

To all Crawfordsville High School Students, Parents and Guardians:

This curriculum guide has been prepared to assist you in making the best choices possible concerning your course selection and educational planning at Crawfordsville High School. You should read the guide in its entirety to learn about graduation requirements, types of diplomas which are available, course descriptions, placement in the different level courses, credits for courses, length of the course, prerequisites and recommendations.

Many resources are available to assist you in determining which courses are appropriate for student at CHS. As you begin the process of planning your courses for next year, we encourage you to utilize those resources in order to obtain the greatest benefit from this important time in your life.

To help with the planning process we encourage parents and students to have discussions at home about career goals, interests and skills. The faculty of CHS, administrators, and counselors can assist you by providing opinions and data. The counseling center will provide group sessions for disseminating information. They will also schedule individual planning sessions as needed to further facilitate your decision making process.

We all recognize that parents, counselors, teachers play a tremendously important role in guiding the course selection process. The primary responsibility, however, rests with the student as they establish goals and plans for their future.

Please consider the following when planning for the 2016-2017 school year.

Plan ahead. Know the graduation requirements. Use the enclosed 4-year planning worksheet (page G) to help plan course selections.

Remain current in regards to college or vocational entrance requirements. Students with a career/vocational goal in mind are more successful than those students who plan without a goal. If you are in doubt about credits for graduation, colleges, or vocational plans, see your school counselor.

Current grade 9-11 students will meet individually with counselors to go over their next year's course selection and update their 4-year plan. Parents are encouraged to make an appointment during **OPEN HOUSE** in September with their student's counselor.

Current eighth grade students will be working with high school counselors to work through their course selections. Parents are encouraged to attend the **8th Grade Parent Night on Monday, January 25, 2016.**

| | |
|---------------------------------------|------------------|
| Principal..... | Gregory L. Hunt |
| Assistant Principal..... | Mark A. Melton |
| Director of High School Guidance..... | Brenda S. Lovold |
| Counselor..... | Missy Hammersley |

Department Chairpersons

| | |
|--|---------------|
| Art..... | Mrs. Marsh |
| Business, Marketing & Information Technology.... | Mr. Pierce |
| Engineering & Technology Education..... | Mr. Wilcoxson |
| Family & Consumer Sciences..... | Mrs. Totheroh |
| Language Arts..... | Ms. Bryant |
| Mathematics..... | Mrs. Hobson |
| Music..... | Ms. Fights |
| Physical Education..... | Mrs. Johnson |
| Science..... | Mrs. Veatch |
| Social Studies..... | Mr. Ervin |
| Special Education..... | Mrs. Ervin |
| World Language..... | Mrs. Neville |

CHS uses a 4.0 grading scale to compute GPA and class rank which is calculated at the end of each semester. Students who are in AP classes are on a 4.0 weighted grading scale. Students who are in a year long AP class **MUST** complete the entire year in order to receive the weighted grade. If a student drops an AP class after the 1st semester then that 1st semester grade will not be weighted.

Your Academic Edge Succeeding with Core 40

1. Core 40 became Indiana's required high school curriculum in fall 2007. Students will be expected to complete Core 40 as a graduation requirement. By providing all Indiana students a balanced sequence of academically rigorous high school courses in the core subjects of English/language arts, mathematics, science and social studies; physical education/health and wellness; and electives including world languages, career/technical, and fine arts, the Core 40 requirement gives all our students the opportunity to compete with the best. That's great news for Indiana students.
2. To graduate with less than Core 40, a student must complete a formal opt-out process involving parental consent. See your school counselor for full details. For more information about Core 40 and your career and course plan, see your counselor and visit Learn More Resource Center at www.learnmoreindiana.org.
3. Indiana's Core 40 is the academic foundation all students need to succeed in college, apprenticeship programs, military training, and the workforce.

Challenging Courses = Big Rewards. Students who take strong academic courses in high school are more likely to enroll in college and earn a degree. That's important, because higher education pays: On average, college graduates earn more than a million dollars more over a lifetime than those with only a high school education. High school graduates earn 42 percent more than high school dropouts. Core 40 pays.

- **More Career Options.** Good jobs require education beyond high school. That means if you want a job that will support you and your future family, provide health benefits and offer a chance for advancement, you'll need to complete a two- or four-year degree, apprenticeship program, military training, or workforce certification. If you are planning to go directly to work after high school graduation, you will still need to be prepared for training and retooling throughout your lifetime. Core 40 gives you more options – and more opportunities – to find a career with a real future.
- **What Employers and Training Programs Want.** Employers, apprenticeship programs and the military all agree – they expect you to arrive with essential skills, including speaking and writing clearly, analyzing information, conducting research, and solving complex problems. The expectations are the same: You need Core 40.
- **Preparation for College Success.** It's not just about getting in – it's about finishing. To succeed in college-level work, students need to complete Core 40 in high school. Anything less may mean taking remedial [high school] coursework in college, which mean it will take longer to finish and will cost our more in college tuition. It also means you'll have a greater chance of dropping out before you get your degree. That's why Core 40 is a college admissions requirement: In fall 2011 you won't be able to start at a four-year public Indiana college without Core 40 [or a documented equivalent]. Most private colleges require students to have at least this level of high school academic preparation. Core 40 is your best preparation for success.
- **Money for College.** The Core 40 diploma can help you earn money for college. Indiana students who complete a Core 40 diploma and meet other financial aid and grade requirements can receive up to 90 percent of approved tuition and fees at eligible colleges. Core 40 with Academic Honors graduates can receive up to 100 percent and some colleges also offer their own scholarships specifically for students who earn this diploma.

Crawfordsville High School seeks to offer credit programs and courses and to provide admission and counseling for all high school students, regardless of race, color, creed, religion, sex, national origin, physical or mental handicap, or age including limited English proficiency.

REQUIREMENTS FOR GRADUATION

| Required | 40 Total State Credits | 43 Crawfordsville High School Credits |
|--|-------------------------------|--|
| Additional Information | | |
| 1. Students pursuing a college preparatory course should select academic English courses. In addition, you should earn minimum credits from the following areas: English (8), Foreign Language (4), Mathematics (6), and Social Studies (6). The guidance counselor can help you to obtain requirements from specific colleges. | | |
| 2. Students who wish to graduate early must declare their intention in writing prior to scheduling their senior courses. Parent permission and school approval will be required. | | |
| 3. Curriculum plans are to be made for both the first and second semesters. Plan carefully as changes are discouraged and often impossible. | | |
| 4. Course change policy: Students may not add courses to their schedules after the first two days of the semester. Any course change must have a "Schedule Change Request Form" signed by parent or a "Course Level Review Request Form" signed by parent and teacher. Students must see the counselor to add course prior to the first day of second semester. | | |
| 5. Students may carry a maximum of 1 study hall. | | |
| 6. Any incomplete must be made up within the nine week period following the absence. After the Succeeding 9 week period an incomplete will be changed to a failure. | | |
| 7. Grade classification is based upon credits earned. Classification by grades is as follows: Freshmen = 0-8; Sophomore = 9-18; Junior = 19-29; Senior = 30+ credits | | |

**The Frank O'Bannon Award
(Indiana Academic Honors/Core 40 Grant Premium)**

A premium grant award has been approved for Indiana students who qualify for state student assistance grants and who prepare well for college. Currently, students who meet eligibility criteria may qualify for up to 80% approved tuition (less a student or family contribution based upon ability to pay) to an eligible Indiana college or university. This is awarded as a State Student Assistance Commission of Indiana (SSACI) grant based on financial need calculated from the federal needs assessment mechanism available through the Free Application for Federal Student Aid (FAFSA).

Eligible students who graduate from an Indiana secondary school, having met prescribed Core 40 requirements and with a cumulative grade point average of at least 2.0/4.0, may qualify for a SSACI grant premium at 80% of demonstrated need for tuition and mandatory fees.

Indiana High School Graduation Requirements and SSACI Grant Incentives

| Regular /General Diploma | Core 40 | Core 40 with Technical Honors | Core 40 with Academic Honors |
|-----------------------------|----------------------------|----------------------------------|------------------------------------|
| SSACI Award | | | |
| 80% Tuition less EFC/PC | 80% Tuition less EFC/PC | 100% Tuition less EFC/PC | 100% Tuition less EFC/PC |

Indiana Department of Education High School Diploma Requirements

Mathematics Requirements

- The State Board set the expectations that all students earning a diploma (i.e., any student except for a certificate of completion students) have access to completing **Algebra I** by the end of their freshman year. To support this, **Pre-Algebra** is no longer a high school course and has been replaced by **Algebra Enrichment**. The main difference between the courses is that **Algebra Enrichment** must be offered during the same academic year as **Algebra I**.
- Students earning a Core 40 Diploma, Core 40 with Academic Honors, or Core 40 with Technical Honors must earn six (6) credits in Mathematics in Grades 9-12.

Quantitative Reasoning Courses

- The State Board created a new category of courses called “Quantitative Reasoning” courses. These are existing courses that help advance a student’s ability to apply mathematics in real-world situations and contexts. A proposed list of these courses can be found on the second page of the State Board memo.
- General diploma students will be required to earn two (2) credits in a Mathematics course **OR** a Quantitative Reasoning course during their junior or senior year.
- Core 40, Academic Honors, and Technical Honors students will be required to be enrolled in a Mathematics course **OR** a Quantitative Reasoning course each year they are in high school.

Core 40 with Academic Honors Diploma

- If a student chooses to use the SAT option to fulfill the Academic Honors requirements, the score must include the written section of the test. A student must achieve a composite score of 1750 and no less than 530 on each section.
- If a student chooses to use the ACT option to fulfill the Academic Honors requirements, the student must complete the written portion of the ACT.

Core 40 with Technical Honors Diploma

- To be eligible for a Technical Honors diploma, the student must earn six (6) credits in a college and career pathway. This replaces the previous requirement of eight to ten (8-10) credits in a career-technical program.
- The additional requirements now mirror the Academic Honors requirements but include options for fulfilling the Technical Honors diploma. In addition to earning a minimum score on WorkKeys, a student now has the option of demonstrating proficiency by (1) earning a minimum score on Accuplacer; or (2) earning a minimum score on Compass.

Dual Credit

- Courses counting as “Dual Credit” under the Academic Honors or Technical Honors diplomas must be *verifiable* and from the priority Course list set forth by the Commission for Higher Education.
- *Verifiable* means a school must receive notification from a postsecondary institution that the student has been awarded college credit for that course.
- There are two subsections that comprise the priority Course list: (1) Liberal Arts and (2) Career and Technical Education. Both lists are in the final stages of development. Once available, these lists will be made available to the Commission of High Education website (www.che.in.gov) and on the Learning Connection in the Dual Credit Community.

Dual Credit Opportunities

A student must achieve an equivalent of a 2.0 on a 4.0 unweighted grading scale, as established by the eligible institution, in order for the student to receive postsecondary credit [for a course taught in the high school setting].

