

# Westfield High School

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**2019-2020**

## COURSE CATALOG

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## **WHS VISION & MISSION STATEMENT**

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### **WESTFIELD HIGH SCHOOL VISION**

Westfield High School will become a world-class learning organization focused on continuous quality growth for all. We will produce graduates who are respectful, responsible, compassionate, hardworking, honest citizens. WHS graduates will be learners and leaders in a diverse world.

### **WESTFIELD HIGH SCHOOL MISSION**

We desire to move Westfield High School from a high performing school to a top performing school academically, athletically, and in extra-curricular activities. We will be purposeful in developing practices and habits that maintain a safe and student centered culture.

## **WWS VISION & MISSION STATEMENT**

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### **WESTFIELD WASHINGTON SCHOOLS VISION**

Westfield Washington Schools will provide rigorous and engaging experiences to prepare all children—socially, emotionally, and academically—for their future.

### **WESTFIELD WASHINGTON SCHOOLS MISSION**

To be an exemplary learning organization focused on collaboration, innovation, and continuous growth for all.

## LETTER FROM THE SCHOOL COUNSELING CENTER

Dear Westfield High School Student and Parent/Guardian:

It is time to begin considering your course selections for the 2019-2020 school year. This is a very important process, as many things will be impacted by the choices you make. The courses you take will help determine how well prepared you will be for the many opportunities during and after high school. We ask that you take time to consult with your parents, teachers, friends and counselor as you make these important choices. Never again will the cost of education be as inexpensive, so we encourage you to take full advantage of the numerous opportunities at WHS. Finally, as a result of your course selections many decisions regarding the school's master schedule will be made by the school, so make sure you have thought through your choices and are committed to your selections.

The specific Westfield graduation requirements for the diploma options are listed on the following pages to help you plan and meet your goals. It is your responsibility to make sure you understand these requirements and earn the appropriate grades to achieve your desired diploma. Please be sure to ask your school counselor if you have questions regarding this information.

After making course selections, the counselors will meet with every student to review their requests. As it is our intent to include the parent in the student's course selections, final schedules will be distributed in late April for the student's and parent's final review and approval. If there are any remaining changes to be made, the student must turn in a signed **Schedule Change Form** to the Counseling Center prior to **May 20, 2019**. Good luck with your course selections!

Sincerely,

*Westfield High School Counseling Center*

# WESTFIELD HIGH SCHOOL SCHEDULE CHANGE POLICY

Students should submit all Schedule Change Request forms by May 17, 2019. **After the Schedule Change deadline, a student may only change their schedule under specific circumstances.**

**Students wishing to change their schedule based on the allowances listed below are strongly encouraged to do so before the start of the trimester in which they wish to make the change. Courses started more than five days after the trimester begins may not be taken for credit.**

**A counselor may adjust a student's schedule, after the Schedule Change Deadline, for the following reasons:**

- The student must retake a failed class in order to meet graduation requirements.
- The student no longer meets the pre-requisite for a class.
- A student wishes to drop an elective course to take an academic course in one of the five core areas: English, math, science, social studies and world language; or a student is moving from a regular academic or elective class into an honors, AP or dual credit class.
- A student wishes to drop an elective to take another elective course. **Academic classes in the five core areas may not be dropped to take an elective course.**
- A senior wishes to take a course that would pertain to his or her chosen college major or commitment.
- In cooperation with the state of Indiana's career and technical education initiatives, a senior may choose to replace an elective course with an Independent Co-op, Cadet Teaching, Career Exploration Internship or Service Leadership course.
- A senior chooses to add a course to replace a Senior Seminar. **Seniors are not allowed to drop classes for a Senior Seminar release period after the May 17, 2019 deadline.**

**Students may not drop a course in-progress due to poor grades or attendance. Once a trimester has begun, the only changes which will be made will be based on the following:**

- A teacher has recommended a student's level in a particular class be moved up or down based on the student's academic performance. For example, a student may be moved from regular English to Honors English based on a teacher recommendation.
- Medical reasoning with documentation explaining why the student cannot continue in the course. In this case, the counselor, student and parent will determine the best placement for the student for the remainder of the trimester.

## NEW COURSES FOR 2019-2020

Intro to 3D Art

Computer Science III– Cybersecurity

Computer Science III-Software Development

Information Technology Support

Film Literature

Poetry

CCR Bridge: Literacy Ready

Genres in Literature, Science Fiction & Adventure

Developmental Reading

Intro to Housing & Interior Design

Culinary Arts & Hospitality Management

Innovation by Design

CVS Pharmacy Tech Externship

Industrial Technical Maintenance

Peer Tutoring - English Learners

CCR Bridge: Math Ready

Jurassic Paleontology

AP Spanish Literature & Culture

Medical Spanish I and II

Advanced Technical Theatre

## COLLEGE ENTRANCE REQUIREMENT INFORMATION

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Students are advised that enrolling in rigorous college preparatory courses in all four years of high school is the best plan in preparing for college. While college admissions committees act differently each year according to the quantity and quality of applicants, and according to other special circumstances, the uniform expectation is to emphasize academic subjects — English, Math, Science, Social Studies and World Language. Most colleges will evaluate a student's application and high school transcript not only on the grades presented, but also on the strength of the courses the student has taken. Indiana colleges and universities typically require applicants to have met all Indiana Core 40 requirements. Many four year colleges now require two years of world language. Indiana colleges have varying GPA requirements. Students interested in being considered for admission to highly competitive colleges and universities are encouraged to take advantage of available honors, Advanced Placement (AP) and dual credit Advance College Project (ACP) courses as well as the Academic Honors Diploma.

### ADVANCED PLACEMENT & DUAL CREDIT

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The **Advanced Placement (AP) Program** is a cooperative educational endeavor of secondary schools, colleges and the College Board. Research shows that students enrolling in challenging academic courses are far better prepared for serious academic work when entering college. Most colleges and universities grant credit and/or advanced placement to students who perform satisfactorily on AP examinations. Each May the **College Board AP** examinations are offered at Westfield High School. All students enrolled in AP courses will take the corresponding AP exam, which is approximately \$94.

**Dual Credit Courses** are courses that can be taken for WHS credit only, or for high school AND college credit. There is no minimum GPA requirement or additional cost to take the courses for WHS credit only. The following additional requirements are only for students wishing to earn college credit as well.

**The Advance College Project (ACP)** is a national program offered through **Indiana University**. IU has a minimum GPA requirement of 2.7 to register for college credit. Tuition is \$25 per credit hour and paid directly to IU. Students who earn IU credit in these courses will have a separate IU transcript. If enrolling at another college or university, students should present their IU transcript for evaluation for possible transfer credit. Be sure to check with the college or university to confirm they will award transfer credit.

**IVY Tech Dual Credit Courses** - Students must meet the standardized exam cut off score or minimum GPA in order to take the courses for IVY Tech credit. Students will enroll with IVY Tech in the course in the first few days of class at no cost to the student.

**Butler University Dual Credit Course** - Students must have a 3.0 minimum GPA and permission of instructor and parent to enroll. There is a fee of \$195 (\$65 per credit hour) payable to Butler University if the student is taking the course for Butler credit.

## WESTFIELD HIGH SCHOOL BRING YOUR OWN TECHNOLOGY (BYOT)

Westfield High School is developing an ongoing Bring Your Own Technology (BYOT) curriculum in many classes. BYOT classes have students bring a laptop, notebook, or other electronic device to their classes, as technology is implemented on a regular basis. If a student does not have the capability of bringing their own technology, they may rent a device from Westfield High School during that BYOT class period.

Note: iPads can be used; however with some curriculum and online textbooks that require Adobe, issues have been encountered. Laptops and notebooks are the recommended, but not the required, devices at Westfield High School. Below is a list of those classes that have formally implemented a BYOT curriculum:

ACP Introduction to Business	AP Macroeconomics	French IV
ACP US Government	AP Microeconomics	Geography and History of
ACP US History	AP Physics	the World Honors
Advanced Accounting	AP Physics C	German III
Agricultural Biotechnology	AP Spanish	Intro to Accounting
Anatomy and Physiology	AP US Government	Physics I
AP Art History	AP US History	Sociology
AP Biology	AP World History	Spanish III
AP Chemistry	Astronomy	Spanish III Honors
AP Environmental Science	Biology Honors	Spanish IV
AP European History	Chemistry Honors	Student Media—Yearbook
AP French	Creative Writing	Zoology
AP German	French III	
AP Human Geography	French III Honors	

There may be more classes coming online for the school year. WHS will have an addendum for these classes prior to students beginning the scheduling process. A letter with more information will be mailed home in the summer to all students enrolled in a BYOT class.

All classes that are BYOT classes will have the following notation listed under the course title:

**This is a BYOT class**

**ADVANCED PLACEMENT COURSES :** All AP courses receive a full point weight for a C– or higher. We offer the following AP courses at Westfield High School:

<b>AP Courses Taught at Westfield High School</b>	<b>Number of Trimesters/ HS Credits</b>	<b>Grade Level</b>
AP Art History	3	10, 11, & 12
AP Biology	3	11 & 12
AP Calculus AB	3	11 & 12
AP Calculus BC	3	12
AP Chemistry	3	11 & 12
AP Computer Science A	2	10, 11 & 12
AP Computer Science Principles	2	10, 11, & 12
AP English Language & Composition	3	11 & 12
AP English Literature & Composition	2 or 3	12
AP Environmental Science	3	10, 11 & 12
AP European History	3	10, 11 & 12
AP French	3	12
AP German	3	12
AP Human Geography	1	9, 10, 11 & 12
AP Economics (Micro/Macro)	3	11 & 12
AP Macroeconomics	2	11 & 12
AP Microeconomics	2	11 & 12
AP Music Theory & Composition	2	10, 11 & 12
AP Physics I	3	9, 10, 11, & 12
AP Physics C (Mech. & Elect/Mag)	3	11 & 12
AP Psychology	2	10, 11 & 12
AP Research	2	12
AP Seminar (with AP Language)	3	11 & 12
AP Spanish Language	3	11 & 12
AP Spanish Literature	3	11 & 12
AP Statistics	2	10, 11 & 12
AP Studio Art 2-D Design & Drawing	3	11 & 12
AP Studio Art Photography	1	10, 11, & 12
AP Studio Art 3-D	3	11 & 12
AP U.S. Government	2	11 & 12
AP U.S. History	3	11 & 12
AP World History	3	10, 11 & 12



## DUAL CREDIT CLASSES Taken at Westfield High School

### ACP - Indiana University Dual Credit Classes

WHS Course	Indiana University Course Title and Number	High School Credits	College Credits
ACP Brief Survey of Calculus	M 119 Brief Survey of Calculus	2	3
ACP Comp	W 131 Reading, Writing, and Inquiry	1	3
ACP Finite Math	M 118 Finite Mathematics	2	3
ACP Government	POLS Y 103 Introduction to American Politics	1	3
ACP Intro to Business	BUS X100 Business Administration: Introduction	1	3
ACP Speech	P 155 Public Speaking	1	3
ACP US History	H 105 and H 106 American History I and II	2	6

WHS Courses	Ivy Tech Course Number	Ivy Tech Course Title	HS Credits	College Credits
Construction Trades I	BCTI 100, 101 & 102	Intro to Construction Technology, Intro to Carpentry 1 & 2	2	9
Construction Trades II	BCTI 103 & 104	Carpentry Framing and Finishing, Part 1 and 2	2	6
Intro to Adv Manufacturing & Log	MPRO 100 & 106	Introduction to Plant Floor and CNC; Intro to Workplace Safety	2	6
Advanced Manufacturing	MPRO 101, 122 & 201	Introduction to Print Reading ; Mechanatronics Electrical Systems; Lean Mftg	2	9
Intro to Engineering Design (IED)	PLTW DESN 101 & 113	Intro to Design Technology; 2D Computer Aided Design	2	6
Princ of Engineering (POE) - PLTW	PLTW DESN 104	Mechanical Graphics	2	3
Civil Engineer and Arch (CEA) PLTW	PLTW DESN 105	Architectural Design I	2	3
Intro to Accounting	ACCT 118	Financial Concepts for Accounting	2	3
Principles of Marketing	MKTG 101	Principles of Marketing	2	3
Health Science Ed II: Nursing (CAN)	HLHS 101 & 107	Medical Terminology and CNA Preparation	2	3
Introduction to Tourism	HOSP 114 & 171	Introduction to Hospitality; Principles of Event Management	1	6
Tourism and Hotels	HOSP 215 & 272	Front Office; The Tourism System	1	6
Intro to Culinary Arts and Hospitality	HOSP 101	Sanitation and First Aid	2	3
College Algebra	MATH 136	College Algebra	2	3
Emergency Medical Services (EMS)	HSPS 125, PARM 102, HLHS 101	First Responder, Emergency Medical Technician, Medical Terminology	6	13.5

### Butler University Dual Credit

WHS Courses	Butler Course Number	Butler Course Title	HS Credits	College Credits
Cadet Teaching	ED403	Workshop in Education: Future Educators	2	3

### J. Everett Light Career Center and Advanced Technical Education through IVY Tech - Hamilton Co.

There are several career-based programs through JEL and IVY Tech that students can elect to take for both high school and college credits. These programs are offsite, and vary in the number of college credits that students can earn. Please see the respective sections in the course book for more details.

## HONORS COURSES

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The following Honors courses will receive a half point weight for students that earn a C- or higher:

English 9-11 Honors

Algebra II Honors

Biology I Honors

Spanish I-III Honors

Geometry Honors

Chemistry I Honors

French I-III Honors

Pre-Calculus Honors

Geography & History of the  
World I and II Honors

All **Project Lead the Way** classes in Engineering, and the 2nd through 4th year of the Biomedical Pathways classes are Honors Level Classes.

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## ISTEP+: GRADUATION QUALIFYING EXAMS

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Beginning in 2016-17, the ISTEP+ Grade 10 English/Language Arts and Mathematics tests replace the End of Course Assessments in Algebra I and English 10 as the graduation requirement. Every Indiana student in the graduating class of 2019 - 2022 must demonstrate mastery of the Indiana Academic Standards measured by the ISTEP+ Grade 10 English/Language Arts and Mathematics assessments. The ISTEP+ Grade 10 Math Assessment is based on standards adopted in 2014; the Grade 10 English Assessment is based on standards adopted in 2014.

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## NCAA ELIGIBILITY REQUIREMENTS

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For students entering a NCAA Division I school, the number of required full-year core courses is 16 (32 credits). The 16 units (32 credits) must include 4 years of English, 3 years of Math (Algebra I or higher), 2 years of Natural/Physical Science, 1 year of additional English, Math or Science, 2 years of Social Science, and 4 years of additional courses from any of the above areas or from World Language. Other requirements include minimum SAT Reasoning and ACT test scores that are determined by the student's cumulative GPA in core classes.

Prospective student-athletes should register with the eligibility center by their junior year of high school. Specific information about eligibility for all NCAA divisions can be found on the NCAA Eligibility Center website at [www.ncaaeligibilitycenter.org](http://www.ncaaeligibilitycenter.org). Information on recruiting and eligibility can also be found on the NCAA website at [www.ncaa.org](http://www.ncaa.org).

# WESTFIELD HIGH SCHOOL AND INDIANA

## GRADUATION REQUIREMENTS

### CORE 40 DIPLOMA

Core 40 is the minimum diploma a student must earn to be considered for admission to a four year college in Indiana. **Students may earn the Core 40 by earning 42 credits and completing the following requirements:**

<b>English</b>  <b>8 Credits</b>	English 9 or English 9 (Honors)	2 credits
	English 10 or English 10 (Honors)	2 credits
	English 11 or English 11 (Honors)	2 credits
	<b>OR</b> AP English Lang. & Comp/AP Seminar	3 credits
	English 12	2 credits
	<b>OR</b> English 12 may be replaced with any two of the following electives:	
	Contemporary Literature	1 credit
	Composition ACP	1 credit
Debate	1 credit	
Creative Writing	1 credit	
Literary Interpretation ACP	1 credit	
Poetry	1 credit	
Speech or ACP Speech	1 credit	
Film Literature	1 credit	
<b>OR</b> English 12 may be completely replaced with any of these classes:		
AP English Lang. & Comp.	3 credits	
AP Research	2 credits	
AP English Lit. & Comp.	2 or 3 credits	
<b>Math</b>  <b>6 Credits</b>	Algebra I	2 credits
	Geometry or Geometry Honors	2 credits
	Algebra II or Algebra II Honors	2 credits
	Students who take Algebra I in middle school must complete Geometry and Algebra II at the high school level and must earn two additional math credits beyond Algebra II. All students must take a math or quantitative reasoning course each year in high school	
<b>Science</b>  <b>6 Credits</b>	Biology I or Biology Honors or AP Biology	2-3 credits
	Integrated Chemistry/Physics (ICP),	2 credits
	Chemistry I or Physics I	
	Additional Core 40 Science Courses	2 credits
<b>Social Studies</b>  <b>6 Credits</b>	U.S. History or ACP US History	2 credits
	<b>OR</b> AP U.S. History	3 credits
	U.S. Government or ACP U.S. Government	1 credit
	<b>OR</b> AP U.S. Government	2 credits
	Economics	1 credit
<b>OR</b> AP Micro/Macro Economics	2 or 3 credits	
Two credits in World History, Geography History of the World or AP World History		2 or 3 credits
<b>PE/Health</b>  <b>4 Credits</b>	PE I & PE II	2 credits
	Health	1 credit
	Advanced Health <b>OR</b> Elective PE	1 credit
<b>Directed Electives</b>  <b>12 Credits</b>	World Languages, Fine Arts, Business, Computers, etc.	5 credits
	Seven additional electives in any area	7 credits

## CORE 40 with ACADEMIC HONORS DIPLOMA

The **Core 40 with Academic Honors Diploma** is a rigorous diploma that a student may earn by meeting specific criteria established by the Indiana State Board of Education. The student must complete all of the requirements for a Core 40 diploma, earn a **minimum of 47 credits**, and must also:

- Earn 2 additional Math credits beyond Algebra II (Pre Calculus or AP Statistics)
- Earn 6 or 8 credits in World Languages (3 years of one language or 2 years of 2 different languages, including the year-long World Language credits received in middle school.)
- Earn 2 Fine Arts credits (Art, Music, Theatre, or Yearbook)
- Earn a grade of C– or above in all courses that will count towards the diploma
- Have a grade point average of B (3.0) or above at graduation

**AND Complete one of the following:**

- Complete two Advanced Placement courses and their corresponding AP exams
- Earn 6 verifiable transcribed college credits in dual credit courses from the approved dual credit list.
- Complete one Advanced Placement course (2 credits) and its corresponding AP exam, and a minimum of 3 verifiable transcribed college credits from the approved dual credit list.
- Earn a combined score of 1250 or higher on the SAT, and a minimum score of 590 on the Evidence Based Reading and Writing section and a 560 on the Math section .
- Earn an ACT composite score of 26 or higher and complete the written section.

## CORE 40 with TECHNICAL HONORS DIPLOMA

The **Core 40 with Technical Honors Diploma** is a technical diploma that a student may earn by meeting specific criteria established by the Indiana State Board of Education. The student must complete all of the requirements for a Core 40 diploma, earn a **minimum of 47 credits** and must also:

- Complete all requirements for Core 40.
- Earn 6 credits in the college and career preparation courses in a state-approved College and Career Pathway and one of the following:
  1. State approved, industry recognized certification or credential, *or*
  2. Pathway dual credits from the approved dual credit list resulting in 6 transcribed college credits.
- Earn a grade of C- or above in courses that count towards the diploma.
- Have a grade point average of B (3.0) or above at graduation
- Complete one of the following:
  - A. Any one of the options (A-F) of the Core 40 with Academic Honors
  - B. Earn the following scores or higher on WordKeys; Reading for Information– Level 6, Applied Mathematics– Level 6, and Locating Information– Level 5.
  - C. Earn the following minimum score(s) on Accuplacer: Writing 80, Reading 90, Math 75
  - D. Earn the following minimum score(s) on Compass; Algebra 66, Writing 70, Reading 80.

# INDIANA GENERAL DIPLOMA

To graduate with less than a Core 40 diploma, the following formal opt-out process must be completed:

- The student, the student's parent/guardian, and the student's counselor meet to discuss the student's progress.
- The student's career and course 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 requirements for a general diploma and the career/academic sequence the student will pursue is determined. Students may earn the General Diploma by earning 42 credits and completing the following requirements:

<b>ENGLISH</b>  <b>8 Credits</b>	English 9	2 credits
	English 10	2 credits
	English 11	2 credits
	English 12	2 credits
	OR English 12 may be replaced with two of the following electives: Contemporary Literature    1 credit    Composition ACP    1 credit Creative Writing    1 credit    Literary Interpretation ACP    1 credit Speech    1 credit    Speech ACP    1 credit	
<b>MATH</b>  <b>4 Credits</b>	Must complete Algebra I	2 credits
	Additional Math course	2 credits
<b>SCIENCE</b>  <b>4 Credits</b>	In addition, 2 credits of a math or Quantitative Reasoning (QR) Course is required during the junior or senior year. QR courses do not count as math credit.	
	Biology I    2 credits Other Science Credits    2 credits <b>At least one credit must be from a Physical Science or Earth and Space Science course</b>	
<b>SOCIAL STUDIES</b>  <b>4 Credits</b>	U.S. History I & II	2 credits
	U.S. Government	1 credit
<b>PE/HEALTH</b>  <b>4 Credits</b>	One additional Social studies credit	1 credit
	PE I and PE II	2 credits
<b>DIRECTED ELECTIVES</b>  <b>12 Credits</b>	Health	1 credit
	One additional PE or Health elective	1 credit
<b>COLLEGE AND CAREER PATHWAY COURSES</b>	World Languages, Fine arts, Business Computers, etc.	5 credits
	Seven additional electives in any area	7 credits
<b>COLLEGE AND CAREER PATHWAY COURSES</b>	Selecting electives in a deliberate manner to take full advantage of college and career exploration and preparation opportunities.	
		6 credits

# WESTFIELD HIGH SCHOOL GRADUATION PATHWAYS

## Graduation Checklist—Class of 2023 and Beyond

Students must satisfy **all three** of the following Graduation Pathway Requirements by completing **at least one** of the associated Graduation Pathway Options.

Graduation Pathway Requirements	Graduation Pathway Options
<input type="checkbox"/> <b>High School Diploma</b> Meet the statutorily defined diploma credit and curricular requirements General _____ Core 40 _____ Core 40 with AHD _____ Core 40 with THD _____	
<input type="checkbox"/> <b>Learn and Demonstrate Employability Skills</b> Students must complete at least one of the Graduation Pathway Options	<p><u><a href="#">Project-Based Learning Experience</a></u>: Working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge. Students engage in a rigorous, extended process of asking questions, finding resources, and applying information. Students often make work public by explaining, displaying, and/or presenting it to people beyond the classroom. This can include completion of a research project, completion of a course capstone, an AP Capstone Assessment, or another experience as approved by the State Board of Education.</p> <p>Description: _____</p> <p>Verification: _____</p> <p><u><a href="#">Service-Based Learning Experience</a></u>: Integrates meaningful service to enrich and apply academic knowledge, teach civic and personal responsibility, and strengthen communities. This can 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 another experience as approved by the State Board of Education.</p> <p>Description: _____</p> <p>Verification: _____</p> <p><u><a href="#">Work-Based Learning Experience</a></u>: Reinforces academic, technical, and social skills learned in the classroom through collaborative activities with employer partners, allowing students to apply classroom theories to practical problems, explore career options, and pursue personal and professional goals. This can include completion of a course capstone, completion of an internship, obtaining the Governor's Work Ethic Certificate, employment outside of the school day, or another experience as approved by the State Board of Education.</p> <p>Description: _____</p> <p>Verification: _____</p>
<input type="checkbox"/> <b>Postsecondary-Ready Competencies</b> Students must complete at least one of the Graduation Pathway Options	<p>Honors Diploma _____ AHD _____ THD _____ GPA _____ Credits _____</p> <p>ACT College Ready Benchmarks (18 in English or 22 in Reading and 22 in Math or 23 in Science) English _____ or Reading _____ and Math _____ or Science _____</p> <p>SAT College Ready Benchmarks (480 in EBRW, 530 in Math) EBRW _____ Math _____</p> <p>ASVAB (minimum score of 31) AFQT score _____</p> <p>State and Industry Recognized Credential or Certification _____</p> <p>State, Federal, or Industry Recognized Apprenticeship or Co-Op _____</p> <p>CTE Concentrator (earn C- average in at least 6 high school credits in career sequence) _____</p> <p>_____ Total Average Grade _____</p> <p>AP/Dual Credit** (earn C- average in at least 3 courses) _____ Total Average Grade _____</p> <p>AP Exam scores _____</p> <p>Locally Created Pathway that earns approval of State Board of Education _____</p>

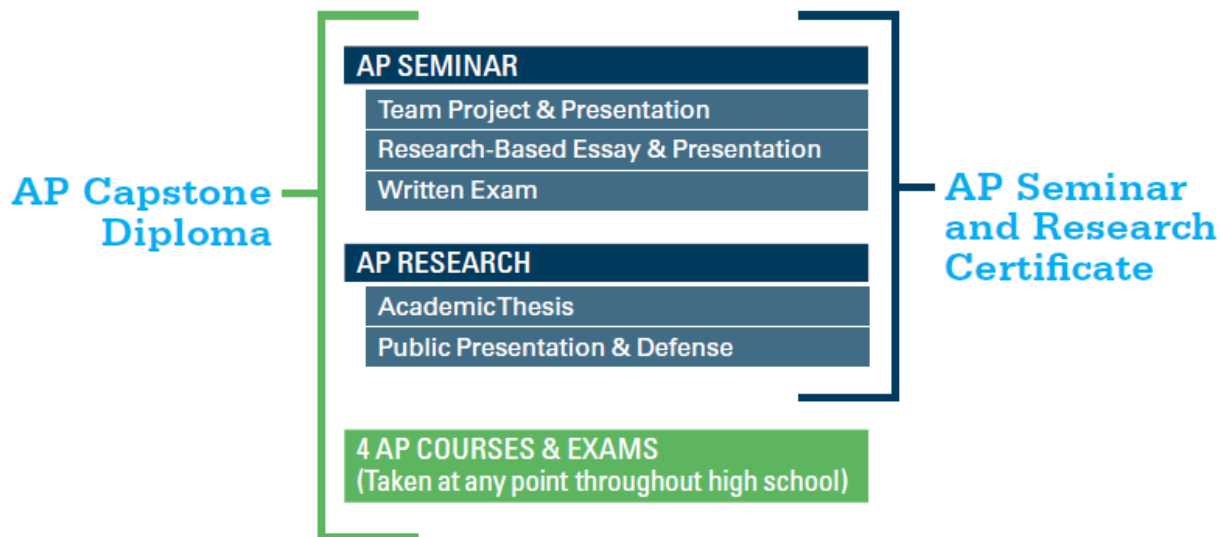
\*\*At least one AP/Dual Credit course must be in a core content area (e.g. English, math, science, or social studies). Students must take any corresponding AP exams for their courses. A score of 3 or higher on an AP exam may satisfy the C- requirement for a particular course.

## AP CAPSTONE DIPLOMA

The **AP Capstone Diploma** is an innovative, new, and prestigious diploma program that gives students an opportunity to apply critical thinking, collaborative problem solving, and research skills in a cross-curricular context. The Class of 2016 was the first class of WHS with the opportunity to earn this high-level, nationally recognized diploma.

Students who are motivated and prepared for college-level coursework are best suited for the program, but the program benefits those students who show potential for AP coursework but have not yet enrolled in AP courses. Students should demonstrate curiosity about real world issues, a willingness to take intellectual risks, and a dedication to acquiring the skills that colleges and universities value – critical inquiry, analysis, and research. In short, AP Capstone students have an interest in becoming curious, independent, and collaborative scholars.

### Basic Requirements for AP Capstone Diploma



All students interested in pursuing the AP Capstone Diploma at WHS are required to select AP Seminar and AP English Language and Composition as their grade 11 English courses.

For more information you may visit [www.collegeboard.org/apcapstone](http://www.collegeboard.org/apcapstone).

## MESSAGE FROM THE INDIANA DEPARTMENT OF EDUCATION

All students earning a Core 40, Academic Honors Diploma or Technical Honors Diploma must take a mathematics or a Quantitative Reasoning course **each year** they are enrolled in high school. The Indiana Department of Education defines a Quantitative Reasoning course as a class that advances a student's ability to apply mathematics in real world situations and contexts and that deepens a student's understanding of high school mathematical standards. Listed below are the WHS courses that will fulfill the Quantitative Reasoning requirements:

**Qualifying Quantitative Reasoning Courses at WHS**

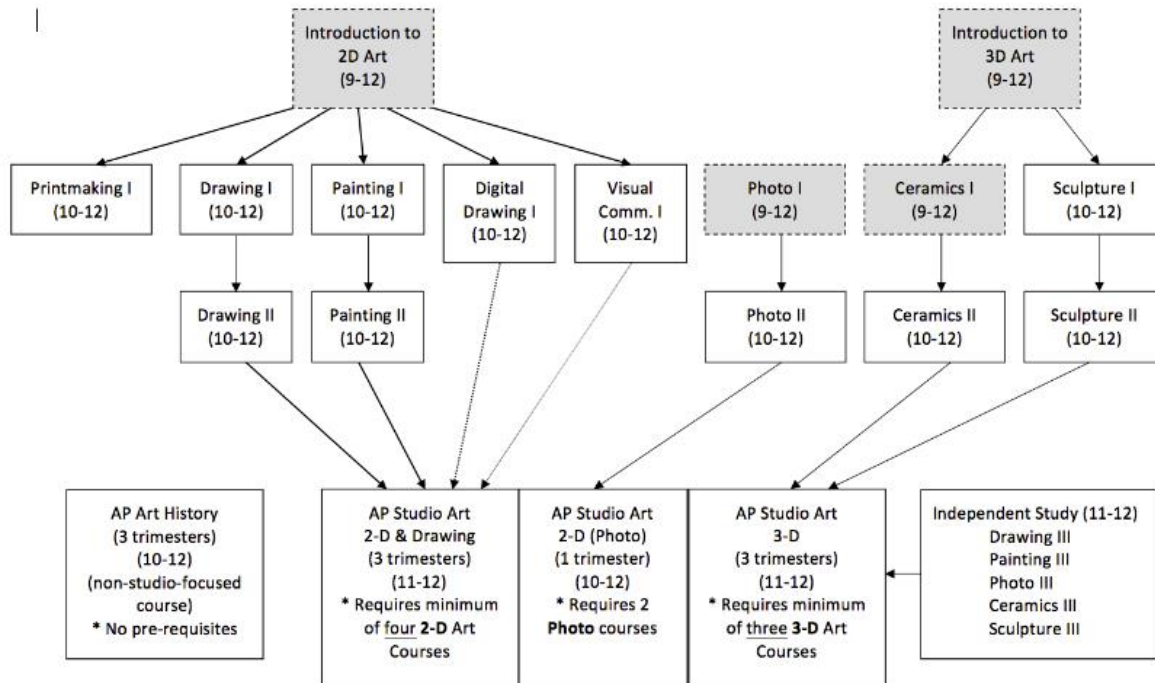
Course Title	Department	Approved for All Diplomas
Accounting	Business, Marketing and Information Technology	✓
Aerospace Engineering	Engineering and Technology	✓
Algebra I	Mathematics	✓
Algebra II	Mathematics	✓
AP Biology	Science	✓
AP Calculus AB	Mathematics	✓
AP Calculus BC	Mathematics	✓
AP Chemistry	Science	✓
AP Computer Science A	Business, Marketing and Information Technology	✓
AP Computer Science Principles	Business, Marketing and Information Technology	✓
AP Environmental Science	Science	✓
AP Macroeconomics	Social Studies	✓
AP Microeconomics	Social Studies	✓
AP Physics	Science	✓
AP Statistics	Mathematics	✓
Business Math	Business, Marketing and Information Technology	✓
Chemistry I	Science	✓
Civil Engineering and Architecture	Engineering and Technology	✓
Economics	Social Studies	✓
Engineering Design and Development	Engineering and Technology	✓
Geometry	Mathematics	✓
Integrated Chemistry Physics (ICP)	Science	✓
Personal Financial Responsibility	Business, Marketing and Information Technology	✓
Physics I	Science	✓
Pre-Calculus	Mathematics	✓
Principles of Engineering	Engineering and Technology	✓
Probability and Statistics	Mathematics	✓
Advanced Accounting	Business, Marketing and Information Technology	✓
Computer Science I– Game Programming I	Business, Marketing and Information Technology	✓
Computer Science– Special Topics– Game Programming II	Business, Marketing and Information Technology	✓
Computer Science I- Pre-AP Java Programming	Business, Marketing and Information Technology	✓
Computer Science II– C++ Programming	Business, Marketing and Information Technology	✓



## ART COURSE MAP

**These course recommendations are for the serious art student who wants to concentrate on an art, architecture, or a photo educational plan at the high school level.**

**These are also recommended courses to take before entering college.**



Students in any Visual Arts Course engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality works. In the areas of:

**Art History:** students search for meaning, significance, and direction in two-dimensional or three-dimensional works of art and artifacts through an in-depth biographical study and analysis of artwork from specific artists and time periods;

**Art Criticism:** students search for meaning, significance, and direction in two-dimensional or three-dimensional works of art by critically examining current works and artistic trends, and exploring art criticism as a method of identifying strengths and limitations in student artwork;

**Aesthetics:** students search for meaning, significance, and direction in two-dimensional or three-dimensional works of art and artifacts by attempting to respond to their personal questions about the nature of art, reflecting on their own changing definitions in relation to the art community in general; and

**Production:** students search for meaning, significance, and direction in their own work by producing works of art in a variety of two-dimensional or three dimensional media. At this level, students produce works for their portfolios that demonstrate a sincere desire to explore a variety of ideas and problems.

