics HL upon completion of AP Year 1 and AP Year 2 OR AP C Physics and after taking the IB Physics HL Exam in May.

BIOMEDICAL SCIENCE: PROJECT LEAD THE WAY (PLTW)

The PLTW™ Biomedical Sciences program consists of a sequence of four courses: Principles of Biomedical Sciences, Human Body Systems, Medical Interventions, and Biomedical Innovation. The goal of the program is to provide rigorous and relevant curriculum that is project and problem-based in order to engage and prepare high school students for the post-secondary education and training necessary for success in the wide variety of careers associated with the Biomedical Sciences, such as physicians, nurses, veterinarians, medical and pharmaceutical research scientists, allied health professionals, and technicians.

5218 CTE HEALTH SCIENCES: PRINCIPLES OF BIOMEDICAL SCIENCES (9, 10, 11) This course provides an introduction to the biomedical sciences through “hands-on” projects and problems. Students investigate the human body systems and various health conditions including heart disease, heart dissection, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. Key biological concepts including: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease are embedded in the curriculum. Engineering principles including: the design process, feedback loops, fluid dynamics, and the relationship of structure to function are incorporated in the curriculum where appropriate. The course is designed to provide an overview of all the courses in the Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses. **Requirement: Completion of Algebra I and completion or concurrent enrollment of Biology (or Honors).**

5216 CTE HEALTH SCIENCES: HUMAN BODY SYSTEMS (10, 11, 12) This course is the second course after Principles of Biomedical Sciences. Students examine the processes, structures, and interactions of the human body systems to learn how they work together to maintain homeostasis (internal balance) and good health. Hands-on projects include designing experiments, investigating the structures and functions of body systems, dissection, and using data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation. Students that object to dissection will be given an alternate assignment upon parental request. **Requirement: Completion of Algebra I and completion or concurrent enrollment in Chemistry I or Honors Chemistry I.**

NOTE – Students who pass both years of Principles of Biomedical Science and Human Body Systems will have fulfilled the requirements for Health and Wellness. No grade and no credit will be earned for the Health course.

5217 # CTE HEALTH SCIENCES: MEDICAL INTERVENTION (11, 12) In the Medical Interventions™ course, students will investigate the variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the lives of a fictitious family. A “How-To” manual for maintaining overall health and homeostasis in the body, the course will explore how to prevent and fight infection, how to screen and evaluate the code in our DNA, how to prevent, diagnose and treat cancer, and how to prevail when the organs of the body begin to fail. Through these scenarios, students will be exposed to a wide range of interventions related to Immunology, Surgery, Genetics, Pharmacology, Medical Devices, and Diagnostics. These interventions will be showcased across the generations of the family and will provide a look at the past, present, and future of biomedical science. This course counts as CORE 40, AHD general elective. **Requirement: Successful completion of Principles of Biomedical Sciences and/or Human Body Systems or any level of Anatomy & Physiology; and completion or concurrent enrollment in Chemistry I or Honors Chemistry I.**

5219 # CTE HEALTH SCIENCES: BIOMEDICAL INNOVATION (11, 12) In Biomedical Innovation™, the fourth course of the PLTW Biomedical Science Program, students will use the knowledge they have to design and conduct experiments related to the diagnosis, treatment, and prevention of disease or illness. They will apply the knowledge and skills learned in the previous courses; Principles of Biomedical Science, Human Body Systems, and Medical Interventions, to answer questions or to solve problems related to the biomedical sciences. They may work with a mentor or have an advisor from a university, hospital, physician’s office, or industry during the second semester as they complete their work. Students will be expected to make a presentation of their work to an adult audience that may include representatives from the local community or the school’s PLTW® partnership team. This course counts as CORE 40, AHD general elective. **Requirement: Successful completion of Principles of Biomedical Sciences, Human Body Systems, and Medical Interventions OR permission of the instructor. Special permission may be sought to allow a student to take Medical Interventions and Biomedical Innovation concurrently.**

HAMILTON SOUTHEASTERN SCHOOLS POLICY ON DISSECTION AND DISSECTION ALTERNATIVES

Participation in hands-on science is important to learning science and dissections are a valuable learning experience in which all students are encouraged to participate.

When dissection is used in the classroom:

- Teachers will thoroughly explain the learning objectives of the lesson.
- All specimens will be treated with respect.
- All students will be informed, prior to the dissection, that they have the option of discussing individual concerns about dissection with the appropriate teacher.
- Upon completion of the dissection, the remains will be appropriately disposed of as recommended by the local board of public health.

The science courses that include dissection will also include dissection alternatives. Upon written request of a student's parent or guardian, schools will permit a student who objects to dissection activities to demonstrate competency through an alternative method.

Specific dissection activities will be listed in the course curriculum or on the course syllabi, available to students before enrolling in these courses. Alternative activities will be available and may include use of models and Internet programs.

The procedure for a student to participate in an alternative activity in place of dissection is as follows:

- The student will notify the science teacher of the student's choice to participate in an alternative activity in place of participating in a dissection.
- The student will submit a written request from his or her parent/legal guardian to the science teacher a minimum of a week prior to the dissection activity.
- The student will be provided an alternative activity to be determined by the teacher who will specify in writing what is expected of the student. Alternative activities will allow students to gain the same content knowledge as a dissection activity and will require a comparable investment of time and effort by the student.
- The student will accept responsibility for completing the alternative activity within the assigned time and is expected to learn the same content knowledge as if the student were performing the dissection activity.
- The student will be subject to the same course standards and examinations as other students in the course.

ENGINEERING & TECHNOLOGY (& PLTW)

Fishers High School has aligned with a national engineering training program entitled **Project Lead the Way**. This program will combine curriculum from mathematics, science, and technology to prepare students for college level engineering coursework. Instructors for Project Lead the Way courses have received training from engineering specialists at Purdue University. Upon successful completion of the end of course exam and an optional processing fee, college credit is available at over 30 schools across the United States. Project Lead the Way is a four year comprehensive pre-engineering program. More information can be obtained by visiting the national **Project Lead The Way** website at <https://www.pltw.org/>

Students are expected to follow a college preparatory sequence of courses in high school mathematics as well as completion of physics. To enter the program as a freshman, students are required to have taken Algebra 1.

FOUNDATIONAL PLTW COURSES

4802 CTE ENGINEERING TECH: INTRODUCTION TO ENGINEERING DESIGN (PLTW) (9, 10, 11, 12) This course is the first level in all course sequences in technology education. This Project Lead The Way course develops student problem-solving skills using a design development process. Models of product solutions are created, analyzed, and communicated using solid modeling computer design software. **Requirement: Successful completion of Algebra 1. Recommendation: At least a "B" average in Algebra 1**

5644 CTE ENGINEERING TECH: PRINCIPLES OF ENGINEERING (PLTW) (10, 11, 12) This PLTW course helps students understand the field of engineering/engineering technology by exploring various technology systems and manufacturing processes. Students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. **Requirement: Introduction to Engineering Design or permission from the instructor. Recommendation: Completion of Intro to Engineering Design with a "B" average or better.**

ELECTIVE ENGINEERING COURSES

5538 # CTE ENGINEERING TECH: DIGITAL ELECTRONICS (PLTW) (11, 12) This PLTW course is a course in applied logic that encompasses the application of electronic circuits and devices. Computer simulation software is used to design and test digital circuitry prior to the actual construction of circuits and devices. **Requirement: Principles of Engineering or permission of the instructor. Recommendation: Completion of Principles of Engineering with a "B" average or better or completion or concurrent enrollment in any level of physics.**

4728 CTE ENGINEERING TECH: ROBOTICS DESIGN AND INNOVATION (RDI) (10,11,12) This course guides students to design, program, and test innovative technological designs related to robotic systems. Topics involve mechanics, pneumatics, control technologies, computer fundamentals, and programmable control technologies. Students design, build, and optimize robots to perform a variety of pre-designated tasks. Individuals or small teams may choose to participate in organized robotic competitions or develop their own events during the course. Through this course, students will investigate exciting career and collegiate programs of study. **Recommendation: Completion of Intro to Engineering Design with a "B" average or better.**

* 1-semester course ** can be taken 1 or 2 semesters # single-weighted course ## double-weighted course

THE FOLLOWING COURSES ARE OFFERED AT HSE ONLY

5650 # CTE ENGINEERING TECH: CIVIL ENGINEERING AND ARCHITECTURE (PLTW) (11, 12) This PLTW course provides an overview of the fields of Civil Engineering and Architecture, while emphasizing the interrelationship and dependence of both fields on each other. Students use state of the art software to solve real world problems and communicate solutions to hands-on projects and activities. **Requirement: Principles of Engineering or permission of the instructor. Recommendation: Completion of Principles of Engineering with a "C" average or better.**

5518 # CTE ENGINEERING TECH: AEROSPACE ENGINEERING (PLTW) (11, 12) Through hands-on engineering projects developed with NASA, students learn about aerodynamics, astronautics, space-life sciences, and systems engineering (which includes the study of intelligent vehicles like the Mars rovers Spirit and Opportunity). **Requirement: Principles of Engineering or permission from the instructor, Recommendation: Completion of Principles of Engineering with a "C" average or better.**

5534 # CTE ENGINEERING TECH: COMPUTER INTEGRATED MANUFACTURING (PLTW) (11, 12) This Project Lead The Way course applies principles of rapid prototyping, robotics, and automation. Students use CNC equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing and design analysis are included. **Requirement: Completion of Principles of Engineering or permission from the instructor. Recommendation: Completion of all PLTW courses with a "C" average or better.**

5698 # CTE ENGINEERING TECH: ENGINEERING DESIGN AND DEVELOPMENT (PLTW) (12) This Project Lead The Way course is an engineering research course in which students work in teams to research, design and construct a solution to an open-ended engineering problem. Students apply principles developed in the four preceding courses and are guided by a community mentor. They must present progress reports, submit a final written report and defend their solutions to a panel of outside reviewers at the end of the school year. **Requirement: successful completion of PLTW foundational courses and one PLTW elective course. Recommendation: Completion of all PLTW courses with a "C" average or better.**

AGRICULTURE

Animal Sciences Pathway

Animal Science expands farther than veterinary sciences. Students in the animal science pathway will get hands on experience working with animals. Students will practice veterinary procedures, hear from professionals in the field, and work in a hands-on environment with animals. By taking all animal science courses, students will have a well-rounded understanding of the animal industry.

Careers Related to Animal Sciences:

-
- | | |
|---------------------------------|---------------------------|
| ✓ Animal Nutritionist | ✓ Feed Sales |
| ✓ Veterinarian | ✓ Zoologist |
| ✓ Vet Tech | ✓ Wildlife Rehabilitation |
| ✓ Herd Manager | ✓ Habitat Specialists |
| ✓ Food/Meat Product Development | |

Example: Four-Year Course Plan

Freshman Year	Principles of Agriculture
Sophomore Year	Animal Science
Junior Year	Advanced Life Science: Animals
Senior Year	Agribusiness Management

Plant Sciences Pathway

Plant Science expands farther than having a garden. Students in the plant science pathway will get hands on experience working with plants, seeds, and soil. Students will practice managing a greenhouse, hear from professionals in the field, and work in a hands-on environment with plants. By taking all plant science courses, students will have a well-rounded understanding of the plant industry.