******* Students must request a transcript [from Ivy Tech or Vincennes] after graduation to submit to the college they plan on attending in order to receive their dual credit.**

| <u>Crawfordsville HS</u> | <u>Ivy Tech / IU / Vincennes Course</u> | <u>Prior to Enrollment Testing Requirement</u> |
|--|--|--|
| Adv. Manufacturing I | ADMF 101- Key Principals of Adv. Manuf. | Accuplacer Read. 55/ Sent Skills 60 / Math 30 PSAT Reading 46/ Writing 46 /Math 46 SAT Reading 460/ Writing 460 / Math 460 ACT Reading 18 / Writing 17/ Math 18 |
| Adv. Manufacturing II | ADMF 102 – Technology in Adv Manuf. | * Must have completed ADMF 101 |
| Advanced Composition (1098) | ENGL 111 – English Composition | Accuplacer Reading 76/Sentence Skills 80 PSAT Critical Reading 46 /Writing 46 SAT Critical Reading 460 / Writing 460 ACT Reading 18 /English 17, IDOF Accuplacer, Reading 69 / Writing 4 |
| Anatomy & Physiology (5276) Ivy Tech | APHY 101- Anatomy & Physiology ADHY 102- Anatomy & Physiology II | Accuplacer Reading 76/ Writing 80 / Math 40 PSAT Critical Reading 46 /Writing 46 / Math 46 SAT Critical Reading 460 / Writing 460/ Math 460 ACT Reading 18 / Writing 17 / Math 18 IDOE Accuplacer Reading 69 / Writ 4 / Math 45 |
| Auto Service Tech I (5510) Ivy Tech | AUTI 100 – Intro to Transportation | None |
| Auto Service Tech II (5546) Ivy Tech | AUTI - 111 – Electrical I AUTI - 121 - Brake Systems AUTI - 141 -Engine Repair | None |
| Business Law & Ethics (4560) Ivy Tech [may not be offered 2016-2017] | BUSN 201– Business Law | Accuplacer Reading 76 / Sentence Skills 80 PSAT Critical Reading 46, Writing 46 SAT Critical Reading 460 / Writing 460 ACT English 17 / Reading 18 IDOE Accuplacer Reading 69 / Writing 4 |
| Criminal Justice I (5822) (Law Enforcement) Ivy Tech | CRIM 101 – Intro to Criminal Justice System CRIM 105 – Intro to Criminology | Accuplacer Reading 76 / Sentence Skills 80 PSAT Critical Reading 46 / Writing 46 SAT Critical Reading 460 / Writing 460 ACT English 18 / Writing 17 IDOE Accuplacer Reading 69 / Writing 4 |

| | | |
|--|---|---|
| Criminal Justice II (5824) (Law Enforcement) Ivy Tech | CRIM 111 - Intro to Traffic Enforcement CRIM 113- Criminal Investigation | Must have completed CRIM 101 |
| Early Childhood Ed (5412) Ivy Tech | ECED 100 – Intro to Early Childhood Ed. ECED 103 – Curriculum in Early Childhood Classroom | Accuplacer Reading 55 / Sentence Skills 60 PSAT Critical Reading 46 / Writing 46 SAT Critical Reading 460 / Writing 460 ACT English 17 / Writing 18 IDOE Accuplacer Reading 25 / Writing 2 |
| Fire & Rescue I (5820) Ivy Tech | HSPS 106 Fire Suppression HSPS 165 Firefighter I | None None |
| Fire & Rescue II (5826) | HSPS 121 Hazmat Awareness HSPS 167 Fire Fighter II | None None |
| Heating & Air Conditioning (5496) Ivy Tech | HVAC 101 – Heating Fundamentals HVAC 103 – Refrigeration I | None |
| Heating & Air Conditioning, Advanced (5496) | HVAC 107 - Duct Fabrication & Installation | None |
| Health Science Ed. (5282) Ivy Tech | HLHS 100 – Intro to Health Careers | None |
| Medical Terminology (5274) Ivy Tech | HLHS 101 – Medical Terminology | Accuplacer Reading 76 / Sentence Skills 80 PSAT Critical Reading 46 / Writing 46 SAT Critical Reading 46 / Writing 46 ACT Reading 18 / English 17 IDOE Accuplacer Reading 69 / Writing 4 |
| Pre-Calculus/ Trig (2564) (2566) Ivy Tech | Math 136 – College Algebra Math 137 – Trig/Analytical Geometry | Accuplacer Math 74 PSAT Math 52 SAT Math 520 ACT Math 24 IDOE Accuplacer Elem. Alg 92 |
| PLTW – Intro to Engineering Engineering Design (4812) Ivy Tech | DESN 101 - Intro to Design | None |
| PLTW – Prin. of Engineering (4814) Ivy Tech | DESN 104 - Mechanical Graphics | None |
| PLTW – Digital Electronics (4826) Ivy Tech | EECT 112 - Digital Fundamentals | Accuplacer Elem. Algebra 40 / Arithmetic 60 PSAT Math 46 SAT Math 460 ACT Math 19 |
| Radio & Television I (5986) Vincennes only | MCOM 102 - Audio – Video Production MDIA 140 - Video Production | None |

Spanish III (2124)
Ivy Tech

SPAN 101 Spanish Level I
SPAN 102 Spanish Level II

Accuplacer Reading 76 /Sentence Skills 80
PSAT Critical Reading 46 / Writing 46
SAT Critical Reading 460 / Writing 460
ACT Reading 18 /English 17
IDOE Accuplacer Reading 69 / Writing 4

Welding Tech 1 (5776)
Ivy Tech

WELD 100 – Welding Processes
WELD 103 – ARC Welding I
WELD 108 – Shielded Metal Arc Welding I

None

Welding Tech11 (5776)
Ivy Tech

WELD 101 – Gas Welding
WELD 109 – Oxy Fuel Gas Welding & Cutting
WELD 207 Gas Metal Arc Welding

None

In November 2011, the State Board of Education passed new graduation requirements that affect incoming freshman in 2012-13.

- For the Core 40, Academic Honors (AHD), and Technical Honors (THD) diplomas, students must take a mathematics course or a quantitative reasoning course each year they are enrolled in high school.
- For the General Diploma, students must earn two credits in a mathematics course or a quantitative reasoning course during their junior or senior year.
- A quantitative reasoning course is a high school course 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 mathematics standards.”

Note for all classes graduating 2017 and beyond- Students must take Personal Finance OR Preparing for College and Careers before graduation.

Listed below are the Quantitative Reasoning Courses that CHS offers. (The Indiana Department of Education will provide an annual review to determine the high school courses that meet the criteria).

Advanced Placement

Calculus AB, AP (2562)
Calculus BC, AP (2572)
Chemistry, AP (3060)
Environmental Science AP (3012)

Business

Accounting (4524)
Business Math (4512)

Engineering & Technology

Digital Electronics (4826)
Principles of Engineering (4814)

Science

Chemistry I (3064)
Integrated Chemistry – Physics (3108)
Physics I (3084)

Social Studies

Economics (1514)

Indiana General High School Diploma

The completion of Core 40 is an Indiana graduation requirement. Indiana's Core 40 curriculum provides the academic foundation all students need to succeed in college and the workforce.

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

- The student, the student's parent/guardian, and the student's counselor (or another staff member who assists students in course selection) must meet to discuss the student's progress.
- The student's Graduation Plan (including four year 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.

Course and Credit Requirements (Class of 2016 & Beyond)

| | |
|--|---|
| English/Language Arts | 8 credits |
| | Credits must include literature, composition and speech |
| Mathematics | 4 credits |
| | 2 credits: Algebra I or Integrated Mathematics I 2 credits: Any math course General diploma students are required to earn 2 credits in a Math or a Quantitative Reasoning (QR) course during their junior or senior year. QR courses do not count as math credits. |
| Science | 4 credits |
| | 2 credits: Biology I 2 credits: Any science course At least one credit must be from a Physical Science or Earth and Space Science course |
| Social Studies | 4 credits |
| | 2 credits: U.S. History 1 credit: U.S. Government 1 credit: Any social studies course |
| Physical Education | 2 credits |
| Health and Wellness | 1 credit |
| College and Career Pathway Courses Selecting electives in a deliberate manner to take full advantage of college and career exploration and preparation opportunities | 6 credits |
| Flex Credit | 5 credits |
| | Flex Credits must come from one of the following: <ul style="list-style-type: none"> • Additional elective courses in a College and Career Pathway • Courses involving workplace learning such as Cooperative Education or Internship courses • High school/college dual credit courses • Additional courses in Language Arts, Social Studies, Mathematics, Science, World Languages or Fine Arts |
| Electives | 6 credits |
| | Specifies the minimum number of electives required by the state. High school schedules provide time for many more elective credits during the high school years. |

43 Total Credits Required

Schools may have additional local graduation requirements that apply to all students

CURRICULUM PLANNING GUIDE

Four Year Program

Name _____

Class of: _____

Diploma Type:

_____ Core 40 with High Academic Honors

_____ Core 40 with Technical Honor

[Class of 2018 will be the last class for this diploma]

_____ Core 40

_____ Core 40 with Academic Honors

_____ General

Freshman

1. English _____
2. Math _____
3. Science _____
4. Social Studies / Elective _____
5. PE / Health _____
6. _____
7. _____

Sophomore

1. English _____
2. Math _____
3. Science _____
4. Social Studies / Elective _____
5. PE/ Health _____
6. _____
7. _____

Junior

1. English _____
2. U.S. History _____
3. Math or Quantitative Reasoning Course _____
4. _____
5. _____
6. _____
7. _____

Senior

1. English _____
2. Government/Economics _____
3. Math or Quantitative Reasoning Course _____
4. _____
5. _____
6. _____
7. _____

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ART DEPARTMENT FINE ARTS

Introduction to the Fine Arts Curriculum

In order to provide a quality education for every child in Indiana, it is important to provide for all aspects of human growth. This includes artistic, expressive, and cultural, as well as intellectual, emotional, physical and social development. The arts are essential in education for they provide students with the means to think, feel, and understand the world around them in ways unique and distinct from other disciplines. Literacy in the arts enhances a person's ability to participate in society by developing creative problem solving, inquiry, and communication skill, and by providing an avenue for self-expression and multiple points of view. For these reasons, a curriculum in each of the fine arts should be available to all students so that they may become self-directed toward lifelong learning in the arts.

The ultimate goal of the fine arts curriculum is to promote lifelong participation in the arts by developing skilled creators, performers, critics, listeners, and observers of the arts. Students can use the arts as a means of (1) self-expression and communication, (2) develop critical thinking skills, (3) self-knowledge and understanding of the world around them, and (4) increase awareness of the artistic heritage of other cultures, as well as their own.

Students who are proficient in the fine arts grow in their ability to think and learn independently. Their view of the world expands as creative avenues to expression and understanding are developed. Ultimately, the entire community benefits through the creativity, vision, and empathy fostered in the fine arts.

In order for this to happen, students must be immersed in opportunities to learn about the arts, perform and create in one or more of the art forms, and learn to analyze and critique the arts. The goals for students in K-12 (or Crawfordsville Community School Corporation) are to enable each student to do the following:

- Value the arts
- Develop one's artistic skills
- Become confident in one's artistic abilities
- Become creative problem solvers
- Communicate through the arts
- Communicate about the arts
- Exhibit knowledge of the historical and cultural diversity of the arts; and
- Exhibit knowledge of criticism and aesthetics in the arts

Ceramics (4040)**(10, 11, 12)****1 semester, 1 credit**

This course provides an introductory experience in three dimensional design using clay as a medium. Various hand-building techniques will be explored as well as learning to use a potter's wheel. The course will place an emphasis on how the sculptural form is utilized as an art form by both ancient and modern cultures. An in-depth study will be made of Greek pottery forms. A working vocabulary of ceramic terms will be used. The elements of art and principles of design will be utilized in creating clay projects. In addition, students: (a) create works of art, (b) reflect on the outcome of their studio experiences by making historical connections, writing about the process, and making presentations of their work, (c) find correlations to other disciplines, (d) explore career options, (e) identify ways to utilize and support art museums, galleries, studios, and community resources.