# ART

## INTRODUCTION TO TWO-DIMENSIONAL ART

- A course for grades 9, 10, 11, & 12
- A one credit course
- A Core 40 and AHD course

This course is designed to give students a foundation of various art skills needed to take advanced art courses. The primary focus of this course will include the elements and principles of art, basic drawing skills, and painting techniques. Students will explore their own problem solving techniques and styles while working with a variety of media in the development of 2D works. A strong emphasis will be placed on the Elements and Principles of Art. Throughout the course students will gain knowledge in the areas of art history, art criticism, aesthetics, and art production. The combination of these four areas will allow the students to gain a well-rounded foundation and appreciation of art.

## DRAWING I

- Prerequisite: A grade of C or better in Introduction to Two-Dimensional Art
- A course for grades 10, 11, & 12
- A one credit course
- A Core 40 and AHD course

Students at this level begin the foundational drawing portion of their portfolio. Students should have a sincere desire to learn to improve their direct observation skills in regards to drawing. Emphasis will be placed on the production of sketches and drawings from direct observation (still life objects). Basic value and shading techniques are taught through a variety of media, such as graphite, pastel, and colored pencils. Students are expected to participate in critiques, aesthetic discussions and learn about art history.

## DRAWING II

- Prerequisite: A grade of C or better in Drawing I
- A course for grades 10, 11, & 12
- A one credit course
- A Core 40 and AHD course

This course is a continuation of the basic foundations taught in Drawing I. The primary focus of the course will be to concentrate on the students' ability to refine their own techniques

and enhance their drawing ability from direct observation. This can include still life, portraiture and the human figure. Students will begin to search for meaning, significance, and direction in their work in order to find their own artistic voice.

## PAINTING I

- Prerequisite: A grade of C or better in Introduction to Two-Dimensional Art
- A course for grades 10, 11, & 12
- A one credit course

Students taking this class engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality works. In the beginning painting class, students will use a variety of materials such as watercolor, acrylic paint, and mixed media. They will learn a variety of techniques such as working with washes and blending. Criticism and critiques will be a valuable learning platform both within individual and group settings.

## PAINTING II

- Prerequisite: a grade of C or better in Painting I
- A course for grades 10, 11, & 12
- A one credit course

In this second level painting course, students will work with a variety of media such as watercolor, acrylic and oil paint. Students will continue to work on improving their painting technique and explore working on various painting surfaces. At this painting level, students will begin to search for significance and direction in their work by choosing and evaluating subject matter, symbols, and ideas that communicate intended meaning in their artwork. Students will also be expected to do research outside of class on various artists to reference during class. Criticism and critiques will be a valuable learning platform both within individual and group settings.

# ART

## VISUAL COMMUNICATION I (Graphic Design)

- Prerequisite: A grade of C or better in Introduction to Two-Dimensional Art
- A course for grades 10, 11, & 12
- A one credit course
- A Core 40 and AHD course

This course is designed to give students the opportunity to work with the graphic design portion of art. Emphasis will be placed on the creation of advertising designs and creatively conveying ideas visually, utilizing graphic design, typography, and illustration. Students must think clearly through the relationship between artist and consumer in developing artwork designed to relay a message in an artistically enticing yet efficient format. Students use a variety of sharp tools requiring fine motor skills, as well as significant use of digital illustration software.

## DIGITAL ILLUSTRATION

- Prerequisite: A grade of C or better in Introduction to Two-Dimensional Art
- A course for grades 10, 11, & 12
- A one credit course
- A Core 40 and AHD course

This course will build on the drawing skills of perspective, form, color, and light that were introduced in Introduction to Two-Dimensional Art. This exploration of elements will be coupled with the unique medium of digital drawing. The course will be centered on the unique advantages and challenges of digital drawing as they apply to the design process. Students will use drawing tablets and Adobe Photoshop to render a variety of subjects. The projects will mimic the type of work digital drawing is used for in creative industries. Students do not need digital experience, but it is recommended students have strong traditional drawing experience before undertaking this new format.

## PHOTOGRAPHY I

- A course for grades 9, 10, 11, & 12
- A one credit course
- A Core 40 and AHD course

Photography I is an introductory course intended to teach the students basic principles

of the photographic process and the elements of visual art. A complete examination of the history of photography and the camera will be coupled with contemporary practices in digital photography. Included will be a series of lecture-demonstrations to supplement the student's practical experience and the use of the photography textbook. Multiple criticism exercises and critiques of student work will be stressed. The class sessions explain the principles of photography, editing, criticism, production, and discuss how to apply them effectively to the out of class photography assignments. All production of photography in the course is digital and will be submitted online. There will also be a series of printed works, which students will use to learn about professional practices in fine art photography. Students will be using Adobe Photoshop to edit their work in class.

**\*Student must have access to a digital camera outside of class to complete weekly assignments**

## PHOTOGRAPHY II

- Prerequisite: A grade of C or better in Photography I
- A course for grades 10, 11, & 12
- A one credit course
- A Core 40 and AHD course

Photography II will build upon skills and techniques established in Photography I. Students will explore alternative methods and goals for their photography. Students will continue to refine their technical understanding with an increased emphasis on off camera lighting and the studio environment. This course will also continue to refine conceptualization and creative voice in student work. The majority of work will be digitally based, with some printed production works. Online and classroom based critiques will help shape students as photographers. Students will be using Adobe Photoshop and will have access to additional photography equipment in class.

**\*Student must have access to a digital camera outside of class to complete weekly assignments.**

## PRINTMAKING

- Pre-requisite: A grade of C or better in Introduction to Two Dimensional Art
- **This is not a computer class**
- A course for grades 10, 11, & 12
- A one credit course
- A Core 40 and AHD course

Within this context, students create abstract and realistic prints utilizing processes such as etching, relief and embossing. Additionally students will produce works that apply media, technique, and processes to communicate their intended meaning. Students will use a variety of materials such as linocut, woodcut, stencil, silkscreen, and monoprint. Students at this level produce works for their portfolios, which demonstrate a sincere desire to explore a variety of ideas and problems. Students use a variety of sharp tools requiring fine motor skills.

## STUDENT MEDIA- YEARBOOK

- Prerequisite: Successful completion of Journalism, Photography I, OR Graphic Design. Students may also get approval from Yearbook Adviser.
- **This is a BYOT class**
- A course for grades 9, 10, 11, & 12
- Being in two or more trimesters is preferred.

A one, two or three credit course Student Publications (Yearbook) is a workshop class to plan, prepare, and produce Westfield High School's yearbook, the Shamrocket, for the current school year. Photography or writing experience is helpful, but students can be trained on yearbook construction guidelines. Students may specialize in specific roles such as a photographer, copywriter, business staffer, or design staffer. They may also be responsible for a broader range of jobs. Shamrocket staff members are expected to spend time outside of class time working in order to complete necessary tasks. Grades will be based on class participation, timely completion of projects and the final exam.

# ART

## INTRODUCTION TO THREE DIMENSIONAL ART

- A course for grades 9, 10, 11, & 12
- A one credit course
- A Core 40 and AHD course

This course is designed to give students a foundation of various art skills needed to take advanced three-dimensional art courses, such as Ceramics and Sculpture. The primary focus of this course will include the elements and principles of three-dimensional art, basic sculpting skills, and understanding how to manipulate media in-the-round. Students will explore their own problem solving techniques and styles while working with a variety of media in the development of 3D works. Throughout the course students will gain knowledge in the areas of art history, art criticism, aesthetics, and art production. The combination of these four areas will allow the students to gain a well-rounded foundation and appreciation of 3D art and design.

## SCULPTURE I

- Prerequisite: Successful completion of Intro to 3D Art
- A course for grades 10, 11, & 12
- A one credit course
- A Core 40 and AHD course

In this course, students will explore three-dimensional form utilizing a variety of media. Lessons will encompass art history, art criticism, and aesthetics; however most of the focus is on art production. Students will study various historical contexts, relationships between their work and the work of others, and reflect on their ever-changing definition of sculpture. **The media to be explored include, but are not limited to: clay, plaster, stone, metal wire, and papier-mâché/newspaper.** Processes include modeling, casting, carving, assemblage and construction, and installation and collaboration. Students will explore realistic, abstract, and non-objective artworks. Students use a variety of tools and machines throughout the duration of this course, including heavy and sharp objects (hammers, chisels, rasps, files, knives, saws, needles, pliers, wire-cutters, X-actos) as they hone their fine motor skills. It is recommended that students take Ceramics I prior to this course.

## SCULPTURE II

- Prerequisite: A grade of C or better in Sculpture I

- A course for grades 10, 11, & 12
- A one credit course
- A Core 40 and AHD course

Sculpture II will build upon the foundation of three-dimensional knowledge explored in Sculpture I. The course will revisit previous media such as **clay modeling, metal wire assemblage, and stone carving**, but also explore advanced techniques of **metal casting, glass slumping, cardboard manipulation, soft-paper modeling, and installation with presentation**. Students will explore art history, art criticism (of their own work and the work of others), and aesthetics, all in effort to inform the decision making skills during the sculpting process. Aesthetic discussions, reflections, and investigations into the nature of art will take place regularly. Students at this level will produce works that demonstrate a sincere desire to explore a variety of ideas and problems. The course is designed to groom students for AP 3D Studio Art. Students use a variety of advanced tools and machines throughout the duration of this course, including sharp objects (butane torches, hammers, chisels, rasps, files, knives, saws, needles, pliers, wire-cutters, X-actos) as they hone their fine motor skills. Students should be aware that safety is imperative to the success of this course.

## CERAMICS I

- Prerequisite: Successful completion of Intro to 3D Art
- A course for grades 9, 10, 11, & 12
- A one credit course
- A Core 40 and AHD course

In this course, students will: learn about the history of ceramics (clay), critique their own ceramic work, and the ceramic works of others, develop their personal aesthetic, and, most importantly, produce and create multiple quality works. Students will create works of art in clay utilizing the processes of hand-building, wheel-throwing, slip and glaze techniques, and electric kiln firing. Additionally, students will be asked to reflect upon their experiences with the clay, make cultural and historical connections, write about their processes, relate the course to other areas of academia, and explore career options related to ceramics. Students use a variety of tools and machines throughout the duration of this course, including sharp objects (knives, saws, needles) as they hone their fine motor skills.

## CERAMICS II

- Prerequisite: A grade of C or better in Ceramics I
- A course for grades 10, 11, & 12
- A one credit course
- A Core 40 and AHD course

In this course, students will master the foundations established in Ceramics I, such as hand-building and wheel-throwing basics. Students will also be introduced to new clay techniques such as drape, slump, and sling molding, slip decoration, carving, etching, and incising. This course highly emphasizes the use of the pottery wheel, as students will be starting the wheel-throwing process early in the course, and half of the projects must be completed on the wheel. Students will learn new areas of art history, practice formal art criticism, and explore personal aesthetics, all while enhancing the production-focus of the course. Aesthetic discussions, reflections, and investigations into the nature of art will take place regularly. Students use a variety of tools and machines throughout the duration of this course, including sharp objects (knives, saws, needles) as they hone their fine motor skills.

# ART

## INDEPENDENT STUDY

- Prerequisite: Since this is a level 3 course, students must have earned a B or above in level 1 and 2 of the previous courses
- Permission of instructor and coordination through Counselor
- A one credit course
- A course for grades 11 & 12

This course is an equivalent to Drawing III, Painting III, Graphic Design III, Photography III, Ceramics III, and Sculpture III. Final enrollment determined on space availability, course prerequisites, **teacher and counselor recommendation**. Enrollment may not be confirmed until the end of the school year. Independent study is available to a select number of students who have exhausted the curriculum offerings in a particular course of study. The student will work collaboratively with the teacher to determine the course of study, project expectations, and other academic requirements when completing the application process. The teacher will ultimately approve the student's application and submit to the Counseling Center. A final presentation as well as a written component will be required of all independent study students. Placement for Independent Study is at the discretion of the teacher and the student's counselor.

## STUDIO ART (2D DESIGN AND DRAWING PORTFOLIO), ADVANCED PLACEMENT

- Prerequisite: Requires completion and a grade of B or better in at least 4 two-dimensional courses or teacher approval.
- A course for grade 11 & 12
- A three credit course
- A Core 40 and AHD course

*The expectation is that students taking this course will submit the appropriate portfolio materials for review to the College Board by the first week of May.*

AP Studio Art is a course based on the content established by the College Board. 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 at the end of the school year. Students must be prepared to work many hours outside of class on each project in order to complete the College Board requirement of at least 30 AP quality artworks for the year. The AP program is a cooperative endeavor that

helps high school students' complete college-level courses and permits colleges to evaluate, acknowledge, and encourage that accomplishment through the granting of appropriate credit and placement. Students who score a 3 or better on the AP Portfolio Exam may earn college credit for art. .

## STUDIO ART (2D DESIGN PORTFOLIO– PHOTOGRAPHY EMPHASIS), ADVANCED PLACEMENT,

- Prerequisite: A grade of B or better in Photography I and Photography II.
- A course for grades 10, 11, & 12
- A one credit course
- A Core 40 and AHD course

The Two-Dimensional Design, Advanced Placement, Photography Emphasis course is designed to be a capstone course that builds upon the work and experiences in Photography I and II. The course will focus on building student portfolios that exhibit a coherence of vision and excellence in craft. Students will work to develop an in-depth and consistent investigation into a particular subject matter or genre with an outcome that shows artistic maturity as well as visual continuity. AP 2-D Design: Photography Emphasis is not based on a written exam; instead, the students will submit portfolios for evaluation at the end of the trimester. Students who score a 3 or better on the AP Portfolio Exam may earn college credit. In order for students to be successful in this course it is strongly recommended that they not only have a complete understanding of the concepts covered in Photography I and II but also have AP quality works they have produced in these courses they can use in their final portfolio. Students must have access to a digital camera outside of class to complete weekly assignments.

## STUDIO ART (3D DESIGN PORTFOLIO), ADVANCED PLACEMENT

- Prerequisite: Prerequisite: Requires completion of at least 3 three-dimensional courses.
- A course for grade 11 & 12
- A three credit course
- A Core 40 and AHD course

*The expectation is that students taking this course will submit the appropriate portfolio materials for review to the College Board by the first week of May.*

AP Studio Art is a course based on the content

established by the College Board. 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 at the end of the school year. Students must be prepared to work many hours outside of class on each project in order to complete the College Board requirement of at least 30 AP quality artworks for the year. The AP program is a cooperative endeavor that helps high school students' complete college-level courses and permits colleges to evaluate, acknowledge, and encourage that accomplishment through the granting of appropriate credit and placement. Students who score a 3 or better on the AP Portfolio Exam may earn college credit for art.

## ART HISTORY (1,2,3), ADVANCED PLACEMENT

- **This is a BYOT class**
- Recommendation: Student has taken and successfully completed World History and Civilizations and/or Geography and History of the World.
- A course for grades 10, 11, & 12
- A three credit course
- A Core 40 Academic Honors and Technical Honors Course

AP Art History (1, 2, 3) explores topics such as the nature of art, its uses, its meanings, art making, and responses to art. Through investigation of artistic traditions from prehistory to the present, students will gain an understanding the history of art and architecture from a global perspective. Students will learn visual, contextual, and comparative analysis to discuss and write about a variety of art forms. During the course, the students will attend a field trip to an art museum. All students are required to take the AP exam. Students may earn college credit by scoring sufficiently high on the AP exam administered through the College Board in the spring.



## ENTREPRENEURSHIP & INNOVATION PATHWAY

	<u>Required Classes</u>	<u>Optional/Alternative Classes</u>
Year 1	<p><b>Entrepreneurship I &amp; II: The Retail Experience</b> <i>1 or 2 Trimesters</i></p> <p><b><i>Intro to Business</i></b> <i>1 Trimester</i></p>	<p><b><i>Alternative to Intro to Business:</i></b>  <b>Graphic Design/Web Design/Digital Applications/ Computer Science/</b>  <b>Prep for College and Careers</b>  <b>Personal Financial Responsibility</b>  <i>1 Trimester</i></p>
Year 2	<p><b>Principles of Marketing I &amp; II</b> <i>2 Trimesters</i></p> <p><b>Merchandising II— Retail Experience</b> <i>1 Trimester</i></p>	<p><b><i>Alternative to Merchandising II:</i></b>  <b>Intro to Accounting</b>  <i>2 Trimesters</i>  <b>Merchandising I—Fashion</b>  <i>1 Trimester</i></p>
Year 3	<p><b>Principles of Business Management: Retail Applications</b> <i>2 or 3 Trimesters</i></p> <p><b>Bus. Law and Ethics</b> <i>1 Trimester</i></p>	<p><b><i>Alternative to Business Law &amp; Ethics:</i></b>  <b>ACP Introduction to Business Administration</b>  <i>1 Trimester</i>  <b>Sports and Entertainment Marketing</b>  <i>1 Trimester</i></p>
Year 4	<p><b>A Total of 3 Trimesters of:</b></p> <p><b>Entrepreneurship and New Ventures Capstone: C-Level School Store Management</b></p> <p><b>Work Based Learning Capstone</b></p> <p><b>Professional Career Internship</b></p>	<p><b><i>Other Business, Marketing &amp; Merchandising classes can be taken in Senior Year, if space allows</i></b></p>

# BUSINESS, MARKETING & INFORMATION TECHNOLOGY

## BUSINESS COURSES

### INTRODUCTION TO ACCOUNTING

- **This is a BYOT class**
- A two credit course
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Recommended grade levels 9, 10, 11 & 12

*Accounting* introduces the language of business using Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and corporations using double-entry accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision making. Accounting is the most fundamental study which prepares students to enter their personal and business financial worlds. All students contemplating a collegiate business or management major of any type are urged to complete this course. Students will learn to keep journals, ledger accounts, and construct financial statements for proprietorships (first trimester) and for corporations (second trimester). This course utilizes on-line working papers for the majority of the instruction.

Students will be provided the opportunity to earn 3 dual credit hours in ACT 118 through Ivy Tech. In order to be eligible for dual credit hours, both trimesters of Accounting must be completed. Students must earn a C or higher both trimesters. There is not a course fee for this Ivy Tech dual credit.

### ADVANCED ACCOUNTING

- **This is a BYOT class**
- Prerequisite: Introduction to Accounting. B average in Introduction to Accounting preferred
- A one or two credit course
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Recommended grade levels: 10, 11 and 12

Advanced Accounting expands on the Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting covered in Introduction to Accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision-making. Students will enhance their understanding of depreciation, accrual concepts, inventory systems, notes, stocks and bonds, budgeting, and cash flow. Lectures, projects, case studies, and demo of problem solving will be the primary means for instruction in this class to assist students in applying accounting principles. Students should be active in classroom discussion and in-class work.

### ACP INTRODUCTION TO BUSINESS (IUB BUS X100)

- **This is a BYOT class**
- A student must have a GPA of 2.7 to be eligible for admission to the ACP Program through Indiana University and be able to take the course for IU college credits
- There is a tuition fee to take an ACP course through Indiana University. Tuition is payable to IU upon enrollment in the class for college credit.
- A one credit course
- A Core 40 and Core 40 with Technical Honors diploma elective course.
- Recommended grade levels: 11 & 12

Introduction to Business is part of Indiana University's Advance College Project. Westfield High School will be following the curriculum and syllabus for Indiana University's X100 Introduction to Business. Students will be provided the opportunity to take this course for 3 hours of Indiana University college credit in X100 that are transferable to most other universities, both in-state and out-of-state. Students must have a minimum 2.7 GPA to be accepted into the ACP Program in order to take this course for I.U. credit. This introductory course covers the terms and concepts associated with the environments in which businesses operate. Emphasis will be placed on business in a changing world, starting and growing a business, managing for quality and competitiveness, creating the human resource advantage, and financing the enterprise. There is a course fee to take Introduction to Business ACP for IU credit.

### INTRODUCTION TO BUSINESS

- A one credit course
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Recommended Grade Levels: 9 & 10. **Juniors and seniors with a B average or above should take ACP Introduction to Business.**

*Introduction to 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/or international scale. The course covers business management, entrepreneurship, marketing fundamentals, and business ethics and law. The course further develops business vocabulary and provides an overview of business and the role that business plays in economic, social, and political environments. Diversity training, employment skills, and teamwork will also be included.

# BUSINESS, MARKETING & INFORMATION TECHNOLOGY

## BUSINESS MATHEMATICS 1-2

- A one or two credit course
- Recommended grade levels: 11 & 12
- Fulfills a Mathematics requirement for the General Diploma only or counts as an Elective or Directed Elective for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Business Math is a business course designed to prepare students for roles as entrepreneurs, producers, and business leaders by developing abilities and skills that are part of any business environment. A solid understanding of math including algebra, basic geometry, statistics and probability provides the necessary foundation for students interested in careers in business and skilled trade areas. The content includes mathematical operations related to accounting, banking and finance, marketing, and management. Instructional strategies should include simulations, guest speakers, tours, Internet research, and business experiences. Business Mathematics is a business course designed to develop the ability to solve real world problems in order to become productive citizens and workers in a technological society. Areas of study to be included are number relationships and operations; patterns and algebra; measurements; and statistics and probability. Problem-solving applications will be used to analyze and solve business problems for such areas as taxation; savings and investments; payroll records; cash management; financial statements; purchases; sales; inventory records; and depreciation.

## PERSONAL FINANCIAL RESPONSIBILITY

- A one credit course
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Recommended Grade Levels: 9 & 10

Personal Financial Responsibility addresses the identification and management of personal financial resources to meet the financial needs and wants of individuals and families, considering a broad range of economic, social, cultural, technological, environmental, and maintenance factors. This course helps students build skills in financial responsibility and decision making; analyze personal standards, needs, wants, and goals; identify sources of income, saving and investing; understand banking, budgeting, record-keeping and managing risk, insurance and credit card debt.

A project based approach and applications through authentic settings such as work based observations and service learning experiences are appropriate. Direct, concrete applications of mathematics proficiencies in projects are encouraged.

## ENTREPRENEURSHIP AND NEW VENTURES I and II (ENTREPRENEURSHIP I: THE RETAIL EXPERIENCE)

- Prerequisites: None
- A one or two credit course
- An Academic Honors and Technical Honors Diploma career program
- Recommended Grade Levels: 9, 10, 11 & 12

Entrepreneurship and School Store Experience builds upon the foundations of marketing, business and technologies classes and focuses on applying the information learned in those classes to either a new business the school *will* create or to the Rock Shop or Famous Phil's Cafe. Students will study the basic principles of consumer behavior and apply marketing and business ideas in real world settings. Further, students will develop skills and tools critical for starting and succeeding in a new venture. The entrepreneurial process of opportunity recognition, innovation, value proposition, competitive advantage, venture concept, feasibility analysis, and "go to" market strategies will be explored. Additionally, topics of government and legal restrictions, intellectual property, location selection, basic business accounting, raising startup funding, sales and revenue forecasting and business plan development will be practiced. Students will also practice Google's idea of 20% time and spend time in the Idea Farm each week cultivating their creativity. Practical experience in store organization is gained through the actual operation of school stores.

## ENTREPRENEURSHIP AND NEW VENTURES CAPSTONE: C-LEVEL SCHOOL STORE MANAGEMENT

- Recommended Grade Level: 12
- A two or three credit course, 2 trimesters required
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- 

- Prerequisite: Principles of Business Management or teacher permission

Entrepreneurship and New Ventures Capstone further develops entrepreneurship skills and tools critical for starting and succeeding in a new venture learned through Entrepreneurship and Retail Experience as well as Principals of Business and Retail Management. Students will act as the leaders of the school based businesses at Westfield High School such as Chief Executive Officer, Chief Operating Officer, Chief Marketing Officer, and the like in order to gain true decision making experience. Students will be given the authority to make purchasing decisions for the school based businesses and will be responsible for generating income. Students will also practice Google's idea of 20% time and spend time in the Idea Farm each week cultivating their creativity. Practical experience in store organization is gained through the actual operation of school stores.



# BUSINESS, MARKETING & INFORMATION TECHNOLOGY

## PRINCIPLES OF BUSINESS MANAGEMENT: RETAIL APPLICATIONS

- Recommended Grade Level: 11, 12
- A two trimester course, does not have to be consecutive
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Prerequisite: Entrepreneurship I or teacher permission

Principles of Business Management focuses on the roles and responsibilities of managers as well as opportunities and challenges of ethically managing a business in the free-enterprise system. Students will attain an understanding of management, team building, leadership, problem-solving steps and processes that contribute to the achievement of organizational goals. The management of human and financial resources is emphasized in the real world environments of the Rock Shop, Famous Phil's Cafe, or their own business that they start during this class. If a student elects to start their own business, they will be expected to take substantial and actual steps towards beginning to operate his or her business including but not limited to filing the appropriate paperwork with the State of Indiana and all other government organizations. Students will also practice Google's idea of 20% time and spend time in the Idea Farm each week cultivating their creativity. Practical experience in store organization is gained through the actual operation of school stores

## PRINCIPLES OF MARKETING I & II

- A two credit course
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Recommended Grade Levels 9, 10, 11 & 12

Principles of Marketing provides a basic introduction to the scope and importance of marketing in the global economy. Emphasis is placed on oral and written communications, mathematical 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 is a business course designed for students who plan to major in business or marketing in college. Students are encouraged to become members of DECA. This course is a pre-requisite for Sports & Entertainment Marketing and Merchandising. Various topics covered in Principles of Marketing include evolution of marketing, target markets, competitive advantage, SWOT analysis, breakthrough opportunities, marketing plan development, implementation and control, segmenting dimensions, marketing mix, uncontrollable variables, consumer behavior, marketing research methods, new product development, consumer adoption process (diffusion of innovation), product life cycle, physical distribution concept, distribution channels, ideal market exposure (levels of distribution), customer service, promotion mix, advertising/media selection, pricing strategies, and product classes.

Students will be provided the opportunity to earn 3 dual credit hours in MKTG101 through Ivy Tech. In order to be eligible for dual credit hours, both trimesters must be completed within the same school year. Students must earn a C or higher both trimesters. In addition, students must pass the required Accuplacer test or have met the SAT, ACT, or PSAT requirement. There is no course fee for this Ivy Tech credit.

## MERCHANDISING—FASHION (MERCHANDISING I-CHANGING WORLD OF FASHION)

- Prerequisite: Principles of Marketing
- A one credit course
- Counts as a directed elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Recommended grade levels: 10, 11 & 12

Merchandising is a specialized marketing course providing instruction of marketing practices that support the sale of products to retail consumers. Emphasis is placed on oral and written communications, problem solving, and critical thinking skills as they relate to product design, selling, pricing, distribution, retail promotion, visual merchandising, retail cycles, retail theories, and career opportunities in the retail industry. This course, is designed for students who plan to major in marketing or fashion at the college level, can focus on a

specific retail sector, such as fashion, sporting goods, or electronics. Students are encouraged to become members of DECA. Topics covered in this sections include: Nature of Fashion, Silhouettes, Environment of Fashion, Visual Merchandising, Movements, Forms of Businesses, and Fibers/Textiles.

# BUSINESS, MARKETING & INFORMATION TECHNOLOGY

## MERCHANDISING II- RETAIL FASHION

- Prerequisite: Principles of Marketing. (Merchandising I is NOT a prerequisite. Students may take one or both sections. Both Sections can be taken in any order)
- A one credit course
- Counts as a directed elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Recommended grade levels: 10, 11 & 12

Merchandising is a specialized marketing course providing instruction of marketing practices that support the sale of products to retail consumers. Emphasis is placed on oral and written communications, problem solving, and critical thinking skills as they relate to product design, selling, pricing, distribution, retail promotion, visual merchandising, retail cycles, retail theories, and career opportunities in the retail industry. This course, is designed for students who plan to major in marketing or fashion at the college level, can focus on a specific retail sector, such as fashion, sporting goods, or electronics. Students are encouraged to become members of DECA. Topics covered in this sections include: Product Development, Apparel, Accessories, Global Sourcing/ Merchandising, Retailing, and Auxiliary Services.

## BUSINESS LAW AND ETHICS

- Prerequisite: None
- A one credit course
- Counts as a directed elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Recommended grade levels: 11 & 12

Business Law and Ethics provides an overview of the legal system in the business setting. Topics covered include: basics of the judicial system, contract, personal, employment and property law. Application of legal principles and ethical decision-making techniques are presented through problem-solving methods, case review, and situational analyses. Students will be exposed to real-world legal issues faced by the Rock Shop and Famous Phil's Cafe as well as be given the opportunities to explore their interest in the legal profession through guest speakers and field trips.

## SPORTS AND ENTERTAINMENT

## MARKETING

- Prerequisite: Principles of Marketing
- A one credit course
- Counts as a directed elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Recommended grade levels: 10, 11 & 12

Sports and Entertainment Marketing is a specialized marketing course that develops student understanding of the sport/event industries, their economic impact, and products; distribution systems and strategies; pricing considerations; product/service management, and promotion. Students acquire an understanding and appreciation for planning. Throughout the course, students are presented problem-solving situations for which they must apply academic and critical-thinking skills.

## CAREER COURSES

### PREPARING FOR COLLEGE AND CAREERS

- A one credit course
- Counts as a directed elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Recommended grade levels: 9 & 10

Preparing for College and Careers addresses the knowledge, skills, and behaviors all students need to be prepared for success in college, career, and life. The focus of the course is the impact of today's choices on tomorrow's possibilities. Topics to be addressed include twenty-first century life and career skills; higher order thinking, communication, leadership, and management processes; exploration of personal aptitudes, interests, values, and goals; examining multiple life roles and responsibilities as individuals and family members; planning and building employability skills; transferring school skills to life and work; and managing personal resources. This course includes reviewing the 16 national career clusters and Indiana's College and Career Pathways, in-depth investigation of one or more pathways, reviewing graduation plans, developing career plans, and developing personal and career portfolios. A project based approach, including computer and technology applications, cooperative ventures between school and community, simulations, and real life experiences, is recommended.

## WORK BASED LEARNING CAPSTONE, BUSINESS AND MARKETING

- Prerequisites: Preparing for College and Careers (may be waived with business department approval) and a minimum of 5 credits of Business and Entrepreneurship courses
- A two credit course
- A Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diploma elective and directed elective course
- A course for grade level 12
- Transportation is the responsibility of the student.

This course builds students' skills and knowledge in their chosen career path or furthers their study within the area of interest. A standards based training plan is developed by the student, teacher, and workplace mentor to guide the student's work based learning experiences and assist in evaluating achievement and performance. Students have the opportunity to apply the concepts, skills, and dispositions learned in previous coursework in the Entrepreneurship and Innovation Pathway in real world business and industry settings. Intensive applications are a required component of this course and may be either school based or work based or a combination of the two. Students can utilize this course to work further upon their entrepreneurial ideas created and tested earlier in the Entrepreneurship and Innovation Pathway.

## Computer Science Career and Curriculum Pathways

Below is the WHS sequence of courses, when combined with traditional mathematics and science course, introduces students to the scope, rigor, and discipline of computer science prior to entering college.