Careers Related to Animal Sciences:

-
- | | |
|---------------------------|-------------------|
| ✓ Botanist | ✓ Soil Scientist |
| ✓ Plant Pathologist | ✓ Agronomist |
| ✓ Landscape Architect | ✓ Ecologist |
| ✓ Plant Geneticist | ✓ Floral Designer |
| ✓ Environmental Scientist | |

Example: Four-Year Course Plan

Freshman Year	Principles of Agriculture
Sophomore Year	Horticulture Science or Plant & Soil Science
Junior Year	Horticulture Science or Plant & Soil Science
Senior Year	Agribusiness Management

7117 ** PRINCIPLES OF AGRICULTURE – (9, 10, 11, 12) The nature of this course is to provide students with an introduction to the fundamentals of agricultural science and business. Topics to be covered include: animal science, plant and soil science, food science, horticultural science, agricultural business management, landscape management, natural resources, agriculture power, structure and technology, leadership development, supervised agricultural experience and career opportunities in the area of agriculture, food and natural resources. **This is a dual credit course through Ivy Tech. This is a prerequisite for most agriculture courses.**

5008 ANIMAL SCIENCE - (10, 11, 12) Students participate in a large variety of activities and laboratory work including real and simulated animal science experiences and projects. All areas that the students study can be applied to both large and small animals. Topics to be addressed include: anatomy and physiology, genetics, reproduction, nutrition, common diseases and parasites, social and political issues related to the industry and management practices for the care and maintenance of animals while incorporating leadership development, supervised agricultural experience and learning about career opportunities in the area of animal science. **]This is a dual credit course through Ivy Tech.**

5070 ADVANCED LIFE SCIENCE: ANIMALS (10, 11, 12) Advanced Life Science, Animals, is a standards-based interdisciplinary science course, geared to college bound and honors level students that integrates biology, chemistry and microbiology in an agricultural context. Students investigate concepts that enable them to understand animal life and animal science as it pertains to agriculture. Through instruction, including laboratory, fieldwork, leadership development, supervised agricultural experience and the exploration of career opportunities, they will recognize concepts associated with animal taxonomy, life at the cellular level, organ systems, genetics, evolution, and ecology, historical and current issues in animal agriculture in the area of advanced life science in animals. This year-long course qualifies as a 3rd science credit towards an Academic Honors Diploma. Complete your science credits in a new and exciting way! This course provides excellent preparation for Purdue University's Advanced Credit Examination, which could allow students who excel the opportunity to earn college credit through Purdue University. **This is a dual credit course through Ivy Tech. Requirement: Successful completion of two of the following: Biology, Chemistry or ICP.**

5132 HORTICULTURE SCIENCE (10, 11, 12) This is a yearlong course. This course is designed to give students a background in the field of horticultural plants and products. Topics covered include: reproduction and propagation of plants, plant growth, growth media, management practices for field and greenhouse production, marketing concepts, production of plants of local interest and pest management. Students participate in a variety of activities to include extensive laboratory work usually in a school greenhouse, leadership development, supervised agricultural experience and learning about career opportunities in the area of horticulture science. **Prerequisite: Principles of Agriculture.**

5180 NATURAL RESOURCES (10, 11, 12). This course is a year long class that provides students with a foundation in natural resources. Hands-on learning activities in addition to leadership development, supervised agricultural experience and career exploration encourage students to investigate areas of environmental concern. Students are introduced to the following areas of natural resources: soils, the water cycle, air quality, outdoor recreation, forestry, rangelands, wetlands, animal wildlife and safety. **Prerequisite: Principles of Agriculture.**

5072 PLANT & SOIL SCIENCE (10, 11, 12) This two-semester course provides students with opportunities to participate in a variety of activities including laboratory and field work. Coursework includes hands-on learning activities that encourage students to investigate areas of plant and soil science. Students are introduced to the following areas of plant and soil science: plant growth, reproduction and propagation, photosynthesis and respiration, diseases and pests of plants and their management, biotechnology, the basic components and types of soil, soil tillage, and conservation. Counts as a Science credit for all diplomas. **Prerequisite: Principles of Agriculture**

5228 SUPERVISED AGRICULTURAL EXPERIENCE (10, 11, 12) This year long course is designed to provide students with opportunities to gain experience in the agriculture field in which they are interested and can be taken multiple years. Students should experience and apply what is learned in the classroom, laboratory and training site to real-life situations. Students work closely with their agricultural science and business teacher(s), parents and/or employers to get the most out of their SAE program. This course can be offered each year as well as during the summer session. SAE may be offered as a Cooperative Education Program. Curriculum content and competencies should be varied so that school year and summer session experiences are not duplicated. **Prerequisite: Principles of Agriculture.** [Watch this course video to learn more about the course!](#)

5002 AGRIBUSINESS MANAGEMENT (11, 12) Agribusiness Management provides foundation concepts in agricultural business. It is a two semester course that introduces students to the principles of business organization and management from a local and global perspective, with the utilization of technology. Concepts covered in the course include; accounting and record keeping, business planning and management, food and fiber, forms of business, finance, management, sales and marketing, careers, leadership development. Students will demonstrate principles and techniques for planning, development, application and management of agribusiness systems through a supervised agriculture experience (work based learning) programs. **Prerequisite: Principles of Agriculture.** [Watch this course video to learn more about the course!](#)

SOCIAL STUDIES COURSE OPTIONS

Freshman
Year

Requirement for Core 40 and Academic Honors Diplomas:

Geography and History of the World

OR

World History

OR

AP World History (recommended for IB candidates and 8th grade counselor/instructor recommendation)

Sophomore
Year

Electives: AP European History, AP Human Geography*, AP United States History, AP World History, Current Issues*, Geography and History of the World, Law Education*, World History, Indiana Studies*, Ethnic Studies*, African Studies*, Race in America*, Sports Psychology*

Required for IB candidates: AP United States History

Junior Year

Requirement:

United States History

OR

The American Experience (combined Eng11 & US History)

OR

AP United States History

Electives: AP European History, AP Human Geography*, AP World History, Dual Credit Sociology, AP Psych, Comparative Religions*, IB World Religions*, IB Global Politics, Constitutional Law*, Current Issues*, Global Studies*, Law Education*, Psychology*, Sociology*, World History, ACP Government*, AP Government*, Government*, Indiana Studies*, Ethnic Studies*, International Relations*, African Studies*, Race in America*, Sports Psychology*

Courses for IB students: AP/IB European History, IB Psychology, IB World Religions, IB Global Politics

Senior Year

Requirement:

Government*

OR

AP US Government*

OR

We the People* (ACP Gov)

OR

ACP Government

Electives: AP Comparative Government*, AP European History, AP Human Geography*, AP World History, AP Psych, Dual Credit Sociology, Comparative Religions*, IB World Religions, IB Global Politics, Constitutional Law*, Global Studies*, Psychology*, Sociology*, World History, Cadet Teaching I & II, Indiana Studies*, Ethnic Studies*, International Relations*, African Studies*, Race in America*, Sports Psychology*

Courses for IB students: IB History HL, IB Psychology, IB World Religions*, IB Global Politics

SOCIAL STUDIES

The Social Studies Department encourages all students to become responsible and participatory citizens. Students are expected to support their beliefs with logic and be willing to consider the opinions of others. The department also expects social studies students to exhibit critical thinking skills as they analyze, synthesize, & evaluate issues. The development of these skills will encourage students to become productive members of society and to meet the challenges of today.

1570 GEOGRAPHY AND HISTORY OF THE WORLD (9, 10) Specific geographic and historical skills and concepts of historical geography will be used to explore global themes primarily, but not exclusively, for the period beginning in 1000 CE. Historical geography concepts are used to explore the global themes including change over time, origin, diffusion, physical systems, cultural landscapes, and spatial distribution and interaction. By using these skills, concepts and the processes associated with them, students are able to evaluate, and make predictions about major global developments.

1548 WORLD HISTORY AND CIVILIZATION (9, 10, 11, 12) *World History and Civilization* emphasizes events and developments in the past that greatly affected large numbers of people across broad areas and that significantly influenced peoples and places in subsequent eras. Key events related to people and places as well as transcultural interaction and exchanges are examined in this course. Students are expected to compare and contrast events and developments involving diverse peoples and civilizations in different regions of the world. Students are also expected to practice and process skills of historical thinking and research and apply content knowledge to the practice of thinking and inquiry skills and processes. There will be continuous and pervasive interactions of processes and content, skills and substance, in the teaching and learning of history.

1612 ## AP WORLD HISTORY MODERN (9, 10, 11, 12) This course is designed to be the equivalent of a two-semester introductory college or university world history course. According to the College Board, AP World History Modern students “investigate significant events, individuals, developments, and processes in historical periods from approximately 1200 CE to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; making historical comparisons; utilizing reasoning about contextualization, causation, and continuity and change over time; and developing historical arguments. The course provides five themes that students explore throughout the course in order to make connections among historical developments in different times and places: interactions between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development & transformation of social structures. **Summer reading information will be distributed in the spring. Recommendation: 3.4 GPA. Exam registration will take place in September & October. Standard AP fees apply.**

1572 * ## AP HUMAN GEOGRAPHY (10, 11, 12) In this college level elective course, students will study the patterns of human activities across the globe. Class activities and discussions are created which challenge students to demonstrate their understanding of the vocabulary and theories of human geography. Class time provides opportunities for students to work collaboratively with their peers to examine why the systems of the world work the way they do. **Recommendation: 3.4 GPA. AP Exam registration will take place in September & October. Standard AP fees apply.**

1526 * LAW EDUCATION (10, 11, 12) This elective class provides an understanding of the American legal system and its basis in the United States Constitution. The course is designed to promote an understanding of criminal and civil law and corresponding topics. Real life applications of the law are emphasized, along with the development of critical thinking and problem solving skills. Case studies, simulations, debate, and mock trials will be used in this course.

1512 * CURRENT ISSUES (10, 11, 12) This elective course focuses on the study of the modern day world with emphasis on the United States. The students will engage in a variety of activities to increase their awareness of current happenings in our country and the impact on their lives.

1542 U.S. HISTORY (11) This course builds upon concepts developed in previous studies of American history and emphasizes national development from the late nineteenth century into the twenty-first century. After a review of fundamental themes in the early development of the nation, students study the key events, people, groups, and movements in the late nineteenth, twentieth, and early twenty-first centuries as they relate to life in Indiana and the United States.