Prerequisite:Introduction to Art 2 & 3 D
pending teacher approval**Digital Design (4082)****(11, 12)****1 semester, 1 credit**

Students in this class will learn to use the computer as a means of visual communication. Students will learn to use various hardware and software tools in their work. The differences between raster and vector graphics will be discussed and utilized. The class will utilize the elements of art and principles of design. A working vocabulary of the computer graphics field will be used. In addition, students: (a) create works of art, (b) reflect on the outcome of their studio experiences by making historical connections, writing about the process, and making presentations of their work, (c) find correlations to other disciplines, (d) explore career options, (e) identify ways to utilize and support art museums, galleries, studios, and community resources.

Prerequisite:Introduction to Art 2D & 3D,
pending teacher approval**Drawing I (4060)****(10, 11, 12)****1 semester, 1 credit**

This course focuses on drawing techniques, processes, and media. The class will look at drawings of both contemporary and historical artists during different art periods, and will analyze the works of those artists using art criticism and aesthetics. Students will gain a working vocabulary of various drawing terms and will create drawings using a variety of media (such as pencil, charcoal, conte, pen & ink, etc...) and techniques. Concepts in value, composition and problem-solving will be incorporated in the class. Written assignments and analyses of artwork will be part of the course. In addition, students: (a) create works of art, (b) reflect on the outcome of their studio experiences by making historical connections, writing about the process, and making presentations of their work, (c) work individually and in groups, (d) find correlations to other disciplines, (e) explore career options, (f) identify ways to utilize and support art museums, galleries, studios, and community resources.

Prerequisite:Introduction to Art 2D & 3D,
pending teacher approval**Drawing II (4060)****(10, 11, 12)****1 semester, 1 credit**

This course builds on Drawing I. Additional materials and techniques will be used. Color will be introduced in drawings. Emphasis will be placed on the student searching for meaning, significance and direction in their work. Use of organizational principles to solve visual problems will be explored. A working vocabulary of drawing techniques will be expanded from Drawing I. The work of contemporary and historical artists and art periods will be studied. Students will learn how to use symbolism in their studio work. There will be written assignments and analyses as in Drawing I. Art history, aesthetics, and art criticism will be included. Students should be willing to experiment with different media, techniques and subject matter. In addition, students: (a) create works of art, (b) reflect on the outcome of their studio experiences by making historical connections, writing about the process, and making presentations of their work, (c) work individually and in groups, (d) find correlations to other disciplines, (e) explore career options, (f) identify ways to utilize and support art museums, galleries, studios, and community resources.

Prerequisite:Introduction to Art 2D & 3D
pending teacher approval

Introduction to 2 Dimensional Art (4000) (9, 10, 11, 12) **1 semester, 1 credit**
This course is an introductory survey of two dimensional art and art production. The class will study various periods of art history, analyze works of various artists and include art criticism and aesthetics. Students will gain a working vocabulary of art terms and will be introduced to various media and techniques. The class stresses the elements of art and principles of design, visual awareness, and composition in two dimensional art. In addition, students: (a) create works of art, (b) reflect on the outcome of their studio experiences by making historical connections, writing about the process, and making presentations of their work, (c) find correlations to other disciplines, (d) identify ways to utilize and support art museums, galleries, studios, and community resources.

Prerequisite: None

Introduction to 3 Dimensional Art (4002) (9, 10, 11, 12) **1 semester, 1 credit**
This class builds on the sequential learning experiences of Introduction to 2 Dimensional Art and is a survey of three dimensional art and art production. The class will study various periods of art history, analyze works of various artists and include art criticism and aesthetics. Students will build on their working vocabulary of art terms and will be introduced to various three dimensional media and techniques. This class will continue to build on the elements of art and principles of design, visual awareness, and composition in three dimensional art. In addition, students: (a) create works of art, (b) reflect on the outcome of their studio experiences by making historical connections, writing about the process, and making presentations of their work, (c) find correlations to other disciplines, (d) identify ways to utilize and support art museums, galleries, studios, and community resources.

Prerequisite: Introduction to 2 Dimensional Art

Jewelry (+Metalworking) (4042) (10,11,12) **1 semester, 1 credit**
Jewelry I is designed for the student who has interest in three-dimensional design. Students begin to explore the art of hand formed jewelry and metal craft. The course is approached from the standpoint that the student has little or no experience in working with metal as a medium. Projects will be executed in copper, brass, nu-gold, and mixed media. Items created are to be hand-fabricated, such as rings, bracelets, pendants, pins, and other body adornment and small trinkets, etc. Units to be studied include a survey of historical and contemporary jewelry from a variety of cultural groups including aesthetics and criticism. Emphasis is placed on safety, and proper technique in addition to quality workmanship. Students will learn design processes and fabrication techniques such as, basic soldering, sawing, filing, piercing, wirework, rolling mill, forming, forging and finishing techniques. Students in Jewelry I engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality works.(a) Students create works of art, (b) reflect on the outcome of their studio experiences by making historical connections, writing about the process, and making presentations of their work, (c) work individually and in groups, (d) find correlations to other disciplines, (e) explore career options, (f) identify ways to utilize and support art museums, galleries, studios, and community resources.

Prerequisite: Intro to 2D & 3D Art, Semester 1 & 2, pending approval of instructor

Jewelry II (4042)**(10,11,12)****1 semester, 1 credit**

Jewelry II is designed to offer a continued education of jewelry and an in depth study of three-dimensional metal design. Students will discuss, create, and fabricate jewelry or other body adornment pieces to illustrate how historical and contemporary relationships blend with the technology of today and traditions of the past. Projects will be executed in copper, brass, nu-gold, and mixed media. Items created are to be hand-fabricated. Students should be willing to demonstrate a sincere desire to explore a variety of ideas, techniques, processes, problem solving skills, as well as extensive design experimentation. Emphasis is placed on safety, and proper technique in addition to quality workmanship. Various metals, media, and techniques will be explored including surface embellishment, forming, coloring and texturing metal, roller embossing, cold joining, movable parts, casting, inlay, resin, and incorporating found objects into personal work.

Students in Jewelry II engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality works. (a) Students create works of art, (b) reflect on the outcome of their studio experiences by making historical connections, writing about the process, and making presentations of their work, (c) work individually and in groups, (d) find correlations to other disciplines, (e) explore career options, (f) identify ways to utilize and support art museums, galleries, studios, and community resources.

Prerequisite:Jewelry I & Intro to
2 D & 3 D Art**Painting (4064)****(10, 11, 12)****1 semester 1 credit**

This class is an introduction to the materials, techniques, and subject possibilities of painting. A sequential learning experience encompassing art history, art criticism, and aesthetics will be built into the studio experience. Color theory will be explored in detail. Students will build on learning to express meaning, significance, and direction in their work and use the elements of art and principles of design to solve visual problems. Symbolism and intended meaning will be discussed. A working vocabulary of painting techniques and media will be used. Realistic, abstract, and non-objective paintings will be created. In addition, students: (a) create works of art, (b) reflect on the outcome of their studio experiences by making historical connections, writing about the process, and making presentations of their work, (c) work individually and in groups, (d) find correlations to other disciplines, (e) explore career options, (f) identify ways to utilize and support art museums, galleries, studios, and community resources.

Prerequisite:Introduction to Art 2D &
3D Drawing I and II,
pending approval of
instructor**Photography I (4062)****(10, 11, 12)****1 semester, 1 credit**

*Photography I is an introduction to the concepts related with photography, emphasizing the basics of Photography. Students will explore techniques, visual awareness, compositional skills, and proper execution using a digital camera. Students will learn the operations and functions of a camera, but will focus on their own camera. Class will include a brief art history section followed by an assignment. Students will be expected to participate in discussions and critiques. Students will explore visual subject matter, problem solving, and question what is good art?

Students in Photography I engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality works. (a.) Students create works of art, (b) reflect on the outcome of their studio experiences by making historical connections, writing about the process, and making presentations of their work, (c) work individually in groups, (d) find correlations to other disciplines, (e) explore career options, (f) identify ways to utilize and support art museums, galleries, studios, and community resources.

***Students must provide their own digital camera. There are no cameras to rent.**

Prerequisite:

Intro to Art 2D preferred

Photography II (4062)**(10,11,12)****1 semester, 1 credit**

Photo II is a continuation of the study of photography. This course is designed for the student who wishes to expand his/her knowledge and experience in black and white photography, digital image making and editing. The course will concentrate on film and digital photography, dark room skills, advanced application, printing techniques, increased compositional understanding, and communicating with an audience through their photography. Students will explore a variety of photographic techniques and manipulations using traditional and digital equipment. Class work will include the appreciation and exploration of historical and contemporary photography as well as art criticism and aesthetics. Students should demonstrate a sincere desire to explore ideas and willingness to solve visual problems.

Students in Photography II engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality works. (a) Students create works of art (b) reflect on the outcome of their studio experiences by making historical connections, writing about the process, and making presentations of their work, (c) work individually and in groups, (d) find correlations to other disciplines, (e) explore career options, (f) identify ways to utilize and support art museums, galleries, studios, and community resources.

***Students must provide their own digital camera. There are no cameras to rent.**

Prerequisite:

Photography I

Photography III (4062)**(11,12)****1 semester, 1 credit**

Photography III is an in-depth study of traditional photography and digital imagery. Students create images incorporating a variety of film-based and non-film processes. They will use single lens reflex cameras and digital cameras, computer editing programs (Photoshop CS), darkroom equipment, digital software, scanners and printers. This class will introduce students to additional dark room practices and manipulation for special effects including, combination printing, night photography, and high speed film use. Students will search for meaning, significance, and direction in their work using art/photographic history, art criticism and aesthetics. Students are encouraged to evaluate subject matter, symbols, and ideas that communicate intended meaning in their artwork and solve specific visual and photographic problems. An image portfolio and written artist statement is required at the end of the semester.

*Students in Photography III engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality works.(a) Students create works of art (b) reflect on the outcome of their studio experiences by making historical connections, writing about the process, and making presentations of their work, (c) work individually and in groups, (d) find correlations to other disciplines, (e) explore career options, (f) identify ways to utilize and support art museums, galleries, studios, and community resources.

***Students must provide their own digital camera. There are no cameras to rent.**

Prerequisite:

Photography I & II

Photography IV (4062)**(11,12)****1 semester, 1 credit**

Media Arts IV is intended for the highly motivated student seriously interested in the concepts, theories, and aesthetics of photography. This class is a combination of traditional and digital imaging processes. Focus is on the use of digital and traditional media arts as an extension of the creative mind. Emphasis is placed on critical thinking skills involving relationships between context, form, and function in historical and contemporary photography. Students should be willing to explore a variety of ideas, techniques, processes, and problem solving criteria working toward individual direction and personal expression in the photographic medium. Students will write about photographic connections and processes and make presentations. An image portfolio and written artist statement is required at the end of the semester.

*Students in Photography IV engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality works. (a) Students create works of art, (b) reflect on the outcome of their studio experiences by making historical connections, writing about the process, and making presentations of their work, (c) work individually and in groups, (d) find correlations to other disciplines, (e) explore career options, (f) identify ways to utilize and support art museums, galleries, studios, and community resources.