\*All pathways can be adjusted for individual student needs and interests. Any class can be added to a pathway for additional knowledge and content

Grade	Core Classes	Programming Pathway	Network/ Hardware/IT Support Pathway	Web Development Pathway
9	Introduction to CS (1 Tri) *Prerequisite for all CS classes	Computer Science I - Game Programming I (1 Tri)	AP CS Principles(2 Tri)	Introduction to CS Web Design I
10	AP CS Principles (2 Tri)	Computer Science 1 - Pre-AP Java Programming AP Computer Science A (2 Tri)	Computer Science 1 - Pre-AP Java Programming or Computer Science 1 - Game Programming I	Web Design II Computer Science 1 - Game Programming I
11	Computer Science 1 - Pre-AP Java Programming AP Computer Science A (2 Tri)	Computer Science II - Game Programming II (1 Tri) Computer Science II - C++ (1 Tri)	IT Support	AP CS Principles (2 Tri)
12		Computer Science III - Software Development (2 Tri)	Computer Science III - Cybersecurity	Computer Science II - Game Programming II

# BUSINESS, MARKETING & INFORMATION TECHNOLOGY

## COMPUTER COURSES

### INTRODUCTION TO COMPUTER SCIENCE

- Credit: A one credit course
- Recommended grade levels: 9, 10, 11, & 12
- **9th graders who have taken PLTW Computer Science at WMS should not take class**

Introduction to Computer Science allows students to explore the world of Computer Science. Students will gain a broad understanding of the areas involved in Computer Science. Additionally, there will be a focus on the areas of computer programming, gaming/mobile development, and artificial intelligence/robotics. This is a great course for any student who is curious, but unclear, about what computer science really is. **NOT RECOMMENDED FOR STUDENTS WHO HAVE TAKEN COMPUTER SCIENCE I, COMPUTER SCIENCE II, OR AP COMPUTER SCIENCE.**

### WEB DESIGN I

- Credit: A one credit course
- Prerequisite: Intro to Computer Science or Digital Applications/Responsibility
- Recommended grade levels: 9, 10, 11 & 12

**Web Design I** is a course that provides instruction in the principles of web design using HTML5/CSS and current/emerging software programs. Areas of instruction include audience analysis, hierarchy layout and design techniques, software integration, and publishing. Instructional strategies may include peer teaching, collaborative instruction, project-based learning activities and school community projects. Web Design I will focus on client-side development.

### WEB DESIGN II

- Prerequisite: Web Design I
- Credit: A one credit course
- Recommended grade levels: 9, 10, 11 & 12

**Web Design II** is a course that provides instruction in the principles of web design using HTML5/CSS and current/emerging

software programs. Areas of instruction include audience analysis, hierarchy layout and design techniques, software integration, and publishing. Instructional strategies may include peer teaching, collaborative instruction, project-based learning activities and school community projects. Web Design II is designed to expand student knowledge of server side web development using HTML5, Javascript, PHP, and SQL or other language for managing database connectivity.

### COMPUTER SCIENCE I— GAME PROGRAMMING I

- Credit: A one credit course
- This course is aligned with postsecondary courses for Dual Credit
- Prerequisite: Intro to Computer Science
- Recommended Grade Levels: 9, 10, 11 & 12
- 9th graders who have taken PLTW Computer Science at WMS may take without prerequisite

Computer Science I introduces the structured techniques necessary for efficient solution of game industry-related computer programming logic problems and coding solutions into a high-level language. The fundamental concepts of programming are provided through explanations and effects of commands and hands-on utilization of lab equipment to produce correct and accurate outputs. Topics include program flowcharting, pseudo-coding, and hierarchy charts as a means of solving problems. The course covers creating file layouts, print charts, program narratives, user documentation and system flowcharts for graphics problems; algorithm development and review, flowcharting, input/output techniques, looping, modules, selection structures, file handling, and control breaks and offers students an opportunity to apply skills in a laboratory environment using the Java programming language. This course will prepare students for AP Computer Science.

### COMPUTER SCIENCE I— JAVA PROGRAMMING

- Prerequisites: Algebra I and Intro to Computer Science
- Credit: A one credit course
- Recommended grade levels: 10, 11 & 12

Computer Science I introduces the structured techniques necessary for efficient solution of business-related computer programming logic

problems and coding solutions into a high-level language. The fundamental concepts of programming are provided through explanations and effects of commands and hands-on utilization of lab equipment to produce correct and accurate outputs. Topics include program flowcharting, pseudo-coding, and hierarchy charts as a means of solving problems. The course covers creating file layouts, print charts, program narratives, user documentation and system flowcharts for business problems; algorithm development and review, flowcharting, input/output techniques, looping, modules, selection structures, file handling, and control breaks and offers students an opportunity to apply skills in a laboratory environment using the Java programming language. This course will prepare students for AP Computer Science.

### COMPUTER SCIENCE II— GAME PROGRAMMING II

- Prerequisite: Game Programming I
- Credit: A one credit course
- Recommended Grade Levels: 10, 11 & 12

Computer Science II: Programming explores and builds skills in programming and a basic understanding of the fundamentals of object oriented program development using structured, modular concepts. Coursework emphasizes logical program design involving user-defined functions and standard structure elements. Discussions will include the role of data types, variables, structures, addressable memory locations, arrays and pointers and data file access methods. An emphasis on logical program design using a modular approach, which involves task oriented program functions.

Game Programming II explores and builds skills in Java and continues the study of game development from Game Programming I with a focus on developing mobile applications. This course will prepare students for AP Computer Science.

# BUSINESS, MARKETING & INFORMATION TECHNOLOGY

## COMPUTER SCIENCE II— PROGRAMMING—C++

- Prerequisites: Algebra I AND Computer Science I
- Credit: A one credit course
- Recommended grade levels: 10, 11 & 12

Computer Science II: Programming explores and builds skills in programming and a basic understanding of the fundamentals of procedural program development using structured modular concepts. Coursework emphasizes logical program design involving user-defined functions and standard structure elements. Discussions will include the role of data types, variables, structures, addressable memory locations, arrays and pointers and data file access methods. An emphasis on logical program design using a modular approach, which involves task oriented program functions. This course will be taught using the C++ programming language.

## INFORMATION TECHNOLOGY SUPPORT

### (Computer Tech Support)

- Grade Level: 11-12
- Required Prerequisites: Introduction to Computer Science and AP Computer Science Principles or AP Computer Science A
- Credits: 1 trimester
- Counts as a Directed Elective or Elective for all diplomas

Information Technology Support (formerly computer tech support) allows students to explore how computers work. Students learn the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. Through hands-on activities and labs, students learn how to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems.

## COMPUTER SCIENCE III - CYBERSECURITY

- Grade Level: 10-12
- Required Prerequisites: Introduction to Computer Science and AP Computer Science Principles or AP Computer Science A
- Credits: 2 Trimester Course
- Counts as a Directed Elective or Elective for all diplomas

Cybersecurity introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. Nationally, computational resources are vulnerable and frequently attacked; in Cybersecurity, students solve problems by understanding and closing these vulnerabilities. This course raises students' knowledge of and commitment to ethical computing behavior. It also aims to develop students' skills as consumers, friends, citizens, and employees who can effectively contribute to communities with a dependable cyber-infrastructure that moves and processes information safely.

## COMPUTER SCIENCE III: SOFTWARE DEVELOPMENT

- Recommended Grade Level: Grade 12
- Required Prerequisite: AP Computer Science A
- Credits: 2 Trimester Course
- Counts as an elective Science credit or Directed Elective for all diplomas

Software Development focuses on gaining knowledge and acquiring competencies in the processes, techniques and tools used 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. Project will focus on serving the Westfield community or WHS need.**

## COMPUTER SCIENCE A, ADVANCED PLACEMENT

- Recommended: Java, Game Programming II or teacher recommendation
- Credit: A two credit course
- Recommended grade levels: 10, 11 & 12

Computer Science A, Advanced Placement is a business mathematics course that provides students with the content established by the College Board. The course emphasizes object-

oriented programming methodology with a concentration on problem solving and algorithm development, and also includes the study of data structures, design, and abstraction. The course provides students an alternative to taking pre-calculus or calculus to fulfill the four-year math requirement for graduation. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: <http://apcentral.collegeboard.com/apc/public/repository/ap-computer-science-course-description.pdf>.

## COMPUTER SCIENCE PRINCIPLES, ADVANCED PLACEMENT

- Prerequisites: Recommended for students seeking the AP Capstone diploma and any student not on a computing/engineering career path
- Credit: A two credit course
- Recommended grade levels: 10, 11 & 12
- 9th Graders who took PLTW Computer Science in 8th grade with teacher permission.

The AP Computer Science Principles curriculum focuses on the innovative aspects of computing as well as the computational thinking practices that help students see how computing is relevant to many areas of their everyday lives. Computational thinking practices capture important aspects of the work that computer scientists engage in at the level of competence expected of AP Principles students. The computational thinking practices taught help students coordinate and make sense of knowledge to accomplish a goal or task. They enable students to engage with the course content by developing computational artifacts and analyzing data. Skills developed in computational thinking practices include: computing, creating computational artifacts, abstracting, analyzing problems and artifacts, communicating, and collaborating. The major areas of the course are organized around seven big ideas, which encompass ideas foundational to studying computer science. These big ideas connect students to a curriculum scope that includes the art of programming but is not programming-centric. The big ideas included are: Creativity, Abstraction, Data and Information, Algorithms, Programming, The Internet, and Global Impact of Computing. **Students do not need to have prior knowledge of any programming language.**



# ENGINEERING & TECHNOLOGY EDUCATION

## TECHNOLOGY SYSTEMS

- A course for grades 9, 10, 11, and 12
- A one credit course
- A Core 40 elective and an Academic Honors and Technical Honors elective

Technology Systems is a course that focuses on the technologies used in the career pathways related to Architecture & Construction, Manufacturing, Transportation, & Engineering Design career clusters. Students will have project based assignments that help introduce them into these fields. Students are also introduced to, and engaged in, investigating career opportunities. This is a great introductory course into Technology Education.

## INTRODUCTION TO DESIGN PROCESSES (1-2)

- A course for grades 9, 10, 11, and 12
- A two credit course
- A Core 40 elective and an Academic Honors and Technical Honors elective
- If student has completed Introduction to Engineering Design, Introduction to Design Processes can not be taken.

Introduction to Design Process (1-2) is a course that introduces students to the graphic language of industry. It is a specialized course that explores technological processes and employs creative problem solving in developing, engineering, testing, and communicating designs, structures, and systems. The course covers such areas as sketching, multi-view drawing, sectioning, dimensioning, pictorial drawings, and 3D solid modeling. Students will participate in design drafting activities using CAD software on the computer. All drawing equipment is provided. This course is highly recommended for students planning a career in engineering, technology, or any post secondary technical training.

## INTRODUCTION TO MANUFACTURING

- A course for grades 9, 10, 11, and 12
- A one credit course
- A Core 40 elective and an Academic Honors and Technical Honors elective

Introduction to Manufacturing is a broad course that explores the application of tools, materials, and energy in developing, producing, using and assessing manufactured products. Students will

explore manufacturing processes such as plastics, robotics, hot metal foundry, and CAD/CAM. This is a comprehensive study of most manufacturing processes available today. Students will also explore techniques used to apply technology in obtaining resources and in changing them into industrial materials and finished products through a production process.

## INTRODUCTION TO TRANSPORTATION

- A course for grades 9, 10, 11, and 12
- A one credit course
- A Core 40 elective and an Academic Honors and Technical Honors elective

Introduction to Transportation is a course that explores the application of tools, materials, and energy in designing, producing, using and assessing transportation processes. Students will explore systems and techniques used to apply technology to move people and cargo in vehicles and by other means on land, in water, air, and space. This is a comprehensive study of most transportation processes available today. Practical lab applications are a major part of this course.

## CONSTRUCTION TRADES I (1-2)

- A course for grades 9, 10, 11, and 12
- A two credit course
- **This course is aligned with postsecondary courses for Dual Credit**
- A Core 40 elective and an Academic Honors and Technical Honors elective

This course offers hands-on activities and real world experiences related to the skills essential in residential construction. The student will also learn and apply knowledge of the care and safe use of hand and power tools as related to construction trades. In addition, students are introduced to blueprint reading, basic tools and equipment, and safety. Students will demonstrate building construction techniques including framing, roofing, exterior finishing, electrical, plumbing, dry wall and painting. Students learn architectural ideas and how projects are managed during a construction project. Students also investigate topics related to the purchasing and maintenance of structures, green construction and construction careers.

## INTRODUCTION TO COMMUNICATIONS (1-2)

- A course for grades 9, 10, 11, and 12
- A two credit course
- A Core 40 elective and an Academic Honors and Technical Honors elective

Introduction to Communications is a course that specializes in identifying and using modern communication to exchange messages and information. This course explores the application of the tools, materials, and techniques used to design, produce, use, and assess systems of communication. Students will produce graphic and electronic media as they apply communication technologies. This course will also explore the various technical processes used to link ideas and people through the use of electronic and graphic media. Major goals of this course include an overview of communication technology; the way it has evolved, how messages are designed and produced, and how people may profit from creating information services and products. Students will explore mass media communication processes including radio and television broadcasting, recording services, and other related systems. Basic film-making skills implementing such programs as Final Cut Pro are integral parts of this curriculum.

# ENGINEERING & TECHNOLOGY EDUCATION

## CONSTRUCTION TRADES II (3-4)

- Prerequisite: Introduction to Construction (B average recommended)
- A course for grades 10, 11, and 12
- A two credit course
- **This course is aligned with postsecondary courses for Dual Credit**
- A Core 40 elective and an Academic Honors and Technical Honors elective

*Construction Trades II* builds on the formation, installation, maintenance, and repair skills learned in Construction Trades I. Information on materials, occupations, and professional organizations within the industry will be covered. Students will develop basic knowledge, skills, and awareness of interior trim and the installation of drywall, moldings, interior doors, kitchen cabinets, and baseboard moldings. Students will also develop exterior finishing competencies. The course includes instruction on the installation of cornices, windows, doors and various types of sidings currently used in industry. Studies will also focus on the design and construction of roof systems and the use of framing squares for traditional rafter and truss roofing.

## ROBOTICS DESIGN AND INNOVATION (1-2)

- A course for grades 9, 10, 11, and 12
- A two credit course
- A Core 40 elective and an Academic Honors and Technical Honors elective

Robotics Design and Innovation allows 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 predesignated 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.

## INTRODUCTION TO ADVANCED MANUFACTURING AND LOGISTICS (1-2)

- Prerequisite: Introduction to Manufacturing or Introduction to Transportation (1-2)
- A course for grades 10, 11, and 12
- **This course is aligned with postsecondary courses for Dual Credit**
- A two credit course
- A Core 40 elective and an Academic Honors and Technical Honors elective

Introduction to Advanced Manufacturing and Logistics is a course that specializes in how people use modern manufacturing systems with an introduction to advanced manufacturing and logistics and their relationship to society, individuals, and the environment. Students apply the skills and knowledge of using modern manufacturing processes to obtain resources and change them into industrial materials, industrial products and consumer products. Students investigate the properties of engineered materials such as: metallics; polymers; ceramics; and composites. Students study six major types of material processes: casting and molding; forming; separating; conditioning; finishing; and assembling. After gaining a working knowledge of these materials, Students are introduced to advanced manufacturing, logistics, and business principles that are utilized in today's advanced manufacturing industry. Students gain a basic understanding of tooling, electrical skills, operation skills, inventory principles, MSDS's, chart and graph reading and MSSC concepts. There is also an emphasis placed on the flow process principles, material movement, safety, and related business operations. Students have the opportunity to develop the characteristics employers seek as well as skills that will help them in future endeavors.

## ADVANCED MANUFACTURING I (1-2)

- Prerequisite: Introduction to Advanced Manufacturing and Logistics (1-2)
- A course for grades 11, and 12
- **This course is aligned with postsecondary courses for Dual Credit**
- A two credit course
- A Core 40 and an Academic Honors and Technical Honors Diploma elective

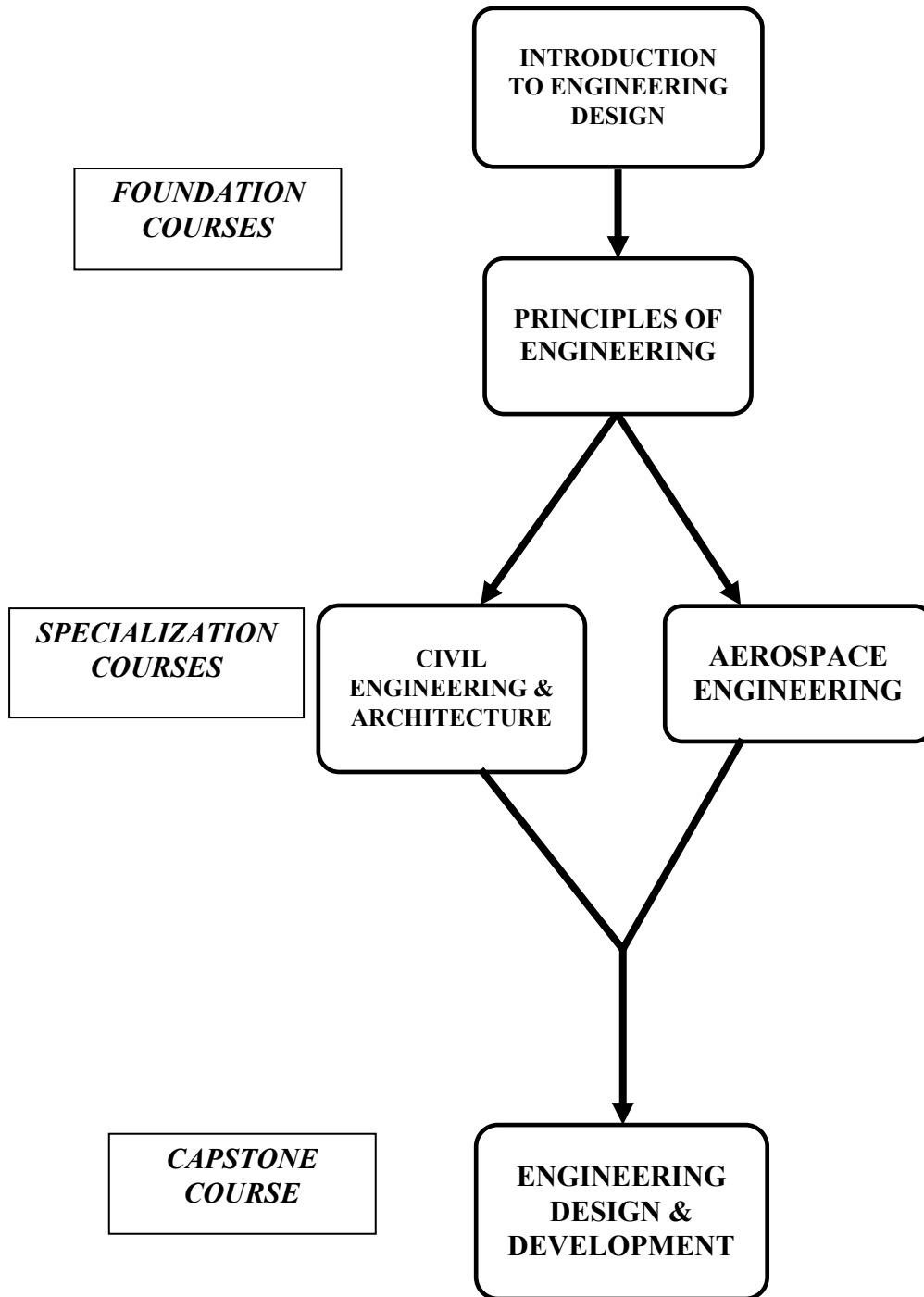
Advanced Manufacturing I is a course that includes classroom and laboratory experiences in two broad areas: Industrial Technology/ Software Controls and Manufacturing Trends. Industrial Technology and Software Controls

covers wiring and schematic diagrams used to design, install, and repair electrical/electronic equipment such as wireless communication devices. Course content will include basic theories of electricity, electronics, digital technology, and basic circuit analysis. Understanding and using the underlying scientific principles related to electricity, electronics, circuits, sine waves, and Ohm's Law are integral to this course. Manufacturing Trends covers basic concepts in manufacturing operations and plant floor layout in the production environment. Applications of Computer Numerical Control (CNC), and lathe and turning operations are developed as a foundation for machining operations. Fluid power concepts will include hydraulic components and circuits, laws and principles, fluid power controllers, and the construction of systems. Students will also be introduced to lean manufacturing and the concepts related to it. This course includes MSSC concepts required to earn MSSC certification.

# PROJECT LEAD THE WAY

## PROJECT LEAD THE WAY– PATHWAY TO ENGINEERING

Below is the WHS four year sequence of courses, when combined with traditional mathematics and science courses, introduces students to the scope, rigor and discipline of engineering and technology prior to entering college.





# PROJECT LEAD THE WAY

## PROJECT LEAD THE WAY— PATHWAY TO ENGINEERING

The PLTW Pathway To Engineering (PTE) program is a sequence of courses, which follows a proven hands-on, real-world problem-solving approach to learning. Throughout PTE, students learn and apply the design process, acquire strong teamwork and communication proficiency and develop organizational, critical-thinking, and problem-solving skills. They discover the answers to questions like “How are things made and what processes go into creating products?” Students use the same industry-leading 3D design software used by major companies. They explore aerodynamics, astronautics and space life sciences. They work collaboratively on a culminating capstone project.

PTE courses complement traditional mathematics and science courses and can serve as the foundation for STEM-centered or specialized academies. The program is designed to prepare students to pursue a post-secondary education and careers in STEM-related fields.

## INTRODUCTION TO ENGINEERING DESIGN HONORS (PLTW) (1-2)

- A course for grades 9, 10, 11, and 12
- **This course is aligned with postsecondary courses for Dual Credit**
- A two credit course
- An Academic Honors and Technical Honors Diploma career program elective

This PLTW course encourages and compliments student problem solving skills with an emphasis placed on the development of three-dimensional solid models. Utilizing simple sketching of geometric shapes and applying a solid modeling program, students will learn problem solving design processes as they apply to manufacturing a product for industry. A Computer Aided Design System (CAD) will be used to analyze and evaluate the product design. The techniques learned, and equipment used, are currently being used by engineers throughout the United States.

## PRINCIPLES OF ENGINEERING HONORS (PLTW) (1-2)

- Prerequisite: Introduction to Engineering Design
- A course for grades 10, 11, and 12

- **This course is aligned with postsecondary courses for Dual Credit**
- A two credit course
- An Academic Honors and Technical Honors Diploma career program elective

Students will explore several areas of engineering throughout the course including: thermodynamics, mechanisms, fluid power, electrical control systems, strength of materials, statics, characteristics and properties of materials, quality control, review of the design process, material testing, and kinematics. By exploring various technology systems and manufacturing processes, students will learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit mankind. Hands-on, problem-based activities supplement the subject matter provided within the curriculum.

## AREOSPACE ENGINEERING HONORS (PLTW) (1-2)

- Prerequisite: Introduction to Engineering Design & Principles of Engineering or Physics with recommendation from teacher
- A course for grades 11, and 12
- A two credit course
- An Academic Honors and Technical Honors Diploma career program elective

Students will be exposed to the world of aeronautics, flight and engineering, applying engineering and scientific concepts in the solution of aerospace problems. Units of study include: evolution of flight, physics of flight, flight planning and navigation, materials and structure, propulsion, flight physiology, space travel, orbital mechanics, alternative applications of space technologies, remote systems (including VEX autonomous and user controlled robotics) and aerospace careers. Aerospace Engineering is a Project Lead The Way Course.

## CIVIL ENGINEERING AND ARCHITECTURE HONORS (PLTW) (1-2)

- Prerequisite: Introduction to Engineering Design and/or concurrent enrollment in Principles of Engineering
- A course for grades 10, 11, and 12
- **This course is aligned with postsecondary courses for Dual Credit**

- A two credit course
- An Academic Honors and Technical Honors Diploma career program elective

Civil Engineering and Architecture allows students to apply what they learn about various aspects of civil engineering and architecture to the design and development of a property. Students explore hands-on activities and projects to learn the characteristics of civil engineering and architecture. In addition, students use 3D design software to help them design solutions to solve major course projects. Students learn about documenting their project, solving problems and communicating their solutions to their peers and members of the professional community of civil engineering and architecture.

## ENGINEERING DESIGN AND DEVELOPMENT HONORS (1-2)

- Prerequisite: Introduction to Engineering Design & Principles of Engineering plus a minimum of at least one specialized course (Aerospace, or Civil Engineering & Architecture)
- A course for grade 12
- A two credit course
- An Academic Honors and Technical Honors Diploma career program elective

Engineering Design and Development is a research course in which students will work to research, design, test and construct a solution to an open-ended engineering problem. The product development life cycle and a design process are used to guide and help the student to reach a solution to the problem. The student presents and defends their solution to a panel of outside reviewers at the conclusion of the course. The EDD course allows students to apply all the skills and knowledge learned in previous Project Lead The Way courses. This course also engages students in time management and teamwork skills, a valuable set for students in the future.

# FAMILY AND CONSUMER SCIENCES

## ADULT ROLES AND RESPONSIBILITIES

- A course for grades 11 and 12
- A one credit course

Adult Roles and Responsibilities is a one trimester course that builds the knowledge, skills, attitudes, and behaviors students will need as they prepare to take the next steps toward adulthood in today's ever-changing society. The focus is on becoming independent, contributing, and responsible participants in family, community, and career settings. Topics of this course include exploration of self-esteem and self-concept; exploration of various career options; exploration of housing options and responsibilities; exploration and responsibilities of various transportation options; planning and responsibilities of marriage and a family, including the average wedding; consumer protection and responsibility including the use of credit cards, loans, online banking and savings accounts, and insurance; and specific buying practices of recreational activities, clothing, food, and other items of the consumer's choice. Students will explore the topics of this course through assignments, projects, guest speakers, and team building experiences. The use of the internet and computers will be a required component of this course.

## CHILD DEVELOPMENT

- A course for grades 10, 11, and 12
- A one credit course

Child Development and Parenting is a one trimester course that addresses the knowledge, skills, attitudes, and behaviors associated with supporting and promoting optimal growth and development of infants and children. Topics addressed include consideration of the roles, responsibilities and challenges of parenthood; human sexuality; adolescent pregnancy; prenatal development; preparation for birth; the birth process; meeting the physical, social, emotional, intellectual, moral, and cultural growth and developmental needs of infants and children; impacts of heredity, environment, and family and societal crisis on development of the child; meeting children's needs for food, clothing, shelter, and care giving; caring for children with special needs; parental resources, services, and agencies; and career awareness. A project-based

approach that utilizes higher order thinking, communication, leadership, and management processes will be used to integrate suggested topics into the study of child development and parenting. Students will work both individually and in groups throughout the trimester on special projects and assignments that increase skill and knowledge necessary to work with and appreciate young children.

## ADVANCED CHILD DEVELOPMENT

- Prerequisite: Child Development
- A course for grades 10,11, and 12
- A one credit course

Advanced Child Development is a one trimester sequential course that addresses more complex issues of child development and early childhood education with emphasis on guiding physical, social, emotional, intellectual, moral, and cultural development throughout childhood, including school age children. Topics include positive parenting and nurturing across ages and stages; practices that promote long-term well-being of children and their families; developmentally appropriate guidance and intervention strategies with individuals and groups of children; accessing, evaluating, and utilizing information, including brain/learning research and other research results; meeting needs of children with a variety of disadvantaging conditions; and, exploration of "all aspects of the industry" for selected child-related careers. Authentic applications are required through field-based or school-based experiences with children in locations such as observation/interaction laboratories, preschools, elementary schools, or daycare settings. Service learning experiences are highly recommended.

## INTRODUCTION TO HOUSING AND INTERIOR DESIGN

- Grade Level: 9 - 12
- Credits: 1 Trimester
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

Introduction to Housing and Interior Design is an introductory course essential for those students interested in academic enrichment or a career within the housing, interior design, or furnishings industry. This course addresses the selection and

planning of designed spaces to meet the needs, wants, values and lifestyles of individuals, families, clients, and communities. Housing decisions, resources and options will be explored including factors affecting housing choices and the types of housing available. Developmental influences on housing and interior environments will also be considered. Basic historical architectural styling and basic furniture styles will be explored as well as basic identification of the elements and principles of design. Design and space planning involves evaluating floor plans and reading construction documents while learning to create safe, functional, and aesthetic spaces. Presentation techniques will be practiced to thoroughly communicate design ideas. Visual arts concepts including aesthetics, criticism, history and production, are addressed. Direct, concrete mathematics proficiencies will be applied. A project based approach will be utilized requiring higher-order thinking, communication, leadership and management processes as housing and interior design content is integrated into the design of interior spaces while meeting specific project criteria. This course provides the foundation for further study and careers in the architecture, construction, housing, interior design, and furnishings industries.

# FAMILY AND CONSUMER SCIENCES

## NUTRITION AND WELLNESS

- A course for grades 9, 10, 11, and 12
- A one credit course

Nutrition and Wellness is a one trimester introductory course designed to enable students to realize the components and lifelong benefits of sound nutrition and wellness practices and empower them to apply these principles in their everyday lives. Students will learn the basics of food preparation so that they can become self-sufficient in accessing healthy and nutritious foods. Topics include the impact of daily nutrition and wellness practices on long-term health and wellness; food preparation, safety, sanitation, and storage; selection and preparation of nutritious meals and snacks based on the 2010 USDA Dietary Guidelines including My Plate; impacts of science and technology on nutrition and wellness issues; and careers in nutrition and wellness. Food preparation lab experiences are a required component of this course. Group work will be used to provide lab experiences. Several cooking techniques and methods to explore foods within each of the major food groups will be used. Nutrition and Wellness is a prerequisite for Advanced Nutrition and Wellness.

## ADVANCED NUTRITION AND WELLNESS

- Prerequisite: Nutrition & Wellness
- A course for grades 10, 11, and 12
- A one credit course

This one trimester advanced course is designed to build upon the foundations established during Nutrition and Wellness (prerequisite course). You will extensively learn about the study of nutrition, as well as practice advanced culinary techniques through preparation of nutrient-rich meals. This is a lab-based course, and participation in weekly (sometimes more) cooking labs is a requirement. In this course we will do a more in-depth study of each major nutrient using a hands-on approach with real food and food products, analyze the different ways that nutrition affects the body across the life-span, explore the various social and cultural influences on nutrition and wellness, and explore the world of food science and technology through research and experimentation.

## ADVANCED NUTRITION AND WELLNESS II—GLOBAL NUTRITION

- Prerequisite: Nutrition and Wellness, Advanced Nutrition and Wellness
- A course for grades 10, 11, and 12
- A one credit course

This one trimester advanced course is designed to build upon the foundations established during Nutrition and Wellness, and Advanced Nutrition and Wellness I (prerequisite course). You will be learning advanced cooking methods and techniques while studying and preparing regional and international cuisine. A major goal of this course is to foster an appreciation of cultural differences by studying food customs, etiquette, historical and geographical influences on food, and the nutrition guidelines of several countries around the world including the United States. You will explore various cultures and food-related customs through class assignments, projects, food lab experiences and guest speakers. This is a lab-based course, and participation in weekly (sometimes more) cooking labs is a requirement.

## INTRODUCTION TO CULINARY ARTS AND HOSPITALITY

- Prerequisite: Nutrition and Wellness, Advanced Nutrition and Wellness
- A course for grades 10, 11, and 12
- A two trimester course
- Students will take the exam for ServSafe Food Handling Certification

Introduction to Culinary Arts and Hospitality is a two-trimester course designed to build upon the foundations established during Nutrition and Wellness (prerequisite) and Advanced Nutrition and Wellness (prerequisite). The focus of the course will include those related to the many jobs and careers related to food service industry. Topics will include advanced culinary arts skills, advanced food preparation skills, advanced food safety and sanitation, nutritional menu options, customer service, hospitality management skills, and career investigation. The course will include a lab-based approach that utilizes higher order thinking, communication, leadership, and management processes. Food preparation lab experiences are a

required component of this course. It is especially appropriate for students with an interest in careers related to Hospitality, Tourism, and Culinary Arts, however, is recommended for any student interested in furthering their skill set and knowledge in Culinary Arts.