1562 ## AP U.S. HISTORY (10, 11) In this college level course, students will study the history of the United States from its beginnings through the twenty-first century. Much outside reading and writing is expected. Students will gain analytical skills to interpret events in the context of the times in preparation for the AP Exam in May. Students who score a 3 or higher on the AP exam will earn college credit in the state of Indiana. Students should expect to spend extensive time reading and studying outside of class. **Recommendation: 3.4 GPA. Required: student should be a sophomore who successfully took AP World History as a freshman or a junior with a B- or higher in previous Social Studies and English classes. AP Exam registration will take place in September & October. Standard AP fees apply.**

0590 ## AP AFRICAN AMERICAN STUDIES (10, 11, 12) AP African American Studies is an interdisciplinary course that examines the diversity of African American experiences through direct encounters with authentic and varied sources. Students explore key topics that extend from early African kingdoms to the ongoing challenges and achievements of the contemporary moment. This course foregrounds a study of the diversity of Black communities in the United States within the broader context of Africa and the African diaspora. This course is designed to be the equivalent of an introductory college or university course in African American studies. At some institutions, the course may also fulfill other requirements such as social and behavioral sciences, arts and humanities, or history. **AP Exam registration will take place in September & October. Standard AP fees apply.**

1556 ## AP/IB EUROPEAN HISTORY (10, 11, 12) This college level elective course is a chronological study of European history which covers the events from the Renaissance up to the 21st century. The study of European History since 1450 introduces students to the cultural, economic, political and social developments that played a fundamental role in shaping the world in which we live. Some topics of particular focus will be war and conflict; their origins, development and consequences and development of modern states of Europe. This course requires a commitment to reading and organization. This course will serve as the first year of the IB History of Europe HL course sequence. **Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance. Recommendation: 3.4 GPA and completion of World History or AP World History. AP Exam registration will take place in September & October. Standard AP fees apply.**

1538 * TOPIC IN HISTORY (Overview of America for English Lang. Learners) This is an overview of American history and its democratic foundations in preparation for U.S. History, Government, and Economics classes. **Requirement: Successful completion of Geography & History of the World OR World History; also need approval of ENL dept. Recommendation: LEP level 2-5.**

1538 * TOPIC IN HISTORY / GLOBAL STUDIES (11, 12) This elective course focuses on the study of the modern day world and international events. The students will engage in a variety of activities to increase their awareness of current situations and challenges and to place Indiana in its proper world perspective. The need for global awareness and cooperation will be emphasized.

1550 * TOPIC IN SOCIAL SCIENCES / COMPARATIVE RELIGIONS (11, 12) This elective course serves as an introduction to most major world religions. It will be an unbiased and scholastic investigation of the basic history, values, goals & beliefs of each religion. Through the course, students will examine the similarities and differences of the religions for themselves to develop familiarity and tolerance for other religions. Students will attend various religious services of different faiths during the semester. **Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance. This course also serves as the first semester of IB World Religions.**

1538 * TOPIC IN HISTORY/CONSTITUTIONAL LAW (10, 11, 12) This elective course will explore in depth constitutional subjects and recent Supreme Court decisions in order to prepare students for higher level U.S. Government courses such as ACP Government, AP Government, and We the People. **Requirement: Sophs must receive permission from the Instructor.**

1588 * IB WORLD RELIGIONS - SL (11, 12)** This course serves as the second semester of the IB World Religions curriculum and follows the introductory class, Comparative Religions, a survey course. The course of study will focus on an in-depth examination of two major world religions, Buddhism and Islam. The nature of rituals, a review of sacred texts, an analysis of doctrines, beliefs and the religious experiences of the followers would be studied. The students will also undertake a research/analysis paper to investigate a specific topic in World Religions. This course may also be taken as an elective course by non-IB students. **Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance. Recommendation: 3.4 or higher GPA and a B- in Comparative Religions**

1534 * SOCIOLOGY (11, 12) Sociology is the study of human relationships. In this elective course, the student will learn the role of culture in the shaping of group behavior. Emphasis will be placed on how the family, religions, community organizations, and life span development influence society. Political and social groups, race and ethnic relations, social stratification, adolescence and social and urban problems will be discussed. Completion of community service hours as determined by the instructor is an expectation for this course.

1574 * ## ADVANCED SOCIAL SCIENCE CC, PRINCIPLES OF SOCIOLOGY (11, 12) Dual Credit Sociology course option through Ball State University (SOC 100), is an introduction to the topic and gives an understanding of the theories & research on social structures, processes, and problems. This course is **double-weighted** and costs \$350 plus textbooks and is taught by a BSU professor. More info can be found on the BSU website: <https://www.bsu.edu/>

1532 * PSYCHOLOGY (11, 12) Psychology is the study of human behavior. This elective course covers a variety of topics including history and approaches, physiology, learning and memory, stress, social psychology, and abnormal behavior. Activities will include hands on learning experiments, group projects, and active class discussions. This course will benefit all students, but is designed for those who are college bound.

1558 ## AP/IB SL PSYCHOLOGY (11, 12) This elective year long course includes: history and approaches, research methods, biological bases of behavior, sensation and perception, states of consciousness, learning, cognition, motivation and emotion, developmental psychology, personality, testing and individual differences, abnormal psychology, treatment of psychological disorders, and social psychology, all while applying these topics with the Levels of Analysis. Students will fulfill course work for the SL IB Psychology class that includes a simple experiment replication and APA formatted write up individually. To meet AP requirement for the honors diploma you must sit for the exam in May. Students may choose to be IB certificate students and sit for IB examination in May with registration. **Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance. Recommendation: a 3.4 GPA. AP Exam registration will take place in September & October. Standard AP fees apply.**

1604 ## IB PSYCHOLOGY HL (12) This is the second year in the IB Higher Level Psychology curriculum and may also be taken as an elective course by non-IB students. Students will study the biological, cognitive, learning and humanistic perspectives of psychology as well as two of the following topics: comparative psychology, cultural psychology, dysfunctional behavior, health psychology, lifespan psychology, psychodynamic psychology or social psychology. All aspects of research in the field, including ethics, qualitative and quantitative research, and experimental study are included. Students will design and implement three experimental studies. **Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance. Requirement: AP/IB Psychology. Recommendation: 3.4 GPA.**

1540 * U.S. GOVERNMENT (11, 12) A project based course intended to effectively increase a student's understanding of American government. This class uses interactive lessons and activities like mock trials, election projects and current events debate to give students an experience in how the government works in real life. As part of the class the seniors will participate in a field trip to the historic state capitol for a day and tour the executive, legislative and judicial branches. Emphasis is placed on developing responsible citizens who value and appreciate a commitment to active participation in national, state, and local levels of government. There is a focus on the U. S. Constitution, civil liberties and the role the government plays in their lives.

1574 * ## ACP GOVERNMENT (INTRO TO AMERICAN POLITICS) (11, 12) This course explores the structure and dynamics of American national government, providing a broad-based introduction to the ideas and institutions that shape politics in the contemporary United States. Focus will be on three major areas: the Constitution & debates of the founding eras, the institutions of modern American government, and the political behavior of the American mass public. Ultimately, the goal of this course is to help each member of the class arrive at a deeper, more comprehensive understanding of the forces that shape American government and politics while at the same time experiencing a college-like experience. The class will meet three times a week. Any additional days can be used by students to conduct research, complete class readings, and do any other work required for the class. This course will also be available for dual credit through Indiana University. IU Requirements for admission to ACP Introduction to American Politics – GPA 2.7 or higher on a 4.0 scale with a college preparatory curriculum. IU's policy with regard to submission of assignments will supersede the FHS Social Studies Department policy on late assignments. Tuition will be determined by IU and will be communicated to students at the beginning of the semester (tuition in 2018 was \$75.00). **Requirement: U.S. History, Recommendation: B- in U.S. History & strong grades in Soc. Studies classes.**

1574 ## ADVANCED SOCIAL STUDIES / WE THE PEOPLE (11, 12) In this college level course, students will study the U.S. government foundations and political theories with relationship to present day laws. Students in this class also will participate in the We the People competition, which will require substantial time outside of class for preparation and practice. This course satisfies the Indiana U.S. government requirement. Summer reading information will be distributed during a group orientation in the spring. This HL course will be offered only in the Fall Semester. IU requirements for admission to ACP Introduction to American Politics – GPA 2.7 or higher on a 4.0 scale within a college preparatory curriculum. IU's policy with regard to submission of assignments will supersede the FHS Social Studies Department policy on late assignments. Tuition will be determined by IU and will be communicated to students at the beginning of the semester. (tuition in 2017 was \$75.00) **Requirement: U.S. History. Recommendation: B- in U.S. History and strong grades in Social Studies class.**

1560 * ## AP U.S. GOVERNMENT & POLITICS (11, 12) In this college level course, students will use an analytic perspective to study American Government, including general concepts and specific examples. We will focus our analysis on three major areas: the Constitution and the debates of the founding era, the institutions of modern American government, and the political behavior of the American mass public. Our analysis will draw heavily both on documents from America's formative period and on insights from modern political science, allowing us to examine important political phenomena from a variety of perspectives. Ultimately, the goal of this course is to help each member of the class arrive at a deeper, more comprehensive understanding of the forces that shape American government and politics. This course satisfies the U.S. government requirement. **Requirement: U.S. History, Recommendation: B- in U.S. History, Recommendation for AP credit: a 3.4 GPA and strong grades in Social Studies classes. AP Exam registration will take place in September & October. Standard AP fees apply.**

1552 * ## AP COMPARATIVE GOVERNMENT AND POLITICS (12) In this college level elective course, students will analyze the political systems of China, Great Britain, Iran, Mexico, Nigeria and Russia. These political systems will then be compared to the United States' political system. Instructional methods will include group projects, class discussions, lecture, writing, and video presentations. Students may earn college credit. **Requirement: U.S. History, U.S. Government or AP Government & Politics. Recommendation: 3.4 GPA. AP Exam registration will take place in September & October. Standard fees apply.**

1518 * INDIANA STUDIES (9, 10, 11, 12) This one semester elective course is an integrated course that compares and contrasts state and national developments in the areas of politics, economics, history, and culture. The course uses Indiana history as a basis for understanding current policies, practices, and state legislative procedures. It also includes the study of state and national constitutions from a historical perspective and as a current foundation of government. Examination of individual leaders and their roles in a democratic society will be included and students will examine the participation of citizens in the political process. Selections from Indiana arts and literature may also be analyzed for insights into historical events and cultural expressions..

1516 * ETHNIC STUDIES (10, 11, 12) This one-semester elective course examines the intersection of identity, race, and community in the United States. We will study the formation of American identities and the invention of race. We will also explore racial fault lines in modern American culture through numerous case studies, including the impact of red-lining, continued segregation, and mass incarceration. The course aims to empower students of all backgrounds to become more socially, historically, and culturally aware.

1500 * AFRICAN STUDIES (9, 10, 11, 12) African Studies is a one-semester course that will focus on the history of Africa and how specific eras and events in Africa continue to affect our current global relationships. Students will learn about various cultures represented on the continent of Africa, ethnicities, religion, arts and entertainment, forms of government, and economic trends and systems. Students will be able to recognize evidence of African influence in their own communities. This course counts as an elective for all diplomas.