***Students must provide their own digital camera. There are no cameras to rent.**

Prerequisite:

Photography I, II, & III

Printmaking (4066)**(10, 11, 12)****1 semester, 1 credit**

Students will explore various printmaking methods including relief, silk screen and stenciling. The works of printmakers – both contemporary and historical – will be studied and students will use art criticism and aesthetics in this process. A working vocabulary of printmaking terms will be used. The elements of art and principles of design will be used in designing projects and students will be encouraged to use creative thinking and expression. Problem solving will be a part of all projects. In addition, students: (a) create works of art, (b) reflect on the outcome of their studio experiences by making historical connections, writing about the process, and making presentations of their work, (c) work individually and in groups, (d) find correlations to other disciplines, (e) explore career options, (f) identify ways to utilize and support art museums, galleries, studios, and community resources.

Prerequisite:

Into 2 & 3 D Art, pending approval of instructor

Sculpture (4044)**(10, 11, 12)****1 semester, 1 credit**

This course provides an introduction to three dimensional design. Students will create realistic, abstract and non-objective sculptures utilizing subtractive and additive techniques of carving, modeling, construction, and assembling. Students will increase their perception and expressive skills through visual problem solving and the use of a variety of materials, tools, and techniques. Emphasis will be placed on aesthetic qualities found in the three dimensional form using the elements of art and principles of design. A working vocabulary of sculptural terms will be used. Students will learn how the sculptural form has been used by both contemporary and historical cultures. In addition, students: (a) create works of art, (b) reflect on the outcome of their studio experiences by making historical connections, writing about the process, and making presentations of their work, (c) work individually and in groups, (d) find correlations to other disciplines, (e) explore career options, (f) identify ways to utilize and support art museums, galleries, studios, and community resources.

Prerequisites:

Introduction to Art 2D and 3D, pending approval of instructor

Advanced 2 D Art (Independent Study) (4048)**(11,12)****1 semester, 1 credit****or****2 semesters, 2 credits**

Advanced 2 D Art is designed for the serious, self-motivated student who wants advanced studio time for creating two and three-dimensional art and for those student considering a career in the visual arts. Students will continue to create focused art work for college portfolio entrance. This class is reserved for students who have had most of the art classes offered within the department. Adv. 2 D art involves significant commitment and goal setting. (*Option of Advanced Placement – see below). Students must attend class daily and be willing to work independently during their assigned class period as well as outside the classroom. Each student will meet with the instructor with his/her accomplished ideas, direction and goals at least three times per week. Advanced 2D Art will address three major concerns: (1) Quality (compositional and technical skills, realization of artist's intentions); (2) Concentration (on a particular problem or visual interest), (3) Breadth (experience in the formal, technical, and expressive means of the student artist). Students must be willing to explore and concentrate on a variety of ideas, techniques, and problem solving solutions working toward individual direction and personal expression in their chosen area. Students will produce and exhibit a series of works accompanied by a written artist statement at the end of the semester. Areas of study for Studio Art may include: Drawing, Painting, Sculpture, Ceramics, Jewelry, Printmaking, Digital Design, Photography, Digital Photography, Mixed media, or Art History.

*Students in Advanced 2D Art engage in learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality works.(a) Students create works of art, (b) reflect on the outcome of their studio experiences by making historical connections, writing about the process, and making presentations of their work, (c) work individually and in groups, (d) find correlations to other disciplines, (e) explore career options, (f) identify ways to utilize and support art museums, galleries, studios, and community resources.

Prerequisite:

Intro to Art 2-D & 3-D plus 3 electives and consent of teacher – or --4 electives and consent of teacher.

****Option: Students are encouraged to apply for Advanced Placement (AP) acceptance.**

AP Studio Art is not based on a written examination; instead, students submit portfolios for evaluation at the end of the school year. Most four-year colleges in the United States give students credit, advanced placement or both on the basis of AP Exam scores. By entering college with AP credits, you'll have the time to move into upper level courses, pursue a double-major or study abroad.-If your intention is to apply and submit your portfolio for AP, you must take Studio Art

both semester I and semester II. (2 semesters, 2 credits).

-This course involves a significant commitment of time and energy as students will also need to work outside the classroom to complete the AP portfolio requirements. It is vital that you plan far enough in advance so that you can complete the portfolio on time.

-Students are required to get consent from the teacher (spring of previous year) who will be mentoring your AP work or who is assigned as your AP Coordinator.

-AP portfolios require 27 works of art.

-You must choose an AP portfolio concentration in: Drawing, 2-D Design, or 3-D Design.

-AP Coordinator/teacher will provide student with instruction and guidance on requirements, choosing art work, and proper submission to Advanced Placement.

-Student is required to submit/mail the required portion of the AP portfolio, complete the online registration and application, enter the concentration statement online, take photographs of all portfolio submissions and upload images.

-Students are required to forward the completed AP portfolio to the AP Coordinator/AP teacher for review by mid April.

BUSINESS, MARKETING AND INFORMATION TECHNOLOGY

| | | |
|---|----------------------|--------------------------------|
| Introduction to Accounting (4524) | (10,11,12) | 2 semesters, 2 credits |
| Accounting is an introductory-level business finance course that introduces basic principles and procedures of double-entry accounting as used in for-profit businesses [proprietorships, partnerships and corporations]. Emphasis in this course is placed on learning how to keep formal financial records for a business and then using that information to assist managers/owners in making decisions. Instructional strategies include use of accounting software and real-life simulation projects. This course is highly recommended. | | |
| | Prerequisite: | None, |
| Advanced Accounting (4522) | (11,12) | 2 semesters, 2 credits |
| 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 related 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 are required to take Introduction to Accounting prior to enrollment in this course. | | |
| | Prerequisite: | Introduction to Accounting |
| Business Math (4512) | (10,11,12) | 2 semesters, 2 credits |
| Business Math is a course designed for students interested in careers in business and skilled trade areas by developing abilities and skills that are part of any business environment. The content includes mathematical operations related to accounting, banking and finance, marketing, and management. Instructional strategies include simulations, guest speakers, tours, Internet research, and business experiences. | | |
| | Prerequisite: | Algebra 1 |
| Business Law & Ethics (4560) | (10,11,12) | 1 semester, 1 credit |
| Business and Personal Law is an introductory law course that 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 principals and ethical decision-making techniques are presented through problem-solving methods and situation analyses. Instructional strategies will include case studies, current court cases, and guest speakers from our legal community. This course is aligned with Ivy Tech's BUSN 102 Business Law course for Dual Credit. | | |
| | Prerequisite: | None Dual Credit / Ivy Tech |
| Digital Applications and Responsibility (4528) (Formerly Computer Apps. Advanced) | (9,10,11,12) | 1 semester, 1 credit |
| Digital Applications and Responsibility prepares students to use technology in an effective appropriate manner in school, in a job, or everyday life. Students develop skills related to work processing, spreadsheets, presentations and communications software. Students learn what it means to be a good digital citizen and how to use technology including social media, responsibly. Students expand their knowledge of how to use digital devices and software to build decision-making and problem-solving skills. Students should be provided with the opportunity to seek industry-recognized digital literacy certifications. | | |
| | Prerequisite: | None |

| | | |
|--|-----------------|---|
| Intro to Business (4518) | (9, 10) | 1 semester, 1 credit |
| Intro 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. | | |
| Prerequisite: | | None |
| Personal Financial Responsibility (4540) (Formerly Personal Finance) | (11, 12) | 1 semester, 1 credit |
| Personal Financial Responsibility is a valuable class for all students that addresses the identification and management of personal financial resources to meet the financial needs and wants of individuals and families. 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; and insurance and credit card debt. Instructional strategies will include the use of projects to simulate real world experiences; guest speakers; videos; internet activities and research with the objective of preparing students to be financially knowledgeable and responsible citizens for life. | | |
| Prerequisite: | | None |
| Preparing for College and Careers (5394) | (9, 10) | 1 semester, 1 credit |
| 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. | | |
| Prerequisite: | | None |
| Principles of Business Management (4562) | (11, 12) | 2 semesters, 2 credits |
| Principles of Business Management focuses on the roles and responsibilities of managers as well as opportunities and challenges of ethical managing a business in the free enterprise system. Students will attain an understanding of management, team building, and leadership, problem solving steps and processes that contribute to the achievement of organizational goals. The management of human and financial resources is emphasized. | | |
| Prerequisite: | | Introduction to Business or Instructor approval. |

ENGINEERING AND TECHNOLOGY EDUCATION

Construction Systems I (4782)

(9,10,11,12)

1 semester, 1 credit

Construction Systems is a course that specializes in how people use modern construction systems and the management of resources to efficiently produce a structure on a site. Students will explore the application of tools, materials, and energy in designing, producing, using, and assessing the construction of structures. Classroom activities introduce students to the techniques used in applying construction technology to the production of residential, commercial, and industrial building in addition to civil structures. Students learn how architectural ideas are converted into projects and how projects are managed during a construction project in this course.

Prerequisite:

None

Intro to Advanced Manufacturing (4796) and Logistics

(9,10,11,12)

2 semesters, 2 credits

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 to 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: metallic; polymers; ceramics; and composites. Students study six major types of material processes: casting molding; forming; separating; conditioning; finishing; and assembling. After gaining a working knowledge of these materials, students are introduced 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. This 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.

Prerequisite:

None

Intro to Construction (4792)

(9,10,11,12)

2 semesters, 2 credits

Introduction to Construction is a course that will offer hands-on activities and real world experiences related to the skills essential in residential, commercial and civil building construction. During the course students will be introduced to the history and traditions of construction trades. The student will also learn and apply knowledge of the care and safe use of hand power tools as related to each trade. In addition, students are introduced to blueprint reading, applied math, basic tools and equipment, and safety. Students will demonstrate building construction techniques, including concrete and masonry, framing, electrical, plumbing, dry walling, HVAC, and painting as developed locally in accordance with available space and technologies. Students learn how architectural ideas are converted into projects and how projects are managed during a construction project in this course. Students study construction technology topics such as preparing a site, doing earthwork, setting footings and foundations, building and superstructure enclosing the structure installing systems, finishing the structures and completing the sight students also investigate topics related to purchasing and maintenance of structures, special purpose facilities, green construction & construction careers.

Prerequisite:

None

Intro to Manufacturing (4784)**(9,10,11,12)****2 semesters, 2 credits**

Introduction to Manufacturing is a course that specializes in how people use modern manufacturing systems with an and introduction to manufacturing technology and its relationship to society, individuals, and the environment. An understanding of manufacturing provides a background toward developing engineering and technology literacy, This understanding is developed through the study of the two major technologies, material processing and management technology, used by all manufacturing enterprises. Students will 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 will investigate the properties of engineered materials such as: metallic; polymers; ceramics; and composites. After gaining a working knowledge of these materials, study six major types of material processes: casting and molding; forming; separating; conditioning; finishing; and assembling.

Prerequisite:**None**

- **Counts as a Directed Elective or Elective for the General, Core 40. Core 40 with Academic Honors and Core 40 Technical Honors diplomas.**

Project Lead the Way

Computer Science & Software Engineering PLTW (4801)

(10,11,12)

2 semesters, 2 credits

Computer Science & Software Engineering (CSE) will be composed of 4 units. **Unit 1) Graphics** will introduce fundamental computer science concepts. Students will engage problems requiring graphical and text responses to user input utilizing software such as Scratch or Alice. **Unit 2) Web Design and Information Technology** will introduce code writing, networking concepts, privacy, and security. Students will engage problems involving eCommerce and other Web-base interactions with an emphasis on the effects of computing on users and society. Students will use tools like HTML/CSS, or JavaScript to create interactive Web pages. **Unit 3) Information Science** will introduce concepts in discrete mathematics, probability, and association, and data visualization. It will emphasize how computational thinking affects every discipline, as computational thinking can put existing code to great use. Students will use databases of genetic information and health records, will utilize a face-recognition API, and will use APPinventor to develop a simple Android phone app. **Unit 4) Modeling** will further develop the concepts in discrete mathematics and introduce computability, and artificial intelligence. Students will engage problems using Python or Processing languages to simulate the physical world.