## CULINARY ARTS & HOSPITALITY I

- Grade Level: 11,12
- Prerequisite: Introduction to Culinary Arts & Hospitality
- Credits: 2 Trimester Course

Counts as a Directed Elective or Elective for all diplomas. This course is aligned with postsecondary courses for Dual Credit.

Culinary Arts and Hospitality I prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the hospitality industry. This course builds a foundation that prepares students to enter the Advanced Culinary Arts or Advanced Hospitality courses. Major topics include: food safety and personal hygiene; sanitation and safety; regulations, procedures, and emergencies; basic culinary skills; culinary math; and food preparation techniques and applications; principles of purchasing, storage, preparation, and service of food and food products; apply basic principles of sanitation and safety in order to maintain safe and healthy food service and hospitality environments; use and maintain related tools and equipment; and apply management principles in food service or hospitality operations. Intensive laboratory experiences in commercial kitchen settings are a required component of this course of study, as well as one capstone event that will take place outside of school hours. Work-based experiences in the food industry are strongly encouraged. A standards-based plan guides the students' laboratory experiences. Students are monitored in their laboratory experiences by the Culinary Arts and Hospitality teacher. This course is aligned with the following Post-Secondary courses for Dual Credit: Ivy Tech - HOSP 101 Sanitation and First Aid

# ADVANCED TECHNICAL EDUCATION THROUGH IVY TECH

## Ivy Tech Community College— Hamilton County Technical Education Programs for High School Students

ALL CAREER AND TECHNICAL EDUCATION CLASSES THROUGH IVY TECH WILL ARE OFFERED TO GRADES 11 AND 12

- Worth 6 high school credits
- Complete four college courses in one year, earning 12-13 college credits
- Include the credits in your Core 40 or Honors Diploma
- Transfer the credits to an Associate or Bachelor's Degree
- Earn industry recognized certifications

Students will attend Ivy Tech College—Hamilton County (Noblesville) from 12:15-2:15 PM four afternoons (Monday, Tuesday, Thursday, and Friday) per week. Students remain at their high school on Wednesdays.

School district is paying instructional fees for this course. If students choose to drop this course, students will be responsible for all fees incurred.

### INFORMATICS AND CYBER SECURITY

- A Core 40 elective and an Academic Honors and Technical Honors elective
- A minimum of 2.6 GPA or placement assessment score
- Students may earn up to 13 dual credits

Introduces the student to terminology, concepts, theory, and fundamental skills used to implement information system. A brief introduction to word processing and spreadsheets is included as part of a skill set that students will use throughout their careers in informatics.

Students will have the knowledge required to assemble components based on customer requirements, install, configure and maintain devices/software for end users, understand the basics of networking and security, properly and safely diagnose, resolve and document common hardware and software issues.

Introduces the student to algorithms, logic development and flowcharting as tools used to

document computer logic.

Students will be introduced to the basic terminology, concepts, and best practices of computer/network security and the roles and responsibilities of management/security personnel.

**Certifications:** CompTIA A+; CompTIA Security Plus

### IVY Tech Courses Include:

#### **INFM 109 Informatics Fundamentals —3 College Credits**

- Prerequisites: 2.6 GPA or college level Reading and Writing placement assessment score.

Introduces the student to terminology, concepts, theory, and fundamental skills used to implement information system. Topics include the trends in computing, operating systems, security, and cloud implementations. A brief introduction to word processing and spreadsheets is included.

#### **ITSP 135 Hardware/Software Support —4 College Credits**

- Prerequisites/Co-requisite: INFM 109  
Delivers the necessary competencies with hands-on experience in the lab for an entry-level Information technology professional. Students will have the knowledge required to assemble components based on customer requirements, install, configure and maintain devices/software for end users, understand the basics of networking and security, properly and safely diagnose, resolve and document common hardware and software issues while applying troubleshooting skills.

Students can prepare for the CompTIA A+ certification exam through **ITSP 136**.

#### **SDEV 120 Computing Logic —3 College Credits**

- Prerequisites: 2.6 GPA or college level Reading, Writing, and Math placement assessment score.

Introduces the student to algorithms, logic development and flowcharting as tools used to document computer logic. Concepts covered are order of precedence, decision trees, security, different types of language approaches, and scripting. Concepts will be demonstrated using basic scripting and simple programming code.

#### **CSIA 105 Introduction to Cyber Security/Information Assurance —3 College Credits**

- Prerequisites: ITSP 135.

Students will be introduced to the basic terminology, concepts, and best practices of computer/network security and the roles and responsibilities of management/security personnel. The students will learn the technologies used and techniques involved in

creating a secure computer networking environment including authentication and the types of attacks against an organization.

#### **CSIA 106 Workforce Preparation: CompTIA Security+ Certification —1 College Credit**

- Prerequisites/Co-requisite: CSIA 105.

Students can prepare for the CompTIA Security+ certification.



# ADVANCED TECHNICAL EDUCATION THROUGH IVY TECH

## BUILDING CONSTRUCTION (RESIDENTIAL CONSTRUCTION)

- Students may earn up to 12 college credit hours
- Worth 6 high school credits

This program is based on the standards of the National Center for Construction Education & Research (NCCER). The program begins with a study of basic safety, communication skills, and an introduction to construction drawings. Carpentry Level 1 skills and competencies address building materials, fasteners, adhesives, hand and power tools, specifications, layout, and floor systems, wall systems, ceiling joist and roof framing, basic stair layout, and introduction to building envelope systems. NCCER carpentry and framing standards address commercial drawings, roofing applications, thermal and moisture protection, exterior finishing, and cold-formed steel framing.

**Certifications:** NCCER Core Curriculum; NCCER Carpentry Level 1

### IVY Tech Courses Include:

#### **BCTI 100 Introduction to Construction Technology —3 College Credits**

This course covers the NCCER Core Curriculum and is a prerequisite to most other construction courses. Its modules cover topics such as basic safety, communication skills, and introduction to construction drawings; all basic skills needed to continue education in the construction program.

Industry Certification: NCCER Core Curriculum

#### **BCTI 101 Introduction to Carpentry, Part I —3 College Credits**

- Prerequisites: BCTI 100.

This course covers the first half of NCCER Carpentry Level I. Its modules cover topics such as building materials, fasteners, adhesives, hand and power tools, introduction to construction drawings, specifications, layout, and floor systems.

#### **BCTI 102 Introduction to Carpentry, Part 2 —3 College Credits**

- Prerequisites/Co-requisites: BCTI 101.

This course covers the second half of NCCER Carpentry Level I. Its modules cover topics such as wall systems, ceiling joist and roof framing, basic stair layout, and introduction to building envelope systems. The NCCER Carpentry Level I certificate and wallet card

will also be awarded upon successful completion of this course.

Industry Certification: NCCER Carpentry Level 1

#### **BCTI 103 Carpentry Framing and Finishing, Part I —3 credits**

- Prerequisites: BCTI 100.

This course covers the first half of NCCER Carpentry Framing and Finishing Level 2. Its modules cover topics such as commercial drawings, roofing applications, thermal and moisture protection, exterior finishing, and cold-formed steel framing. The NCCER Carpentry Framing and Finishing Level 2 certificate and wallet card will not be awarded until the student successfully completes both this course and BCTI 104.

## VISUAL COMMUNICATIONS & WEBSITE DEVELOPMENT

- Students may earn up to 12 college credits
- Worth 6 high school credits

The program introduces students to a full range of image input technology and manipulation including conventional photography, digital imaging, and computer scanners. Students will learn the basics of planning, shooting, editing and post-producing video and sound. The fundamentals of computer graphics, vector-based and page layout software used in the professional visual communications industry will be emphasized. Illustration techniques using computer software to create illustrations, technical drawing, logos, packaging, maps, charts, and graphs will be explored.

**Prerequisites:** 2.6 GPA or placement assessment score

**Time Commitment:** One Year Program; 2 hours/day; 4 days/week

**Possible College Credits:** 12 credits

### IVY Tech Courses Include:

#### **VISC 102 Fundamentals of Imaging —3 College Credits**

- Prerequisites: 2.6 GPA or college-level Reading and Writing placement assessment score.

Introduces students to a full range of image input technology and manipulation including conventional photography, digital imaging, and computer scanners. Students will learn to communicate concepts and ideas through various imaging devices. Explores composition and fosters creativity.

#### **VISC 105 Video and Sound —3 College Credits**

- Prerequisites: 2.6 GPA or college-level Reading and Writing placement assessment score.

An introduction to the field of video technology. Students will learn the basics of planning, shooting, editing and post-producing video and sound. Projects include exercises in technical and creative skills application, equipment usage and production techniques.

#### **VISC 115 Introduction to Computer Graphics—3 College Credits**

- Prerequisites: 2.6 GPA or college-level Reading and Writing placement assessment score.

This course introduces students to fundamental computer graphics in visual communications. The initial focus of the course is on basic computer terminology and use, mastering fundamental skills, and developing efficient working styles. These skills are further developed through work with vector-based and page layout software used in the professional visual communications industry.

#### **VISC 216 Electronic Illustration —3 College Credits**

- Prerequisites: VISC 115

Provides intermediate instruction in illustration techniques using computer software designed for creating illustrations, technical, drawing, logos, packaging, maps, charts, and graphs. Emphasis is on preparing effective, creative illustrations for various media applications in an efficient, productive manner. Produces samples for student portfolios.

# ADVANCED TECHNICAL EDUCATION THROUGH IVY TECH

## AUTOMOTIVE SERVICE TECHNOLOGY

- Students may earn up to 12 dual credits
- Worth 6 high school credits

**Certifications:** Courses count toward Ivy Tech certificate and prepare students for national certifications.

### Program Description:

This program gives students an overview of the operating and general maintenance systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the automotive industry and will study maintenance, light repair, and electrical operating systems. Safety procedures for the operation of equipment and tools used in the electrical diagnosis and repair in the automotive electrical industry will be emphasized. Repair techniques for today's modern engines and engine theory, operation and design will be studied and practiced.

### IVY Tech Courses Include:

#### AUTI 100 Basic Automotive Service —3 College Credits

This course gives students an overview of the operating and general maintenance systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the automotive industry. Students will study the maintenance and light repair of automotive systems. In addition, this course will prepare students to take a nationally recognized certification exam.

#### AUTI 111 Electrical Systems I—3 College Credits

- Prerequisites/Co-requisites: AUTI 100 or AUBR 100, or TRCK 100 or AUTC 100, and AUTC 107.

This is the first of two courses that gives students an overview of the electrical operating systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the electrical diagnosis and repair in the automotive electrical industry. Students will study the fundamentals of electricity and automotive electronics. In addition, this course will prepare students to take a nationally recognized certification exam.

#### AUTI 122 Steering and Suspension Systems—3 College Credits

- Prerequisites/Co-requisites: AUTI 111, or AUTC 113.

This is the first of two courses that teaches theory, service and repair of automotive steering and suspension systems. This course provides an overview of various mechanical, power, and electrical steering and suspension systems used on today's automobiles. This course will emphasize professional diagnosis and repair methods for steering and suspension systems.

#### AUTI 141 Engine Fundamentals and Repair—3 College Credits

- Prerequisites/Co-requisites: AUTI 100.

This course focuses on repair techniques for today's engines. The course will utilize precision measuring tools, specialized tools and equipment, and emphasize following prescribed procedures needed to properly repair today's modern engine. This course also presents engine theory and operation and studies the various engine designs utilized today. In addition, this course will prepare students to take a nationally recognized certification exam.

## INDUSTRIAL TECHNICAL MAINTENANCE I

*Industrial Technical Maintenance I includes classroom and practical experiences that prepare students to apply technical knowledge and skills to repair and maintain industrial machinery and equipment. Instructional activities develop diagnostic and problem-solving skills related to electric circuits, wiring, motors, robotics, hydraulics, and pneumatics. Additional areas of instruction should include plumbing, rigging, basic machining, welding and cutting.*

- Recommended Grade Levels: 11 & 12
- Recommended Prerequisites: Introduction to Manufacturing or similar course
- 3 trimester course, 2 credits per trimester
- Counts as a Directed Elective or Elective for all diplomas
- This course is aligned with a post secondary institution for dual credit

### Content Covered Includes the Following:

Basic Mechanical – Rigging, Fasteners, Bearings & Shafts, Mechanical Drives  
Maintenance Fundamentals – Basic Safety, Materials & Measurement, Math & Print Reading  
Basic Electricity – Meters, Ohm's Law &

Circuits (Components, Calculations, & Diagnosis), AC & DC Power Sources (Batteries, Power Supplies, Generated Power)  
Electrical Diagrams – Understanding of Symbols & Electrical Connections  
Distribution – Conduit, Distribution Panels and Buss Bars, Panel Wiring  
Motors – AC & DC Motors, Transformers & Solenoids, Troubleshooting, Replacement & Alignment  
Motor Control – Contractors, Control Circuits, Reversing Techniques, Intro to VFD's  
Basic Fluid Power – Diagrams, Hydraulics, Pneumatics, Troubleshooting

# ADVANCED TECHNICAL EDUCATION THROUGH IVY TECH

## ABC CONSTRUCTION PREP ACADEMY (COMMERCIAL CONSTRUCTION)

**ALL ABC CONSTRUCTION PREP COURSES THROUGH IVY TECH WILL ARE OFFERED TO GRADES 11 AND 12. Students will attend Ivy Tech College—Hamilton County (Noblesville)**

### Program Description

Associated Builders and Contractors Construction Preparatory Academy (ABC Prep Academy) is an interactive, 2 year program that will allow students to explore the construction industry through a hands-on introductory approach. The hands-on experience includes work in our lab and through job site field trips. The goal of this program is to introduce students various trades within the construction industry and help them determine a career path of interest. Juniors who have successfully completed Prep Academy I are eligible to continue with Prep Academy II their senior year. In Prep Academy II, students are enrolled in the Level I apprenticeship program of the trade of their choosing. This gives Prep Academy students a one-year head start on their career as a Craft Professional.

**School district is paying instructional fees for this course. If students choose to drop this course, students will be responsible for all fees incurred.**

### Prep Academy I: Construction Trades I

- **Grades 11 & 12**
- **Prerequisites:** None
- **Time Commitment:** One Year Program; 5 days/week
- **Certifications:** OSHA 10 Certification, Scissor Lift Certification, Welding Certification, Confined Space & First Aid/CPR Certification

The Prep Academy I course offers students an introduction to the various construction trades offered by ABC. Through lab based experiences and field trips, students will gain multiple certifications in safety (OSHA 10 & First Aid/CPR) plus Scissor Lift. This course is available for all high school Juniors or Seniors. The curriculum utilized in Year I is aligned with the Indiana Department of Education Academic Standards Content Framework for the Construction Trades I. The course seeks to provide an overview; so no formal textbook will be utilized for the course. Instead, applicable modules from The National Center for Construction and Education Research

(NCCER) curriculum will be applied. These modules are pulled from the Level 1 course within that trade. NCCER Curriculum is a competency-based, task oriented curriculum. Some of the topics include Heavy Equipment Operation, Concrete/Masonry, Power Tools, Welding, Plumbing/Pipefitting, HVAC/Sheet Metal, Sprinkler Fitting and Electrical.

### Prep Academy II: Apprenticeship

- **Grade 12**
- **Prerequisites:** Prep Academy I: Construction Trades I
- **Time Commitment:** One Year Program; 5 days/week

The Prep Academy II course, allows students to be enrolled in the adult apprenticeship program (Level 1) in the trade of their choosing. ABC provides formal apprenticeship training programs that are registered with the United States Department of Labor, Office of Apprenticeship. These programs meet all federal and state requirements for formal apprenticeship and prevailing wage work including employer-sponsored classroom instruction and on-the-job training. Upon successful completion, craft workers are recognized at the journey level in their trade and are awarded their apprenticeship certificate. Students will get a one-year head start, compared to their peers, towards earning their Craft Professional license. The trades offered at ABC can include some of the following; Carpenter, Electrician, Insulation Installer, HVAC Technician, Ironworker, Welder, Pipefitter, Plumber, Sheet Metal Worker and Sprinkler Fitter.

# WESTFIELD HIGH SCHOOL

## IVY Tech—Hamilton County Advanced Technical Education Courses STUDENT/PARENT CONTRACT

Ivy Tech—Hamilton County offers Westfield High School students an exciting educational opportunity. It is our goal to provide these types of learning experiences to our students. Our district spends approximately \$1,500 on each student for tuition for these course offerings. Once a student is accepted and enrolled in the Ivy Tech CTE courses, the student will be required to complete the 180-day program. **Students will not be allowed to drop or change programs anytime during the year, including trimester/semester breaks.**

The following must be signed by both student and parent in order to participate in the Ivy Tech Hamilton County Advanced Technical Education courses:

\_\_\_\_\_ and \_\_\_\_\_ agree to **ALL** policies stated below.

(Student Name)

(Parent/Guardian Name)

- ♣ Student and parent are familiar with all policies and procedures of Ivy Tech Hamilton County Advanced Technical Education Courses. We have attended the student and parent meetings about the program.
- ♣ Student **cannot** change or drop their Ivy Tech class after **May 20, 2019**
- ♣ Student will attend Ivy Tech Hamilton County CTE Courses on days when Westfield High School is not in session and attend Westfield High School on days when Ivy Tech Hamilton County is not in session.
- ♣ Student may miss Westfield High School pep sessions, bonus periods, and other school activities due to the Ivy Tech Hamilton County CTE Courses class schedule.
- ♣ Student will conduct himself/herself in an appropriate manner at all times.
- ♣ Student will attend their scheduled Ivy Tech Hamilton County CTE Course class for the entire school year.

**IF A STUDENT FAILS TO COMPLETE THE 180 DAY PROGRAM, THE FAMILY WILL BE RESPONSIBLE FOR REIMBURSEMENT OF TUITION TO WESTFIELD WASHINGTON SCHOOLS**

**Student Signature:**

**Date**

\_\_\_\_\_

\_\_\_\_\_

**Parent/Guardian Signature:**

**Date**

\_\_\_\_\_

\_\_\_\_\_



# HOSPITALITY AND TOURISM

## TOURISM, CONVENTIONS, AND EVENT MANAGEMENT PATHWAY

Tourism, Conventions, and Event Management pathway allows detail-oriented people to call the shots in a fast-paced work environment that changes daily. What can students do with a tourism degree? There are many things such as Tourism development, marketing, public relations, sales, event management, cultural tourism, sustainability, and so much more.

Westfield High School is offering a one-of-a-kind college credit opportunity in one of Indiana's hottest tourism destinations: Hamilton County, Indiana. The partnership with Ivy Tech Community College, IU's School of Physical Education and Tourism Management and Hamilton County Tourism, Inc., this program readies students for the real world of hospitality management and allows students to graduate with up to 18 college credits hours, or an entire semester of college credit on a college transcript along with valuable paid field experience.

### Program Description

- Students can begin the pathway as a freshman taking Principles of Marketing. Sophomore year continue by taking the intro classes, and students officially join the program the junior or senior year
- Students can take one or all of the classes of the following classes:
  - Principles of Marketing – Located in the Business Department section of course book
  - ACP Intro to Business Administration
  - Introduction to Hospitality
  - The Tourism System
  - Hotel Management
- All transfer to or through Ivy Tech Community College to Indiana University's Tourism Convention and Event Management program
- Even if students decide not to pursue a major at IU, the college credits may transfer to other programs in the state or elsewhere, or students can use them to build a minor in event and hospitality management which serves as a great foundation for a wide variety of career options
- One of the requirements of the full program is to work in some sector of hospitality management – the winter of the junior year, students interview for and are placed at a local hospitality partner for a paid position that begins that spring and continues for a year working alongside

tourism professionals in one of the most vibrant tourism markets in the Midwest. More than 12,000 employees work in the Hamilton County Tourism, annually welcoming more than 4 million visitors!

## INTRODUCTION TO TOURISM

- Recommended Grade Levels: 10-12
- Credit: A one credit course
- A minimum GPA of 2.6 or placement assessment score
- This course is aligned with postsecondary courses for Dual Credit

### *HOSP 114 Introduction to Tourism/Hospitality*

Introduction to Hospitality introduces students to the various components of the tourism, events, and hospitality industry. Emphasis is placed on exploring such areas as service, food and beverage operations, lodging, hospitality, events and attractions. Students are exposed to different career opportunities available within the diverse scope of the industry. Some of the topics covered include; Hospitality industry: food service, lodging, and transportation, Customer service, and Types of events.

### *HOSP 171 Principles of Event Management*

Provides an introductory approach to planning and organizing events. Focus is on the operational principles of for-profit and non-profit event types, including sporting, cultural, social, and business. Some of the topics covered include; Event organizers and hosts, Event types and purposes, Event venues, Event technology and Event sponsorship.

## TOURISM & HOTEL MGT.

- Recommended Grade Levels: 11 and 12
- Prerequisite: Introduction to Tourism
- A minimum GPA of 2.6 or placement assessment score
- Credit: A one credit course
- **This course is aligned with postsecondary courses for Dual Credit**

### *HOSP 272 The Tourism System*

Designed to develop an understanding of travel trends and modes and the social, environmental, and economic impact on destination areas. The course explores major concepts in tourism, what makes tourism possible, and how tourism can become an

important factor in the wealth of any nation. Emphasis is given to local, regional, and national tourism.

### *HOSP 215 Hotel Management (Front Office)*

This course presents a systematic approach to front office procedures, detailing the flow of business through a hotel beginning with the reservation process and ending with billing and collection procedures within the context of the overall operation of a hotel. Students will examine front office management, the process of handling complaints and concerns regarding hotel safety and security. Students will become involved in the processes for forecasting future business, sales, and rate structure of the hotel as well as methods for budgeting hotel finances for success.

## HEALTH SERVICES

### HEALTH SCIENCE EDUCATION II: NURSING

- Grade Levels: 11-12
- Credit: A two credit course
- Counts as a Directed Elective or Elective for all diplomas

Health Science Education II: Nursing is an extended laboratory experience designed to provide students with the opportunity to assume the role of nurse assistant. Students will practice technical skills previously learned in the classroom; all while working at clinical site and under the direction of licensed nurses. These sites may include extended care facilities, hospitals and home health agencies. Throughout the course, students will focus on learning about the healthcare system and employment opportunities at a variety of entry levels; an overview of the healthcare delivery systems, healthcare teams and legal and ethical considerations; and obtaining the knowledge, skills and attitudes essential for providing basic care in a variety of healthcare settings. Additionally, students will build their essential job related skills to record patient medical histories and symptoms; provide medication and treatments; consult with physicians and other healthcare providers; operate and monitor medical equipment; perform diagnostic tests; teach patients and families how to manage their illness or injury; and perform general health screenings. This course also prepare students to find employment at an entry level position in hospitals, nursing homes or doctors' office by teaching the students skills to become a Certified Nursing Assistant. Upon successful completion of this course, students will be qualified to take the state certification test for Certified Nursing Assistant. All students must have a physical, 2 step TB test and a criminal background check to participate in the class.

**School district is paying instructional fees for this course. If students choose to drop this course, students will be responsible for all fees incurred.**

### EMERGENCY MEDICAL SERVICES

- Grade Level: 11 - 12
- Prerequisites: None
- Credits: 3
- Counts as a Directed Elective or Elective for all diplomas
- This course is aligned with postsecondary courses for Dual Credit

Emergency Medical Services prepares students for a state certification which may lead to a career in Emergency Medical Services. Examples of those careers include Emergency Medical Technician and Paramedic. This course is designed for persons desiring to perform emergency medical care. Theories, techniques, and operational aspects of pre-hospital emergency care, within the scope and responsibility of the basic emergency medical technician are covered in this course. Students will learn to recognize the seriousness of the patient's condition, use the appropriate emergency care techniques and equipment to stabilize the patient, and safely transport them to the hospital. The handling of victims of hazardous materials accidents is also addressed in this course. Opportunities for laboratory practice and clinical observation in a hospital emergency room and ambulance are also included to provide occasions for students to further develop clinical skills and the appropriate ethical behavior.

# WESTFIELD HIGH SCHOOL

## Health Science Education II: Nursing provided by All Heart CNA STUDENT/PARENT CONTRACT

All Heart CNA offers Westfield High School students an exciting educational opportunity. It is our goal to provide these types of learning experiences to our students. Our district spends approximately \$1,350 on each student for tuition for this training opportunity. Once a student is accepted and enrolled in the CNA Nursing course, the student will be required to complete the 60-day program. **Students will not be allowed to drop or change programs anytime during the year, including trimester breaks.**

The following must be signed by both student and parent in order to participate in the All Heart CNA training classes:

\_\_\_\_\_ and \_\_\_\_\_ agree to **ALL** policies stated below.

(Student Name)

(Parent/Guardian Name)

- ♣ Student and parent are familiar with all policies and procedures of All Heart CNA  
We have attended the student and parent meetings about the program.
- ♣ Student **cannot** change or drop their CNA Nursing class after **May 20, 2019**
- ♣ Student may miss Westfield High School pep sessions, bonus periods, and other school activities due to the CNA nursing class schedule.
- ♣ Student will conduct himself/herself in an appropriate manner at all times.
- ♣ Student will attend their scheduled CNA nursing class for the entire trimester.

**IF A STUDENT FAILS TO COMPLETE THE 60 DAY PROGRAM, THE FAMILY WILL BE RESPONSIBLE FOR REIMBURSEMENT OF TUITION TO WESTFIELD WASHINGTON SCHOOLS**

**Student Signature**

**Date**

\_\_\_\_\_

\_\_\_\_\_

**Parent/Guardian Signature**

**Date**

\_\_\_\_\_

\_\_\_\_\_

# ENGLISH

## ENGLISH 9 (1A, 1B, and 2A)

- A three credit course
- A Core 40 and AHD course

English 9 in 3 trimesters fulfills an English/Language Arts requirement for the General and Core 40 diplomas. English 9, an integrated English course based on *Indiana's Academic Standards for English/Language Arts* in Grade 9 and the *Common Core State Standards for English/Language Arts*, is a study of language, literature, composition, and oral communication with a focus on exploring a wide-variety of genres and their elements. Students write short stories, responses to literature, expository and persuasive compositions, research reports, business letters, and technical documents. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

## ENGLISH 9 (1-2)

- A two credit course
- A Core 40 and AHD course

English 9 students use language as a tool for thinking and learning as they practice in identifying, analyzing, and composing with different elements, structures, and genres of written language. Literature instruction focuses on opportunities to read, comprehend, analyze, and respond to a broad variety of literature. Students will also develop vocabulary and language skills, analyzing the role of diction and syntax in literature. Students will write for various audiences and purposes while strengthening skills in paragraph and multi-paragraph writing. Using technology they will practice the writing process. This process includes: (1) prewriting, including summarizing, analyzing, and evaluating research; defining a problem or question; and outlining; (2) drafting; (3) revising; (4) editing; and (5) publishing. Oral Communication (speech) emphasizes effective listening and speaking techniques and provides opportunities for students to integrate other reading and language arts skills as they learn to express ideas verbally.

## ENGLISH 9 HONORS (1-2)

- A two credit course
- A Core 40 and AHD course

English 9 Honors students use language as a tool for thinking and learning at a more rigorous level than English 9. Literature instruction focuses on opportunities to read, comprehend, analyze, and respond to a broad

variety of literature. Students will also develop vocabulary and language skills, analyzing the role of diction and syntax in literature. Writing instruction focuses on narration, synthesis, persuasion, and analysis, all through multi-paragraph essays. Students are also expected to be critical discussion participants and listeners and give effective oral presentations that clearly express ideas and employ persuasive techniques.

## ENGLISH 10 (3-4)

- A two credit course
- A Core 40 and AHD course

English 10-3 and 10-4, an integrated English course based on Indiana's Academic Standards for English/Language Arts in Grade 10, is a study of language, literature, composition, and oral communication with a focus on exploring universal themes across a wide variety of genres including plays, classic and contemporary novels, non-fiction documents and novels, short stories, and poetry. Beyond these, English 10 develops the reading canon, increases the conscious choice of reading and writing strategies, and prepares students for academic, state, and college entrance standardized tests. Students use literary interpretation, analysis, comparison, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 10. Students write short story analysis, response to literature, expository and persuasive compositions, research reports, and technical documents. Students study grammar and vocabulary through writing and literature, deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

## ENGLISH 10 in 3 Trimesters (3A, 3B, & 4A)

- A three credit course
- A Core 40 and AHD course

This course covers the state of Indiana standards for English 10 over three trimesters, moving at a slower pace for students who may need additional support.

## ENGLISH 10 HONORS (3-4)

- Recommended "B" or higher in an Honors English class, an "A" in a regular English class, or teacher recommendation
- A Core 40 and AHD course
- A two credit course

English 10-3 Honors and 10-4 Honors, an integrated English course based on Indiana's Academic Standards for English/Language Arts in Grade 10, is a dynamic and fast-paced study of language, grammar, literature, composition, and oral communication with a focus on exploring universal themes across a wide variety of genres including plays, classic and contemporary novels, non-fiction documents, essays, and books. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance. Students vigorously read, analyze, and evaluate all texts to prepare for academic, state, and college entrance standardized tests and Advanced Placement English courses. Students write literary analysis, expository and persuasive compositions, research reports, and technical documents. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information. Students will be expected to intellectually contribute to Socratic seminar discussions in class using proof of reading.

## ENGLISH 11 (5-6)

- A two credit course
- A Core 40 and AHD course

In English 11-5 and 11-6, students move from predominantly analyzing and using the elements of written language to making arguments based on those analyses. English 11 also incorporates a survey of American literature from different time periods. Composition in English 11/5-11/6 continues to refine students' abilities to articulate sophisticated ideas in an organized manner. Increased sensitivity to context—audiences, purposes, and other environmental considerations—helps students better communicate their thoughts. Juniors will complete a research paper utilizing the writing process. Practice in oral communication (speech) provides opportunities for students to integrate other reading and language arts skills as they incorporate correct grammar, usage, vocabulary, reading, and composition skills while learning to express ideas verbally.

# ENGLISH

## ENGLISH 11 HONORS (5-6)

- A two credit course
- A Core 40 and AHD course

English 11-5 and 11-6 (Honors) move from predominantly analyzing and using the elements of written language to making judgments based on those analyses on a more rigorous level than English 11. Students continue making judgments based on their analysis of professional works. They practice synthesizing elements of style and construction into their own writing. Self-evaluation and evaluation of professional writers are both a part of this class. The class also incorporates a survey of American Literature from different time periods. Students write a variety of compositions ranging from analytical, expository, and persuasive to more creative pieces such as poetry and playwriting. Students will also complete a formal research paper with MLA documentation in 11/6. Students will continue to review the mechanical aspects of writing such as punctuation, placement of modifiers, effective syntax and diction, and pronoun/antecedent agreement. The recommended criteria for placement in an English 11 is prior trimester grade of "B" or higher in an Honors English class, an "A" in a regular English class, or teacher recommendation.

## ENGLISH 12 (7-8)

- A Core 40 and AHD course
- A one or two credit course

In English 12/7-12/8, students practice explaining and defending their analysis of readings to others. The emphasis is on different cultural contexts and is intensified through a focus on World Literature. Students learn to identify and communicate about the broad themes, trends, and cultural issues present in World Literature. Literature instruction focuses on these opportunities:

- \* Applying appropriate reading skills and strategies to make and defend judgments about written quality and content of literary works
- \* Responding critically, reflectively, and imaginatively to the literature of outstanding writers
- \* Further enlarging vocabulary

Composition in English 12/7-12/8 should demonstrate (1) a clearly identified audience, (2) a well articulated purpose and thesis, and (3) a structured body that fulfills its stated

purpose and supports its thesis. Oral Communication (speech) continues to emphasize the organization of ideas, awareness of audience, and sensitivity to context in carefully researched and well organized presentations.

## ENGLISH ELECTIVES

### ENGLISH LANGUAGE AND COMPOSITION/SEMINAR, ADVANCED PLACEMENT

This course is a combination of two AP courses combined into one class due to similar skills and requirements. Students will prepare for and be expected to take both the AP English Language and Composition exam and the AP Seminar exam.

- Required course for AP Capstone Diploma
- A course for grades 11 & 12
- A three credit course
- A Core 40 and AHD course
- This course may replace either junior or senior English requirements
- This is the prerequisite for AP Research

**AP English Language and Composition** is a course based on content established by the College Board. This course engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and in becoming skilled college writers who compose for a variety of purposes. The purpose of the course is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers. Students will recognize and develop stylistic techniques through utilizing a wide-ranging vocabulary, a variety of sentence structures, and logical organization, while learning to effectively use rhetoric.