1520 * INTERNATIONAL RELATIONS (10, 11, 12) This course provides a survey of the formal relationships among sovereign states in the international system, emphasizing the operation of diplomacy. The procedures for settlement of disputes and various methods of international conflict resolution are included. The course examines power, interdependence, global development, and international organizations and much of this class will be performed in a simulation format. **Prerequisite: World History, AP World History Modern, or Geography & History of the World.**

1578 IB GLOBAL POLITICS SL (10*, 11, and 12) (*only 11 or 12 may take for IB Credit) IB Global Politics explores fundamental political concepts such as power, liberty and equality, in a range of contexts and at a variety of levels. It allows students to develop an understanding of the local, national, international and global dimensions of political activity, as well as allowing them the opportunity to explore political issues affecting their own lives. It helps students to understand abstract political concepts by grounding them in real world examples and case studies, and also invites comparison between such examples and case studies to ensure a transnational perspective. Developing international mindedness and an awareness of multiple perspectives is at the heart of this course. It encourages dialogue and debate, nurturing the capacity to interpret competing and contestable claims. All students complete four integral units: Power, Sovereignty and International Relations; Human Rights; Development; and Peace and Conflict. **Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance. Recommendation: 3.4 or higher GPA and have taken World History (AP or regular); U.S. History preferred but may be taken concurrently**

1538 * TOPICS IN HISTORY / RACE IN AMERICA: THE AFRICAN AMERICAN EXPERIENCE (10, 11, 12). This course will explore the African American experience from the beginning of slavery to present-day America. Students will examine the African slave trade and its impact on the foundation of America. During the first half of the semester, students will examine the regional impact of slavery, slave societies, the abolitionist movement, the Underground Railroad, slave rebellions, the slave family, free African Americans in antebellum America, and the role African Americans played in the Civil War. During the second half of the semester, students will examine the lasting effects of Reconstruction, the impact of segregation, and the challenges African American men, women, and children faced during the Civil Rights Movement. Particular attention will be given to the achievements and contributions of African Americans and the impact institutional racism has on American society today.

1550 * TOPICS IN SOCIAL SCIENCES / SPORTS PSYCHOLOGY (10, 11, 12) This one semester elective course will provide students with knowledge about psychological factors that affect performance in sports such as motivation, concentration, focus, confidence, anxiety, team building, and relaxation. Students will also be introduced to mental skills that will enhance performance, make participation more enjoyable, and learn skills that can be transferred to other aspects of their lives. Specific skills to be covered in this class will include: how to set measurable goals and strategies to achieve them, visualization and imagery techniques, leadership, team-building, and how to find enjoyment in what you do.

VISUAL ARTS

4060 * DRAWING I (9, 10, 11, 12) Students will focus primarily on art production. Emphasis is placed upon developing students' observational drawing skills and strengthening perceptual awareness in order to draw more realistically

- Students will experience a variety of drawing materials using dry media.
- Students will be introduced to the elements of art and principles of design.
- This course is encouraged for students interested in taking AP Studio Art, pursuing an art career, or just would like to gain foundational skills in drawing.
- **No prerequisites required for this class**
- **Not recommended to take simultaneously with Introduction to Two-Dimensional art**

4002 * INTRODUCTION TO TWO-DIMENSIONAL ART (9, 10, 11, 12) This course is designed to give students a basic understanding of two-dimensional media and various art skills needed for other art classes.

- Introduced the elements, principles, and design concepts that serve as a foundation for all works of art.
- Encompasses art production, art criticism, aesthetics, and art history.
- Students will explore a variety of media such as graphite, colored pencil, marker, printmaking, and painting.
- No previous art courses are necessary.
- Students interested in graphic design (Visual Communications I and II) should have this as their required prerequisite.
- **Not recommended to take simultaneously with Drawing I**

4006 * INTRODUCTION TO THREE-DIMENSIONAL ART (9, 10, 11, 12) Students taking 3-D Art engage in learning experiences that encompass art history, art criticism, aesthetics, and production of work.

- Through exploration of materials and techniques students will strengthen their ability to develop and organize their visual communication skills through creation of three-dimensional art work.
- Students will be introduced to the elements of art, principles of design, and design concepts that serve as a foundation for all works created in art and design.
- This class is a prerequisite for ceramics, sculpture and jewelry/metals courses and is especially recommended for all students intending to major or minor in art and/or design.

0520 * PEER ART EDUCATION (9, 10, 11, 12) is designed to provide exceptional learners an opportunity to communicate through visual art. This course will provide instruction through several different methods of art-making designed to lead our exceptional learners toward positive self-expression.

- Processes explored include (but are not limited to) drawing, painting, printing, and sculpting. Exceptional learners are paired with peers who will facilitate a series of lessons in coordination with the lead teacher. These peers will be instructed and guided on artistic technique, proper facilitation, best-practice classroom methods, and reflection.
- This course will address fine and gross motor skills as well as behavioral goals. Finally, participating as a group, they will work at presenting their finished pieces in an exhibition style showcase.
- **RECOMMENDED : at least one semester of Art**

4066 * PRINTMAKING (9, 10, 11, 12) Students will learn printmaking techniques and processes while exploring the disciplines of art history, art production, art criticism and aesthetics.

- They will create abstract and realistic prints using some of the following techniques: woodcut, monotype, drypoint, embossing, linocut, etching, lithography and silkscreen.
- Students will reflect upon and refine their work while looking for ways to relate to other disciplines and the community around them.
- **Requirement: Introduction to Two-Dimensional Art**

4062 * BEGINNING DIGITAL PHOTOGRAPHY (9, 10, 11, 12) Formerly called "Point & Shoot Photography, this intro-level course to learn design foundations & make art. For any student, regardless of art background.

- Learn camera controls for your digital device.
- Explore photo editing techniques with emphasis on Adobe Photoshop
- Understand what art is, and its place in history.
- Discover your inner artists.
- Fulfills the general fine arts elective requirement, no prerequisites required
- **Students must supply a digital camera of any kind or a cell phone.**
- <https://fishershighschoolphotography.weebly.com/>

4062 * ADVANCED DIGITAL PHOTOGRAPHY I (10, 11, 12) This semester course is an introduction to the digital lens reflex (DSLR) This course will encompass all aspects of digital fine art photography.

- Class provides freedom to explore your creative side, using your imagination.
- Learn to use a DSLR camera in manual mode.
- Develop compositional design skills.
- Learn editing techniques using Adobe Photoshop – to enhance, manipulate and transform your photographs.
- Practice identifying and creating high quality artwork.
- **Requirement: Any Intro level art course.**
- **Students must provide their own DSLR camera, SD card and flash-drive**
- <https://fishershighschoolphotography.weebly.com/>

4062 * ADVANCED DIGITAL PHOTOGRAPHY II (10, 11, 12) Designed for the serious photographer this course will provide students a continuation of *Advanced Photography I* with further development of aesthetic and technical skills.

- Develop and learn additional Photoshop skills.
- Use the creative process to discover and convey vision.
- Projects will be theme based and individualized through research and exploration of techniques and subjects.
- Produce exhibition-quality work.
- **Students must provide their own DSLR camera, storage card with at least 4GB capacity, and flash-drive.**
- **Requirement: Advanced Photography I**
- <https://fishershighschoolphotography.weebly.com/>

4060 * DRAWING II (10, 11, 12) Drawing II has students develop compositions with advanced drawing styles, techniques, and subject matter.

- Designed for a serious art student who had success in Drawing I, and is interested in developing and improving their knowledge of drawing and techniques using a broad range of mediums.
- Students will further develop their knowledge in the areas of art history, art criticism, and aesthetics.
- Students are required to purchase supplies for the course through the school bookstore.
- Students interested in pursuing AP Studio Drawing or AP 2-D Design are encouraged to take this course during their sophomore or junior year.
- **Requirement: Drawing I (suggested B+ or higher)**

4060 * DRAWING III (11, 12)

This course specializes in the study of the human form.

- Students will study the skeletal make-up of the human figure, live model observational studies, along with completing a large-scale self-portrait.
- This class is recommended to students interested in pursuing a Visual Art degree in college.
- Students interested in taking AP Studio Drawing or AP 2-D Design are encouraged to take this course their junior year, or during senior year when taking AP studio.
- **Requirement: Drawing I and Drawing II (suggest B+ or higher in both)**

4060 * DRAWING IV (11, 12)

This course is an advanced drawing class utilizing techniques and concepts from Drawing I, II, and III.

- Students will work with more advanced concepts, developing proposals for their teacher before each project, creating larger scale compositions using a variety of media.
- Drawing IV continues to cover topics of aesthetics, criticism, and art history in the context of drawing.
- This course is designed as a Pre-AP course for students planning to major in art by building their AP Drawing portfolios, or complete portfolios for college admission. Recommended students take during senior year.
- **Prerequisites: Drawing I, II, III (suggest A average from Drawing I, II, and III)**

4086 * VISUAL COMMUNICATIONS I / GRAPHIC DESIGN I (10, 11, 12) This course enables students to gain experience on Apple/Macintosh computers using Adobe Illustrator and Adobe Photoshop applications.

- Students develop original artwork on the iMac's by learning how to successfully combine type and imagery in every composition relating to the ever-popular field of Graphic Design.
- Students will create logos, design original posters, and more by learning how to communicate successfully in an artistic format using Adobe applications.
- Experiences addressing art history, art criticism, and aesthetics will be discussed throughout the course. Any student interested in pursuing a career in the graphic design field should take this course.
- Students are required to purchase a 16GB or 32GB flash drive for this class.
- **Requirement: Introduction to Two-Dimensional Art or Drawing I**

4086 * VISUAL COMMUNICATIONS II / GRAPHIC DESIGN II (10, 11, 12) This course is a continuation of Visual Communications I/Graphic Design I.

- Student's utilize prior knowledge of Adobe Illustrator and Adobe Photoshop to create advanced graphic designs, cover current trends, and discuss advanced concepts.
- Art history, art criticism, and aesthetics will again be addressed throughout the course as it pertains to the projects.
- This course is highly recommended for students interested in pursuing an art degree of Graphic Design in college.
- Students are required to use the flash drive purchased for VCI to save projects for this class.
- **Requirement: Visual Communications I**

4064 * PAINTING I (10, 11, 12) Painting is a studio oriented class which enables students to experience different painting techniques, styles, and media while exploring art history, art criticism, and aesthetics.

- Focus on painting skill and technique building, color experimentation and exploration, and vocabulary.
- Course will use watercolor and acrylic paint as mediums for developing original compositions.
- Students will participate in peer critiques and self-reflection about artworks to create a dialogue about the creation process.
- **Requirement: Drawing I or Introduction to Two-Dimensional Art**

4064 * PAINTING II (10, 11, 12) Painting II is a studio class that builds upon the foundation of Painting I. Students in this course engage in a sequential learning experience that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality works.

- Students will work with a variety of media including oil paint, watercolor, acrylic on a variety of surfaces.
- Painting II focuses on choosing subject matters, symbols, and ideas that communicate ideas in their artwork combined with the skills they learned in Painting I to create high quality works.
- Critiques and reflection will be conducted in both an individual and group setting.
- This course is recommended for students pursuing AP Studio 2-D Design/Drawing.
- **Requirement: Painting I.**

4064 * PAINTING III (11, 12) Painting III is a studio class that challenges students to explore and experiment with media, content, and technique. Students' strengths are built upon and artworks may be connected by themes. Students will work with a variety of media including oil paint, watercolor, acrylic on a variety of surfaces. Critiques and reflection will be conducted in both an individual and group setting. This course counts as a directed elective or elective for all diplomas and fulfills Fine Arts requirement for the Core 40 w/ AHD. **Requirement: Successful completion of Painting II.**

4090/4092 IB VISUAL ARTS SL OR HL ## (11, 12) – IB Visual Arts provides students with the opportunities to make personal, sociocultural and aesthetic experiences meaningful through the production and understanding of art. It exemplifies and encourages an inquiring and integrated approach towards visual arts in their various historical and contemporary forms and promotes visual and contextual knowledge of art from various cultures.