Prerequisite:

None

Computer Science Applications (PLTW)

(11,12)

2 semesters, 2 credits

CSA focuses on integrating technologies across multiple platforms and networks, including the Internet. Students collaborate to produce programs that integrate mobile devices and leverage those devices for distributed collection and data processing. Students analyze, adapt, and improve each other's programs while working primarily in "Java" and other industry-standard tools. This course prepares students for the AP Computer Science – A course.

Prerequisite:

Must have taken Computer Science & Software Engineering or be a senior.

Digital Electronics PLTW (4826)

(10,11,12)

2 semesters, 2 credits

Digital Electronics is a course of study in applied digital logic that encompasses the design and application of electronic circuits and devices found in video games, watches, calculators, digital cameras, and thousands of other devices. Instruction includes the application of engineering and scientific principles as well as the use of Boolean algebra to solve design problems. Using computer software that reflects current industry standards, activities should provide opportunities for students to design construct, test, and analyze simple and complex digital circuitry software will be used to develop and evaluate the product design. This course engages students in critical thinking and problem-solving skills, time management and teamwork skills. **NOTE: Use of the PLTW Course number is limited to schools that have agreed to part of the Project Lead the Way network and follow all training and date collection requirements.** Counts as a Directed Elective or Elective for the General, Core 40 Core 40 with AH and Core 40 with TH diplomas.

Prerequisite:

Intro to Engineering Design, Principles of Engineering

Introduction to Engineering Design PLTW (4812) (9,10,11,12)

2 semesters, 2 credits

Introduction to Engineering Design is an introductory course which develops student problem solving skills using the design process. Students document their progress of solutions as they move through the design process. Students develop solutions using elements of design and manufacturability concepts. They develop hand sketches using 2D and 3D drawing techniques. Computer Aided Design (CAD). **NOTE: Use of the PLTW Course number is limited to schools that have agreed to be part of the Project Lead the Way network and follow all training and date collection requirements.** This 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. It is aligned with the following Pose-Secondary courses for Dual Credit.

Prerequisite:

None

Principles of Engineering PLTW (4814)

(10,11,12)

2 semesters, 2 credits

Principles of Engineering is a course that focuses on the process of applying engineering, technological, scientific and mathematical principles in the design, production, and operation of products, structures, and systems. This is a hands-on course designed to provide students interested in engineering careers to explore experiences related to specialized fields such as civil, mechanical, and materials engineering. Students will engage in research, development, planning, design, production, and project management to simulate a career in engineering. The topics of ethics and the impacts of engineering decisions are also addressed. Classroom activities are organized to allow students to work in teams and use modern technological processes, computers, CAD software, and production systems in developing and presenting solutions to engineering problems. **NOTE: Use of the PTLs Course number is limited to schools that have agreed to be to be part of the project Lead the Way network and follow all training and date collection requirements.** Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with AH and Core 40 with TH.

Prerequisite:

Intro to Engineering Design

FAMILY AND CONSUMER SCIENCES

Child Development (5362)

(10,11,12)

1 semester, 1 credit

This course addresses issues of child development from conception/prenatal through age 3. It includes the study of prenatal development and birth; growth and development of children; child care giving and nurturing; and support systems for parents and caregivers. A project based approach with authentic applications such as introductory laboratory/field experiences with young children and/or service learning that builds knowledge of children will be applied.

Prerequisite:

None

Advanced Child Development (5360)

(10,11,12)

1 semester, 1 credit

Advanced Child Development is for students interested in life foundations, careers related to knowledge of children, child development, and nurturing of children. This course addresses issues of child development from a Advanced Child Development includes the study of professional and ethical issues in child development; ;child grown and development; child development theories, research; child health and wellness teaching and guiding children; special conditions affecting children, and career exploration in child development and nurturing. A project based approach with service learning, introductory laboratory/field experiences with children in preschool and/or early elementary provides a foundation for continuing and post=secondary education in all career areas related to children.

Prerequisite:

Child Development

Interpersonal Relationships (5364)

(9,10,11,12)

1 semester, 1 credit

Interpersonal is an introductory course that is relevant for students interested in careers that involve interacting with people. This course addresses the knowledge and skills needed for positive and productive relationships in career, community, and family settings. Topics include communication skills; leadership, teamwork, and collaboration; conflict prevention, resolution, and management; building and maintaining relationships; and individual needs and characteristics and their impacts on relationships.

Prerequisite:

None

Intro to Fashion & Textiles (5380)

(9,10,11,12)

1 semester, 1 credit

Introduction to Fashion and Textiles addresses knowledge and skills related to design, production, acquisition, and distribution in fashion, textile, and apparel arena. Topics include exploration of textiles and fashion industries, elements and principles of design in textiles, and the social, psychological, cultural, and environmental aspects of clothing and textile selection. Other topics include use of related equipment and tools, impacts of technology, careers and construction skills.

Prerequisite

None

Introduction to Housing & Interior Design (5350)

(9,10,11,12)

1 semester, 1 credit

Introduction to Housing and Interior Design 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 spacing 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.

Prerequisite:

None

Nutrition & Wellness (5342)**(9,10,11,12)****1 semester, 1 credit**

Nutrition and Wellness focuses on the components and lifelong benefits of sound nutrition and wellness practices applied in everyday life. It is an introductory course valuable for students interested in careers related to nutrition, food and wellness. Topics include the impact of daily nutrition and wellness practices on long-term health and wellness, and the physical, social, and psychological aspects of healthy nutrition and wellness choices. Planning for wellness and fitness, selection and preparation of nutritious foods based on USDA Dietary Guidelines including MyPlate will be included in laboratory experiences. Safety, sanitation, storage and recycling processes and issues associated with nutrition and wellness; impacts of science and technology; and nutrition and wellness career paths will also be explored.

Prerequisite:

None

Advanced Nutrition & Wellness (5340)**(9,10,11,12)****1 semester, 1 credit**

Advanced Nutrition and Foods is a sequential course that addresses more complex concepts in nutrition and foods. Topics include nutrition and wellness for individuals and families across the life span, community and world food concerns, impacts of technology on nutrition, foods, and related tools and equipment; management of food-related resources; acquiring, organizing, and evaluating information about food and nutrition; and exploration of careers in the food industry. Laboratory experiences will emphasize advanced applications.

Prerequisite:Nutrition and Wellness
or permission of the
Instructor

English Language Arts (ELA) Department

| 8 th Grade | 8 th grade Honors | English 8 | English 8 |
|------------------------|------------------------------|--|---|
| | Passed ISTEP+ | Passed 8 th grade ISTEP+ and earned a C average or above in English 8 | Did Not Pass 8 th grade ISTEP+ or earned below a C average in English 8 |
| ↓ | ↓ | ↓ | ↓ |
| 9 th Grade | English 9 Honors (1002C-D) | English 9 (1002A-B) | English 9 (1002E-F) |
| | Passed ISTEP+/ECA | Passed 9 th grade ISTEP+/ECA and earned a C average or above in English 9 | Did Not Pass 9 th grade ISTEP+/ECA or earned below a C average in English 9 |
| ↓ | ↓ | ↓ | ↓ |
| 10 th Grade | English 10 Honors (1004C-D) | English 10 (1004A-B) | English 10 (1004E-F) + ECA Lab (1010) |
| | Passed ECA | Passed 10 th grade ECA and earned a C average or above in English 10 | Did Not Pass 10 th grade ECA or earned below a C average in English 10 |
| ↓ | ↓ | ↓ | ↓ |
| 11 th Grade | English 11 Honors (1006C-D) | <ul style="list-style-type: none"> • American Literature: Pre-1865(1020A) or Post-1865(1020B) AND • 1 semester from the following: <ul style="list-style-type: none"> ○ Creative Writing (1092) ○ Debate (1070) ○ Etymology (1060) ○ Speech (1076) | English 11 (1006E-F) + ECA Lab (1010) |
| | | 10 th grade ECA Retakes (Dec. & May) | 10 th grade ECA Retakes (Dec. & May) |
| | | Earned a C average or above in ELA courses | Earned below a C average in ELA courses |
| | | ↓ | ↓ |
| | | ↓ | ↓ |
| 12 th Grade | AP/H English 12 (1056C-D) | <ul style="list-style-type: none"> • Advanced Composition (1098) or Technical Communications (1096) AND • 1 semester from the following: <ul style="list-style-type: none"> ○ American Literature (1020A/B) ○ Biblical Literature (1022) ○ Classical Literature (1026) ○ English Literature (1030) ○ World Literature (1052) | <ul style="list-style-type: none"> • Technical Communications (1096) AND • 1 semester from the following: <ul style="list-style-type: none"> ○ American Literature (1020A/B) ○ Biblical Literature (1022) ○ Classical Literature (1026) ○ English Literature (1030) ○ World Literature (1052) |
| | | English 12 (1008E-F) + ECA Lab (1010) | English 12 (1008E-F) + ECA Lab (1010) |
| | | ↓ | ↓ |
| | | ↓ | ↓ |
| | | ECA Retakes (Dec. & May) | ECA Retakes (Dec. & May) |

Grades 9-12

English as a New Language ENL (1012)

(9, 10, 11, 12)

2 semesters, 2 elective credits

This course is the study of language, literature, composition and oral communication for Limited English Proficient (LEP) students so that they improve their proficiency in listening, speaking, reading, writing and comprehension of standard English. Students study English vocabulary used in fictional texts and content-area texts, speak and write English so that they can function within the regular school setting and an English-speaking society, and deliver oral presentations appropriate to their respective levels of English proficiency. ENL 1 and ENL 2 may be repeated for additional elective credits.

Prerequisite:

English proficiency placement test

Mass Media: Newspaper (1084N-1085N) / Yearbook (1086Y-1087Y)

(9, 10, 11, 12)

2 semesters, 2 elective credits

Mass Media provides an interactive study of video, print, audio, and digital sources of information, persuasion, historical perspective, and creative expression. This course helps students to develop an awareness of audience and purpose in evaluating mass media, as well as in producing their own media productions. It should also help students to judge media critically and understand the use of persuasive language and strategies. A range of opportunities are provided for student to generate material for mass media, such as radio and television material, film, and news articles. This course may be repeated for additional elective credits. STUDENTS MUST SUBMIT AN APPLICATION AND BE SELECTED FOR ADMITTANCE.

Prerequisite:

Strong English and organizational skills

GPA: 2.5 or above

Recommended:

Computer and photography skills

Grade 9

English 9/Honors (1002C-1002D)

(9)

2 semesters, 2 credits

Freshman English Honors is a course for the highly motivated English student. Comprehensive study of spoken and written English usage and mechanics and the mastery of sentence and paragraph writing are included. Students read and discuss literature and non-fiction from the various genres and write in response to their reading. Writing and vocabulary development are stressed through Write to Learn strategies. Each student will compile a Writer's Portfolio. Summer reading is a requirement. Students will give oral presentations, practice other speech activities, and learn the fundamentals of critical analysis.