**AP Seminar** is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students will practice reading and analyzing articles, research students and foundational literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students will learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip

students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

## RESEARCH, ADVANCED PLACEMENT

**Seniors will take this course to satisfy their eligibility for a Westfield High School Capstone Diploma. More information about the Capstone Diploma can be found on page 14 or at [www.collegeboard.org/apcapstone](http://www.collegeboard.org/apcapstone)**

- Prerequisite: Completion of AP Seminar
- A course for grade 12
- A two credit course
- A Core 40 and AHD course
- This course may replace both senior English requirements

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 two trimester 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.



# ENGLISH

## ENGLISH LITERATURE AND COMPOSITION 1 AND 2, ADVANCED PLACEMENT

- A course for grade 12
- A two credit course
- A Core 40 and AHD course
- This course may replace both senior English requirements

AP English Literature and Composition is a course based on content established by the College Board. Students read fictional literature from a wide variety of time periods, settings, and genres, including poetry, short stories, plays, and novels. Students develop the skill of close reading and analysis as they read critically to discover how authors communicate universal themes and ideas that stretch beyond place and time. Students are also able to identify and describe the effect of various literary techniques which contribute to the effective development of ideas. In addition to reading analytically, students develop their own writing skills so that they are able to write focused, well-developed analyses of the various works that they read. Writing is an integral part of this class. Students will prepare for the AP English Literature and Composition test in May, which may qualify them for college credit, depending on their score.

## ENGLISH LITERATURE & COMPOSITION 3, ADVANCED PLACEMENT

- A course for grade 12
- A one credit course available third trimester
- A Core 40 and AHD course
- This course may replace both senior English requirements
- Prerequisite: Completion of AP Literature and Composition 1 and 2 or Research during first two trimesters of senior year.

This class is a continuation of AP English Literature and Composition I and II and serves as an opportunity for students to fine tune their analytical and composition skills before sitting for the exam in May. This exam may qualify them for college credit, depending on their score. See description of AP English Literature and Composition I and II for a brief synopsis of the class.

## ACP English Courses

- A student must have a GPA of 2.7 to be eligible for admission to the ACP Program through Indiana University and be able to take these courses for IU college credit.
- There is a tuition fee to take an ACP course through Indiana University. Tuition is payable to IU upon enrollment in the class for college credit.

## ACP COMPOSITION (IUB W131)

- Prerequisite: At least 6 earned English credits
- A course for grade 12
- A one credit course
- A Core 40 and AHD course
- This course may replace 1 senior English class

ACP Composition offers students an opportunity to develop the knowledge, skills, and perspectives that every college freshman is expected to attain. The course is developed in cooperation with Indiana University. In this course students will learn, by explanation and example, many ideas, patterns, and methods for composing dynamic papers of the type that are expected throughout college. Through critical reading and thinking, speaking, and especially writing, students will master college level academic writing and seek to identify and clarify their own specific writing style. In addition to the one credit offered through Westfield High School, this class may also be taken for three college credits through Indiana University that are transferable to most other universities, both in-state and out-of-state. This course may replace the second senior English requirement.

## ACP LITERARY INTERPRETATION (IUB L202)

- Prerequisite: completion of or concurrent enrollment in ACP Composition.
- A course for grade 12
- A one credit course
- This course may replace 1 senior English class
- A Core 40 and AHD course

Development of critical skills essential to participation in the interpretive process of the college class will be emphasized through

various readings, class discussion, and focused writing assignments. The course is developed in cooperation with Indiana University. Students will read literature closely with a focus on poems that have something in common, particularly first-person poems, place works of fiction in context by considering their genre, and consider other contexts in which a literary work can be placed, including the author's re-visions, the author's career, the author's historical/cultural world, critical commentary on the work and adaptations of the work. In addition to the one credit offered through Westfield High School, this class may also be taken for three college credits through Indiana University that are transferable to most other universities, both in-state and out-of-state. The college credits for ACP Literary Interpretation are not the same credits earned in ACP Comp (W131). Credits for L202 will transfer as elective credits.

## ACP SPEECH (IUB P155)

- Prerequisite: Completion of English 11, or English 10 and Speech
- A course for grades 11 and 12
- A one credit course
- A Core 40 and AHD course
- This course may replace 1 senior English class

This one trimester course is designed to help students enter into the practice of public address in order to understand the human phenomenon of communication in all its wealth and complexity. The performance of formal audience-directed speeches will be devoted to issues that require our attention and action as citizens of a community. The approach will be grounded in rhetorical theory as well as contemporary examples of great speaking in a variety of contexts. You'll learn how to prepare convincing arguments enlivened with confident delivery and based through understanding of your audience. Along with formal speeches students will deliver impromptu speeches and complete textbook readings along with supplemental readings. In addition to the one credit offered through Westfield High School, this class may also be taken for three college credits through Indiana University that are transferable to most universities, both in-state and out-of-state.



# ENGLISH

## CONTEMPORARY LITERATURE

- A course for grades 11 and 12
- A one credit course
- A Core 40 and AHD course
- This course may replace one senior English class.

This course will focus on the reading and analysis of literature since the 1950s. Modern issues will be discussed as they are portrayed in the literature. Students will be expected to read from several genres and be prepared for class discussion. Class evaluation will be based upon discussion, class presentations, tests, and a number of essays. This class is for the student who has an interest in the study of modern literature with an emphasis on modern fiction and discussion of recent social issues found in contemporary literature.

## CREATIVE WRITING

- **This is a BYOT class**
- Prerequisite: Successful completion of English 9 and 10
- A course for grades 11, and 12
- A one credit course
- A Core 40 and AHD course
- This course may replace one senior English class

**This BYOT (Bring Your Own Technology)** course is designed for the student who possesses not only an ability to write, but also a desire to express his/her imagination, creativity, and emotions in the form of writing. Numerous forms of written expression--memoirs, creative essays, poetry, short stories, plays--will be explored, with an emphasis on the development and enhancement of each student's ability to write creatively. Representative examples of popular works will be studied concurrently with the individual projects. With a strong emphasis on peer editing, students should expect to present their work to the class for both peer review/suggestions, as well as aloud as part of their final portfolio presentation.

## SPEECH

- A course for grades 9,10, 11 and 12
- A one credit course
- A Core 40 and AHD course
- This course may replace one senior English class

The Speech course will enable students to become proficient public speakers through the study of and practice in the basic techniques of effective communication. Course topics include the communication process, listening skills, group communication, verbal and nonverbal communication, and effective delivery. Both informal and formal speeches will be given and will include impromptu and ceremonial speeches. Major researched speeches include demonstration, informative and persuasive types. Students will learn to organize and improve speeches through structure and outlining, research, vocabulary and style, and preparation and presentation. Students will participate in the peer evaluation process as part of the development of critical listening skills.

## DEBATE

- A course for grades 9, 10, 11 , and 12
- A Core 40 and AHD course
- A one, two or three credit course
- This course may replace one senior English class.

Debate, a course based on Indiana's Academic Standards for English/ Language Arts, is the study and application of the basic principles of debate involving support for the basic types of arguments and debate strategies (affirmative and negative argument construction and extension, case development, refutation or rebuttal of argument claims and evidence, and persuasive speaking). Students will do a substantial amount of research, reading and writing in preparation for case development. Emphasis will be placed on the Lincoln-Douglas and Public Forum Debate structures, as defined by the Indiana High School Forensics Association and the National Speech and Debate Association.

## POETRY

- A course for grades 11, and 12
- A one credit course
- A Core 40 and AHD course
- This course may replace one senior English class

Poetry will focus on the careful reading of poetry as well as the writing of our own poetry. We will look at how many different forms of poetry and then learn how to construct our own poetry in response. The goal is to make poetry less intimidating and mysterious and instead make it accessible and fun.

## FILM LITERATURE

- A course for grades 11, and 12
- A one credit course
- A Core 40 and AHD course
- This course may replace one senior English class

Film literature will analyze a variety of popular, historical and award-winning films for their literary merit. Students will also analyze films of various genres and content. In addition, the course will observe the differences and similarities of storytelling in different mediums. Students will have the opportunity to look at what goes into the screenwriting process as well. Students will practice skills in writing, analysis, comprehension and speaking, as well as additional communication and English skills. Films may tackle mature content (nothing gratuitous), so it is important that any student who takes the class is willing to engage in mature age-appropriate discussions if they arise.

## GENRES IN LITERATURE (Sci Fi & Adventure)

- A course for grades 9, 10, 11 , and 12
- A Core 40 and AHD course
- A one credit course
- This course may replace one senior English class.

This one-trimester course is a study of various literary genres but specifically in science fiction and adventure themes, such as poetry, dramas, novels, short stories, biographies, journals, diaries, essays, and others. Students examine esteemed literary works written that address similar topics or themes. Students analyze how each genre shapes literary understanding or experiences differently, how different genres enable or constrain the expression of ideas, how certain genres have had stronger impact on the culture than others in different historical time periods, and what the most influential genres are in contemporary times. Science Fiction will focus on various types of literature related to the genre of science-fiction both classic and current. The adventure element will focus on various types of literature related to the themes of adventure. These include both contemporary, classic, fiction and non fiction novels, stories, poems, etc.

# ENGLISH

## COLLEGE-ENTRANCE PREPARATION

- Prerequisite: Must have completed OR be enrolled in Algebra II (3-4) , Algebra II (3-4) (Honors)
- A course for grade 11
- A one credit course

College Entrance Preparation is a one semester, elective course open to juniors who are planning to attend a 4-year college/university. The course emphasizes preparation for the SAT and ACT. The course is designed to give students information in order to select and apply to a college or university best suited to their future plans.

## ETYMOLOGY

- A course for grades 10, 11, and 12
- A one credit course

Etymology provides instruction in the derivation of English words and word families from their Latin and Greek origins. It also provides the connotative and denotative meaning of words in a variety of contexts. Students study the origins and meanings of English words, including roots, suffixes, prefixes, and reasons for language change. As it enables students to increase their vocabularies, this course helps prepare students to perform well on the SAT. Additionally, students will complete research and writing projects in this course.

## JOURNALISM

- A course for grades 9, 10, 11, and 12
- A one credit course

Journalism is a one-trimester course designed to teach the Indiana Academic State Standards for Journalism. This class offers training and practice in all aspects of journalistic writing, including some participation in the design and production of the Westfield High School online publication. Students will study communications history and the legal boundaries and ethical principles that guide journalistic writing as they learn writing styles and visual design. Personality profiles, feature stories, news stories, food/movie reviews, photojournalism, editorials, and opinion writing will be explored in depth.

## CCR BRIDGE: LITERACY READY

- A course for grades 10 and 11
- Recommended Pre requisite: Must be students who want to attend college, but who have not passed the Grade 10 English Istep and have scored below a 45 on the PSAT,
- A two credit course

CCR Bridge: Literacy Ready is an innovative, dynamic course built to help students master the literacy skills needed for three subject areas – English, social science, and science. CCR Bridge consists of eight units: three in history, three in English, and two in science. Content of each of the disciplines is at the forefront of the curriculum, while disciplinary literacy skills are emphasized through reading and writing assignments based on the content. The focus is on truly understanding how to read and interpret texts in the discipline on a college level. Students in this course want to be college bound, but have not met the requirements necessary to fulfill that goal.

## DEVELOPMENTAL READING

- A course for grades 9, 10, 11, and 12
- A one credit course

Developmental Reading is a supplemental course that provides the students with individualized instruction designed to support success in completing course work aligned with the *Indiana Academic Standards for English/ Language Arts* focusing on the Reading Standards for Literature and Nonfiction. All students should be concurrently enrolled in an English course in which class work will address all of the Indiana Academic Standards. This course allows for successive semesters of instruction for students who need additional support in vocabulary development and reading comprehension. May earn up to 8 credits total.

# MASS MEDIA

## MASS MEDIA (1-2)

- A course for grades 9, 10, 11,12
- A two credit course

This course provides a study of television, film, radio, advertising, newspapers, the internet, magazines and other forms of media as sources of information, persuasion and creative expression. This course helps students develop an awareness of audience and purpose in evaluating mass media, as well as in producing their own media. It will also help students to judge media critically and understand the use of persuasive language and strategies. Students will also study copyright issues, media ethics, digital citizenship, and include basic filmmaking

## VIDEO PRODUCTION (1-2-3)

- Prerequisite: Successful completion of Mass Media
- A course for grades 10, 11, 12
- A one, two or three credit course

This course provides the opportunity for students to learn the five components of video production and broadcasting – camera operation, audio, lighting, writing and editing with a “hands-on” approach. Students will record the weekly announcements for ROCK-TV. This course also details the three phases of production; pre-production, production and post-production.. This course requires that students use the computer software that is used in the industry.

## BROADCAST JOURNALISM (1-2-3)

- Prerequisite: Successful completion of Mass Media
- A course for grades 10, 11, 12
- A one, two or three credit course

This course introduces the beginning journalist to the basic tools, techniques and vocabulary of broadcast journalism. The focus of this course is on broadcast writing, research, reporting and editing techniques. This course will present students with story-telling tools by introducing them to basic techniques of reporting with editing sound and video. The emphasis of this course will be on the use of digital video recorders in the field to produce news stories for television and the web. This course requires

that students use the computer software that is used in the industry.

Ethical issues will also be reviewed and analyzed. Students will also examine, analyze and critique the development of broadcast news productions.

## ADVANCED VIDEO PRODUCTION AND FILM (1-2)

- Prerequisite: Successful completion of Video Production 1 and 2
- A course for grades 11, 12
- A two credit course

Advanced Video Production is designed to give students specialized training in the video production industry. Students will produce multiple group and independent projects. These projects may include: music videos, video art projects, short films and documentary. Students will also be provided the opportunity to fine-tune their productions through special effects and advanced audio editing techniques. This course will provide students with advanced knowledge of non-linear video editing systems and field camera work.

# MATHEMATICS

## ALGEBRA I: 3 TRIMESTERS (Investigative, 1A & 2A)

- A three credit course
- A Core 40 and AHD course

This course covers the state of Indiana standards of first-year Algebra over 3 trimesters. This course provides a formal development of the algebraic skills and concepts necessary for the students who will take other advanced college- preparatory courses. The instructional program provides for the use of algebraic skills in a wide range of problem solving situations. The concept of function is emphasized throughout the course. Topics include: (1) properties of real numbers, (2) solving linear equations and inequalities, (3) operations with polynomials, (4) solving quadratic equations and systems, (5) use of exponents, and (6) introductory topics from statistics and probability.

## ALGEBRA I (1-2)

- A two credit course
- A Core 40 and AHD course

This course provides a formal development of the algebraic skills and concepts necessary for the students who will take other advanced college- preparatory courses. The instructional program provides for the use of algebraic skills in a wide range of problem solving situations. The concept of function is emphasized throughout the course. Topics include: (1) properties of real numbers, (2) solving linear equations and inequalities, (3) operations with polynomials, (4) solving quadratic equations and systems, (5) use of exponents, and (6) introductory topics from statistics and probability.

## GEOMETRY IN 3 TRIMESTERS (Investigative, 1A & 2A)

- Prerequisite: Algebra I (1-2 or 1-2-3)
- A three credit course
- A Core 40 and AHD course

This course provides students with experiences that deepen the understanding of shapes and their properties. Deductive and inductive as well as investigative strategies in drawing conclusions are stressed. Properties and relationships of geometric figures include the study of (1) angles, (2) lines, (3) planes, (4) congruent

and similar triangles, (5) trigonometric ratios, (6) polygons, and (7) circles and spatial drawings. An understanding of proof and logic is developed.

## GEOMETRY (1-2)

- Prerequisite: Algebra I (1-2) or Algebra (1-2-3)
- A two credit course
- A Core 40 and AHD course

This course provides students with experiences that deepen the understanding of shapes and their properties. Deductive and inductive as well as investigative strategies in drawing conclusions are stressed. Properties and relationships of geometric figures include the study of (1) angles, (2) lines, (3) planes, (4) congruent and similar triangles, (5) trigonometric ratios, (6) polygons, and (7) circles and spatial drawings. An understanding of proof and logic is developed.

## GEOMETRY HONORS (1-2)

- Admission: Algebra I (1-2), approved standardized test scores, and recommendation of teacher.
- A two credit course
- A Core 40 and AHD course

This course provides students with experiences that deepen the understanding of shapes and their properties. Deductive and inductive as well as investigative strategies in drawing conclusions are stressed. Properties and relationships of geometric figures include the study of (1) angles, (2) lines, (3) planes, (4) congruent and similar triangles, (5) trigonometric ratios, (6) polygons, and (7) circles and spatial drawings. An understanding of proof and logic is developed.

Honors Geometry 1 and 2 will develop many of the same topics with greater rigor and depth to help students prepare for future higher level math courses.

## ALGEBRA II IN 3 TRIMESTERS (Investigative, 3A & 4A)

- Prerequisite: Geometry (1-2-3)
- A Core 40 and AHD course
- A three credit course

This course covers state of Indiana academic standards for Algebra II over a full school year. This course is open to students who complete Geometry in 3 trimesters, or by teacher recommendation. This course expands on the topics of Algebra I (1-2) and provides further development of the concept of a function. Topics include: The theorems and algorithms of algebra, polynomials and polynomial functions, rational exponents, complex numbers, sequences and series, probability and statistics, and an introduction to trigonometric functions. Students who plan to advance to Pre-Calculus should take Algebra II or Algebra II Honors in 2 trimesters.

## ALGEBRA II (3-4)

- Prerequisite: Geometry (1-2-3), Geometry (1-2) or Geometry (Honors) (1-2)
- A Core 40 and AHD course
- A two credit course

This course expands on the topics of Algebra I (1-2) and provides further development of the concept of a function. Topics include: The theorems and algorithms of algebra, polynomials and polynomial functions, rational exponents, complex numbers, sequences and series, probability and statistics, and an introduction to exponential and logarithmic functions.

## ALGEBRA II HONORS (3-4)

- Admission: A "B-" or better in Honors Geometry is recommended.
- A two credit course
- A Core 40 and AHD course

This course provides students with more rigorous experiences than regular Algebra II (3-4) that deepen the understanding of advanced Algebra. The regular Algebra II (3-4) curriculum will be followed, with an extra emphasis placed on enrichment and application

# MATHEMATICS

## COLLEGE ALGEBRA (IVY TECH M136)

- Prerequisite: Algebra II
- A course for grades 11 & 12
- A two credit course
- A Core 40 course

Ivy Tech M136 is offered as a dual credit course in College Algebra through Ivy Tech. Students who qualify through Ivy Tech admission standards will be able to earn 3 credit hours of college credit upon successful completion of the course. M136 College Algebra presents an in-depth study of functions, quadratic, polynomial, radical, and rational equations, radicals, complex numbers, absolute value equations and inequalities, rational functions and exponential and logarithmic functions. This course is NOT intended as a pre-requisite to Calculus.

## CCR BRIDGE: MATH READY

- Prerequisite: Recommended for students who have not passed the Grade 10 Math ISTEP+ and have scored below a 45 on the PSAT test OR students who score below proficient on a diagnostic test
- A course for grade 12
- A two credit course

The CCR Bridge: Math Ready course will include and reinforce the Algebra 1, Geometry, Algebra 2 and Statistics skills necessary to be ready for an entry-level college math course. This course emphasizes understanding of math concepts rather than just memorizing procedures. Math Ready students learn the context behind the procedure: why to use a certain formula or method to solve a problem, for example. This equips them with higher-order thinking skills in order to apply math skills, functions and concepts in different situations. The course is intended for students who currently have achieved the minimum math requirements for college entry. The content of this course is designed to enhance students' math skills so that they are ready for college-level math assignments. It is not designed to prepare students for college-level math in STEM majors.

## COLLEGE-ENTRANCE PREPARATION

- Prerequisite: Must have completed OR be enrolled in Algebra II (3-4) or Algebra II (3-4) Honors
- A course for grade 11 only
- A one credit course

College Entrance Preparation is a one semester, elective course open to juniors who are planning to attend a 4-year college/university. The course emphasizes preparation for the Scholastic Aptitude Test (SAT). The course is designed to give students information in order to select and apply to a college or university best suited to their future plans.

## PRE-CALCULUS 1-2

- Prerequisite: Algebra II (3-4) or Algebra II (Honors) (3-4)
- A two credit course
- A Core 40 & AHD course

The study of Pre-Calculus is primarily the study of functions. For each function family, students will be able to identify the basic characteristics, graph, study the applications of, and describe the limiting characteristics and continuity. The function families studied will be the basic functions (linear, quadratic, cubic, absolute value, and square root), trigonometric functions, rational functions, exponential functions and logarithms, and conic sections.

## PRE-CALCULUS 1-2 HONORS

- Prerequisite: Algebra II (Honors) (3-4)
- A two credit course
- A Core 40 & AHD course

This course provides a more rigorous study of Pre-Calculus. The subject matter covered will be the same standards as the Pre-Calculus course, as well as a beginning study of Calculus. **This course is required for students who plan to enroll in AP Calculus BC their senior year.** Any student considering enrollment in AP Calculus BC should enroll in this course.

## PROBABILITY AND STATISTICS

- Prerequisite: Algebra II (3-4) or Algebra II

(Honors) (3-4)

- A one credit course
- A Core 40 & AHD course

This course develops skill in applying statistical techniques in the decision making process. Topics include (1) methods of data collection, (2) organization of data, and (3) graphical techniques for exhibiting data together with measures of central tendency and variation. Basic laws of probability, sampling theory, hypothesis testing, and making inferences from samples are included. Examples based on experimental data are used and students will plan and conduct experiments or surveys and will analyze the resulting data. Probability and Statistics is a one credit course. It is intended for the students who desire an introductory look at Probability and Statistics.

## AP STATISTICS (1-2)

- Prerequisite: Algebra II (3-4) or Algebra II (3-4) (Honors)
- A two credit course
- A Core 40 and AHD course
- A graphing calculator is required for this course

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, planning a study, anticipating patterns, and statistical inference. Students who successfully complete the course and examination may receive credit, advanced placement, or both for a one-semester introductory college statistics course. AP Statistics is a 2 trimester course.



# MATHEMATICS

## ACP FINITE MATHEMATICS (IUB M118)

- A student must have a GPA of 2.7 to be eligible for admission to the ACP Program through Indiana University and be able to take the course for IU college credits
- There is a fee for tuition to take an ACP course through Indiana University. Tuition is payable to IU upon enrollment for the class for college credit.
- Prerequisite: Algebra II or Algebra II Honors
- If not already passed, Pre-Calculus must be taken the same year as Finite Math ACP
- A two credit course
- A Core 40 and AHD course

Finite Mathematics is part of Indiana University's Advance College Project. Westfield High School will be following the curriculum and syllabus for Indiana University's *M118 Finite Mathematics*. Students will be provided the opportunity to take this course for Indiana University college credit in M118. Topics included are set theory, logic, permutations, combinations, simple probability, conditional probability, and Markov Chains.

**Westfield High School offers three levels of Calculus courses. Students will be given the Indiana University skills assessment math placement exam while enrolled in Pre-Calculus to aid in determining the best Calculus placement**

## ACP BRIEF SURVEY OF CALCULUS (1-2) (IUB M119)

- A student must have a GPA of 2.7 to be eligible for admission to the ACP Program through Indiana University and be able to take the course for IU college credits
- There is a fee for tuition to take an ACP course through Indiana University. Tuition is payable to IU upon enrollment for the class for college credit.
- Prerequisite: Pre-Calculus 1-2
- A two credit course
- A Core 40 & AHD course

This course presents an overview of basic concepts in Calculus. Westfield High School will be following the curriculum and syllabus for Indiana University's *M119 Brief Survey of Calculus*. M119 is an introduction to Calculus designed primarily for students in business and the social sciences. **Students may take this course for college credit (3 credit hours) through Indiana University.**

## CALCULUS AB (1-2-3), ADVANCED PLACEMENT

- Prerequisite: "B" or better in Pre-Calculus 1-2
- A three credit course
- A Core 40 & AHD course
- A graphing calculator is required for this course

Calculus AB is a course in single variable calculus that covers techniques and applications of the derivative, techniques and applications of the definite integral, and the Fundamental Theorem of Calculus. Algebraic, Numerical, and Graphical representations are emphasized through the course. This course is a three-trimester course. 4 hours of college credit may be earned by achieving a passing score on the AP Exam in May.

All students enrolled in this course are expected to take the Advanced Placement Exam in May.

## CALCULUS BC (1-2-3), ADVANCED PLACEMENT

- Prerequisite: Pre-Calculus Honors
- A three credit course
- A Core 40 & AHD course
- A graphing calculator is required for this course

Calculus BC is a course in single-variable calculus that includes all the topics of Calculus AB (techniques and applications of the derivative, techniques and applications of the definite integral, and the Fundamental Theorem of Calculus) plus additional topics in differential and integral calculus (including parametric, polar, and vector functions) and series. It is equivalent to at least a year of calculus at most colleges and universities. Algebraic, numerical, and graphical representations are emphasized throughout the course. This course is a 3-trimester course. Up to 8 hours of college credit Calculus may be earned.

All students enrolled in this course are expected to take the Advanced Placement Exam in May.



## MULTI-DISCIPLINARY

### COLLEGE ENTRANCE PREPARATION

- Prerequisite: Must have completed OR be enrolled in Algebra II (3-4) or Algebra II (3-4) Honors
- A course for grade 11
- A one credit course

College Entrance Preparation is a one semester, elective course open to juniors who are planning to attend a 4-year college/university. The course emphasizes preparation for the SAT and ACT. The course is designed to give students information in order to select and apply to a college or university best suited to their future plans.

### INNOVATION BY DESIGN

- A course for grades 10, 11, 12
- A one credit course

Innovation by Design will utilize tools of design thinking to identify and address a real-world problem. Students will gain a working familiarity with a variety of tools to utilize in creating solutions from 3-D printers, 3D modeling software, CNC machines, laser cutters, digital prototyping tools, etc... Students are encouraged to tackle problems without easy/simple solutions. Much of the course is student directed and focused on creating solutions.

### CADET TEACHING

- Prerequisite: Permission from your counselor
- A course for grade 12
- A one credit course
- This course may be taken for multiple trimesters
- This course is aligned with post-secondary courses for dual credit. Students must sign up for two trimesters for the dual credit.
- Students are responsible for their own transportation.
- Counts as a Directed Elective or Elective for all diplomas.

Cadet Teaching is a course for students who have an interest in becoming an educator after graduation. Students are placed in an elementary or middle school classroom at a grade level they would like to explore. Students will spend the trimester with a mentor teacher learning the skills and strategies necessary for successful teaching. Students who complete this course exit with a basic understanding of classroom management, organization and instruction processes. In addition to their classroom learning

experiences, students will participate in online assignments to reflect on the experiences and background readings will add information concerning the teaching profession. All teaching experiences will be preplanned by the high school Cadet Teaching Coordinator and the cooperating teacher(s) who are supervising prospective teachers. Students applying for the course must have good attendance and be on target for graduation. Students must complete an application after enrolling in this course.

### INDEPENDENT CO-OP

- Prerequisite: Permission from your counselor
- A course for grade 12
- Independent Co-op may be taken up to six times senior year
- A one credit course
- Students are responsible for securing their own part-time job and transportation

Co-op students may earn credit for a part time job. They will be required to turn in paperwork which documents their hours worked and evaluates their work performance.

### SERVICE LEADERSHIP

- A course for grades 10, 11 and 12 with available transportation.
- May be repeated for one additional trimester
- A one credit course

This course is designed for students to participate in their community through volunteerism. Interest assessments, types of business and business relationships in communities, work of volunteer and civic groups, and understanding of the need for volunteers in communities will be emphasized. Each student will volunteer to work on a community project in a local organization and will be released from class multiple days per week to fulfill his/her commitments. Each participant must provide transportation to and from the volunteer site. To receive credit, the student must successfully complete a minimum of 40 hours of volunteer experience.

### CAREER EXPLORATION INTERNSHIP

- Prerequisite: Permission from your counselor
- A course for grade 12
- Career Exploration Internship may be taken up to six times senior year
- A one credit course
- Students are responsible for securing their own internship.

- Students are responsible for their own transportation.
- Students may be able to earn credit for summer internships

Career Exploration Internship is a course that allows students to work in a public or private sector workplace learning about a possible career interest. Students have the opportunity to work side-by-side with professionals in the workforce learning about the activities and skill sets that are necessary for the specific career, as well as practicing and understanding the importance of the soft skills necessary in today's workforce. In addition to their workplace learning activities, students will participate in online assignments related to the experience and occasional meetings with the Intern Coordinator for the purpose of helping students make the connection between academic learning and their work-related experiences. There are a minimum number of hours at the workplace for the student to achieve for the course. During the experience, students may not be paid for their services during school hours. Students must complete an application after enrolling in this course.

### CVS PHARMACY TECHNICIAN EXTERNSHIP

- Prerequisite: Permission from your counselor
- A course for grade 12
- A two credit course
- May be taken for a 3rd trimester
- Students are responsible for their own transportation.
- Students may be able to earn credit for summer internships

Through a partnership with CVS, participants will have the unique opportunity to improve the quality of lives in the communities CVS serves. The CVS Health Externship Program allows student the opportunity to learn many aspects of being pharmacy technicians through an internship and training program. Students will complete online CVS training modules and internship hours in CVS pharmacies. After graduation, CVS preps students for the Pharmacy Technician Certification License test. Upon passing the certification, students are able to work as a Pharmacy Technician, as well as continue to study Pharmacy in college. The CVS program focuses on developing not only clinical skills, but also team building, interpersonal and management skills that will expose participants to quality training. Participants of the CVS Health's Externship Program will be provided guidance, encouragement, academic and career development support.

## MULTI-DISCIPLINARY

### ACADEMY CLASS

- A one credit course for diploma track students
- Placement determined by administration
- 9, or 10/11/12 grade-specific classes

Academy's mission is to empower individuals to reach their full potential through a powerful mentor relationship, consistency, accountability, and a dynamic curriculum. Students are invited to participate in this year-long program based on academic performance and staff observations. Students enrolled in the program are assigned to an Academy Coach one period per school day each trimester. Students follow a set curriculum and are afforded some independent time to complete work for other classes so they can practice applying the powerful learning habits they are gaining through their Academy lessons. The Academy curriculum focuses on organization, self-discovery, goal setting, leadership development and study/test-taking skills. Students track their progress through various methods and complete reflective tasks. The class has separate offerings for Freshmen, Sophomores, and Upperclassmen.

### PEER TUTORING—WMS

- A course for grades 11 and 12
- A one credit course
- This course may be taken for additional trimesters. Counts as an Elective for all diplomas

Peer Tutoring provides high school students with an organized exploratory experience to assist students at Westfield Middle School (7-8), through a helping relationship, with their studies and personal growth and development. The course provides opportunities for the students taking the course to develop a basic understanding of individual differences and to explore career options in related fields. Peer Tutoring experiences are preplanned by the peer mentoring teacher and the middle school counselors. The course provides a balance of class work relating to the development of and use of: (1) listening skills, (2) communication skills, (3) facilitation skills, (4) decision-making skills, and (5) teaching strategies.

### PEER TUTORING - ENGLISH LEARNERS

- Prerequisite: Teacher recommendation
- A course for grades 11, and 12
- A one credit course

Students learn to interact with, and tutor, students with language barriers allowing them to reach their potential and work towards a

better understanding of the English language. Throughout the grading period, students demonstrate an understanding of the following: a) challenges that come with learning a new language b) values and issues related to the integration of students from other cultures and backgrounds; c) career options in the field of ESL or related areas; d) teaching/behavior management techniques terminology, and tutoring strategies.

### PEER TUTORING I—WHS Special Services

- Prerequisite: Teacher or Counselor recommendation
- A course for grades 10, 11, and 12
- A one credit course

Students learn to interact with, and tutor, students with disabilities allowing them to learn teaching behavior management techniques and terminology. Throughout the grading period, students demonstrate an understanding of the following: a) causes of handicapping conditions; b) values and issues related to the integration of students with substantial handicaps in the school and community; c) career options in the field of special education; d) teaching/behavior management techniques and terminology. Enrollment in this course allows the student to participate in Peer Tutoring (Life Skills), Peer Tutoring (Adaptive PE), and community based outings.

### PEER TUTORING II—WHS Special Services

- Prerequisite: Peer Tutoring I and instructor approval
- A course for grades 10, 11, and 12
- A one credit course

Students continue to learn to interact and tutor students with disabilities. The students will also improve knowledge of values and issues related to the integration of students with disabilities in the school and the community as well as teaching and behavior management techniques for students with disabilities. Enrollment in this course allows the student to participate in Peer Tutoring (Life Skills), Peer Tutoring (Adaptive PE), and community based outings.