- The core elements are introduction to art concepts, criticism and analysis, acquisition of studio technical and media skills, and relation of art to sociocultural and historical contexts.
- It consists of two compulsory parts: studio work – the practical exploration and artistic production; and research workbooks – independent critical research and analysis, visual and written, in more than one culture.
- Students may need to purchase supplies for the course at the school bookstore and area art supply stores.
- **Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance.**
- **Requirement: Any two of the following introductory art courses: Intro to 2-Dimensional Art, Drawing I, Intro to 3-Dimensional Art, Painting, Ceramics, Sculpture or Jewelry**

AP STUDIO ART COURSES

For all AP Studio Art courses, the following guidelines are expected:

- In an AP Art & Design course, you'll develop the skills that artists and designers use, as well as create a portfolio of work you'll submit for an AP score.
- Portfolios are designed for students who are seriously interested in the practical experience of art. AP Studio Art is not based on a written examination; instead, students submit portfolios for evaluation.
- Students may need to purchase supplies for the course at the school bookstore or area art supply stores.
- Summer portfolio work is required
- **Requirements: At least 2 advanced level art courses in the chosen portfolio area: Drawing, 2D, or 3D along with approval from the Department Chair.**

4048 ## AP DRAWING (11, 12) Develop your skills in drawing as you experiment with different materials and processes. You'll create artwork that reflects your own ideas and skills and what you've learned. Portfolios are evaluated based on standardized scoring descriptors aligned with the skills and understanding developed in college foundation courses. The portfolio will have two sections: Sustained Investigation and Selected Works. **For the AP Drawing Portfolio:**

- Your work should focus on the use of drawing skills, including mark-making, line, surface, space, light and shade, and composition.
- Think about marks that can be used to make drawings, the arrangement of marks, the materials and processes used to make marks, and relationships of marks and ideas.
- There's no preferred or unacceptable content or style.

For more information, see the following website: <https://apstudent.collegeboard.org/apcourse/ap-studio-art-drawing>

4050 ## AP 2-D ART & DESIGN (11, 12) Develop your 2-D skills through materials and processes such as graphic design, photography, collage, printmaking, fashion illustration, collage, and others. You'll create artwork that reflects your own ideas and skills and what you've learned. The portfolio will have two sections: Sustained Investigation & Selected Works. For your AP 2-D Art & Design portfolio:

- Your work should focus on the use of two-dimensional skills of art & design, including point, line, shape, plane, layer, form, space, texture, color, value, opacity, transparency, time, unity, variety, rhythm, movement, proportion, scale, balance, emphasis, contrast, repetition, figure/group relationship, connection, juxtaposition, and hierarchy. There's no preferred or unacceptable content or style.
- Think about how materials, processes, and ideas can be used to make work that exists on a flat surface.
- Here are some formats you can submit: graphic design, digital imaging, printmaking, photography, collage, fabric design, weaving, fashion design, illustration, and painting.

For more information, see the following website: <https://apstudent.collegeboard.org/apcourse/ap-studio-art-2-d-design>

- **NOTE:** FHS offers two **DIFFERENT / SEPARATE** AP 2-D Art & Design courses (with different foci):
 - **AP 2-D Art & Design (Photography)**, where the portfolio is intended to address 2-D design issues within photography and digital medium
 - **AP 2-D Art & Design (Painting, Drawing, and other mediums)**, where the portfolio is intended to address 2-D design issues through painting, drawing, and other mediums.

4052 ## AP 3-D ART & DESIGN (11, 12) Develop 3-D skills in materials and processes, such as sculpture, architectural rendering and models, metal work, ceramics, glass work, and others. You'll create artwork that reflects your own ideas and skills and what you've learned. The portfolio will have two sections: Sustained Investigation & Selected Works. For the 3-D Art & Design portfolio:

- Your work should focus on the use of 3-D skills of art and design, including point, line, shape, plane, layer, form, volume, mass, occupied/unoccupied space, texture, color, value, opacity, transparency, time, unity, variety, rhythm, movement, proportion, scale, balance, emphasis, contrast, repetition, connection, juxtaposition, and hierarchy. There's no preferred or unacceptable content or style.
- Think about how materials, processes, and ideas can be used to make work that involves space & form, whether physical or virtual.
- Here are some formats you can submit: figurative or non figurative sculpture, architectural models, metal work, ceramics, glasswork, installation, performance, assemblage, and 3-D fabric / fiber arts.

See the website for more info: <https://apstudent.collegeboard.org/apcourse/ap-studio-art-3-d-design>

4040 * CERAMICS I (9, 10, 11, 12) This studio oriented class enables students the opportunity to creatively explore the possibilities of clay work using various methods of hand built construction with an introduction to the use of the potter's wheel.

- Emphasis is placed on development of skills, use of appropriate ceramic vocabulary, fabrication techniques and equipment associated with the ceramics craft.
- Students will also engage in learning experiences that encompass art history, art criticism, and aesthetics.
- All assignments must demonstrate both artistic merit and good craftsmanship.
- **Requirement: Introduction to Three-Dimensional Art.**

4040 * CERAMICS II (10, 11, 12) This studio oriented class enables students the opportunity to further explore the possibilities of clay.

- Students build on the skills, vocabulary, and processes gained from Ceramics I.
- Techniques learned previously are combined to produce a variety of sculptural and functional ceramic forms.
- A well-designed set is developed and throwing skills on the potter's wheel are improved.
- Creativity is fostered while students learn to analyze, evaluate, communicate, organize and problem solve through ceramics.
- The learning experiences encompass art history, art criticism, aesthetics, and production. All assignments must demonstrate both artistic merit and good craftsmanship.
- This course is encouraged for students interested in pursuing AP 3D Studio
- **Requirement: Introduction to Three-Dimensional Art and Ceramics I.**

* 1-semester course ** can be taken 1 or 2 semesters # single-weighted course ## double-weighted course

4040 * CERAMICS III (10, 11, 12) This studio oriented class caters to student's specific strengths (hand building or the potter's wheel), projects are larger in scope and include multiple teacher-student critiques.

- Students use advanced design skills acquired from the Ceramics I and II courses to complete high-quality, formal ceramic pieces. Students are asked to push the boundaries of function, materials, and the fabrication processes in hand building, while continuing to improve their techniques on the potter's wheel. Trimming, extruding and using armatures will be used to refine and elaborate forms.
- **Requirement: Introduction to Three-Dimensional Art and Ceramics I and II**

4042 * JEWELRY I: METALSMITHING (10, 11, 12) This class enables students to develop their technical and craftsmanship skills through the creation of several metals projects.

- Students will explore a variety of materials, which may include: copper, brass, nickel silver, sterling silver, plastics and wood.
- Studying jewelry-making & metals techniques, students will engage in art history, aesthetic, & art criticism.
- Students are required to purchase saw blades for this course at the school bookstore.
- **Requirement: Introduction to Three-Dimensional Art**

4042 * JEWELRY II: METALSMITHING (10, 11, 12) Students taking this metals course engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works.

- Students are required to purchase saw blades for this course at the school bookstore.
- **Requirement: Introduction to Three-Dimensional Art and Jewelry I**

4044 * SCULPTURE I (10, 11, 12) This class enables students to explore various techniques; carving, modeling, molding, casting, and assemblage/construction, as well as photographing and displaying works of art.

- Media such as; clay, plaster, stone, wood, wire, and metal are explored.
- Students participate in class critiques and one-on-one evaluations with the teacher during the production process.
- Students engage in learning experiences that encompass art history, art criticism, and aesthetics.
- Students may need to purchase supplies for the course at the school bookstore or area art supply stores.
- This course is encouraged for students interested in pursuing AP Studio 3D - Design.
- **Requirement: Introduction to Three-Dimensional Art**

4044 * SCULPTURE II (10, 11, 12) This studio based course builds on a working vocabulary and knowledge of tools, equipment, and fabrication techniques explored in Sculpture I.

- Larger scale projects delving into sculptural processes and techniques, including brazing will be introduced. Students use their advanced design skills to complete high-quality sculptures. The elements of art and principles of design will be incorporated into student's work.
- This course is encouraged for students interested in pursuing AP Studio 3D - Design.
- **Requirement: Introduction to Three-Dimensional Art and Sculpture I**

4025 ## AP ART HISTORY (10, 11, 12), Advanced Placement Art History is a course based on the content established by the College Board.

- The AP Art History course is equivalent to a two-semester college survey course exploring the nature of art, art making, and responses to art.
- By investigating specific course content of 250 works of art characterized by diverse artistic traditions from prehistory to the present, students develop in-depth, holistic understanding of the history of art from a global perspective.
- Students become active participants in the global art world, engaging with its forms and content. They experience, research, discuss, read, and write about art, artists, art making, responses to, and interpretations of art.
- **World History and Civilization, "B" or better in advanced English recommended**

FINE ARTS ALTERNATIVE CREDIT

Students have the opportunity to earn credit in fine arts through alternative experiences. A student may submit a proposal to the Department Chair prior to the experience. The Department Chair will assign a designee who is licensed/HQ in the field related to the proposal. The premise of the request must be that the student wants to do more than what will fit in their high school program. In the proposal, the student must describe how he/she will present evidence of proficiency for each of the standards involved in the course under consideration. The teacher may define assessments to be used for grading, including a final assessment, portfolio or project.