Prerequisite:

Approval of Honors Committee

Students who **passed the 8th grade ISTEP+ and earned a C average or above in English 8** (and are not in Honors) must select this course:

English 9 (1002A-1002B)

(9)

2 semesters, 2 credits

English 9, an integrated English course based on Indiana's Academic Standards for English/Language Arts in Grade 9, is a study of language, literature, composition, and oral communication with a focus on exploring a wide-variety of genres and their elements. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 9 in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository and argumentative/persuasive compositions, and research reports. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

Students who **did not pass the 8th grade ISTEP+ or earned below a C average in English 8** must select this course:

English 9 (1002E-1002F)

(9)

2 semesters, 2 credits

English 9, an integrated English course based on Indiana's Academic Standards for English/Language Arts in Grade 9, is a study of language, literature, composition, and oral communication with a focus on exploring a wide-variety of genres and their elements. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 9 in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository and argumentative/persuasive compositions, business letters, and technical documents. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

Grades 10, 11, & 12

Students who **did not pass the 9th grade ISTEP+/ECA or 10th grade ECA** must select this course:

Language Arts LAB ECA (1010)**(10, 11, 12)****1 semester, 1 elective credit**

Language Arts Lab is a reading and writing class, utilizing a workshop approach. This course provides a boost with language skills so that students who do not receive help through any other program can experience more success in their other classes and perform at appropriate grade levels on achievement tests. This class is taken concurrently with the student's required English class. Students who do not pass the ECA will repeat the course.

Grade 10**English 10/Honors (1004C-1004D)****(10)****2 semesters, 2 credits**

This course provides opportunities for advanced English students to further develop their use of language as a tool for learning and thinking and as a source of pleasure. Students examine the writing process, using their own papers and exemplary models. They practice research skills, give oral presentations, and read and critically analyze selected literature and non-fiction. Each student compiles a Writer's Portfolio of creative and expository work. Summer reading is a requirement.

Prerequisite:

Approval of Honors Committee

Students who **passed the 9th grade ISTEP+/ECA and earned a C average or above in English 9** (and are not in Honors) must select this course:

English 10 (1004A-1004B)**(10)****2 semesters, 2 credits**

English 10, 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. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 10 in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository and argumentative/persuasive compositions, and research reports. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

Students who **did not pass the 9th grade ISTEP+/ECA or earned below a C average in English 9** must select this course:

English 10 (1004E-1004F)**(10)****2 semesters, 2 credits**

English 10, 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. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 10 in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository and argumentative/persuasive compositions, business letters, and technical documents. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

Grade 11

English 11/Honors (1006C-1006D)

(11)

2 semesters, 2 credits

This class provides opportunities for extensive study of various genres of American literature and for writing and speaking in response to such literature. Students study a variety of literary genres, such as drama, poetry, fiction, and non-fiction. Curriculum includes quality works of various ethnic and cultural minorities, such as African-American writers, women writers, and Native American writers as well as the works of contemporary writers. Advanced college-bound students write their own literary analysis. Other expository writing includes in-class essays and long-term composition assignments; creative writing may enhance the course. Each student will compile a Writer's Portfolio. Students will orally present their findings to the class. Summer reading is a requirement.

Prerequisite:

Approval of Honors Committee

Students who **passed the 10th grade ECA and earned a C average or above in English 10** (and are not in Honors) must **select one of these two courses:**

American Literature: Pre-1865 (1020A)

(11, 12)

1 semester, 1 credit

This course is a study of representative works and authors of the United States from pre-Revolutionary times through the Civil War. Students read, analyze, evaluate, critique, and actively respond to a wide variety of literary genres that reflect American culture, including quality works of various ethnic and cultural minorities. Students compare readings and media from literature, history, and other subjects by demonstrating how the ideas and concepts presented in the works are interconnected, distinctly American, and important to an understanding of the development of the current culture.

American Literature: Post-1865 (1020B)

(11, 12)

1 semester, 1 credit

This course is a study of representative works and authors of the United States from the Civil War to the present. Students read, analyze, evaluate, critique, and actively respond to a wide variety of literary genres that reflect American culture, including quality works of various ethnic and cultural minorities. Students compare readings and media from literature, history, and other subjects by demonstrating how the ideas and concepts presented in the works are interconnected, distinctly American, and important to an understanding of the development of the current culture.

Students who **passed the 10th grade ECA and earned a C average or above in English 10** (and are not in Honors) must also **select one of these four courses:**

Creative Writing (1092)

(11)

1 semester, 1 credit

Creative Writing is designed for students who enjoy writing their own fiction and poetry. Within a workshop format, students study the writing process and elements of literature and write original short stories, poems, and plays. Students prepare a portfolio and orally present their work.

Debate (1070)

(11)

1 semester, 1 credit

Debate focuses on developing skills for students to become (1) in-depth researchers, (2) technical and persuasive writers, (3) effective communicators, and (4) perceptive listeners. Students gain an understanding of argumentation and persuasion theories and develop skills in logic and analysis. Students also research topics, organize research, write persuasive cases, and practice public speaking. **MANY COLLEGES ACCEPT THIS COURSE FOR COLLEGE COMMUNICATIONS CREDIT.**

Etymology (1060)

(11)

1 semester, 1 credit

This course provides instruction in the derivation of English words and word families primarily from their Greek and some Latin roots. It also provides a study of the implied and specific meaning of words in a variety of contexts. Students study the origins and meaning of English words, including roots, prefixes, suffixes, and reasons for language change. This course introduces students to tools and resources for etymological study and encourages them to be curious about the English language. The analytic study of word history and semantics is reinforced through written and oral components that involve specific analyses of present-day words that require etymological sensitivity. As it enables students to increase their vocabularies, this course helps prepare students to perform well on the SAT and college placement tests.

Grade 11 (continued)

Speech (1076)

(11)

1 semester, 1 credit

Through reading, writing, and oral activities, students learn how to communicate more effectively in situations where spoken language is used. This course deals primarily with how to collect, organize, and effectively transmit information to others. Students deliver focused and coherent speeches that convey clear messages, using gestures, tone, and vocabulary appropriate to the audience and purpose. Students study all elements of communication, prepared speeches, group discussion, and oral interpretation of literature. Students deliver different types of oral and multi-media presentations, including viewpoint, instructional, demonstration, informative, persuasive, and impromptu. Students use the same standard English conventions for oral speech that they use in their writing.

Students who **did not pass the 10th grade ECA or earned below a C average in English 10** must select this course:

English 11 (1006E-1006F)

(11)

2 semesters, 2 credits

This course refines communication skills for students' lives, careers, and successes. A hands-on, problem -solving approach, using real-life language activities, helps students develop solid communication skills for today's workforce and post-high school study.

Grade 12

English 12 Language, Literature, & Composition, AP/Honors (1056C-1056D)

(12)

2 semesters, 2 credits

Designed for the advanced college-bound senior, this course teaches advanced literary analysis. Students read and analyze various genres in ancient, medieval, and modern British literature. Both in-class and long-term writing and speaking assignments are presented and evaluated to prepare students for advanced placement in college English courses. Each student compiles a Writer's Portfolio. Summer reading is a requirement.

Students who **passed the 10th grade ECA and earned a C average or above in prior ELA courses** (and are not in Honors) must **select one of these two courses**:

Advanced Composition (1098) /

(12)

1 semester, 1 credit

English 12-Advanced Composition (1008IT)

This course is designed for students who are seeking to further develop and refine their writing skills in preparation for the demands of four-year college/university writing. Reading, research, and critical thinking are incorporated in order to develop students' abilities to think, organize, and express their ideas clearly and effectively in writing. Emphasis is placed on the various forms of writing (narrative, expository, and persuasive) and their necessary elements (description, analysis, and argumentation). Writing will take place both in and outside of the classroom with class time for instruction on technique; skill development in mechanics, usage, style, and grammar; and class, small group, and individual critique.

Prerequisite:

Achieved required score on Ivy Tech
Accuplacer test or ACT (for dual credit)

Technical Communications (1096)

(12)

1 semester, 1 credit

Technical Communications is the study and application of the processes and conventions needed for effective technical writing-communications in the workplace or in further study after high school such as Ivy Tech or vocational college. Using the writing process, students demonstrate a command of vocabulary, English language conventions, research and organizational skills, an awareness of the audience, the purpose for writing, and style. Technical Writing Project: Students complete a project, such as a multi-media advertising campaign for a generic product or idea or a multi-media proposal of an action plan to implement a project or service, which demonstrates knowledge, application, and writing progress in the Technical Communications course content.

Grade 12 (continued)

Students who **passed the 10th grade ECA and earned a C average or above in prior ELA courses** (and are not in Honors) must also **select one of these four courses***:

*12th grade students may also select American Literature: Pre-1865 or American Literature: Post-1865.

Biblical Literature (1022)

(12)

1 semester, 1 credit

This course is a study of the *Bible*, viewed from a literary standpoint, as a source of a wide variety of literary patterns, themes, and conventions. Students examine the different books in relation to the various historical time frames of the books and in relation to related literature as it pertains to Biblical themes. Students read, discuss, and write about Biblical references (allusions) in both classical and modern literature. A variety of reading, writing, and speaking opportunities are included.

Classical Literature (1026)

(12)

1 semester, 1 credit

Classical Literature surveys Greek and Roman Literature, including such great classical authors as Homer, Sophocles, Euripides, Virgil, and Aeschylus. This course includes the study of a variety of literary genres including: tragedy, epic, and oratory. Possible themes include the transition from oral to literate cultures, the uses of mythology, the emergence of cities and empires, and the influences of classical archetypes on modern literature. Students will read, discuss, and write in response to classical literature.

English Literature (1030)

(12)

1 semester, 1 credit

English Literature is a study of representative works of the English-speaking authors associated with the Commonwealth of Nations, including England, Scotland, Ireland, Wales, Canada, Newfoundland, Australia, New Zealand, India, South Africa, Kenya, Botswana, and others. Students examine a wide variety of literary genres that reflect the English-speaking peoples from the Anglo-Saxon Period to the present. Students analyze how the ideas and concepts presented in the works are both interconnected and distinctly reflective of the cultures and the countries in which they were written.

World Literature (1052)

(12)

1 semester, 1 credit

World Literature is a study of ancient and modern representative works by major authors from six continents: Africa, Asia, Australia, Europe, North America, and South America. Students examine a wide variety of literary genres and themes. Students analyze how the ideas and concepts presented in the works are both interconnected and reflective of the cultures and historical periods of the countries represented by the authors.

Students who **did not pass the ECA or earned below a C average in English 11** must select this course:

English 12 (1008E-1008F)

(12)

2 semesters, 2 credits

This class emphasizes those listening, speaking, reading, writing, and problem-solving skills valuable in the workplace, community life, and further study after high school such as Ivy Tech or vocational college. Students work collaboratively, as well as individually, on projects applicable to real-life language situations.

MATHEMATICS DEPARTMENT

Suggested Sequence of Courses

**General Diploma * Program
Algebra 1
Business Math (taken through the Business Dept.)**

**Core 40 or Core 40 with Technical Honors Diploma program
Algebra 1
Geometry
Algebra 2**

**Core 40 with Academic Honors ** Diploma
(Recommended for college bound students)
Algebra 1
Geometry
Algebra 2
Pre-Calculus/Trigonometry OR Probability & Statistics/Finite Math**

**Core 40 with High Academic Honors ** Program
(Recommended for college bound students with exceptional math skills)
Geometry Honors
Algebra 2 Honors
Pre-Calculus/Trigonometry Honors
Calculus Advanced Placement OR Probability & Statistics/Finite Math**

In order to advance to the next level, students must pass the prerequisite course taught by a math department instructor or pass the prerequisite course's final exam.