### FAP PEER FACILITATION—WHS

- Prerequisite: Teacher and Counselor recommendation
- A course for grades 11, and 12
- A one credit course

Students will assist their peers in the Functional Academic Program (FAP). The FAP classroom supports students with mild disabilities and teaches academic and functional skills. Peer facilitators will provide academic and social support to FAP students in the general education classroom or community setting. Modeling and directing age appropriate behaviors for FAP students is an important role for Peer Facilitators. Strong leadership and attendance are necessary traits for enrollment in this class.

### MENTOR TRAINING IN LEADERSHIP

- A course for grade 11
- A one credit course

This class is for students invited to participate in the Freshmen Mentor Program. This class is the training ground for those choosing to serve as mentors for the incoming Freshman class during their Senior year. We will study the topics of Mentorship and Leadership. We will examine effective leadership strategies and put their theories to the test with engaging leadership challenges and written assignments that occur in and out of the classroom. Our class will also explore specific habits and character traits that can be found in effective mentors and leaders across a variety of fields. All students should emerge from this class as a more confident and educated mentor and leader. This class is only offered during the winter and spring trimesters.

### SENIOR SEMINAR

- A course for grade 12
- Senior Seminar may be taken up to three times senior year (once per trimester)
- A one credit course
- This is a Pass/Fail course. No letter grade will be assigned.

This course is designed to allow seniors some flexibility to study and manage their current course load as well as adequately prepare for their transition to post-secondary education.

**Senior Seminar does NOT count towards WHS athletic eligibility. You must still pass four additional solids in order to participate in Westfield High School athletics.**

# MUSIC

## INTERMEDIATE CHORUS (Mixed Choir)

- A course for grades 9, 10, 11, & 12
- A two or three credit course

Mixed Choir focuses on the fundamentals of singing, such as breathing, posture, tone production, and tone quality; fundamentals of music literacy, rehearsal procedures, and working together as a group. The choir will sing and study many types of choral music during the year. Extra-curricular rehearsals and performances are a required part of this class. Three trimester enrollment is strongly encouraged to maximize learning and prepare interested students for Advanced Chorus.

## ADVANCED CHORUS (1-2-3)

- **Prerequisite: Prepared audition, two or more trimesters of Intermediate Chorus or permission of director**
- A course for grades 9, 10, 11, and 12
- A three credit course

Advanced Chorus builds upon the fundamental skills learned in Intermediate Chorus. Increased musical independence is expected from students. Students will sing advanced level music and study more advanced music literacy topics. The choir will sing and study many types of choral music during the year. Extra-curricular rehearsals and performances are a required part of this class.

## INTERMEDIATE CONCERT BAND (1-2-3)

- **Prerequisite: Membership in a WHS or WMS band during the prior school year or permission of the director.**
- A course for grade 10, 11, 12
- A three credit course

Intermediate Concert Band provides students with a balanced comprehensive study of music through the concert band. Ensemble and solo activities are designed to develop elements of instrumental musicianship. Students will present several formal and informal public performances throughout the school year. This group performs at the ISSMA organizational contest, and participation in the ISSMA solo and ensemble events is encouraged.

## ADVANCED CONCERT BAND (Wind Ensemble) (1-2-3)

- **Prerequisite: Audition and permission of the band director**
- A course for grades 9, 10, 11, and 12
- A three credit course

Advanced Concert Band (Wind Ensemble) provides students with a balanced comprehensive study of music through the concert band. Ensemble and solo activities are designed to develop elements of instrumental musicianship. Students will present several formal and informal public performances throughout the school year. Rehearsals and performances outside of the school day are considered an extension of the class content. This group performs at the ISSMA organizational contest, and participation in the ISSMA solo and ensemble events is encouraged.

## Advanced Concert Band (1-2-3) (Symphonic Band)

- **Prerequisite: Audition and permission of the director**
- A course for grade 10, 11, 12
- A three credit course

Adv. Concert Band (Symphonic Band) is based on the Indiana Academic Standards for High School Instrumental Music. Students taking this course are provided with a balanced comprehensive study of band literature, which develops skills in the psychomotor, cognitive and affective domains. Students develop and refine elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature as pertaining to band literature, and integration of other applicable disciplines. This group performs at the ISSMA organizational contest, and participation in the ISSMA solo and ensemble events is encouraged.

## JAZZ BAND ENSEMBLE

- **Prerequisite: Membership in a WHS or WMS band during the prior school year or permission of the director**
- A course for grades 9, 10, 11, and 12
- A one credit course
- Offered in the second trimester

Students taking this course develop musicianship and specific performance skills

through group and individual settings for the study and performance of varied styles of instrumental jazz. Instruction includes the study of the history, formative, and stylistic elements of jazz. Students develop their creative skills through improvisation, composition, arranging, performing, listening, and analyzing. Some time outside of the school day may be scheduled for rehearsals and performances. In addition, a number of public performances may serve as a culmination of daily rehearsal and musical goals. Students must participate in performance opportunities outside of the school day that support and extend the learning in the classroom. This course can be taken each year.

# MUSIC

## APPLIED MUSIC (L) — GUITAR I

- A course for grades 9, 10, 11, and 12
- A one credit course

This course is designed to teach students the fundamentals of music through the study of acoustic guitar. Students will learn technique, chords, notation, and ensemble skills. Guitars will be provided. No prior musical experience is required.

## APPLIED MUSIC (L)— STEEL PAN WORLD DRUMMING

- A course for grades 9, 10, 11, and 12
- A one credit course

This course will introduce students to playing the steel pan and world drumming instruments. Elements of ensemble playing, critical listening skills, music theory, and cultural context will be covered. Instruments are provided and no prior musical experience is necessary.

## APPLIED MUSIC (L)—STEEL PAN ENSEMBLE II

- Prerequisite: Steel Pan I or Instructor's permission
- A course for grades 10, 11, and 12
- A one credit course

This course will build upon the skills acquired in the first level of steel pan ensemble. Students will develop more skills in pan technique, music theory, critical listening skills, improvisation, and ensemble performance skills. Students will also build gain a better understanding of the steel pan history and culture. Instruments are provided. .

## ELECTRONIC MUSIC I

- A course for grades 9, 10, 11, and 12
- A one credit course

This course will introduce students to the theory and fundamentals of using software and hardware tools for producing music (including waveform editor, multi-track recording software, synthesizer keyboard, signal processing plug-ins, computer music notation software, and microphone technique). The class will stress application and creative content, using a series of creative activities and projects which will give students exposure to performing with electronic instruments, multi-

track recording (both MIDI sequencing and live instruments), music arranging, and equipment configuration. No previous musical experience is necessary.

## MUSIC HISTORY BACH TO ROCK I

- A course for grades 9, 10, 11, and 12
- A one credit course

This course will introduce students to history of European art music, Jazz and Rock. Students will learn about prominent musical time periods, works, instruments, and musicians relating to these two areas. No prior musical experience is necessary.

## MUSIC THEORY, ADVANCED PLACEMENT

- Prerequisite: high standing in piano class, choir, band, or permission from instructor
- A course for grades 10, 11, and 12
- A two credit course

AP Music Theory mirrors the curriculum of first-year university written and aural theory courses. Students will study and develop in the areas of rhythm, harmony, music notation, form, scales, composition, and aural skills. In addition to the benefits of gaining a better understanding of music elements and preparing oneself for potential undergraduate music study, the goal of the course is to prepare students to successfully pass the AP Music Theory examination offered in the spring if they so choose.

## ROCK BAND ENSEMBLE

- Recommendation: Basic skills on a rock band instrument such as drum set, guitar, bass, piano and /or vocals.
- A course for grades 9, 10, 11, and 12
- A one credit course

This course will develop the skills necessary to play in a rock band. Focus will be given to styles, ensemble playing, arranging, performing, and recording. Students enrolling should have a basic proficiency on their instruments. This course may be taken up to 2 times during high school.



# SCIENCE

## BIOLOGY I (L) (1-2)

- A course for grades 9, 10, 11 & 12
- Course is at least 25% laboratory
- A two credit course
- A Core 40 and AHD course

Biology I is a course based on regular laboratory and field investigations that allow students to work with the concepts, principles, and theories of the living environment. At a minimum, students enrolled in Biology I explore the structure and function of cells and their genetic material, as well as the roles and interdependencies of organisms within populations, communities, ecosystems, and the biosphere. In addition, students will study the evidences for Evolution and learn how the theories of Charles Darwin help explain change over time.

## BIOLOGY I (L) HONORS (1-2)

- **This is a BYOT class**
- A class for grades 9 and 10
- Prerequisite for sophomores: "A" in each trimester of ICP (1-2) and a recommendation from your ICP teacher
- A two credit course
- A Core 40 and AHD course

Honors Biology is a course geared for freshmen and sophomores and is designed to meet and exceed the Indiana Biology I standards. The Honors Biology curriculum emphasizes student engagement in the learning process while building those content and laboratory skills necessary to be well prepared for the rigor of AP Biology and other AP Science courses. Topics covered in detail include: Scientific Processes, Ecology, Biological Molecules, Cell Structures and Processes, Classical Genetics and Human Heredity, DNA Technology, and Evolution.

## BIOLOGY, ADVANCED PLACEMENT (1-2-3)

- **This is a BYOT class**
- Prerequisite: Successful completion of Biology I (1-2) and Chemistry I (1-2)
- Recommendation: "B" or better in each trimester of Biology I (1-2) or Biology I Honors (1-2) and "B" or better in each trimester of Chemistry I (1-2)
- A course for grades 11 & 12
- Course is at least 25% laboratory
- A three credit course

- A Core 40 and AHD course

Biology AP is designed to be the equivalent of a college introductory Biology course for Biology majors. The course is designed to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of Biology. The course follows the College Board Entrance Examination guidelines.

## ANATOMY AND PHYSIOLOGY

- **This is a BYOT class**
- Prerequisite: Successful completion of Biology I and concurrent enrollment in Chemistry I, or a "B" or better in ICP.
- Recommendation: "C" or better in each trimester of Biology I
- A course for grades 11 & 12
- Course is at least 25% laboratory
- A two credit course
- A Core 40 and AHD course

This course is a study of the structure and function of human body systems. The course begins with a focus on cellular function & histology (tissues), and then proceeds through the various body systems. Activities include microscope work, detailed dissections of organs (rat, cat, sheep, cattle, etc), and lab activities that study human body function. The goal of the course will be to prepare students going into the life science or health fields for a first year Anatomy & Physiology course. As such, the rigor is on par with college level academics, and students will be expected to complete a significant amount of work outside of class time (outside reading, online homework assignments, group study, etc.).

## ADVANCED SCIENCE, SPECIAL TOPICS (L), ZOOLOGY

- **This is a BYOT class**
- Prerequisite: Successful completion of Biology I (1-2)
- Recommendation: "C" or better in each trimester of Biology I (1-2)
- A course for grades 10, 11, & 12
- Course is at least 25% laboratory
- A one credit course
- A Core 40 and AHD course

- *Not offered in 2019-2020 school year. (This course is offered every other year).*

This course studies various aspects of invertebrate and vertebrate animals including anatomy, habitat, behavior, evolution, and other topics. Activities include microscope work and animal dissections.

## ADVANCED SCIENCE, SPECIAL TOPICS (L), MICROBIOLOGY

- Prerequisite: Successful completion of Biology I (1-2)
- Recommendation: "C" or better in each trimester of Biology I (1-2)
- A course for grades 10, 11, & 12
- Course is at least 25% laboratory
- A one credit course
- A Core 40 and AHD course
- *Not offered in 2019-2020 school year. (This course is offered every other year).*

This course primarily studies the structure and physiology of bacteria, bacterial diversity and genetics, as well as the causation of and control of infectious disease. Lab work includes the preparation of culture media and slides, handling and staining techniques, disinfectant and antibiotic effectiveness, and microscope work.

## ADVANCED SCIENCE, SPECIAL TOPICS (L), ASTRONOMY

- **This is a BYOT class**
- Prerequisite: Successful completion of Algebra I (1-2)
- Recommendation: "C" or better in each trimester Algebra I (1-2)
- A course for grades 10, 11 and 12
- Course is at least 25% laboratory
- A one credit course
- A Core 40 and AHD course
- *Offered during the 2019-2020 school year. (This course is offered every other year).*

Astronomy introduces the planets, stars, and galaxies of the universe. This course covers a variety of topics such as our moon, the planets of our solar system and their satellites, comets, the sun, our space program, red giants, black holes, alien life, the expanding universe, and the contributions of scientists such as Copernicus, Galileo, and Newton.

## SCIENCE

### ADVANCED SCIENCE, SPECIAL TOPICS (L), METEOROLOGY

- Prerequisite: Successful completion of Algebra I (1-2)
- Recommendation: "C" or better in each trimester of Algebra I (1-2)
- A course for grades 10, 11 & 12
- Course is at least 25% laboratory
- A one credit course
- A Core 40 and AHD course
- *Not offered in 2019-2020 school year. (This course is offered every other year).*

Meteorology is an in-depth investigation of the atmosphere, atmospheric processes, and how they influence the weather. The primary emphasis of the course will be basic weather topics that directly influence one's everyday experiences and focuses on the understanding and application of the principles of meteorology. Students will gain an understanding of physical processes responsible for daily weather changes through laboratory and field studies. An in-depth look will be taken of air masses, weather fronts, and extreme weather. Students will be involved in individual and group projects which will incorporate the use of computers to monitor weather related topics.

### ADVANCED SCIENCE, SPECIAL TOPICS (L), AGRICULTURAL BIOTECHNOLOGY

- **This is a BYOT class**
- Prerequisite: Successful completion of Biology I (1-2)
- Recommendation: "C" or better in each trimester of Biology I (1-2)
- A course for grades 10, 11, & 12
- Course is at least 25% laboratory
- A one credit course
- A Core 40 and AHD course

This course provides an understanding of concepts that are necessary to be prepared for a career with one of the many local agricultural biotechnology companies. This course is intended for students interested in biology, focusing on nutrition, plant breeding, horticulture or genetic engineering. This course will include plant science, as it applies to industry standards. Lab work will focus on specific skills utilized by researchers working in these industries. In addition this course explores how modern biotech such as CRiSPR,

genetic modification and genomics are utilized in agricultural biotech.

### ADVANCED SCIENCE, SPECIAL TOPICS (L), HUMAN GENETICS

- Prerequisite: Successful completion of Biology I (1-2)
- Recommendation: "C" or better in each trimester of Biology I (1-2)
- A course for grades 10, 11, & 12
- Course is at least 25% laboratory
- A one credit course
- A Core 40 and AHD course
- *Offered during the 2019-2020 school year. (This course is offered every other year).*

This course provides an understanding of concepts that are essential to modern biologists and for disciplines ranging from agriculture to medicine. Topics include heredity, gene expression, genetic disorders, population genetics, and biotechnology. Laboratory work is an important aspect of this course and includes Mendelian genetics in fruit flies as well as various biotechnology laboratory skill developing experiences including gel electrophoresis.

### ENVIRONMENTAL SCIENCE, ADVANCED PLACEMENT (L) (1-3)

- **This is a BYOT class**
- Prerequisite: Successful completion of Biology and concurrent enrollment in Chemistry, or an "A" in ICP, or a teacher recommendation.
- Recommendation: "B" or better in Biology and Chemistry I (1-2),.
- A course for grades 10,11 & 12
- A three credit course
- Course is at least 25% laboratory
- A Core 40 and AHD course

AP Environmental Science provides students with the scientific principles, concepts, and methodologies to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, and to evaluate the risks associated with these problems examining alternative solutions for resolving and/or preventing them. The course is designed to be equivalent of an introductory college course in environmental science that includes a

laboratory and field investigation component. The topics covered represent those typically covered in a college environmental science course with regard to content and depth of coverage. This class involves many outdoor labs and hands-on activities to reinforce many of the topics in the APES curriculum, such as, water quality, air quality, biodiversity, land use, and energy. This is a good course for introducing many fast-growing, potential career options like environmental studies, energy, environmental engineering, human health, toxicology, land-use planning, forestry, environmental law, etc.

### EARTH/SPACE SCIENCE I (L) (1-2)

- Prerequisite: Successful completion of Algebra I (1-2)
- A course for grades 10, 11, & 12
- Course is at least 25% laboratory
- A two credit course
- A Core 40, AHD, and THD course

Earth and Space Science I begins with a study of the Earth's geologic structure and composition including the study of rocks and minerals, which is the basis for this trimester. The first trimester also focuses on the processes that have shaped the Earth's surface including plate tectonics, mountain-building processes, weathering, erosion, earthquakes, and volcanoes. Students examine energy at work in forming and modifying earth materials, landforms, and continents through geological time. The second trimester of the class focuses on Earth's atmosphere including its structure, composition, variability, and how it relates to weather and climate. The second trimester also includes astronomical studies including stars, galaxies, planets, asteroids, and comets.



# SCIENCE

## JURASSIC PALEONTOLOGY

- A course for grades 10,11 & 12
- A one credit course
- Prerequisites: sophomores must have successfully completed Biology and have a recommendation from that teacher. Juniors and Seniors must have successfully completed Earth Space Science I-1.
- Recommendation: C or better in Biology and Earth Space Science I-1
- A Core 40 and AHD course

This one trimester course will introduce students to one of the many fields in geological sciences. Paleontology is the study of fossilize plants and animals. Students will be examining organisms that roamed the Earth between 252 million to 65.5 million years ago. Prehistoric Earth looked a lot different during the Mesozoic Era, which is also known as “The Age of Reptiles”, or better yet, “The Age of Dinosaurs.”

## INTEGRATED CHEMISTRY—PHYSICS (L), (ICP) (1-2)

- Prerequisite: Algebra I (1-2) which may be taken concurrently with this course
- A course for grades 9 & 10
- A two credit course
- A core 40 and AHD course

Integrated Chemistry/Physics is a laboratory-based course in which students explore fundamental chemistry and physics principles. Students enrolled in this course examine, through the process of scientific inquiry, the structure and properties of matter, chemical reactions, forces, motion, and the interactions between energy and matter. Working in a laboratory environment, students investigate the basics of chemistry and physics in solving real-world problems that may have personal or social consequences beyond the classroom.

**NOTE: This course may not be completed if a student has already successfully completed Chemistry or Physics I**

## CHEMISTRY I (L) (1-2)

- Prerequisite: Successful completion of Algebra I (1-2)
- Recommendation: “C” or better in each semester of Algebra I (1-2)
- A course for grades 10, 11, and 12

- Course is at least 25% laboratory
- A two credit course
- A Core 40 and AHD course

Chemistry I (1-2) is a course based on laboratory investigations of matter, chemical reactions, and the role of energy in those reactions. Students enrolled in Chemistry I (1-2) compare, contrast, and synthesize useful models of the structure and properties of matter and the mechanisms of their interactions.

## CHEMISTRY I (L) (1-2) HONORS

- **This is a BYOT class**
- Prerequisite: “A” or better in Algebra I (1-2)
- A course for grades 10, 11, and 12
- Course is at least 25% laboratory
- A two credit course
- A Core 40 and AHD course

This course is mainly intended for students pursuing science or math related fields in college such as engineering, medical related fields (pre-medicine), veterinary medicine, or science education.

Chemistry I Honors is a course based on laboratory investigations of matter, chemical reactions, and the role of energy in those reactions. Students enrolled in Chemistry I Honors compare, contrast, and synthesize useful models of the structure and properties of matter and the mechanisms of their interactions. Students in this course will work more independently in the lab and be required to complete a project each semester that illustrates an exemplary knowledge of material presented in class. Chemistry I (1-2) Honors is designed to prepare students for the rigor of AP Chemistry and other AP science courses.

## CHEMISTRY, ADVANCED PLACEMENT (L) (1-2-3)

- **This is a BYOT class**
- Prerequisite: Successful completion of Chemistry I (1-2) and successful completion of Algebra II (3-4)
- Recommendation: “B” or better in Honors Chemistry I (1-2) or an “A” or better in Chemistry.
- A course for grades 11 and 12
- Course is at least 25% laboratory
- A three credit course
- A Core 40 and AHD course

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. This course will follow the AP College Board curriculum for Chemistry, which reviews topics from Chemistry I in much greater depth and covers additional content not introduced in first year chemistry. Students who take an AP Chemistry course will develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. Students in this class should plan on spending a minimum of 1 hour per night on class work. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: <http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html>

## PHYSICS I (L), (1-2)

- **This is a BYOT class**
- Prerequisites: Successful completion of Geometry (1-2)
- Recommendation: “C” or better in each trimester of Geometry (1-2)
- A course for grades 10, 11, and 12
- Course is at least 25% laboratory
- A two credit course
- A Core 40 and AHD course

Physics I is a course focused on the following core topics: constant velocity; constant acceleration; forces; energy; linear momentum in one dimension; simple harmonic oscillating systems; mechanical waves and sound; simple circuit analysis. 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. Physics I emphasizes problem solving and understanding of the physical world. It is designed to cater to students by allowing them to learn through many self-guided hands-on assignments as well as various projects. Throughout the course of the year students will complete various projects including: the building and complete analysis of a balsa bridge, egg drop protection devices, water rockets, electric circuits, etc. Additionally, this course will help students develop a firm foundation of problem solving skills on which to build in subsequent science and math courses.

## SCIENCE

### PHYSICS 1, ADVANCED PLACEMENT (1-2-3)

- **This is a BYOT Class**

- Prerequisite: Successful completion of Honors Geometry (1-2) or Geometry (1-2)
- Recommendation: "B" or better in Honors Geometry (1-2) or "A" or better in Geometry (1-2) A course for grades 9, 10, 11, and 12
- A course for grades 9, 10, 11, and 12
- Course is at least 25% laboratory
- A three credit course
- A Core 40 and AHD course

AP Physics 1 is a three-trimester, first year physics course that helps students develop life-long skills in problem solving as well as an understanding of the physical world around them! In the immersive AP Physics 1 course, you don't just read about things, you get to learn how things really work. You won't just be memorizing facts and figures that you'll forget moments after the test.

In AP Physics 1 you'll tackle concepts and do things that will stick with you long after the class is through. The hands-on approach to learning takes you out of the typical classroom and into an experience that will prepare you for college and beyond! With AP Physics 1, you'll explore new ideas side-by-side with your classmates and the AP teacher. When you get to college, you'll be asked to manage your own time and study habits while tackling challenging problems and subject areas. You experience the same rigor when you take an AP class, however, you have the added benefit of your AP Physics 1 teacher helping you throughout the journey. AP Physics 1 lets you to see and feel what college work is like while receiving the support to help you get there. AP Physics 1 emphasizes problem solving and understanding of the physical world. It is designed to cater to high-achieving students by allowing them to learn through many self-guided hands-on assignments as well as various projects. Throughout the course of the year students will complete various projects including: the building and complete analysis of a balsa bridge, air powered bottle rockets, paper roller coasters, electric circuits, as well as many others. Additionally, this course will help students develop a firm foundation of problem solving skills on which to build in subsequent science and math courses. Finally, students will have the opportunity to earn college credit at the end of the year by completing the AP Physics 1 Exam given in May.

More information about AP Physics 1 can be found at: <https://apstudent.collegeboard.org/apcourse/ap-physics-1>

### PHYSICS C, MECHANICS/ ELECTRICITY AND MAGNETISM (L) ADVANCED PLACEMENT (1-2-3)

- **This is a BYOT Class**

- Concurrent enrollment in Honors Pre-Calculus, ACP Brief Survey of Calculus, Advanced Placement Calculus AB, or Advanced Placement Calculus BC
- Recommendation: "B" or better in Physics I (1-2); Physics I (L), Honors (1-2); or AP Physics 1 (L), AND "B" or better in Pre-Calculus or Honors Pre-Calculus.
- A course for grades 11 and 12
- Course is at least 25% laboratory
- A three credit course
- A Core 40 and AHD course
- Students may earn up to 10 college credits for this course based on a student's score on the AP Physics C: Mechanics and AP Physics C: Electricity and Magnetism exams (each exam may provide up to 5 college credits)

AP Physics C: Mechanics/Electricity and Magnetism is equivalent to a two-semester, calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in Physics, Chemistry, or Engineering. The course explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation; electrostatics; conductors, capacitors, and dielectrics; electric circuits; magnetic fields; and electromagnetism. Introductory differential and integral calculus is used throughout the course.

More information can be found at: <https://apstudent.collegeboard.org/apcourse/ap-physics-c-mechanics> and <https://apstudent.collegeboard.org/apcourse/ap-physics-c-electricity-and-magnetism>

## SCIENCE

### PROJECT LEAD THE WAY: BIOMEDICAL SCIENCES (PLTW)

The PLTW Biomedical Sciences (BMS) Program is a sequence of courses, which follow a proven hands-on, real-world problem-solving approach to learning. Students explore the concepts of human medicine and are introduced to topics such as physiology, genetics, microbiology and public health. Through activities, like dissecting a heart, students examine the processes, structures and interactions of the human body – often playing the role of biomedical professionals. They also explore the prevention, diagnosis and treatment of disease, working collaboratively to investigate and design innovative solutions to the health challenges of the 21st century such as fighting cancer with nanotechnology. BMS courses complement traditional science courses and can serve as the foundation for STEM-centered or specialized academies. The program is designed to prepare students to pursue a post-secondary education and careers in the biomedical sciences.

### PRINCIPLES OF BIOMEDICAL SCIENCES (1-2) (PLTW)

- Prerequisite: Biology I or concurrent enrollment in Biology I or Honors Physics is required
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Fulfills a Core 40 Science **elective** requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas or counts as an Elective or Directed Elective for any diploma
- A course for grades 9 and 10
- A two credit course

*PLTW Principles of the Biomedical Sciences* provides an introduction to this field through “hands-on” projects and problems. Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, hypercholesterolemia, and infectious diseases. A theme through the course is to determine the factors that led to the death of a fictional person. To determine the factors responsible for the death, the students investigate medical history and lifestyle choices. Students also consider medical treatments that might have

prolonged the person’s life. Key biological concepts included in the curriculum are: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease. The course is designed to provide an overview of all courses in the Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses.

### HUMAN BODY SYSTEMS (1-2) HONORS (PLTW)

- Prerequisite: Successful completion of Principles of the Biomedical Sciences and Biology I with a C– or better.
- Grade Level: 10, 11, & 12
- A two credit course
- A Core 40, Academic Honors and Technical Honors course

*Human Body Systems* is a course that focuses on how body systems work together to maintain homeostasis and good health. HBS takes a functional approach to traditional anatomy and physiology concepts. Students learn how different systems of the body work together to complete tasks such as movement, protection, and communication. Students design experiments, investigate the structures and functions of body systems, and use data acquisition software and sensors to monitor body functions such as muscle movement, reflex and voluntary action, and respiratory operation. Students build organs, blood vessels, and nerves on Anatomy in Clay® skeletal manikens®. Exploring science in action, students work through interesting real-world cases and often play the role of biomedical professionals to solve medical mysteries.

### MEDICAL INTERVENTIONS (1-2) HONORS (PLTW)

- Prerequisites: Successful completion of Principles of the Biomedical Sciences and Human Body Systems with a C– or better.
- A course for grades 11 and 12
- A two credit course
- A Core 40, Academic Honors and Technical Honors course

*Medical Interventions* is a course that uses project-based learning as students study medical practices for prevention, diagnosis and treatment of disease. These interventions provide a look at the past, present and future of biomedical sciences as students study a fictitious family across multiple generations. 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. Lifestyle choices and preventive measures are emphasized throughout the course as well as the important role scientific thinking and engineering design play in the development of interventions of the future. In addition, students will complete a year-long independent project on a topic of their choosing which will culminate in a formal poster presentation. Students are also required to complete 8 hours of job shadowing in a field of their choosing during the first trimester of the course.

### BIOMEDICAL INNOVATIONS (1-2) HONORS (PLTW)

- Prerequisites: Successful completion of Principles of the Biomedical Sciences, Human Body Systems and Medical Intervention with a C– or better.
- A course for grade 12
- A two credit course
- A Core 40, Academic Honors and Technical Honors course\
- Student may take concurrent with Medical Interventions with instructor approval.

*Biomedical Innovations* is a capstone course designed to give student teams the opportunity to work with one or more mentors from the scientific and/or medical community. Students will examine the topics of Emergency Room design, environmental health, epidemiology and public health, human autopsies, medical innovations, human physiology, and molecular biology. Each unit will involve students completing a long-term comprehensive project that is shared with the community.

## SOCIAL STUDIES

**The following courses specifically meet the Core 40, AHD & THD World History Requirements:**

### **GEOGRAPHY AND HISTORY OF THE WORLD I and II**

- A two credit course
- A Core 40 and AHD course requirement option for grades 9, 10, 11 and 12

Geography and History of the World I & II focuses on twelve standards or benchmarks over two trimesters. Geography and History of the World I is the first part of the course series that is designed to enable students to use geographical tools and skills and historic concepts and perspectives to deepen their understanding of major global themes including the origin and spread of world religions; exploration; conquest and imperialism; urbanization; and innovations and revolutions.

Geography and History of the World II is the second part of the course series that is designed to enable students to use geographical tools and skills and historic concepts and perspectives to deepen their understanding of major global themes including the origin and spread of world religions; exploration; conquest and imperialism; urbanization; and innovations and revolutions. Geographical and historical skills include forming research questions, acquiring information by investigating a variety of primary and secondary sources, organizing information by creating graphic text representations, analyzing information to determine and explain patterns and trends, planning for the future, and documenting and presenting findings orally or in writing. The historical geography concepts used to explore the global themes include change over time, origin, diffusion, physical systems, cultural landscapes, spatial distribution/patterns, and interaction/relationships.

### **WORLD HISTORY AND CIVILIZATION I (ANCIENT)**

- A one credit course
- A Core 40 and AHD course requirement option for grades 9, 10, 11 and 12

World History and Civilization provides a study of selected world cultures. Students will compare cultures and analyze patterns of culture, focusing on the diverse as well as the common characteristics of the human experience. World History and Civilizations I will focus on ancient civilizations such as those that existed in the Middle East, Asia, Africa, and Europe. Architectural, artistic,

philosophic, and political developments of early civilizations will be studied.

### **WORLD HISTORY AND CIVILIZATION II (MIDDLE AGES)**

- A one credit course
- A Core 40 and AHD course requirement option for grades 9, 10, 11 and 12

World History and Civilizations II will emphasize the cultures unique to the Middle Ages of 500-1500 A.D. and how these cultures serve as a link between the ancient and modern worlds. Possible topics include the Byzantines Islam, the Crusades, and the Renaissance. Attention will be paid to new ways of thought and advances in technology of the time period.

### **WORLD HISTORY AND CIVILIZATION III (MODERN)**

- A one credit course
- A Core 40 and AHD course requirement option for grades 9, 10, 11 and 12

World History and Civilization III will explore modern history from the late 1400's to present day. The course will build upon the tension between modernism v. postmodernism and violence v. nonviolence. We will explore how modern history is a history of inhumanity while hearing the testimony of those who offered a different path through the power of nonviolence. We will focus on the Age of Exploration, the Scientific Revolution/ Enlightenment, the French Revolution, Colonial India and Africa, and 9/11 and the wars in Afghanistan and Iraq.

### **WORLD HISTORY (1-2-3), ADVANCED PLACEMENT**

- **This is a BYOT class**
- Recommendation: Advanced reading and writing skills; minimum grade of "B" in a WHS Honors English class; English teacher recommendation for students who have not taken an honors English class
- Freshmen are placed into AP World History based on a rubric score that includes middle school grades and standardized test scores.
- A course for grades 9, 10, 11 or 12
- A three credit course
- A Core 40, Academic Honors and Technical Honors course

AP World History is a year-long college level course designed for the academically motivated student with a strong interest in world history. This course traces the development and interaction of cultures throughout history while applying a wide range of factual knowledge as students analyze various themes. This is a college level class in which the student will be expected to do extensive outside reading, detailed writing assignments and independent research. A summer assignment is required.