FISHERS HIGH SCHOOL VISUAL ART COURSES

INTRODUCTORY COURSES	2nd LEVEL COURSES	3rd LEVEL COURSES	4th LEVEL COURSES	ADVANCED PLACEMENT
REQUIRED BEFORE TAKING A 2ND LEVEL COURSE	AFTER THE INTRODUCTORY COURSE	AFTER 2nd LEVEL COURSE	AFTER 3rd LEVEL COURSE	
<p>Drawing I</p> <p>Introduction to Two-Dimensional Art</p> <p>Introduction to Three-Dimensional Art</p> <p>Introduction to Digital Art Photography</p>	<p>Drawing II</p> <p>Visual Communications I (Graphic Design)</p> <p>Painting I</p> <p>DSLR Photography I <small>DIGITAL CAMERA REQUIRED</small></p> <p>Visual Communications I (Graphic Design)</p> <p>Painting I</p> <p>Printmaking I</p> <p>DSLR Photography I <small>DIGITAL CAMERA REQUIRED</small></p> <p>Ceramics I</p> <p>Sculpture I</p> <p>Jewelry I</p> <p>DSLR Photography I <small>DIGITAL CAMERA REQUIRED</small></p>	<p>Drawing III</p> <p>Visual Communications II (Graphic Design)</p> <p>Painting II</p> <p>DSLR Photography II <small>DIGITAL CAMERA REQUIRED</small></p> <p>Painting II</p> <p>DSLR Photography II <small>DIGITAL CAMERA REQUIRED</small></p> <p>Ceramics II</p> <p>Sculpture II</p> <p>Jewelry II</p> <p>DSLR Photography II <small>DIGITAL CAMERA REQUIRED</small></p>	<p>Drawing IV</p> <p>Ceramics III</p>	<p>AP Art History <i>World History Required B or better in Adv. English recommended</i></p> <p>AP Art Studio - Drawing</p> <p>AP Art Studio - Two Dimensional</p> <p>AP Art Studio - Three Dimensional</p> <p>AP Photography <small>DIGITAL CAMERA REQUIRED</small></p> <p>IB Visual Art (11th & 12th)</p> <p>11th & 12th grade Must complete 2 semesters of art before Junior year.</p>
1 SEMESTER COURSES	1 SEMESTER COURSES	1 SEMESTER COURSES	1 SEMESTER COURSES	2 SEMESTER COURSES

* 1-semester course ** can be taken 1 or 2 semesters # single-weighted course ## double-weighted course

WORLD LANGUAGES

Studying a world language enhances critical and abstract thinking. It improves reasoning and organizational skills. Interdisciplinary in nature, language is a powerful tool! Among the advantages afforded to students who study world languages are: increased vocabulary in students' native language, increased career opportunities, crucial understanding of the mechanics of language, enhanced cross-cultural communication, heightened development of cognitive growth, and better standardized test scores. All languages offered at FHS enrich students' education and opportunities and prepare them to be global citizens in the 21st century.

- **COURSE MATERIALS:** Fishers High School World Language teachers work collaboratively to develop curriculum and support student learning that includes digital as well as teacher created materials. Classes may utilize an online curriculum, a traditional textbook or both.
- **ASSIGNMENTS:** Assignments in a regular class are generally structured and guided, while in the Honors class the assignments are often open-ended. The pace in an honors class is faster and the content is deeper.
- **USE OF TARGET LANGUAGE:** Much of the lesson is conducted in the target language in the regular class, but there is still a dependency on English for classroom management and grammar instruction. The majority of the Honors class is conducted in the target language. At both levels, there are many opportunities for open-ended speaking, oral exchanges, and classroom conversations in the target language.
- **ADVANCED PLACEMENT:** Students enrolled in the fifth-year AP course of a language are encouraged to sit for the AP exam.
- **ALTERNATE WORLD LANGUAGE CREDIT:** Hamilton Southeastern Schools will allow students to take Russian, Chinese, Japanese, and Latin as on-line courses through the Indiana Academy at Ball State University and Indiana University High School. This on-line work will be completed outside the school day with no supervision/assistance provided by HSE staff. Students will pay for the course to either Ball State University or Indiana University depending on the specific language. These credits will not count against the maximum four correspondence/on-line credits. For more information contact your counselor.

If there are not enough students for both a regular class and an honors class, the administration will determine the level of the course.

A student who has special exposure to a world language (Parents are heritage speakers of the target language, target language is used in the home, student has travel/lived for an extended period of time in a place where the target language is spoken, etc) will be asked to take a diagnostic test. Depending upon the results, the student may be placed at a higher level of study in order for the student to maximize his/her potential.

Level I Languages:

French I (2020), Spanish I (2120), German I (2040)

The first year of any language concentrates on developing proficiency in the four basic skills: listening, speaking, reading and writing. Introduction to the culture is assured through the study of geography, customs, lifestyle, food, and diversity of the people. **Requirement: None. Recommendation: "C" average in core classes.**

2310 # French I / IB ab initio (11) The ab initio program is offered to students who are enrolled in the International Baccalaureate program that have not had any previous exposure to French. This is a two-year course of study at an accelerated pace that will enable the student to be proficient at the third-year level upon completion of the program. Students must be self-motivated and willing to work independently as they will receive supplementary readings and vocabulary beyond the regular French curriculum. **This course is a single-weighted course. Requirement: Permission of the IB coordinator**

* 1-semester course ** can be taken 1 or 2 semesters # single-weighted course ## double-weighted course

Level II Languages:

French II (2022), Spanish II (2122), German II (2042)

During the second year basic skills of listening, speaking, reading and writing are reinforced and expanded. Emphasis is placed on using vocabulary and grammar skills in conversation. The study of the culture of the countries will continue.

Requirement: The first year of the language. Recommendation: "C" average in Level I

Level II Honors (#) Languages:

French II Honors (2022), Spanish II Honors (2122) German II Honors (2042)

Recommendation: "B" average in Level I Honors

Level III Languages:

French III (2024), Spanish III (2124), German III (2044)

In the third year of the study of a language the students review major grammar points of the first two years and continue the study of grammar. The four basic skills of reading, writing, listening and speaking are developed further. Additional authentic reading materials are studied. Students will be expected to communicate primarily in the target language.

Requirement: The second year of the language. Recommendation: "C" average in Level II

Level III Honors (#) Languages:

French III Honors (2024), Spanish III Honors (2124), German III Honors (2044)

Requirement: Level II Honors. Recommendation: "B" in Level II Honors

IB French ab initio year 2 students enroll in French IIIH

Level IV Languages:

French IV (2026), Spanish IV (2126), German IV (2046)

At this level grammar is reviewed and expanded through use of readings, oral presentations, advanced composition, poetry, and novels. Students spend time preparing for college placement tests. Students are expected to communicate in the target language. **Requirement: The third year of the language. Recommendation: "C" average in Level III**

Advanced College Credit, Spanish (BSU Intermediate Spanish 2) (12)

This course grants college credit for SPAN202 through Ball State University. At this level students will review and expand their grammar skills through the use of readings, oral presentations, advanced compositions, music, poetry, and other authentic resources. Students will incorporate the four skill areas of listening, speaking, reading and writing to improve language usage. This course is taught primarily in Spanish and students are expected to communicate in the target language as well. This course is for SENIORS only. The course costs \$25 per credit hour (3 credit hours) plus the cost of textbooks, which students are responsible for. **Requirements:** Completion of third year Spanish; also a 3.0 cumulative high school GPA (or teacher recommendation). Recommendation: "B" average in Level III.

Level IV Honors (#) Languages:

French IV Honors (2026), Spanish IV Honors (2126), German IV Honors (2046)

Requirement: Level 3 Honors. Recommendation: "B" average in Level III Honors

Level V (##) Languages:

AP / IB French (2032), AP / IB Spanish (2132), AP / IB German (2052)

In this course students will review and expand their grammar skills. Students will incorporate the four skill areas of listening, speaking, reading and writing to improve language usage. Accelerated listening activities, oral presentations, college-level reading passages, poetry, newspapers, magazines, novels, and advanced writing assignments are included in the curriculum. Students will also study the culture of the different countries where the target language is spoken. All communication is in the target language. **It is expected that all students take either the AP or IB exam in their language at the end of the course. Due to the integrated nature of IB curriculum and objectives, optional field trips may take place during this course. Any associated fees will be shared by instructors in advance. Requirement:** Level 4 Honors **Recommendation:** "B" average in Level 4 Honors. AP Exam registration will take place in September & October. Standard AP fees apply.

2156 AMERICAN SIGN LANGUAGE (10, 11, 12) American Sign Language (ASL) is a language used by the majority of Deaf and hard of hearing people in the United States and Canada. By learning ASL, students gain both access to the culture of Deaf America and insights into features of spoken language that are often taken for granted. This course provides a firm foundation in language, linguistics, and culture of ASL and the Deaf Community. ASL is a visual language. Students must train their eyes, body movements, and facial expressions in order to communicate effectively. ASL I exposes the student to basics of signing, vocabulary, sentence structure, and culture.

2158 AMERICAN SIGN LANGUAGE II (11, 12) During the second-year basic skills of active listening, signing, grammar, and culture will be reinforced and expanded. Emphasis is placed on using vocabulary and grammar skills in conversations through signing. The study of the culture of the Deaf Community will continue. **Requirement: Students must have a "C" average in ASL I in order to take ASL II.**

2158 AMERICAN SIGN LANGUAGE III (12) This course continues to focus on the students' non-verbal communication skills at advanced levels of competency. ASL is used exclusively in class as students communicate using more complex structures of language on a variety of topics. This course further emphasizes the development of spontaneous language responsive behaviors through activities designed for this purpose. **Requirement: Completion of ASL 2 with a C average.**

2188 (9, 10, 11, 12) ENGLISH AS A NEW LANGUAGE - This course for Limited-English Proficient (LEP) students is geared toward the enhancement of listening, speaking, reading and writing skills while exposing students to American literature, culture, government and history. **Requirement: Referral based on Home Language Survey, language assessment, and counselor recommendation. While not an English credit, this may serve as W.L. Credit for non-native speakers.**

2190 LANGUAGE FOR HERITAGE SPEAKERS I (9, 10, 11, 12) – This course is designed for heritage speakers of world languages who have demonstrated oral proficiency in Spanish. The purpose of this course is to enable Heritage Language Learners to increase proficiency and bi-literacy in their native language by providing opportunities to improve reading and listening comprehension, as well as writing and grammar skills. Special attention will be given to grammar and vocabulary of the standard language, as well as to the importance of biculturalism and bilingualism in the US today. **This course fulfills a World Language requirement for the Core 40 w/ AHD.**

2192 LANGUAGE FOR HERITAGE SPEAKERS II (9, 10, 11, 12) - Language for Heritage Speakers II builds upon Language for Heritage Speakers I, and is a course designed for heritage speakers of world languages who have demonstrated some degree of oral proficiency. The purpose of this course is to enable Heritage Language Learners to increase proficiency and biliteracy in their native language by providing opportunities to improve reading and listening comprehension, as well as writing and grammar skills. Special attention will be given to grammar and vocabulary of the standard language, as well as to the importance of biculturalism and bilingualism in the United States today. **Requirement: successful completion of Language for Heritage Speaks I or teacher recommendation.**

MULTIDISCIPLINARY COURSES

Multidisciplinary courses are not necessarily categorized into any one discipline. These courses integrate two or more disciplines into one course of study. The courses count as elective credits toward graduation but more importantly these courses can provide study which will expand an individual's educational background.