****Students must formally opt out of the Core 40 Diploma track***

*****Certain grade requirements apply***

| | | |
|---|----------------------|---|
| Algebra I (2520) | (9,10,11,12) | 2 semesters, 2 credits |
| <i>Algebra I</i> formalizes and extends the mathematics learned in the middle grades. Algebra I is made up of 5 Strands: Real Numbers and Expressions,; Functions; Linear Equations, Inequalities, and Functions; Systems of Equations and Inequalities; Quadratic and Exponential Equations and Functions; and Data Analysis and Statistics. The critical areas deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods of analyzing, solving, and using quadratic functions. | | |
| | Prerequisite: | None |
| Algebra Lab (2516) | (10,11,) | 2 semesters, 2 credits |
| <i>Algebra I Lab</i> is a mathematics support course for Algebra I and must be taken concurrently with Algebra I. The course provides students with additional time and extra practice to build the foundations necessary for high school math courses. | | |
| Algebra I Lab counts as math credit for the General Diploma only, or as an elective credit for the Core 40 diploma or higher. | | |
| | Prerequisite: | Algebra I |
| Algebra II (2522) | (10,11,12) | 2 semesters, 2 credits |
| Algebra II builds on work with linear, quadratic and exponential functions and allows for students to extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using properties of logarithms. Algebra II is made up of 5 strands; Complex Numbers and Expressions; Functions; Systems of Equations; Quadratic Equations and Functions; Exponential and Logarithmic Equations and Functions; Polynomial, Rational, and Equations and Functions; and Date Analysis, Statistics, and Probability. | | |
| | Prerequisite: | Algebra I and Geometry |
| Algebra II –Honors (2522) | (9,10,11) | 2 semesters, 2 credits |
| This differentiated Algebra II course is a study of the same topics in regular Algebra II at a more challenging level. | | |
| | Prerequisite: | Algebra I and Geometry |
| Geometry (2532) | (9,10,11,) | 2 semesters, 2 credits |
| Geometry formalizes and extends students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships moving towards formal mathematical arguments. Five critical areas comprise the Geometry course: Logic and Proofs; Points, Lines, Angles, and Planes; Triangles; Quadrilaterals and other Polygons; Circles, Transformations; and Three-dimensional Solids. | | |
| | Prerequisite: | Algebra I |
| Geometry-Honors (2532) | (9,10) | 2 semesters, 2 credits |
| This differentiated Geometry course is a study of the same topics in regular Geometry at a more challenging level. | | |
| | Prerequisite: | Algebra I with a B or above and teacher |

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| Pre-Calculus (2564) | (11,12) | 1 semester, 1 credit |
| <p>Pre-Calculus extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to higher—level sequences and series. This course provides students with skills and understandings that are necessary for advanced manipulation of angles and measurement.</p> <p>Pre-Calculus is made up of five strands: Polar Coordinates and Complex Numbers; Functions; Quadratic, Polynomial, and Rational Equations and Functions; Exponential and Logarithmic Equations and Functions; and Parametric Equations. Students will also advance their understanding in Imaginary numbers through an investigation of complex numbers and polar coordinates. This course is designed for students who expect math to be a major component of their future college and career experiences, and as such it is designed to provide students with foundations for calculus and other high-level math courses. This is a dual credit course.</p> | | |
| | Prerequisite: | Ivy Tech Accuplacer test, ACT,PSAT,or SAT required Score [for Dual credit] Geometry, Algebra II |
| | | |
| Pre-Calculus Honors (2564) | (11,12) | 1 semesters 1 credit |
| <p>This differentiated Pre-Calculus course is a study of the same topics as in regular Pre-Calculus, except the course is accelerated and includes enrichment materials..</p> | | |
| | Prerequisite: | Algebra II, Geometry, Ivy Tech Accuplacer test Or ACT, PSAT, or SAT Required score and a C- for dual credit. Final average in Algebra II B or better |
| | | |
| Trigonometry (2556) | (11,12) | 1 semester, 1 credit |
| <p><i>Trigonometry</i> provides students with the skills and understanding that are necessary for advanced manipulation of angles and measurement. Trigonometry provides the foundation for common <i>periodic</i> functions that are encountered many disciplines, including music, engineering, medicine, and finance (and nearly all other STEM (disciplines)). Trigonometry consists of seven strands: Conics, Unit Circle, Geometry, Periodic Functions, Identities, Polar Coordinates, and Vectors, Students will also advance their understanding of <i>imaginary</i> numbers through an investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity of fields such as engineering and computer programming.</p> | | |
| | Prerequisite: | Algebra II, Geometry, Ivy Tech Accuplacer Test or ACT,PSAT, or SAT required score and a C- for dual credit |

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|--|---|-------------------------------|
| Trigonometry Honors (2556) | (10,11,12) | 1 semester, 1 credit |
| This differentiated Trigonometry course is a study of the same topics as in regular Trigonometry, except the course is accelerated and includes enrichment materials. | | |
| Prerequisite: | Algebra II, Geometry, Ivy Tech Accuplacer test or ACT, PSAT, or SAT required score and a C- for dual credit. Final Average in Algebra II, B or better | |
| Finite Mathematics (2530) | (11,12) | 1 semester, 1 credit |
| <i>Finite mathematics</i> is an umbrella of mathematical topics. It is a course designed for students who will undertake higher-level mathematics in college which may not include Calculus. Topics include: Sets, Matrices, Network, Optimization, and Probability; Technology such as graphing calculators, will be used frequently. | | |
| Prerequisite: | Algebra II with C or better | |
| Probability & Statistics (2546) | (11,12) | 1 semester, 1 credit |
| Probability and Statistics includes the concepts and skills needed to apply statistical techniques in the decision making process. Probability and Statistics are made up of three strands;: Data Analysis, Experimental Design, and Probability. Practical examples based on real experimental data are used throughout. Students plan and conduct experiments or surveys and analyze this resulting data. The use of graphing calculators and computer programs is encouraged. The Process Standards for Mathematics apply thorough each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes uses of their ability to make sense of problem situations. | | |
| Prerequisite: | Algebra II with C or better | |
| Calculus AB/Honors (2562) Advanced Placement | (11,12) | 2 semester, 2 credits |
| <i>Calculus AB, Advanced Placement</i> is a course based on content established by the College Board. <i>Calculus AB</i> is primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbal. The connections among these representations also are important. Topics include: (1) functions, graphs, and limits; (2) derivatives; and (3) integrals. Technology will be used regularly by students and teacher to reinforce the relations among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results. | | |
| Prerequisite: | PreCalculus/Trigonometry | |
| Calculus (2527) | (11,12) | 2 semesters, 2 credits |
| Calculus expands a student's knowledge of functions, graphs, limits, derivatives, and integrals. Additionally, students will review algebra and functions, modeling, trigonometry, etc. This class is for students who want to learn calculus without the rigor of advanced placement calculus. | | |
| Prerequisite: | PreCalculus/Trigonometry | |

MULTIDISCIPLINARY DEPARTMENT

Cadet Teaching Experience (0502) (12) 2 semesters, 2 credits

This elective multidisciplinary Cadet Teaching course provides 12th grade students organized exploratory teaching experiences in grades kindergarten (K) through eight (8). All teaching experiences should be pre-planned by the high school Cadet Teaching teacher-trainer and the cooperating teacher(s) who are interested in supervising prospective teachers and providing them with pre-training experiences in one or more classes. The course should provide a balance of classwork relating to classroom organization, management, and instruction; observations of teaching; and instructional experiences. Transportation must be provided by the student. A screening process will select only the most responsible of students to assume such a role. Concern for the welfare of others, the ability to listen and understand others, the ability to adjust to new situations, dependability, the responsibility to follow through with assigned tasks, honesty, confidentiality, good attendance, leadership and being a good role model for younger students are attributes a student must possess to be selected for the program. Evaluation should be based upon the cadet teachers' cooperation, day-to-day practical performance and class work, including the cadet teacher's ability to teach.

Prerequisite: Senior Status Passed ECA
Core 40 Curriculum
Application Approval by
Selection Committee

JAG – Jobs for America's Graduates (0522) (11,12) 4 semesters, 4 credits

A trained JAG Specialist provides individual and group instruction to 35-45 students using the competency-based JAG National Curriculum that fits the needs of the program application of the JAG Model. JAG Specialists administer a pre- and post-test that provides a gain score to assess the attainment of the JAG competencies. All JAG students participate in a motivational student-led organization – the JAG Career Association – to build on the skills gained in the classroom and to develop leadership and teaming skills to improve employability and advancement. Annual State Career Development Conferences (CDC) provide students the opportunity to demonstrate their employability and leadership skills and be recognized for their achievements. JAG provides 12 months post-graduation follow-up and support services on the job and/or enrollment in a postsecondary institution.

Prerequisite: Junior and Senior status
Instructor Approval

Peer Tutoring (0520) (10,11,12) 2 semesters, 2 credits

This course is designed to facilitate the social and academic integration of students with disabilities into the school community. Peer tutors should assist students with their studies, personal growth, and development through a helping relationship. Students taking the course will be paired with a disabled peer for one class hour each day. Tasks will vary depending on the disabled peer's needs. Peer tutors will complete a series of readings on disabilities, do weekly journals, and also be expected to act as advocates for the disabled. This experience will be planned and conducted under the supervision of a special education teacher.

Prerequisite: Instructor Approval

MUSIC DEPARTMENT

Advanced Chorus (4188)

(9,10,11,12)

2 semesters, 2 credits

[Dynamic Expression Show Choir]

This class will do advanced study in all phases of choral literature. The activities and experiences of this class will include show choir, vocal jazz, and classical choral literature. Emphasis will be given to more complex sight singing, rhythm patterns, as well as vocal skills-Including proper use of the singing voice, balance and blending of vocal parts, correct breathing skills, and tone production. Students will learn basic movements and choreography that will be performed at all concerts. Students will attend added dress rehearsals prior to upcoming performances. Students will be required a costume fee, but will have fundraising opportunities to help assist with this cost. This class will be involved in performing not only at school, but visiting all the elementary schools and performing for the community. Members will participate in the ISSMA Solo/Ensemble contest. Students wishing to sing in this choir will be selected by audition.

Prerequisite:

Audition by the director

Intermediate/ Concert Band (4168)

(9,10,11,12)

2 semesters, 2 credits

Through participation in concert band, students will perform, alone and with others, a varied repertoire of music. Students will grow as musicians through the study of the six basic elements of music – rhythm, pitch, dynamics, timbre (tone quality), texture, and form – and how these elements relate to all styles of music from all points in history. Aspects of intonation, balance and blend within the ensemble, and basics of music theory and composition will also be stressed. All students enrolled in this course are also required to participate in marching band and pep band. Marching band includes a summer band camp and several Saturday competitions. Through their involvement in band, students will also have the opportunity to participate in the ISSMA Solo and Ensemble Contest.

Prerequisite:

Prior instrumental experience, or completion of a successful audition and permission of the director.