### **HUMAN GEOGRAPHY, ADVANCED PLACEMENT COMBINED WITH HONORS GEOGRAPHY AND HISTORY OF THE WORLD I AND II**

*A student must enroll in ALL THREE classes. This will satisfy both Honors Geography I and II requirements as well as preparing them for AP Human Geography third trimester.*

### **HONORS GEOGRAPHY AND HISTORY OF THE WORLD I AND II**

- **This is a BYOT class**
- A Core 40 and AHD course requirement option for grades 9, 10, 11 and 12
- A two credit course

In the Honors Geography and History of the world course students will be introduced to topics that will be later be used and built upon in AP Human geography. Students will be introduced to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Class activities and discussions are created which challenge students to demonstrate their understanding of the vocabulary and theories of human geography. Students will employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They will also learn about the methods and tools geographers use in their science and practice. Honors Geography and History of the World will cover all 5 units in preparation for the 3rd Trimester AP Human Geography Course. All students are required to take the AP Human Geography third trimester



## SOCIAL STUDIES

### HUMAN GEOGRAPHY (3), ADVANCED PLACEMENT

- **This is a BYOT class**
- A Core 40 and AHD course requirement option for grades 9, 10, 11 and 12
- A one credit course in 3rd trimester
- Students must have been enrolled in Honors Geography and History I and II to be enrolled in this class

In the AP Human Geography course students will be introduced to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Class activities and discussions are created which challenge students to demonstrate their understanding of the vocabulary and theories of human geography. Students will employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They will also learn about the methods and tools geographers use in their science and practice. All students are required to take the AP exam. Students may earn college credit by scoring sufficiently high on the AP exam administered through the College Board in the spring.

### UNITED STATES HISTORY I (1775-1920)

- United States History or AP United States History is required for graduation
- A course for grade 11
- A one credit course

United States History I will build upon concepts developed in previous studies of American history. It will review major events from 1750 to 1877, but the emphasis of the course is the national development from the end of the Reconstruction period through World War I. Students will use primary sources, analyze historical documents, and develop research skills as they investigate topics such as the Old West, Industrialization, Imperialism and World War I.

### UNITED STATES HISTORY II (1920-1960)

- United States History or AP United States History is required for graduation
- A course for grade 11
- A one credit course

United States History II will explore America from the Roaring Twenties through the 1950's. Along the way students will use primary sources, analyze propaganda, experience the music and arts of the Jazz Age, view historical footage, and further develop and enhance their research skills. Topics will include prohibition and the Jazz Age, the Great Depression, the New Deal, World War II, the beginnings of the Cold War and the development of modern American popular culture in the 1950's.

### UNITED STATES HISTORY III (1960- PRESENT)

- United States History or AP United States History is required for graduation
- A course for grade 11
- A one credit course

United States History III will tell the story of America from the inauguration of President Kennedy through the events of 9/11. Students will view historical footage, experience the sounds of the 1960's Civil Rights and Vietnam War movements, analyze primary sources, and further enhance their research skills. Topics will include JFK and the New Frontier, Civil Rights, the Vietnam War, Watergate, Reagan and the end of the Cold War, the 1990's and the War on Terror.

### UNITED STATES HISTORY (1-2-3), ADVANCED PLACEMENT

- **This is a BYOT class**
- United States History or United States History AP is required for graduation
- Students should be aware that AP US History demands advanced reading and writing skills. Honors English 9 and 10 are strongly recommended).
- A course for grade 11 or 12
- A three credit course (Students selecting AP US History must enroll in all three trimesters)

AP United States History is a year-long college-level course designed for academically prepared and highly motivated students. Course content includes a study of the political, social, economic and cultural development of the United States from its pre-Columbian beginnings (1491) to the present, with emphasis placed on developing analytical, interpretive, and other historical thinking skills. Students enrolling in AP U.S. History should understand that the reading level, vocabulary, writing demands, and pace of the course are at the

college level. All AP U.S. History students are required to take the College Board AP Exam in May; college credit may be earned by a sufficient score on the Exam. An extensive summer assignment is required.

### ACP U.S. HISTORY (1-2) (IUB H105 & H106)

- **This is a BYOT class**
- Students must have a minimum GPA of 2.7 to be eligible for admission to the ACP Program through Indiana University and be able to take the course for IU college credit.
- There is a tuition fee to take an ACP Course through Indiana University. Tuition is payable to IU upon enrollment in the class for college credit.
- A course for grade 11 or 12
- A two credit course
- A Core 40, AHD and THD course

ACP United States History is part of Indiana University's Advance College Project. Westfield High School will be following the curriculum and syllabus of Indiana University's H105 & H106 courses. Students will be provided the opportunity to take this course for 3 hours of Indiana University college credit that are transferable to most other universities, both in-state and out-of-state. Students must have a minimum 2.7 GPA to be accepted into the ACP Program in order to take this course for I.U. credit. This course covers the evolution of American society: political, economic, social structure; racial and ethnic groups; sex roles; Indian, inter-American, and world diplomacy of the United States; evolution of ideology, war, territorial expansion, industrialization, urbanization, international events and their impact on American history.

### UNITED STATES GOVERNMENT

- A one credit course
- A course for grades 11 and 12
- Graduation requirement for all diplomas

United States Government will examine not only the three branches of the US government at both the federal and state levels, but also political parties and voting behavior. Plus, we will explore various fundamental principles of government as well as the rights and responsibilities of citizens.

# SOCIAL STUDIES

## ECONOMICS

- A course for grades 11 and 12
- A one credit course
- A graduation requirement for Core 40 and AHD

Economics is a single-trimester course which provides students with an understanding of the basic characteristics of the American economic system. Economics includes a study of the allocation of scarce resources and their alternative uses for satisfying human wants. This course examines basic models of decision-making at various levels and in different areas including: (1) decisions made as a consumer, producer, saver, investor, and voter; (2) business decisions to maximize profits and understand the need for ethical standards in business; and (3) public policy decisions in specific markets dealing with output and prices in the national economy.

## MICROECONOMICS (1-2), ADVANCED PLACEMENT

- **This is a BYOT class**
- A course for grades 11 and 12
- A two credit course
- A Core 40, Academic Honors and Technical Honors course
- Meets the graduation requirement for Economics

The purpose of an AP course in microeconomics is to give students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the economic system. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy.

## MACROECONOMICS (1-2), ADVANCED PLACEMENT

- **This is a BYOT class**
- A course for grades 11 and 12
- A two credit course
- A CORE 40, Academic, Honors and Technical Honors Course
- Meets graduation requirements for Economics

The purpose of an AP course in macroeconomics is to give students a thorough understanding of the principles of economics that apply to the macroeconomy. The emphasis of this course is to show how entire economies function and interact with each other. Topics will include fiscal policy, monetary policy, foreign exchange and trade. Different economic schools of thought are also explored in this course; classical economics, Keynesian economics, and supply-side economics. Its primary emphasis, unlike the microeconomic option, is on the workings of the entire economy.

## MICRO/MACRO ECONOMICS (1-2-3), ADVANCED PLACEMENT

- **This is a BYOT class**
- A course for grades 11 and 12
- A three credit course (1 for Macro, 2 for Micro)
- A Core 40, Academic Honors and Technical Honors course
- Allows students to take two AP exams, providing the opportunity to earn college credit for two courses
- Meets the graduation requirement for Economics

The purpose of this course is to give students a thorough understanding of the principles of economics that both apply to an economics system as a whole and the functions of individual decision makers within an economic system. This course will thoroughly cover the material described in the AP Microeconomics course as well as emphasizing the study of national income and price-level determination. It will provide students with a familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students enrolled in this course will sit for two AP exams: AP Microeconomics and AP Macroeconomics.

## UNITED STATES GOVERNMENT (1-2), ADVANCED PLACEMENT

- **This is a BYOT class**
- A course for grades 11 or 12
- A two credit course
- Meets graduation requirements for United States Government
- A Core 40, Academic Honors and

Technical Honors course

AP United States Government includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples. It also requires students to become familiar with various institutions, groups, beliefs and ideas that constitute U.S. government and politics. Students will become acquainted with the variety of theoretical perspectives and explanations for various behaviors and outcomes. Students should be strong in vocabulary skills, analysis and application of vocabulary and concepts.

## ACP U.S. GOVERNMENT (IUB POLS Y130)

- **This is a BYOT class**
- Students must have a minimum GPA of 2.7 to be eligible for admission to the ACP Program through Indiana University and be able to take the course for IU college credit.
- There is a tuition fee to take an ACP Course through Indiana University. Tuition is payable to IU upon enrollment in the class for college credit.
- A course for grade 11 or 12
- A one credit course
- A CORE 40, AHD and THD Course

ACP Government is part of Indiana University's Advance College Project. Westfield High School will be following the curriculum and syllabus of Indiana University's POLS Y103 course. Students will be provided the opportunity to take this course for 3 hours of Indiana University college credit that are transferable to most other universities, both in-state and out-of-state. . Students must have a minimum 2.7 GPA to be accepted into the ACP Program in order to take this course for I.U. credit. This course covers the introduction to the nature of government and the dynamics of American politics. It also covers the origin and nature of the American federal system and its political party base.



## SOCIAL STUDIES

### ADDITIONAL SOCIAL STUDIES ELECTIVES

#### EUROPEAN HISTORY (1-2-3), ADVANCED PLACEMENT

- **This is a BYOT class**
- Recommendation; Student has taken and received a B or above in World History and Civilizations and/or Geography and History of the World
- An elective course for grades 10, 11 and 12
- A three credit course
- A Core 40, Academic Honors and Technical Honors Course

The AP European History course begins in 1450 and introduces students to the cultural, economic, political and social developments that played a fundamental role in shaping today's world. The goals of AP European history are to develop an understanding of some of the principle themes in modern European history, develop an ability to analyze historical evidence and historical interpretation and develop an ability to express historical understanding in writing.

#### PSYCHOLOGY (1-2), ADVANCED PLACEMENT

- An elective course for grades 10, 11 and 12
- A two credit course
- A Core 40, Academic Honors and Technical Honors Course

AP Psychology provides students with an opportunity to have an experience similar to a college level Psychology course. The topics studied will include history, research, biology of behavior, sensation and perception, states of consciousness, learning, cognition, motivation and emotion, developmental, personality, testing, abnormal psychology, treatments and social psychology. Students will strive to develop the knowledge and skills required of them on the AP Psychology Exam.

#### PSYCHOLOGY

- An elective course for grades 11 and 12
- A one credit course

Psychology provides an opportunity for students to study how psychologists apply their

knowledge of methods to solving human problems. The content of Psychology includes understanding methods of research and insights into human behavior, emphasizing human perception, conscious experience, personality, and intelligence.

#### SOCIOLOGY

- **This is a BYOT class**
- An elective course for grades 11 and 12
- A one credit course

Sociology will provide students the opportunity to study human social behavior from a group perspective, including recurring patterns of attitudes and actions and how these patterns vary across time, among cultures and in social groups. Students examine society, group behavior and social structures, as well as the impact of cultural change on society, through research methods using scientific inquiry.

#### LAW EDUCATION

- An elective course for grades 10, 11, and 12
- A one credit course
- B average or above in English recommended

Law Education provides students with a basic understanding of the American legal system. Topics discussed in this course include due process, criminal law, civil law, and ways of dealing with interpersonal conflict. Activities such as mock trials, field trips, simulations, and case studies may be used to develop critical thinking and problem-solving skills.

#### CURRENT PROBLEMS, ISSUES, AND EVENTS

- An elective course for grades 9, 10, 11, and 12
- A one credit course

Current Issues/Problems provides students the opportunity to learn about and explore important events/issues that occur nationally and globally. Students will work towards developing these skills: (1) understanding perspectives that are different from one's own (2) learning to read critically and recognize fallacies in reasoning and propaganda devices (3) problem-solving through small group collaboration and (4) improving verbal argument through debate. Issues selected

will have contemporary relevance, yet be grounded in history.

#### TOPICS IN HISTORY: POP CULTURE IN THE UNITED STATES

- Recommendation: must have passed United States History I & II or U.S. History, Advanced Placement
- An elective course for grade 12
- A one credit course

Senior Level (BYOT Encouraged) Class: In this class students will look at the impact of popular culture in American History from the years 1950 – 1999. Students will discover the social impact of music, movies, sports, art and literature on shaping who we are as a society today. A decade by decade look at the popular culture of each decade will take students on a trip through time to experience what it was like to have lived in each of these decades. Heavy emphasis on the ability to interpret primary sources will be required, and extensive participation in class will be required.

#### TOPICS IN SOCIAL SCIENCE: SPORTS PSYCHOLOGY

- An elective course for grades 10, 11 & 12
- A one credit course

This course will provide students with knowledge about psychological factors that affect performance in sports such as motivation, focus, confidence, anxiety, leadership, and group dynamics. Students will conduct research on current sport psychology issues in order to gain a better understanding as to which psychological techniques may help their own performance, not only in sport settings but in all performance situations (e.g., public speaking, academics). 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 best cope and recover from injuries. Its central emphasis is to perform effective psychological strategies and analyze current sports psychology topics.

## SOCIAL STUDIES

### TOPICS IN HISTORY: THE HOLOCAUST

- An elective course for grades 11 and 12
- A one credit course

Topics in History: The Holocaust provides students the opportunity to study the European Holocaust of the WWII era, from exploration of genocide terminology and the rise of anti-Semitism to the chronology of the Holocaust itself. This course will also integrate international reactions to the Holocaust as well as other examples of 20<sup>th</sup> century genocide, such as Rwanda and the Sudan

### TOPICS IN HISTORY: PHILOSOPHY AND RELIGION

- An elective course for grades 10, 11, and 12
- A one credit course
- Prerequisite: World History and Civilization I, II, or III OR Geography and History of the World I or II

To provide for students an understanding of world religions and philosophical schools of thought that moves beyond the basics encountered in *World History* and *Geography and History of the World*. This will be achieved through engaging and applying the tenants of the major schools of philosophical thought as well as by digging deeper into the ideas of important thinkers within these traditions. Some of the key figures in both religion and philosophy will be studied: Abraham, Jesus, Muhammad, Buddha, Confucious, Socrates, Sun-Tzu, Lao-Tzu, Nietzsche, Sarte, Augustine, Paul, Maimonides, Siddiqui, etc. In addition, students will learn how the two areas cross; theology and philosophy. Students will also learn about current religious and philosophical trends such as postmodernism, fundamentalism, religious-based terrorism, and various religious sects and groups.

### INDIANA STUDIES

- An elective course for grades 9, 10, 11, and 12
- A one credit course

Indiana Studies is an integrated program comparing and contrasting state and national

development 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. Selections from Indiana arts and literature might also be analyzed for insights into historical events and cultural expressions.

### ETHNIC STUDIES

- An elective course for grades 9, 10, 11, and 12
- A one credit course

Ethnic Studies provides opportunities to broaden students' perspectives concerning lifestyles and cultural patterns of ethnic groups in the United States. This course will either focus on a particular ethnic group or groups, or use a comparative approach to the study of patterns of cultural development, immigration, and assimilation, as well as the contributions of specific ethnic or cultural groups. The course may also include analysis of the political impact of ethnic diversity in the United States.

## SPECIAL SERVICES

**Students qualify for these courses based on assessments, development of an Individualized Educational Plan (IEP), and a Case Conference Committee decision.**

### BASIC SKILLS DEVELOPMENT

- A one credit course for diploma track students
- Placement determined by Case Conference Committee
- 9/10 or 11/12 grade-specific classes

Basic Skills Development is a multidisciplinary course which provides students opportunities to develop basic skills including: (1) reading comprehension (2) written expression, (3) listening, (4) mathematical computation/reasoning, (5) note-taking, (6) study skills, (7) organizational skills, (8) problem-solving skills, (9) self-awareness, and (10) self-advocacy skills that are essential for high school course work completion and college/career readiness. Determination of the skills to be emphasized in this course each trimester is based on a student's Individualized Educational Plan (IEP) and the General Education curriculum.

### FUNCTIONAL ACADEMICS

- **Not a course for diploma track students**
- Placement determined by Case Conference Committee

Students will acquire skills and demonstrate knowledge in the following areas: Vocational, Social, Self-Help, Social Sciences, Mathematics, and English/Language Arts.

### LIFE SKILLS

- **Not a course for diploma track students.**
- Placement determined by Case Conference Committee

Students will acquire personal management skills, community participation skills, and develop vocational skills

# THEATRE

## THEATRE ARTS

- A course for grades 9, 10, 11 and 12
- Text: Exploring Theatre
- A Core 40 and AHD Course
- A one credit course

This course explores the art of theatre with an emphasis on acting. Students will utilize their own personal resources while building their acting skills through creative drama, pantomime, improvisation, role preparation, and characterization. Students will learn to be more expressive, develop self-confidence, develop their voice and diction, and improve their ability to work with others. Students will gain an understanding of the production process from multiple perspectives and will discover how performances are prepared for an audience. Performance skills will include movement, voice, motivation, emotional recall, and sensory recall. Major projects include writing and performing original monologues, scene work, and stage combat. This is a survey and performance course.

## TECHNICAL THEATRE

- A course for grades 9, 10, 11 and 12
- A Core 40 and AHD Course
- A one credit course

This class explores the behind-the-scenes world of theatre and focuses on play production and stagecraft. Units of study will include: theatre staff and crews, the physical theatre, safety, properties, costumes, stage makeup, and scenic design. Students will explore the evolution of stage technology and its impact on contemporary theatre. Students will explore career opportunities in theatre and related fields. Students understand the ways technical theatre relies on knowledge of other disciplines, such as language arts, mathematics, social studies, science and technology. They also understand the ways technical theatre incorporates all the arts. Light design will include the history of stage lighting, the art of design, computer applications in design, and instrument focus, care, and operation. Special emphasis will be placed on set design and scale drawings, renderings, and models.

**Students enrolled in Technical Theatre actively engage in the process of building, managing, and implementing the technical aspects of a production. These activities should incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies.**

## ADVANCED TECHNICAL THEATRE

- Prerequisite: Technical Theatre
- A course for grades 9, 10, 11 and 12
- A one credit course

This course continues the units of study in technical theatre that can be applied to disciplines beyond live theatre, focusing on lighting and sound design elements. For lighting and sound design, the units include design styles, design movements, color usage, lighting instruments, lighting control, sound equipment, sound effects, sound editing, stage amplification and all other techniques relevant to designing lighting and sound for the stage. Special effects, rigging, video recording, and advanced design will also be explored. Practical work in the theatre will be a major component of this course.

## THEATRE PRODUCTION

- Prerequisite : One of the following:  
Theatre Arts OR Technical Theatre
- A course for grades 10, 11 and 12
- A Core 40 and AHD Course
- A one credit course

Theatre Production is a co-curricular class, involving some outside-of-class rehearsals and performances. Students in this class will take on the responsibilities associated with rehearsing, directing, and presenting a fully mounted production. Depending on the area of interest (acting, directing or technical,) some students will read and analyze plays to prepare for production; conceive and realize a design for the production, including set, lighting, sound and costumes. Some students will be involved in the decision-making through script selection, design, set construction, directing, and auditioning. Some students will create original designs, plans, and models and will be responsible for set design, light design, and sound design of the class production. Students will be expected to learn concepts individually and work independently. The final project will be to produce a student-directed play for an audience. There will be one evening required for dress rehearsal and performance. Each student will have one or more specific and individual responsibilities to the production, and will investigate a theatre arts career associated with that responsibility. This course may be repeated for credit since each class produces a completely different show, and students will have different roles and responsibilities depending on the particular show. **This course is only offered in the third**

**trimester.**

## MUSICAL THEATRE

- Prerequisite: Theatre Arts or permission from instructor
- A course for grades 9, 10, 11 and 12
- A one credit course

Students in this course study the history of musical theatre and its place in today's society. They participate in staging, choreographing, rehearsing, and performing an original or existing musical work. These activities will incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies. Additionally, students will explore career opportunities in the theatre, attend and critique theatrical productions, and recognize the responsibilities and the importance of individual theatre patrons in their community.

## ADVANCED ACTING

- Prerequisite: Theatre Arts
- A course for grades 10, 11 and 12
- A one credit course

Students enrolled in Advanced Acting research, create, and perform characters through script analysis, observation, collaboration and rehearsal. These activities will incorporate elements of theatre history, culture, analysis, response, creative process and integrated studies. Additionally, students explore career opportunities in the theatre by attending plays, meeting actors and discussing their work, and becoming theatre patrons in their community.

## WELLNESS

### PHYSICAL EDUCATION I (Grade 9)

- Classes are coeducational
- Required for graduation
- A Core 40 and AHD course

Physical Education I places emphasis on health-related fitness and developing the skills and habits necessary for a lifetime of activity. The program provides an understanding and implementation of the overall benefits of physical fitness, cardiovascular fitness, muscular endurance and muscular strength through various movement forms. Also included are the understanding and implementation of skill related components into a personal fitness plan and the understanding of skill components as it relates to sports. Ongoing assessment includes both written and performance-based evaluations.

### PHYSICAL EDUCATION II (Grade 10)

- Prerequisite: Physical Education I
- Classes are coeducational
- Required for graduation
- A Core 40 and AHD course

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 to demonstrate their knowledge of fitness concepts. The program includes analyzing the overall benefits of physical fitness along with demonstrating the knowledge and importance of cardiovascular fitness, muscular endurance and muscular strength. Also included is the application of sports skill related components and the development of a personal fitness plan. Ongoing assessment includes both written and performance-based evaluations

### ELECTIVE PHYSICAL EDUCATION: WEIGHT TRAINING

- Prerequisite: Physical Education I
- A course for grades 10, 11, and 12
- Classes are coeducation
- A one credit course

This course is designed for the non-student-

athlete who is interested in participating in weight training and personal fitness development. Students will explore the life-long benefits of weight training as well as the concepts behind each lift. Flexibility, agility, and core development will also be used to create a total body experience.

### ELECTIVE PHYSICAL EDUCATION: STRENGTH AND CONDITIONING FOR THE FRESHMAN ATHLETE

- Prerequisite: Physical Education I
- This is a coeducational course
- A course for grades 9
- This class is focused for the athlete in competitive sports at Westfield High School.
- A one credit course

This coeducational elective course emphasizes the major objectives of development in the following areas: strength, explosive power, flexibility, agility, coordination, quickness, speed, muscular and cardiovascular endurance, self-discipline, proper work ethic, sacrifice, and commitment. A strenuous speed improvement and athletic movement routine for athletes will be combined with various weight training exercises. This class also includes education on mental training, nutrition, hydration and sleep.

### ELECTIVE PHYSICAL EDUCATION: STRENGTH AND CONDITIONING FOR THE ATHLETE

- Prerequisite: Physical Education I
- This is a coeducational course
- A course for grades 10, 11, and 12
- This class is focused for the athlete in competitive sports at Westfield High School.
- A one credit course

This coeducational elective course emphasizes the major objectives of development in the following areas: strength, explosive power, flexibility, agility, coordination, quickness, speed, muscular and cardiovascular endurance, self-discipline, proper work ethic, sacrifice, and commitment. A strenuous speed improvement and athletic movement routine for athletes will be combined with various weight training exercises. This class also includes education on mental training, nutrition, hydration and sleep.

### ELECTIVE PHYSICAL EDUCATION: BOOT CAMP 101

- Prerequisite: Physical Education I
- A course for grades 9, 10, 11, and 12
- A one credit course

The class will give students a sampling of what Boot Camp fitness is all about. It is separated into 4 three week sections with different focus areas of the body. This course is designed for those students who are self-motivated and want to improve their overall fitness level in fun and energetic ways, using minimal equipment. Students will take away from this course multiple fitness activities they can easily do at home with friends and family.

### ELECTIVE PHYSICAL EDUCATION: TEAM AND INDIVIDUAL SPORTS

- Prerequisites: Physical Education I
- A course for grades 10, 11, and 12
- Classes are coeducational
- A one credit course

Elective Physical Education provides an opportunity for an in-depth study and application of skills pertaining to team and individual sport. This program includes refinement and mastery of the skills, rules, and strategies utilized in a variety of movement forms and games. Students will experience playing different roles on the team as they compete. Focus will be placed on balancing competitiveness with sportsmanship while engaging in multiple athletic contests.



## WELLNESS

### ELECTIVE PHYSICAL EDUCATION: RECREATIONAL ACTIVITIES

- Prerequisite: Successful completion of Physical Education I
- A course for grades 9, 10, 11, and 12
- Course offered in 1st and 3rd trimesters
- Classes are coeducational
- A one credit course

This elective course is designed with activities that can be developed into life-long pursuits. As this course will increase proficiency in certain skills, it will teach the students specific activities that they can perform throughout their entire lives.

### ELECTIVE PHYSICAL EDUCATION: BASKETBALL 101

- Prerequisite: Physical Education I
- A course for grades 9, 10, 11, and 12
- A one credit course

Students in this class will immerse themselves in the sport of basketball. Skills will be taught and refined. Strategies of the game will be implemented and analyzed. Students will participate physically in basketball activities on the court. In the classroom we will learn how to take stats and analyze that data by watching and studying college and NBA games. Students will learn the ins and outs of how to be a coach, a referee, a scorekeeper, and a statistician.

### HEALTH EDUCATION

- Required for Graduation
- A one credit course
- A Core 40 and AHD course

Health Education provides the basis for continued methods of developing knowledge, concepts, skills, behaviors, and attitudes related to student health and well-being. This course includes the major content areas in a planned, sequential, comprehensive health education curriculum as expressed in the Indiana Health Education Standard Guide:

(1) Mental and Emotional Health, (2) Nutrition, (3) Community and Environmental Health, (4)

Alcohol, Tobacco, and Other Drugs. (5) Family Life, (6) Personal Health, (7) Injury Prevention, and (8) Chronic and Communicable Disease.

Students are provided with opportunities to explore the effect of health behaviors on an individual's quality of life. This course assists in understanding that health is a lifetime commitment by analyzing individual risk factors and health decisions that promote health and disease prevention.

Students are encouraged to assume individual responsibility for becoming competent health consumers. A variety of instructional strategies, including technology, are used to further develop health literacy.

### ADVANCED HEALTH AND WELLNESS: CURRENT HEALTH ISSUES

- Prerequisite: Health
- A course for grades 10, 11, and 12
- A one credit course

Current Health Issues is a course which focuses on emerging trends in health including but not limited to: (1) medical technology; (2) local, state, and national health policy; (3) health care issues; (4) health careers; (5) chronic and communicable diseases; (6) drug and alcohol awareness and abuse; and (7) mental/emotional health disorders. Special emphasis will be given to the importance of responsible decision making concerning significant health problems such as substance abuse, drinking and driving, STD's and teenage pregnancy.

### ADVANCED HEALTH AND WELLNESS: SPORTS MEDICINE I

- Prerequisites: Health
- A course for grades 10, 11, and 12
- A one credit course

Advanced Health Education/Sports Medicine is designed to support any student interested in pursuing higher education in a sports or health care profession. Emphasis will be placed on the area of prevention, evaluation and treatment of sports related injuries, exercise physiology and basic kinesiology. Inquiry into the various sports and health care professions will also be offered. If a student chooses, he/she may volunteer to work in our athletic training room.

### ADVANCED HEALTH AND WELLNESS: SPORTS MEDICINE II

- Prerequisites: B- or better in Sports Medicine
- A course for grades 10, 11, and 12
- A one credit course

This course is designed as a continuation of Introduction to Sports Medicine. Students will investigate deeper into injury prevention and specific injuries and rehabilitation techniques for these injuries. Upon completion of this course, students will be well equipped to pursue a career in the field of Sports Medicine.



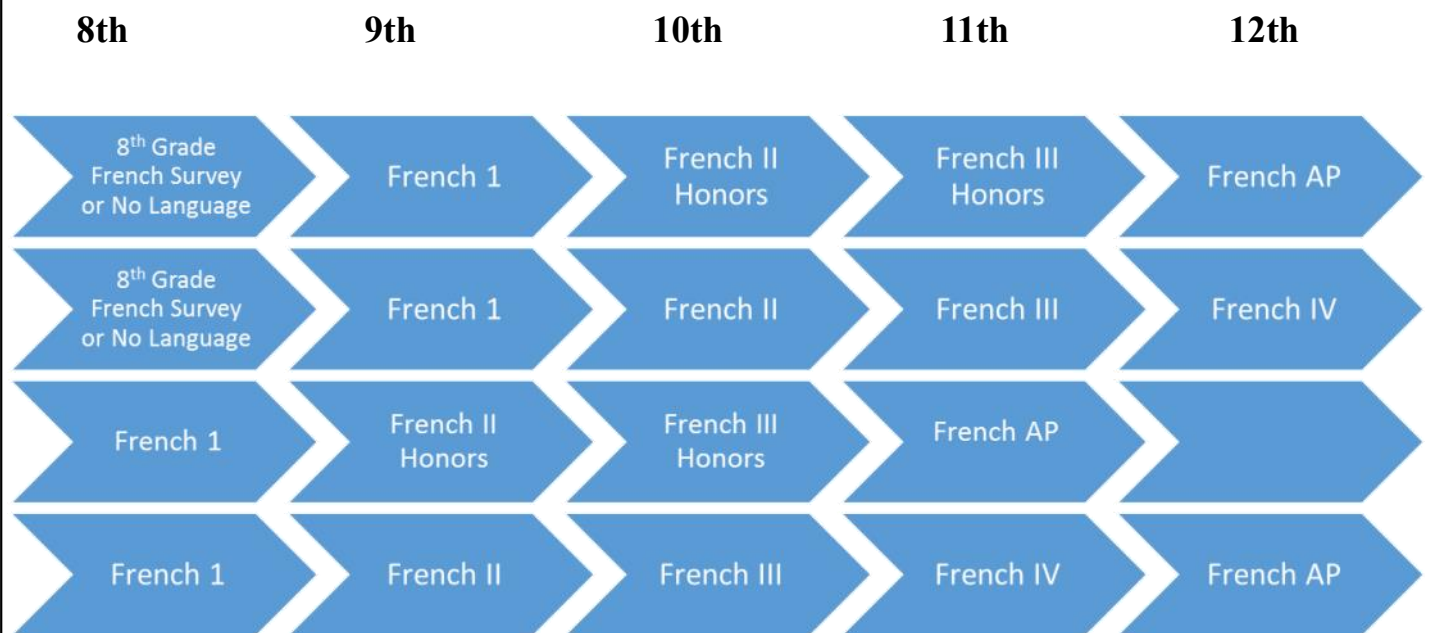
## WORLD LANGUAGE

**Year-long World Language classes taken for credit prior to high school count toward credits for diploma status.**

For a student to receive an Indiana Academic Honors Diploma, they must complete three years of one world language **OR** complete two years of two different world languages.

For each language, students will need to earn a grade of C- or higher in order to advance to the next section or level of the language.

### FRENCH PATHWAYS

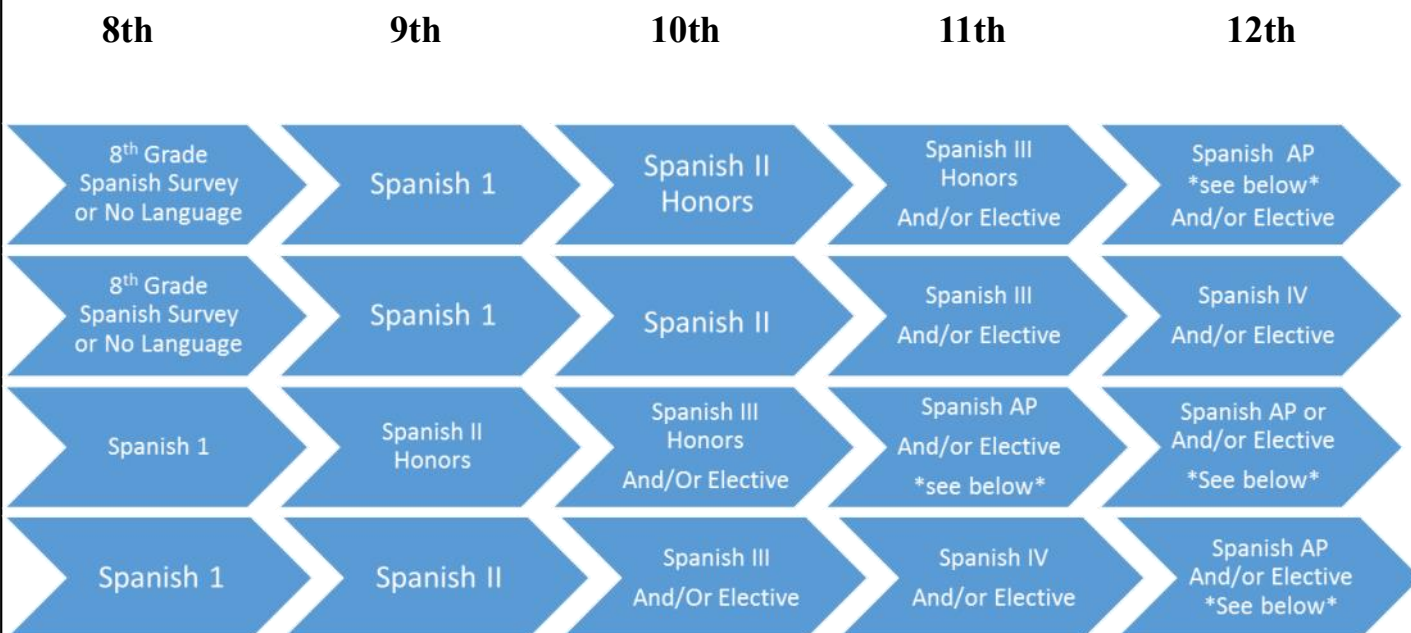


### GERMAN PATHWAY



# WORLD LANGUAGE

## SPANISH PATHWAYS



### Spanish AP

Students may choose from:

- AP Spanish Language & Culture (3 tri)
- AP Spanish Literature & Culture (3 tri)

### Electives

Students may choose from:

- Medical Spanish 1 (1 tri)
- Medical Spanish 2 (1 tri)

# WORLD LANGUAGE

## FRENCH I (1-2)

- It is recommended that students have at least a “C” or higher in high school English .
- You must earn a C- or higher in French I-1 to go on to French I-2
- A two credit course

This course introduces the French language and francophone cultures to students. Emphasis is placed on developing the skills of listening, speaking, reading, and writing within cultural context. Students are introduced to various francophone cultures and learn to communicate basic needs and express likes and dislikes. They will also learn to describe family, friends, and home, and talk about leisure time and school activities. As a result of this course, students will have the basic vocabulary and structure for minimal conversation and will have a basic understanding of francophone cultures. Students will comprehend brief written directions and read short narrative texts on simple topics and write familiar words and phrases.