0500 ** BASIC SKILLS DEVELOPMENT (9, 10, 11, 12) This course is designed for students who have an active IEP and who have demonstrated a need for ongoing instruction in academic skills, social skills, coping skills, and emotional management. Throughout the semester students will establish behaviors and demonstrate knowledge of the following: a) Creating a supportive learning community; b) Developing self-awareness and self-management; c) Building academic strengths and purpose; d) Resolving conflicts and making decisions. **Requirement: Students must have an active IEP.**

0500 ** BASIC SKILLS DEVELOPMENT/READING AND WRITING STRATEGIES (10, 11, 12) This class is designed for students who need support in reading skills and writing. Students will develop skills and strategies to address needs for general education curriculum and graduation exams. **Requirement: Students must have an active IEP**

0500 ** BASIC SKILLS DEVELOPMENT/MATH (10, 11, 12) This class is designed for students who need support in Geometry and Algebra 2 foundational math skills. Students will learn and use specific strategies to enrich their math knowledge in order to apply to general education classes and graduation exams. **Requirement: Students must have an active IEP.**

0520 * PEER TUTORING I / SPECIAL NEEDS (10, 11, 12) Students learn to interact with and tutor students with disabilities allowing them to learn teaching and behavior management techniques and terminology. Throughout the semester, students demonstrate knowledge of the following: a) causes of disabilities; b) values and issues related to the integration of students with disabilities in the school and community; c) career options in the field of special education; d) teaching and behavior management techniques and terminology. **Requirement: Completion of application. The application can be found at <http://goo.gl/forms/Doxp7a4q4S>. A student may earn a maximum of 2 credits in Peer Tutoring I and II.**

0520 * PEER TUTORING II / SPECIAL NEEDS (11, 12) Students learn to interact with and tutor students w/ disabilities allowing them to learn teaching and behavior management techniques and terminology. Throughout the semester, students demonstrate knowledge of the following: a) causes of disabilities; b) values and issues related to the integration of students with disabilities in the school and community; c) career options in the field of special education; d) teaching and behavior management techniques and terminology. **Requirement: Completion of application. The application can be found at <http://goo.gl/forms/Doxp7a4q4S>. A student may earn a maximum of 2 credits in Peer Tutoring I and II.**

0520 ** PEER TUTORING I / ENL (10, 11, 12) Students learn to interact with and tutor students who are English Language Learners, supporting them in their academic studies and acclimatization to American schools. **Requirement: Interested students must get approval from Jim Ziino. A student can earn a maximum of 2 credits in Peer Tutoring.**

0502 ** CADET TEACHING I & II (12) The objective of Cadet Teaching is to interest and encourage college-bound students to enter the teaching profession. This first semester course offers five weeks of in-class preparation and thirteen weeks of field experience. The course gives students information about a career in education as well as providing actual teaching experience in an elementary or intermediate school classroom. Students will be selected on the basis of an application and an interview. Students who have a desire to choose a career working with youth should apply. **Requirement: Completed application and interview; students need their own transportation; students may not take the second semester without successfully completing the first semester. Students are strongly encouraged to take a study hall for travel and extended instructional time with the elementary or intermediate classroom. (Not taking a study hall may limit options for classroom placements.)**

0560 ## * THEORY OF KNOWLEDGE I, IB, SPRING SEMESTER (11,12) Theory of Knowledge (TOK) is a fun, thought-provoking course open to all students. TOK asks them to consider *how* they know what they know about themselves and the world around them. We explore 35 questions like, *are some types of knowledge more useful than others*, and *what role does imagination play in producing knowledge about the world?* Highly conversational, we will use the 35 questions to discuss a wide variety of curious topics like; lunar-landing conspiracies, canceled art, and false memories. Part current events, part critical thinking, and part choose your own adventure, this class asks you to reflect upon how you arrive at your personal conclusions. Our goal is to better understand ourselves, so that we might better respect others in our community, both local and global. **This course is open to all juniors and seniors as a weighted elective and is a requirement for junior IB DIPLOMA candidates. In addition to class discussion, students will participate in share out-group projects and our primary form of assessment is a student journal in the form of a blog.**

0560 ## * THEORY OF KNOWLEDGE II, IB, FALL SEMESTER (12) This follow-up course is the second semester of a year-long course that is the center of the IB Program. This part of the course will continue the conversations started in the previous spring semester but is specifically designed to prepare students for the official IB assessments, the externally assessed TOK essay. A unique feature of this course is that it meets in the fall only. **This course is required for all IB DIPLOMA candidates. Requirement: Successful completion of the first semester of Theory of Knowledge.**

0530 CAREER EXPLORATION – INTERNSHIP (12) The Career Exploration Internship course is a **paid or unpaid work experience** in the public or private sector that provides for workplace learning in an area of student career interest. This could be an experience in which students gain expertise in a specific occupation, or it could be an experience that is designed to expose students to broad aspects of a particular industry or career cluster area by rotating through a variety of worksites or departments. In addition to their workplace learning activities, students participate in (1) regularly scheduled meetings with their classroom teacher, or (2) a regularly scheduled seminar with the teacher for the purpose of helping students make the connection between academic learning and their work-related experiences. Specific instructional standards tied to the career cluster or pathway and learning objectives for the internship must be written to clarify the expectations of all parties.

- Recommended Grade Level: 12
- 1-credit class, semester course
- Students can take 1-3 credits per semester, and it may be taken for multiple semesters
- The course may be taken for additional semesters to allow students to explore additional career areas.
- A minimum of 85 hours of workplace and classroom activities are required for each credit. Students must spend one hour a week on classroom activities
- Counts as a Directed Elective or Elective for all diplomas

5974 WORK BASED LEARNING CAPSTONE – INTERNSHIP (Multiple Pathways) (12) Work Based Learning is designed to provide opportunities for students to explore careers that require additional degrees or certification following high school. The emphasis of the experience is on applying skills developed through instruction and on learning new career competencies at the internship site. The internship is tailored to the unique needs and interests of the student and is considered a high school capstone experience toward fulfillment of the student's future plans. A training agreement will outline the expectations of all parties: the intern, parent/guardian, site supervisor/mentor, internship supervisors, and the school. **This course is for paid internships only** and will include meetings with the internship coordinator.

- Grade Level: 12
- Required Prerequisites: a minimum of 2 courses of introductory and advanced courses related to a student's pathway and to the work site placement
- Credits: 2 semester course, 1-3 credits per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas

5902 INTERDISCIPLINARY COOPERATIVE EDUCATION (12) Interdisciplinary Cooperative Education (ICE) spans all career and technical education program areas through an interdisciplinary approach to training for employment. Time allocations are a minimum of fifteen hours per week of work-based learning and approximately five hours per week of school-based instruction. Additionally, all state and federal laws and regulations related to student employment and cooperative education must be followed. The following two components must be included as part of the course:

1. Related Instruction, that is classroom based, shall be organized and planned around the activities associated with the student's individual job and career objectives in a career cluster area/pathway; and shall be taught during the same semesters as the student is receiving on-the-job training. For a student to become occupationally competent and therefore employable, the related instruction should cover in varying proportions: (a) general occupational competencies, (b) specific occupational competencies, and (c) specific job competencies.
2. On-the-Job Training is the actual work experience in an occupation in any one of the Indiana College and Career Pathways that relates directly to the student's career objectives. On-the-job, the student shall have the opportunity to apply the concepts, skills, and attitudes learned during Related Instruction, as well as the skills and knowledge that have been learned in other courses. The student shall be placed on-the-job under the direct supervision of experienced employees who serve as on-the-job trainers/supervisors in accordance with predetermined training plans and agreements and who assist in evaluating the student's job performance. Students in an ICE placement must be paid in accordance with federal and state student employment and cooperative education laws.
 - Recommended Grade Level: 12
 - Required Prerequisite: Preparing for College and Careers and a minimum of 4 credits in a logical sequence of courses related to the student's pathway and the work site placement
 - Credits: 2 semester course, 2 semesters required, 3 credits per semester, 6 credits maximum
 - Counts as a Directed Elective or Elective for all diplomas

Indiana Certificate of Completion

Course of Study

Effective with the students who enter high school in 2018-19 school year (Class of 2022)

The Course of Study for the Certificate of Completion is a framework for aligning curriculum to grade level standards while meeting the individual goals and transition needs stated in the student’s Individual Education Plan (IEP).

Minimum total 40 credits/applied units: It is expected that these requirements are met through enrollment in a combination of general education courses for credit, modified general education courses in which non-credit applied units are earned and special education courses in which non-credit applied units are earned.

English/Language Arts	8 credits/applied units
	Including a balance of literature, composition, vocabulary, speech/communication
Mathematics	4 credits/applied units
	Including a balance of number sense, expressions, computation, data analysis, statistics, probability, equations and inequalities and personal finance. Student must take a math or applied math course each year in high school.
Science	4 credits/applied units
	Including a balance of physical, earth/nature, life, engineering and technology
Social Studies	4 credits/applied units
	Including a balance of history, civics and government, geography, economics
Physical Education	2 credits/applied units
Health & Wellness	1 credit/applied unit
Employability	10 credits/applied units
	Job exploration, work- or project-based learning experiences, employability skills (mindsets, self-management, learning strategies, social, workplace), portfolio creation, introduction to post-secondary options
	Investigation into opportunities for enrollment in postsecondary programs, work place readiness training to develop employability and independent living skills and instruction in self-advocacy
Electives	7 credits/applied units

Certificate of Completion Transition Portfolio

Students earning a certificate of completion fulfill at least one of the following (aligned with transition goals):

- 1. Career Credential:** Complete an industry-recognized certification, one-year certificate or state-approved alternative
- 2. Career Experience:** Complete project- or work-based learning experience or part time employment
- 3. Work Ethic Certificate:** Earn a Work Ethic Certificate (criteria to be locally determined)
- 4. Other Work Related Activities:** As determined by the case conference committee

Assumptions:

- 1) High Expectations for all students is a shared responsibility.
- 2) General Education courses are accessed whenever appropriate to fulfill the Certificate of Completion course of study.
- 3) Students’ IEP goals are aligned with grade level standards/content connectors that drive curriculum and instruction.
- 4) Communication skills, reading skills, and problem solving skills are integrated into all courses.
- 5) Courses can be repeated with new goals if appropriate; more than four years may be needed for completion.
- 6) All courses are driven by the Transition IEP and individual goals of each student.

CERTIFICATE OF COMPLETION / APPLIED COURSES

1 ST SEMESTER	2 ND SEMESTER
Applied English 9-12 <i>(1 English Unit)</i>	Applied English 9-12 <i>(1 English Unit)</i>
Applied Algebra <i>(1 Math Unit)</i>	Applied Geometry <i>(1 Math Unit)</i>
Applied Digital Apps <i>(1 Employability Unit)</i>	Applied Interactive Media <i>(1 Elective Unit)</i>
Applied Physical Science <i>(1 Science Unit)</i>	Applied Biology 1 (3024A) <i>(1 Science Unit)</i>
Applied Career Information & Exploration <i>(1 Employability Unit)</i>	Applied Career Information & Exploration <i>(1 Employability Unit)</i>
Applied Basic Skills Development <i>(1 Elective Unit)</i>	Applied Basic Skills Development <i>(1 Elective Unit)</i>
Applied Elective Physical Education (APED01) <i>(1 PE Unit)</i>	Applied Elective Physical Education (APED02) <i>(1 PE Unit)</i>

***Students are encouraged to take classes with general education students!
These are not the only classes they are limited to!***

ELA: Applied English 9, 10, 11, 12 *(offered every semester, every year)*

1002 Applied English 9 (9)

Applied English 9 is an integrated English course based on the Indiana Content Connectors for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and communication, focusing on literature and nonfiction within an appropriate level of complexity for each individual student. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to a variety of texts. Students form responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and research tasks when appropriate. Students deliver ability-appropriate presentations with attention to audience and purpose and access, analyze, and evaluate online information.

- *Prerequisites: none*
- *Applied Units: 4 units maximum*
- *Counts as an English/Language Arts Requirement for the Certificate of Completion*

1004 Applied English 10 (10)

Applied English 10 an integrated English course based on the Indiana Content Connectors for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and communication, focusing on literature and nonfiction within an appropriate level of complexity for each individual student. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to a variety of texts. Students form responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and research tasks when appropriate. Students deliver ability appropriate presentations with attention to audience and purpose and access, analyze, and evaluate online information.

- *Prerequisites: none*
- *Applied units: 4 units maximum*
- *Counts as an English/Language Arts Requirement for the Certificate of Completion*

1006 Applied English 11 (11)

Applied English 11, an integrated English course based on the Indiana Content Connectors English/Language Arts in Grades 9-10 and applicable employability skills. This course is a study of language, literature, composition, and communication focusing on literature with an appropriate level of complexity for each individual student. Students analyze, compare and evaluate a variety of classic and contemporary literature and nonfiction texts, including those of historical or cultural significance. Students write narratives, responses to literature, academic responses (e.g. analytical, persuasive, expository, summary), and research tasks when appropriate. Students analyze and create visual information in the form of pictures, graphs, charts, and tables. Students write and deliver grade appropriate multimedia presentations and access online information.

- *Prerequisites: none*
- *Applied units: 4 units maximum*
- *Counts as an English/Language Arts Requirement for the Certificate of Completion*

1008 Applied English 12 (12)

Applied English 12, an integrated English course based on the Indiana Content Connectors English/Language Arts in Grades 9-10 and applicable employability skills. This course is a study of language, literature, composition, and communication focusing on literature with an appropriate level of complexity for each individual student. Students analyze, compare, and evaluate a variety of classic and contemporary literature and nonfiction texts, including those of historical or cultural significance. Students write narratives, responses to literature, academic responses (e.g. analytical, persuasive, expository, summary), and research tasks when appropriate. Students analyze and create visual information in the form of pictures, graphs, charts, and tables. Students write and deliver grade appropriate multimedia presentations and access online information.

- *Prerequisites: none*
- *Applied units: 4 units maximum*
- *Counts as an English/Language Arts Requirement for the Certificate*

Math: Applied Algebra (fall) & Applied Geometry (spring)

2520 Applied Algebra I (9, 10, 11, 12)

Applied Algebra I formalizes and extends the mathematics students learned in the middle grades. Algebra I is made up of five strands: Numbers Sense; Expressions and Computation; Linear Equations; Inequalities and Functions; Systems of Equations and Inequalities and Quadratic and Exponential Equations and Functions. The strands are further developed by focusing on the content of the Algebra content connectors.

- *Prerequisites: None*
- *4 units maximum*
- *Counts as a Math Requirement for the Certificate of Completion*

2532 Applied Geometry (9, 10, 11, 12)

Applied Geometry formalizes and extends students' geometric experiences from the middle grades. These critical areas comprise the Geometry course: Points, Lines, Angles, and Planes; Triangles; Quadrilaterals and Other Polygons; Circles; Transformations; and Three-dimensional Solids. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- *Prerequisites: None*
- *4 units maximum*
- *Counts as a Math Requirement for the Certificate of Completion*

Science: Applied Physical Science (fall) & Applied Biology (spring)

3102 Applied Physical Science (9, 10, 11, 12)

Applied Physical Science is a course in which students develop problem solving skills and strategies while performing laboratory and field investigations of fundamental chemical, physical, and related earth and space science concepts and principles that are related to students' interests and that address everyday problems.

- *Prerequisites: none*
- *Applied Units: 2 units maximum*
- *Counts as an Elective or Science Requirement for the Certificate of Completion*

3024 Applied Biology I (9, 10, 11, 12)

Applied Biology I is a course based on the following core topics: cellular chemistry, structure and reproduction; matter cycles and energy transfer; interdependence of organisms; molecular basis of heredity; genetics and evolution. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation, by designing and conducting investigations guided by theory, and by evaluating and communicating the results of those investigations according to accepted procedures.

- *Prerequisites: none*
- *Applied Units: 4 units maximum*
- *Counts as a Science Requirement for the Certificate of Completion*

Electives (for School Year 2023-2024)

4528 Applied Digital Application and Responsibility (*only offered in fall*)

Applied Digital Applications and Responsibility prepares students to use technology in an effective and appropriate manner in school, in a job, or everyday life. Students develop skills related to word processing, spreadsheets, presentations, and communications software and may use highly specialized or individualized technology or software. Students learn what it means to be a good digital citizen and how to use technology, including social media, responsibly. Students expand their knowledge of how to use digital devices and software to build decision-making and problem-solving skills. Students may be provided with the opportunity to seek industry-recognized digital literacy certifications.

- *Prerequisites: none*
- *4 units maximum*
- *Counts as an Elective or Employability requirement for the Certificate of Completion*

5232 Applied Interactive Media (*only offered in spring*)

Applied Interactive Media prepares students for careers in business and industry working with interactive media products and services; which includes the entertainment industries. This course emphasizes the development and use of digitally generated or computer-enhanced products. Students will develop an understanding of professional business practices including the importance of ethics, communication skills, and knowledge of the “virtual workplace”.

- *Prerequisites: none*
- *12 units maximum*
- *Counts as an Elective or Employability requirement for the Certificate of Completion*

3560 Applied Elective Physical Education (9, 10, 11, 12) (*offered every semester*)

Applied Elective Physical Education, a course based on selected standards from Indiana’s Academic Standards for Physical Education, identifies what a student should know and be able to do as a result of a quality physical education program. The goal of a physically educated student is to maintain appropriate levels of cardio- respiratory endurance, muscular strength and endurance, flexibility, and body composition necessary for a healthy and productive life. Elective Physical Education promotes lifetime sport and recreational activities and provides an opportunity for an in-depth study in one or more specific areas. This course includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. With staff support, students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of fitness and includes self-monitoring. Ongoing assessment may include individual progress and/or performance-based skill evaluation.

- *Prerequisites: none*
- *Applied Units: 8 units maximum*
- *Counts as the Health & Wellness Requirement for the Certificate of Completion*

0500 Applied Basic Skills Development *(offered every semester)*

Applied Basic Skills Development is a multidisciplinary course that provides students continuing opportunities to develop basic skills including: (1) reading, (2) writing, (3) listening, (4) speaking, (5) mathematical computation, (6) note taking, (7) study and organizational skills, and (8) problem-solving skills, (9) employability skills, which are essential for high school achievement and post-secondary outcomes. Determination of the skills to be emphasized in this course is based on Indiana's standards and Content Connectors, individual school corporation general curriculum plans, and the student's Individualized Education Programs (IEP) or other individualized plans.

- *Prerequisites: none*
- *Applied Units: 8 units maximum*
- *Counts as an Employability Requirement, Capstone Course or Elective for the Cert. of Completion*

0522 Applied Career Information and Exploration *(offered every semester)*

Applied Career Information and Exploration provides students with opportunities to learn about themselves including interests, strengths and needed supports while exploring various traditional and nontraditional occupations and careers. Students develop skills in: (1) employability, (2) understanding the economic process, and (3) career decision making and planning. Opportunities are provided for students to observe and participate in various job situations through opportunities such as community-based instruction, internships, mock interviews, and guest speakers. Portfolio and resume development experience and career-related assessments may also be provided to students.

- *Prerequisites: none*
- *Applied Units: 4 units maximum*
- *Counts as an Employability Requirement, Capstone Course or Elective for the Cert. of Completion*

Admission for Hamilton County CTE Program
Ivy Tech Community College-Central Indiana

Ivy Tech Community College of Central Indiana – Hamilton County Campus, in partnership with Hamilton County Schools, will be welcoming high school juniors and seniors to participate in on-campus coursework in three pathways: **Automotive Technology, Information Technology and Welding**. Qualified high school students are able to study advanced level instructional areas not offered at their present school and earn high school and college credits while attending classes at our Hamilton County campus. Specific policies and requirements are listed below.

Requirements for Participation

- 1) Students must complete an online CTE Application: (www.ivytech.edu/cte-app). Students must select "Noblesville" as the Campus and "Courses Only" as the program.
- 2) Students must complete the Early Admission Request Form (second page of this document) with all required signatures, including parent/legal guardian and school principal/guidance counselor. The Admission Request Form is returned to the Hamilton County Campus for submission to Ivy Tech Community College.
- 3) Students must provide proof of college level academic skills (**for Information Technology**) in one of three ways:
 - By providing a high school transcript at the end of the sophomore year (4 academic semesters) with a cumulative GPA of 2.6 for Core 40 diploma.
 - By providing official copies of college boards (PSAT, SAT, or ACT scores). Minimum scores for early admission are: PSAT 46+(taken prior to October 2015) in each reading, writing, and mathematics; SAT 460+ (taken prior to 2016) in each reading, writing, and mathematics; ACT scores 18+ in reading, 17+ in English, and 18+ in math; PSAT (taken after October 2015) 26+ writing, 25+ reading, 24.5 math; SAT (taken 2016 and forward) 27+ writing and language, 25+ reading, 500+ math.
 - By completing Accuplacer. To sign up for Accuplacer go to: <https://www.ivytech.edu/assessment/index.html>. Your high school may be able to provide Accuplacer testing for you.

Special Notes:

Career and Technical Education (CTE) students are enrolled into courses that are college level courses and instructors teach all courses at that level.

- CTE courses establish a permanent college record. Failure or withdrawal from college courses can have an impact on future financial aid eligibility.
- **Students who do not receive a passing grade on the first course may not continue with the program.**
- CTE courses taken for college credit may be used to meet high school graduation requirements; however, this determination is solely made by the student's school.

**Hamilton County Career and Technical Education (CTE)
Admission Request Form**

Name of Applicant _____ Date of Birth _____

Home Address _____

City _____ State _____ Zip _____

Email _____ Phone _____

High School _____

High School Counselor _____

To be signed by the applicant:

I elect to participate in the Hamilton County CTE Program for High School Students. I authorize the release of information between Ivy Tech Community College and my high school and the respective staff of each, as well as, to my parents/legal guardians(s) for the purpose of research, evaluation, financial assistance, student status and/or transfer opportunities. I understand that I will receive a final grade for courses taken. **All grades will be placed on my Ivy Tech Community College permanent record.** I further understand that receipt of an unsatisfactory grade(s) in any course may negatively impact my future eligibility for student financial aid and assistance.

Applicant Signature _____ Date _____

To be signed by the Parent or Legal Guardian:

I understand that the decision to accept college coursework as replacement for high school coursework is determined by the high school. A permanent college transcript will be produced following the completion of the Ivy Tech course(s).

Parent/Guardian Signature _____ Date _____

To be signed by the Guidance Counselor:

I have attached an official copy of the student's high school transcript and current PSAT/SAT/ACT scores (if applicable).

Counselor's Signature _____ Date _____

Program of Interest (please check one):

Automotive Technology ___ **Information Technology** ___ **Welding** ___

**Return this form to your School Counselor, or email to kiglio@ivytech.edu, or fax to
317-916-7975.**

You may also bring this form to the Hamilton County Campus Main Office.

Ivy Tech Community College-Hamilton County Campus
300 North 17th Street, Noblesville, IN 46060
317-921-4300