## FRENCH II (3-4)

- Students must receive a grade of “C-“ or higher in French I (1-2)
- You must earn a C- or higher in French II-3 to go on to French II-4
- A two credit course

French II (3-4) reviews material from level one and introduces new language and cultural skills. Students expand their vocabulary and skills to function within additional cultural settings. Students will write briefly in response to given situations such as letter writing and descriptive paragraphs. Students learn how to communicate thoughts, ideas, and basic information in the past as well as to express present and future hopes and desires for themselves and others. Students will become familiar with different aspects of the culture including the visual arts, architecture, literature, and music, using the foreign language where appropriate.

## FRENCH II (3-4) HONORS

- Placement will be determined by performance in French I (1-2)
- Students must earn a C- or higher in French II-3 Honors to go on to French II-4 Honors
- A two credit course

French II (3-4) Honors is a transition to full immersion course for the student who has successfully complete French I and wants to pursue an honors-level French program with the ultimate goal of success in the Capstone course of Advanced Placement French Language and Culture. In French II Honors, students will continue to develop communicative competence. Authentic materials will be used to improve listening, speaking, reading, and writing skills. Students will be expected to communicate in French at a level commensurate with their study. Students will deepen their understanding of Francophone culture and learn to compare the products, practices and perspectives of a Francophone culture with those of their own culture as well.

## FRENCH III (5-6)

- **This is a BYOT class**
- Students must receive a grade of “C-“ or higher in French II (3-4)
- You must earn a C- or higher in French III -5 to go on to French III-6
- A two credit course

French III (5-6) provides a comprehensive review of fundamentals from former levels and continues to introduce new language and cultural material. Students will further their communication skills through the introduction of new vocabulary and verb tenses. Students will write brief compositions as well as complete oral projects and presentations. There is an emphasis on speaking at this level and students are expected to communicate and participate in the target language. Students will learn about major French historical events and figures as well as read authentic French literature during this year.

## FRENCH III (5-6) HONORS

- **This is a BYOT class**
- Students must receive a grade of “C-“ or higher in French II (3-4) Honors
- Students must earn a C- or higher in French III-5 to go on to French III-6
- A two credit course

French III (5-6) Honors is a full immersion course designed for the student who has successfully completed French II Honors and wants to continue to AP French. In French III Honors, students will continue to develop their communicative competence. Students are expected to communicate primarily in French. The focus will be on improving listening, speaking, reading and writing skills through the use of authentic materials. Students will study

and communicate about a variety of topics related to contemporary and historical events and issues at a proficiency level commensurate with their study. Students will comprehend and produce French in a manner that will prepare them for success in AP French.

## FRENCH IV (7-8)

- **This is a BYOT class**
- Students must receive a grade of “C-“ or higher in French III (5-6)
- Students must earn a C- or higher in French IV-7 to go on to French IV-8
- A two credit course

This is an immersion course where students will extensively review and refine their communication skills in speaking, reading, and writing activities. Students will explore a variety of topics related to contemporary and historical events and issues and will respond to questions and interact in conversations discussing personal interests, current events, and social situations. They will also become aware of major historical and artistic events and figures.

# WORLD LANGUAGE

## ADVANCED PLACEMENT, FRENCH LANGUAGE AND CULTURE

- **This is a BYOT class**
- **This is a three trimester course**
- Students must receive a grade of “C-“ or higher in French III (5-6)
- Students must earn a C- or higher in AP French to continue to the next trimester.

The Advanced Placement French Language and Culture course is a three-trimester course, which prepares the students for the Advanced Placement French Exam. The AP French Language and Culture course is designed to promote proficiency in French and to enable students to explore culture in contemporary and historical contexts. AP French helps students develop language skills that can be applied beyond the French course. The course focuses on communication, encourages cultural awareness, and incorporates themes in meaningful contexts. The course prepares students to demonstrate language fluency and accuracy through Interpersonal, Interpretive, and Presentational modes of communication. The course is conducted in French and focuses on the mastery of listening, speaking, reading, and writing skills through the use of authentic materials and discourse. All students enrolled in this course will be expected to take the AP exam in May.

## GERMAN I (1-2)

- Students It is recommended that students have at least a “C” or higher in high school English.
- Students must earn a C- or higher in German I-1 to go on to German I-2
- A two credit course

This course introduces students to effective strategies for beginning German language learning and to various aspects of German-speaking culture. Emphasis is placed on developing the skills of listening, speaking, reading, and writing within a cultural context. Students compare and contrast cultures by exploring similarities and differences in everyday life, becoming aware of events in cultures and appropriate responses in various social settings. In addition, students learn to communicate basic needs; express likes and dislikes; as well as describe family, friends, and home, and talk about leisure time and school activities. Students will comprehend brief written directions and read short narrative texts on simple topics and write familiar words and

phrases. As a result of this course, students will have the basic vocabulary and structure for minimal conversation and basic understanding of German-speaking cultures.

## GERMAN II (3-4)

- Students must receive a grade of “C-“ or higher in German I (1-2)
- Students must earn a C- or higher in German II-3 to go on to German II-4
- A two credit course

German II (3-4) reviews material and builds upon effective strategies learned in German I (1-2). Students expand their vocabulary and skills to function in a variety of social and cultural settings. Students learn how to communicate thoughts, ideas, and basic information in the past in addition to writing more descriptively in response to various situations. They also learn to compare different viewpoints and opinions while expressing present and future hopes and desires for themselves and others. Students will interact in a variety of situations to meet personal needs and will understand main ideas and facts from simple texts over familiar topics. Students will become familiar with different aspects of the German-speaking culture, including music, literature, art, and everyday life, using the target language where appropriate. This course further emphasizes making connections across content areas and recognizing the impact of the German language and culture outside of the classroom.

## GERMAN III (5-6)

- **This is a BYOT class**
- Students must receive a grade of “C-“ or higher in German II (3-4)
- Students must earn a C- or higher in German III-5 to go on to German III-6
- A two credit course

This course builds upon fundamentals from German I (1-2) and II (3-4) and continues to introduce new language, complex grammar structures, and cultural material. Students will deepen their communication skills through the introduction of new vocabulary and verb tenses. Students will read from a variety of authentic materials such as selections of poetry, plays, and short stories, as well as write paraphrases, summaries and brief compositions in the target language. They will also participate in conversations about personal interests and current events.

## GERMAN LANGUAGE AND CULTURE, ADVANCED PLACEMENT (1-2-3)

- **This is a BYOT class**
- Students must complete German III-6 with a C- or higher.
- Students must earn a C- or higher in AP German to continue the next trimester.
- A three credit course

The Advanced Placement German Language and Culture course is a three trimester course which prepares students for the Advanced Placement German Exam. The AP German Language and Culture course is designed to promote proficiency in German and to enable students to explore culture in contemporary and historical contexts. AP German helps students develop language skills that can be applied beyond the German course in further German study and everyday life. The course focuses on communication, encourages cultural awareness, and incorporates themes in meaningful contexts. The course prepares students to demonstrate language fluency and accuracy through Interpersonal, Interpretive, and Presentational modes of communication. The course is conducted in German and focuses on the mastery of listening, speaking, reading, and writing skills through the use of authentic material and discourse. All students enrolled in this course will be expected to take the AP exam in May.

# WORLD LANGUAGE

## SPANISH I (1-2)

- It is recommended that students have at least a “C” or higher in high school English or “B” or higher in 8th grade English.
- Students must earn a C- or higher in Spanish I-1 to go on to Spanish I-2
- A two credit course

Spanish I (1-2) introduces the Spanish language and Hispanic culture to students. Emphasis is placed on developing the skills of listening, speaking, reading, and writing within the cultural context. Students begin to become familiar with various Hispanic cultures by exploring similarities and differences in everyday life. They will learn about major holidays and geographical features of the countries being studied. Students learn how to communicate basic needs, express likes and dislikes, as well as describe family, friends, and home. They will ask and answer simple questions and participate in brief guided conversations related to their needs and interests. Students will read short narrative texts on simple topics and comprehend brief written directions and information. They will write familiar words and phrases in appropriate contexts and respond in writing to various situations. As a result of this class, students will have basic vocabulary and structures for minimal communication and a basic understanding of the Hispanic culture.

## SPANISH II (3-4)

- Students must earn a grade of C- or higher in Spanish I or Spanish I Honors.
- Students must earn a grade of C- or higher in Spanish II-3 Honors to go on to Spanish II-4.
- A two credit course

Spanish II (3-4) reviews material from Spanish I and introduces new language and cultural material. Emphasis is placed on further development of listening, speaking, reading, and writing skills. Students become more familiar with the people and culture of the Hispanic world and further their understanding of Hispanic culture in different aspects of visual arts, literature, geographical features and historical events, using the foreign language where appropriate. Students learn to communicate thoughts, ideas, and basic information in the past tense. They also learn to express present and future hopes and desires for themselves and others. They will read aloud with appropriate intonation and pronunciation and write briefly in response to given situations. As a result, students will be able to function more effectively in Spanish; learning to appreciate the value of being able to use

Spanish in a global economy.

## SPANISH II (3-4) HONORS

- Students must earn a grade of “C-” or higher in Spanish I (1-2)
- Students must earn a grade of C- or higher in Spanish II-3 Honors to go on to Spanish II-4 Honors.
- A two credit course

Spanish II (3-4) Honors is for the student who has successfully completed a year of Spanish I (1-2). This is a transition to immersion course that is designed for the student who wants to pursue an honors-level Spanish program with the ultimate goals of lifetime language fluency and success in the capstone course of Advanced Placement Spanish. In Spanish II Honors, students will continue to develop communicative competence. Authentic materials will be used to focus on listening, speaking, reading, and writing skills. The students will be expected to communicate in Spanish at a level commensurate with their study. Material from Spanish I (1-2) will be reviewed and new language and cultural material will be introduced. Students will further their understanding of Hispanic culture and learn to express themselves more creatively.

## SPANISH III (5-6)

- **This is a BYOT class**
- Students must receive a grade of “C-” or higher in Spanish II (3-4)
- Students must earn a C- or higher in Spanish III-5 to go on to Spanish III-6
- A two credit course

Students will have the opportunity to acquire greater ability in all language skills. Students will learn to recognize compound tenses and detailed grammatical structures. They will respond to factual and interpretive questions and interact in a variety of situations. They will be given the opportunity to express original ideas and expand vocabulary to individual interests. They will read for comprehension from a variety of authentic materials such as newspapers, magazines, short literary selections of poetry, and short stories. Students will write paraphrases, summaries, and brief compositions. The majority of instruction and communication in this class will be in Spanish. Students will be expected to communicate in the target language.

## SPANISH III (5-6) HONORS

- **This is a BYOT class**
- Students must receive a grade of C- or

higher in Spanish II (3-4) Honors

- Students must earn a C- or higher in Spanish III-5 Honors to go on to Spanish III-6 Honors
- A two credit course

Honors Spanish III is an immersion course designed for the student who has successfully completed Spanish II Honors and wants to continue to AP Spanish. In Spanish III Honors, students will continue to develop their communicative competence. Students are expected to communicate primarily in Spanish and focuses on listening, speaking, reading and writing skills through the use of authentic materials. Students will exchange and support opinions on a variety of topics related to contemporary and historical events and issues at a proficiency level commensurate with their study. Students will begin to produce and comprehend Spanish in a manner that is in accordance with preparing them for success in Advanced Placement Spanish.

## SPANISH IV (7-8)

- **This is a BYOT class**
- Students must receive a grade of “C-” or higher in Spanish III (5-6)
- You must earn a C- or higher in Spanish IV-7 to go on to Spanish IV-8
- A two credit course

Spanish IV (7-8) is a full immersion course designed for the student who has successfully completed Spanish III. In Spanish IV, students will continue to develop their communicative competence. Students are expected to communicate primarily in Spanish and the class focuses on listening, speaking, reading, and writing skills through the use of authentic materials. This course will be centered around themes that focus on relevant, modern vocabulary and culture. Students will explore current events as well as modern and historical challenges in Spanish speaking societies.



## WORLD LANGUAGE

### SPANISH LANGUAGE, ADVANCED PLACEMENT (1-2-3)

- **This is a BYOT class**
- A three credit course
- Students must receive a grade of C- or better in Honors Spanish III (5-6)
- You must earn a C- or higher in AP Spanish to continue to the next trimester

The AP Spanish Language and Culture course has a holistic approach to language proficiency and stimulates participants to improve communication in interpretive, interpersonal and presentational modes. It is taught and managed at the college level. This rigorous course is taught almost exclusively in Spanish and students are held accountable for their participation. The course focuses on the integration of authentic resources including online print, audio, and audiovisual resources; as well as traditional print resources that include literature, essays, and magazine and newspaper articles; and also a combination of visual/print resources such as charts, tables, and graphs; all with the goal of providing a diverse learning experience. Students communicate using rich, advanced vocabulary and linguistic structures as they build proficiency in all modes of communication toward the pre-advanced level. Students explore the products, practices and perspectives of the target cultures. Opportunities to speak Spanish for authentic purposes and gain cultural knowledge are promoted within the classroom and are sought out in the community. Central to communication is the following premise from the AP Spanish Language and Culture Curriculum Framework: When communicating, students in the AP Spanish Language and Culture course demonstrate an understanding of the culture(s), incorporate interdisciplinary topics (Connections), make comparisons between the native language and the target language and between cultures (Comparisons), and use the target language in real-life settings (Communities).

### MEDICAL SPANISH I & II

- Recommended Grade Level: 10, 11, 12
- Prerequisites: Spanish I & II
- Credits: 2 separate 1 trimester courses

Medical Spanish is a course designed to fuse students' desired future career path with the use of the Spanish language in a variety of scenarios. This course will provide students the opportunity to acquire relevant and practical skills in Spanish to prepare them for interactions with Spanish speakers in medical settings.. Students will gain cultural knowledge, focus on culturally-appropriate interactions,

both verbal and nonverbal, and learn specific vocabulary that relates directly to the medical field. A major focus of **Medical Spanish I** is on students' proficiency (both oral and written) in relation to patient interaction and will use a high percentage of only Spanish in instruction and students' work production. A major focus of **Medical Spanish II** is on understanding and discussing the body, medical procedures and interventions, and culturally relevant medical alternatives and will use a high percentage of only Spanish in instruction and students' work production.

**Entry to Med Span 2 is not contingent on having taken Med Span 1.**

This course counts as a general World Language credit as a Directed Elective or Elective, but will not count toward the Academic Honors Diploma as it is not part of a sequenced program.

### SPANISH LITERATURE AND CULTURE, ADVANCED PLACEMENT

- **This is a BYOT class**
- A three credit course
- Students must receive a grade of C- or better in Honors Spanish III (or honors)
- You must earn a C- or higher in AP Spanish to continue to the next trimester

The AP Spanish Literature and Culture course is designed to provide students with a learning experience equivalent to that of an introductory college course in literature written in Spanish. The course introduces students to the formal study of a representative body of texts from Peninsular Spanish, Latin American, and U.S. Hispanic literature. The course provides opportunities for students to demonstrate their proficiency in Spanish across the three modes of communication (interpersonal, interpretive, and presentational) and the five goal areas (communication, cultures, connections, comparisons, and communities) outlined in the Standards for Foreign Language Learning in the 21st Century. The overarching aims of the course are to provide students with ongoing and varied opportunities to further develop their proficiencies across the full range of language skills — with special attention to critical reading and analytical writing — and to encourage them to reflect on the many voices and cultures included in a rich and diverse body of literature written in Spanish.

The inclusion of “and Culture” in the title of the course reflects a purposeful alignment of the course to a standards-based Spanish curriculum. In particular, the course reflects a meaningful integration of the cultures, connections, and comparisons goal areas of the Standards. Emphasis is placed on approaching the study of literature through global, historical and contemporary cultural contexts. A key

objective of the course is to encourage students not only to understand and retell the content of the texts they read but also to relate that content to literary, historical, sociocultural, and geopolitical contexts in Spanish. The course aims to help students progress beyond reading comprehension to read with critical, historical and literary sensitivity. This is an ambitious goal, but it is hoped that when exposed to the methods of literary analysis, with its rigorous attention to linguistic detail coupled with critical interpretation and analysis, students will be able to apply the skills they acquire in this course to many other areas of learning and life.



## J. EVERETT LIGHT CAREER CENTER

The J. Everett Light Career Center advocates *Skills Training for Success in College and the Workplace*. JEL is administered by the Metropolitan School District of Washington Township and serves high school students and adults from 12 school corporations in northern Marion, Boone, and Hamilton counties.

The facility consists of approximately 150,000 square feet including classrooms, laboratories, offices, and other instructional resource facilities.

### WHO CAN TAKE OUR CLASSES?

Our classes are available to students from our 12 sending high schools. JEL is available to Westfield High School juniors and seniors.

### WHEN DO CLASSES MEET?

Career Center classes meet every day for three hours. See the specific course descriptions for the number of hours that each course meets. We have a morning session and an afternoon session.

<i>Morning Session Times</i>		<i>Afternoon Session Times</i>	
3 Hr. Class	7:30 am – 10:23 am	3 Hr. Class	12:08 pm – 3:00pm

**\*Please note that Cosmetology meets four hours a day in the afternoon. First year meets from 12:00-4:00 PM and second year meets from 1:00-5:00 PM. You MUST have your own transportation home from JEL to participate in the Cosmetology program.**

### HOW MANY CREDITS CAN I EARN?

Our students can earn elective high school credits for our courses. JEL is on a semester system. Upon passing a course a student can earn three credits for a three-hour course each semester for a total of six credits per year. The students' high school will add these credits to the transcript.

### WHAT ELSE CAN I EARN?

Students will receive a certificate of employability, which will list the job skills they have mastered. Upon recommendation by your teacher, the Career Center Director also will provide a written guarantee that you, the graduate, can perform the skills listed on the technical certificate. The Student Skills Guarantee is valid for a period of one year following completion of the program.

### HOW DO I APPLY FOR A CLASS?

Students may obtain an application for our classes from their School Counselors. Typically, Counselors will meet with students in January and February to plan a schedule of classes for the next school year. At this time the application must be completed. Many of our classes fill up quickly, so it is important that the student complete and return the application to his/her Counselor as soon as possible.

### WHAT STUDENT SERVICES ARE AVAILABLE?

Different support services are offered to any student enrolled in our classes. Many students benefit from counseling and instructional support to be successful in our programs. Staff members are available to provide these support services during the school day. Contact your high school counselor or the counselor at the Career Center for further information.



## **CLASS OFFERINGS**

Advanced Manufacturing Technology & Engineering

Airport & Aviation Management

Animation & Film Production

Automotive Collision Repair & Refinishing

Automotive Maintenance & Detailing

Cosmetology

Culinary Arts Careers

Dental Careers

Graphic Design (Digital Designs & Advertising)

Education Careers

Health Careers Exploration

Law Enforcement

Media Arts Production

Medical Assisting

Music & Sound Production

Veterinary Careers

Welding

Work Based Learning

## **Advanced Manufacturing Technology and Engineering**

***One or two years, 3 or 2 hours per day | Prerequisite: Algebra 1 or higher***

***Dual Credit: Ivy Tech (1st year, 6 credits) MPRO 100, MPRO 106***

***Certifications: APICS Logistics, APICS Operations, and MSSC Certified Logistics Associate(2nd year, 9 credits) MPRO 122, MPRO 102, MPRO 201***

***Certifications: MSSC Safety, MSSC Mfg. Processes and Production, MSSC Maintenance Awareness, MSSC Full Certified Production Technician***

Robotics, CNC Machining, 3D Printing, and more! Advanced Manufacturing Technology and Engineering is designed to expose students to the skills needed in the growing fields of manufacturing and production. This program will prepare students for employment with prestigious companies by focusing on the subjects of manufacturing processes and production, three dimensional modeling and analysis, robotic applications, quality and continuous improvement practices, maintenance awareness, and safety. Software Used: AutoCAD, Inventor, Aspire, CatalystEX, Repetier, WinCNC *Job Opportunities: Engineer, CNC Machinist, Drafting Technician, Material Handling Specialist*

## **Airport & Aviation Management**

***Location - Indianapolis Metropolitan Airport—personal transportation required***

***One year, 3 hours per day***

***Dual Credit: Ivy Tech (17 Credits) AVIT111, AVIT 120, AVIT132, AVIT138, AVIT208***

***Certification: Private Pilot Knowledge Exam - There is NO Actual Flying in this course***

Participate in this aviation-interactive classroom at the Indianapolis Metro Airport. Learn about aircraft manufacturing, airline operations, aviation technology, air freight, airport management, government service, and weather services.

*Job Opportunities: Airline Pilots, Airport Management, Aviation Technology*

## **Animation/Film Production**

***One or two years, 2 hours per day***

***Dual Credit: Vincennes (6 credits) MCOM 102, MDIA 140***

***Certification: Final Cut Pro***

Have you ever wondered how movies and animations are made? Then this 2-hour class is for you. You'll learn the basics of creating simple animations, the cinematography skills necessary to shoot films and the editing skills to put everything together into a complete project. This course will give you the skills necessary to produce your own films and animations, obtain an entry-level job or expand on your education in college.

*Job Opportunities: Cinematographer, Video Editor, Producer, Screen Writer, Animator*

## **Automotive Collision Repair & Refinishing**

***One or two years, 3 or 2 hours per day***

***Dual Credit: Vincennes (14 credits) BODY100, BODY 100L, BODY 150, BODY 150L***

***SP2 Certificates: Collision Safety, Collision Pollution Prevention, & Shipping Hazardous materials***

Students study a wide range of processes, methods, and materials in keeping with the high-tech nature of today's automotive collision repair industry. State of the art equipment is used in this program. Students will also gain experience in custom painting techniques. We are an I-Car Alliance Training facility. *Job Opportunities: Auto/Truck Collision Repair/Paint Facilities*

## **Auto Maintenance/Detailing**

*One or two year, 2 or 3 hours per day*

***SP2 Certificates: Shipping Hazardous Materials, Mechanical Pollution Prevention & Mechanical Safety, Valvoline Motor Oil Basics Training & Skills Competency Guarantee***

Students will learn how to professionally clean an automobile and prepare for auto detailing jobs available in the area. This course covers basic detailing, including the fundamentals of engine detailing, interior and exterior cleaning, and waxing and buffing techniques. Students will learn the proper use of chemicals and tools, and how to recognize auto problems, and estimate cost and time requirements. Students will explore minor auto repair, including engine performance, tires, brakes, automotive electricity, and minor exterior modifications and repairs, including sound system design and installation, window tinting and other vehicular customization.

*Job Opportunities: Quick Lube Shops, Brake and Muffler Shops, Dealerships*

## **Cosmetology**

*Two years, 4 hours per day*

***Dual Credit: Vincennes (1st year, 14 credits) COSM 100\*, COSM 150 (2nd year, 16 credits) COSM 200, COSM 250***

***Certifications: State of Indiana License***

***Social Security Number required for State License Exam***

Students can qualify for the Indiana State examination required for completion of this 1500 hour course. Theory and practice of facial massage, makeup, hair dressing, styling, and hair color are some of the areas covered in this class. Kit fee and uniform—approximately \$600

## **Culinary Arts**

*One or two years, 3 hours per day*

***Dual Credit: Ivy Tech (1st year, 3 credits) HOSP 101\* (2nd year, 3 credits) HOSP 102***

***Certifications: ProStart National Certificate***

Students will spend the first year learning all the basics of cooking and the second year concentrating on international foods, baking and pastry, entrepreneurship, and hospitality. Students will have the opportunity to work in our restaurant. All students will have the opportunity to be Serv-Safe certified. Students can compete in various culinary competitions through our student CTSO.

*Job Opportunities: Chef, Kitchen Manager, Restaurant Manager, Catering, Dietician*

## **Dental Careers**

*One or two years, 3 hours per day*

***Dual Credit: Ivy Tech (1st year, 4 credits) DENT 115 Certifications: DANB Infection Control, American Heart BLS***

***(2nd year, 5 credits) HLHS 101\*, DENT 124 Certifications: DANB Radiation Health & Safety, NELDA (National Entry Level Dental Assistant)***

Do you notice people's smiles? Do you want to be a part of a career that helps put smiles on people's faces? A career as a dental assistant will provide you with a stable, respected job that can be obtained after your high school graduation and make you smile. Students will study dental anatomy, dental terminology, nutrition, and oral diseases. Skills will be developed in sterilization, operative procedures, radiographs, and patient management. Students will gain leadership skills developed through HOSA participation. Upon successful completion of the two year program, students will be qualified to take the state certification exam in radiology. *Job Opportunities: Dental Assistant, Office Manager, Dental Lab*

## **Digital Designs & Advertising (Graphic Design)**

*One or two years, 2 hours per day*

***Dual Credit: Vincennes (6 credits) MCOM 102, MDIA 140***

***Certifications: Final Cut Pro***

Media is an essential part of our world today, and we consume it in many forms—movies, music, television...even YouTube! Go behind the scenes in this course and learn all aspects of digital audio and video production. Apply what you learn by creating short films and music videos, having a voice as a DJ or sportscaster on our radio station (WJEL 89.3) and showcasing your work to others. You will use software that is currently used by radio, television, and film professionals. Our 17 audio/video recording bays, TV studio, radio station and state-of-the-art equipment will give you the advantage you need to be successful in college or start your career.

## **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).

## **Health Careers Exploration**

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

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

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.

## **Law Enforcement**

*One or two years, 3 hours per day*

***Dual Credit: Vincennes (9 credits) LAWE 100, LAWE 150, LAWE 160***

***Certifications: CPR, AED, Hazard Materials, Basic First Aid, National Incident Mgt.***

This class is designed to provide the knowledge and skills necessary to enter the criminal justice field. Students will study the basic fundamentals of the criminal justice system and how they apply in today's society. The program consists of hands-on activities and requires the ability to participate in physical fitness activities. *Job Opportunities: Law Enforcement Officer, Crime Scene Investigations, Corrections & Parole*

## **Medical Assisting**

*One year, 2 or 3 hours per day*

***Dual Credit: Ivy Tech (3 credits) HLHS 100***

***Certifications: AHA BLS for Healthcare Providers***

Explore health related disciplines and learn associated entry level skills for the medical office. Learn to assist in the performance of diagnostic procedures and physical examinations. Gain Leadership skills developed through HOSA participation. Successful completion will result in CPR certification. Students will experience classroom instruction and practical hands-on experience in an actual medical facility if they choose the 3 hour option. Personal transportation to clinical site is REQUIRED for the 3 hour option.

## **Music/Sound Production**

*One or two years, 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. Students will also have an oppor-

## **Veterinary Assisting**

*One or two years, 3 hours per day | Prerequisite: Biology or Enrolled in Biology*

***High School Science credit possible—see your Counselor***

***Dual Credit: Ivy Tech (3 credits) HLHS 101***

Students will be introduced to the science and art of providing professional support to veterinarians. Students will be instructed in basic anatomy and physiology, medical terminology, and veterinary technician assisting skills. Students will gain leadership skills developed through HOSA participation. Students must have their own transportation. Students will have the option to earn an Advanced Life Science: Animals credit. *Job Opportunities: Veterinary Assistant, Zoos, etc.*

## **Welding**

*One or two years, 2 or 3 hours per day*

***Dual Credit: Ivy Tech (1st year, 3 credits) WELD 108 Certifications: American Welding Society, AWS SENSE (2nd year, 3 credits) WELD 207, WELD 208***

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*



## **Work-Based Learning (WBL), Multiple Pathways**

*Prerequisite: Juniors & seniors only.*

**Earn high school credits while you gain real-world work experience.**

Students have the opportunity to apply the concepts, skills, and dispositions learned in CTE pathways coursework to real-world business and industry settings. Current career-related employment required. Reliable and valid transportation required.

## **Dual Credit Classes**

### **College Credit for JEL Courses**

Enrollment in some of our courses offers an opportunity for students to receive college credit as well as high school credit. This will save time and money because you won't have to take these classes in college. Dual credit is dependent upon successful completion of the course and typically require the student earn at least a "B" grade for each semester. Courses marked with \*, require students to pass Accuplacer, an entrance test.

*Check with program instructors for specific  
dual credit information.*

**Cost of dual credit classes:**

**Ivy Tech:** No charge.

## Career Technical Education (CTE) & Youth Organizations

Career and Technical Student Organizations, commonly referred to as CTSOs, are youth organizations designed to support students in career and technical education (CTE) programs. Career and technical education prepares high school graduates for the next step, whether it is postsecondary education or entry into the workforce.

Rigorous academic content tied to technical subject matter, as well as internships and other cooperative work experiences, are hallmarks of CTE programs. Through these co-curricular programs of study, students get a head start on their career preparation, whether their goal is to become a teacher, doctor, automotive technician, or computer programmer.

CTSOs are considered an integral part of CTE; they help students develop the technical and leadership skills that will enable them to succeed in their career paths.

The following youth organizations are a co-curricular part of every program at JELCC.



# WESTFIELD HIGH SCHOOL

## J. EVERETT LIGHT CAREER CENTER STUDENT/PARENT CONTRACT

The J. Everett Light Career Center offers Westfield High School students an exciting educational opportunity. It is our goal to provide these types of learning experiences to our students. Our district spends approximately \$3,000.00 on each student for tuition at J. Everett Light. Once a student is accepted and enrolled at JEL, the student will be required to complete the 180-day program. **Students will not be allowed to drop or change programs anytime during the year, including semester breaks.**

The following must be signed by both student and parent in order to participate in the J. Everett Light Career Center classes:

\_\_\_\_\_ and \_\_\_\_\_ agree to **ALL** policies stated below.

(Student Name)

(Parent/Guardian Name)

- ♣ Student and parent are familiar with all policies and procedures of JEL  
We have attended the JEL Open House or plan to make a site visit.
- ♣ Student **cannot** change or drop their JEL class after **May 18, 2019**
- ♣ Student will attend JEL on days when Westfield High School is not in session  
and attend Westfield High School on days when JEL is not in session.
- ♣ Student may miss Westfield High School pep sessions, bonus periods, and other school activities due to the JEL class schedule
- ♣ Student will conduct himself/herself in an appropriate manner at all times
- ♣ Student will attend their scheduled JEL class for the entire school year

**IF A STUDENT FAILS TO COMPLETE THE 180 DAY PROGRAM, THE FAMILY WILL BE RESPONSIBLE FOR REIMBURSEMENT OF TUITION TO WESTFIELD WASHINGTON SCHOOLS**

**Student Signature**

**Date**

\_\_\_\_\_

\_\_\_\_\_

**Parent/Guardian Signature**

**Date**

\_\_\_\_\_

\_\_\_\_\_