Intermediate Chorus (4186)

(9,10,11,12)

2 semesters, 2 credits

[Elite Choir]

This class is open to students who desire to continue singing at the high school level. Students will continue using proper vocal skills and music fundamentals. This will include proper vocal use, tone production, balance and blending of voices, and breathing techniques. Sightsinging and rhythm patterns will be more complex as the students advance. A variety of music literature will be used. Students will participate in the ISSMA Solo/Ensemble contest and the ISSMA organizational contest.

Prerequisite:

None

Jazz Ensemble [Percussion Ensemble] (4164) (9,10,11,12) 2 semesters, 2 credits

The CHS Jazz Ensemble is an elite group of dedicated musicians that is interested in expanding their musical experiences through the study of jazz. The band performs all types of jazz, including ragtime, Dixieland, blues, swing, bebop, cool, bossa nova, fusion, and many others. Through their participation in the Jazz Ensemble, students will learn about the history of jazz and influential jazz musicians and composers. They will also learn a great deal of music theory necessary for improvisation. Improvisation, a major component of jazz, is an integral part of daily rehearsals of this ensemble. The instrumentation of this group is limited, and participation is open only by audition each May for the upcoming school year. Because this group is comprised of the most talented and dedicated instrumental musicians in the school, there are several performances each year, including participation in at least one competition in the spring semester. Time commitment to the ensemble is a must.

Prerequisite: Prior instrumental experience and audition by the director.

Recommended: Chorus experience

Music Theory & Composition (4208) (10,11,12) 1 semester, 1 credit

This class is designed for the student who wants to explore deeper into how music is put together. It could be called the grammar of music. It involves the study of basic music fundamentals, the study of scale, chord and harmony construction. Students will have some ear training, rhythmic dictation, and learn some simplified keyboard skills. Also, time is spent with vocal and instrumental arranging as well as the tone color by use of harmonic effects. Students will also study the elements of composition and create some original compositions.

Prerequisite: Department approval; knowledge of music clefs and performance ability

PHYSICAL EDUCATION DEPARTMENT

| | | |
|--|----------------------|--|
| Health & Wellness Education (3506) | (9) | 1 semester, 1 credit |
| <p>This is the required health education course that must successfully be completed by all CHS graduates. Areas of instruction may include the following as recommended by the State of Indiana, Health Education Proficiency Guide: (1) Growth and Development; (2) Mental and Emotional Health; (3) Community and Environmental Health; (4) Nutrition; (5) Family Life Education; (6) Consumer Health; (7) Personal Health; (8) Alcohol, Tobacco, and Other Drug Education; (9) Intentional and Unintentional Injury; and (10) Health Promotion and Disease Prevention. Students will be encouraged to improve their quality of life through developing positive health behaviors. They will view and consider health as a lifetime commitment, through all of the above areas.</p> | | |
| | Prerequisite: | None |
| Elective Physical Education (L) (3560) (Advanced Physical Education) | (11,12) | 2 semesters, 2 credits |
| <p>This class is for juniors and seniors wishing to advance physical skills and knowledge. Students will gain a broad concept of rules and techniques concerning many team games and various activities such as bowling, ping pong, fitness, tennis, and swimming, which have adult carry-over value. It is believed that interests in these lifelong activities are a very important part of education. Physical fitness will be stressed with the President's tests being administered as part of your grade. This class may be taken with credit for two years.</p> | | |
| | Prerequisite: | Basic PE (2 semesters) *Instructor's approval necessary for the second year |
| Physical Education I (L) (3542) | (9,10) | 2 semesters, 1 credit |
| <p>This is designed to create and motivate interest in one's physical condition through selected games and activities. Units included are softball, tennis, soccer, field hockey, flag football, rec. games, basketball, archery, volleyball, swimming, bowling, team handball, and physical fitness testing. Adaptive Physical Education programs will be available to all students with special mental, physical, sensory, or neurological problems. The course should provide, within the least restricted environment, a variety of developmental activities, games, and sports, appropriate for the interests, capabilities, and limitations of these students. The new P.E. will also be integrated into the course promoting fitness through the use of heart rate monitors and tri-fit testing equipment to assess fitness levels.</p> | | |
| | Prerequisite: | None |

Physical Education II (L) (3544) (9,10,11,12) **2 semesters, 2 credits**
(Specialized Physical Education)

The class will feature strength training, aerobic conditioning, agility training, as well as functional training. These components of fitness are emphasized to increase athletic performance as well as preparing for lifelong exercise habits. Exercise techniques, disciplines, sport nutrition, and physiological aspects of fitness will be stressed. Students will be taught the most efficient and safe methods of enhancing the fitness components of muscular strength, muscular endurance, cardiovascular endurance, body composition, and flexibility.

Prerequisite:

Request form must be filled out with all appropriate signatures in order for a student to take Specialized P.E. before the completion of 2 semesters of basic P.E. If approved and placed in the class the student must complete both semesters of Basic P.E. by the end of their sophomore year.

Physical Education II (3544) (9,10,11,12) **1 semester, 1 credit**
(Lifeguard Training)

Lifeguard training is a course designed to provide the student with the knowledge and skills to prevent, recognize and respond to emergencies and to provide care for injuries and sudden illnesses until emergency medical services (EMS) personnel arrive and take over. Topics that will be covered in the class include: Rescue Skills, CPR/AED for the Professional Rescuer, First Aid, and Caring for Head, Neck or Back Injury. The class sessions will be held in the pool as well as lectures in the classroom. If the student has successfully completed all skills and written tests, at the end of the semester the student will be certified in Lifeguard Training, First Aid, and CPR/AED for the Professional Rescuer.

Prerequisite:

Swimming Skills: 300 yard swim (front crawl & breaststroke) 20 yard swim & 10 lb brick retrieval from 7-10 feet water (timed). Must be at least 15 years old by the end of the semester. (Students must also provide their own swimming attire, appropriate for the course – no cut-offs or two piece suits).

Physical Education II (3544) (9,10,11,12) **1 semester, 1 credit**
(Lifetime Aquatics)

The class will provide the students with knowledge of activities dealing with water. Topics to be covered will be aquatic conditioning, boating, snorkeling, and other lifetime water activities.

Prerequisite:

Students must provide their own swimming attire, appropriate for the course –no cut offs or two piece suits.

SCIENCE DEPARTMENT

The State of Indiana has mandated six credits in laboratory science for a Core 40 diploma for high school graduation. Furthermore, it stipulates that 2 credits must be from Biology and 2 credits must be from Chemistry/Physics. Crawfordsville High School has designated the following course offerings to be in the following science disciplines:

| Science Discipline | Course Offerings |
|--------------------|---|
| Biology | Environmental Science [Introductory] Biology I (L) Biology I Honors Biology II (L) (Genetics/Zoology) General Anatomy/Physiology (L) Biology, AP (L) Environmental Science [Advanced Placement] |
| Chemistry | Integrated Chemistry-Physics (L) Chemistry I (L) Chemistry I Honors (L) Chemistry AP |
| Physics | Physics I (L) Science Research, Independent Study |

Anatomy/Physiology (L) (5276)

(10,11,12)

2 semesters, 2 credits

Anatomy & Physiology is a course in which students explore scientific knowledge that 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. In the science classroom, student work includes: the process of homeostasis and the essentials of human function at the level of genes, cells, tissues, and organ systems. At the conclusion of this course, students should be able to understand the structure, organization, and function of the various components of the healthy human body in order to apply this knowledge in all health-related fields. This course includes ample laboratory experiences that illustrate the application of the standards to the appropriate cells, tissues, organs, and organ systems. Students should be able to use basic laboratory equipment such as microscopes, balances, and pipettes.

Prerequisite:

Biology I (with C- or better)

Recommended:

Chemistry I

Dual Credit / Ivy Tech
APHY 101 & APHY 102
(6) credits possible

Biology, AP (L) (3020)**(11,12)****2 semesters, 2 credits**

This is a course that follows the curriculum guidelines set by the College Board for Advanced Placement Biology. Class time is divided between lecture, discussions, and lab activities. Topics discussed in the course reflect those covered in the Advanced Placement Biology exam and include: biological chemistry, cells, heredity, evolution, and organisms and populations. This course is intended for college bound seniors possibly majoring in science who desire a more in-depth study of biological concepts and consequently requires that students be highly motivated to achieve and willing to work hard to master detailed and difficult material.

Prerequisite:Biology I
Chemistry I**Recommended:**2 semester of any Genetics,
Zoology, Anatomy/
Physiology**Biology I –Lab (3024)****(9,10,11,12)****2 semesters, 2 credits**

This is an introductory course in Biology. The students are introduced to the many areas of biological study with the goal of increasing their understanding of life organisms. Students are also introduced to the methods and tools used in the study of Biology and Science, focusing on analytical and critical thinking. The material is presented through lectures, film, laboratory exercised, readings from textbooks and other scientific journals, and the Internet. Areas of study follow the Indiana Academic Standards and include Molecules and Cells, Developmental and Organismal Biology, Genetics, Evolution, and Ecology.

Prerequisite:

C or higher

Biology I - Lab, Honors (3024)**(9)****2 semesters, 2 credits**

This is a course for the highly motivated science student. Students will be introduced to a wide range of organisms and biological processes. Some themes of this course will be: the interdependence of organisms, the structures and functions of organisms, and human impact on the environment. Areas of study follow the Indiana Academic Standards and include Molecules, Cells, Developmental and Organismal Biology, Genetics, Evolution and ecology. Students will be introduced to new technology through laboratory investigations, independent projects and reading various biology-related novels.

Prerequisite:

Teacher recommendation

**Biology II 1st Semester
(Genetics) (3026)****(10,11,12)****1 semester, 1 credit**

Genetics is an advanced laboratory and literature investigation-based course. Students enrolled in Genetics examine in detail cell reproductions, molecular genetics, inheritance and population genetics. In this course, students refine their scientific inquiry skills as they collaboratively and independently apply their knowledge of genetics concepts to real world bioethical issues.

Prerequisite:

Biology [with C- or better]

**Biology II 2nd Semester
(Vertebrate Zoology) (3026)**

(10,11,12)

1 semester, 1 credit

Zoology is a comprehensive study of the animal kingdom. The focus of this course will include animal anatomy, development, behavior and evolution. There will be a strong focus on the comparative study of body systems found in all animal phyla. Throughout this course study, the interconnectedness of animals and their environment will be illustrated. Lab safety and student responsibility will be stressed due to the hands-on nature of the science curriculum where dissections will be required to illustrate the anatomy of representative animals.

Prerequisite:

Biology I (with C- or better)

Chemistry, AP (L) (3060)

(11,12)

2 semesters, 2 credits

This is a course that follows the curriculum guidelines set by the College Board for Advanced Placement Chemistry. Class time will be spent lecturing, working on chemical problems, and performing laboratory investigations. The topics covered in the course are structure of matter, states of matter, equilibrium reactions, acid-base reactions, kinetics, thermodynamics, and organic chemistry. Students who are interested in studying any field of science in college should consider taking this course. AP Chemistry requires strong math and science skills, and there will be required work to be completed outside of class time.

Prerequisite:

Chemistry I, (with A Average), Algebra II

Recommended:

Precalculus

Chemistry I – Lab (3064)

(10,11,12)

2 semesters, 2 credits

This is an introductory course in general chemistry and should be considered by all college bound students. Since many unifying principles can be developed from experimental observations, laboratory work is an integral part of the course. Math-based problem solving is also used during a significant portion of the course. Topics studied include atomic theory, the periodic table, bonding, writing formulas and equations, energy changes in chemical reactions, reaction rates, gas behavior, acids and bases, and oxidation-reduction reactions.

Prerequisite:

Biology I (with A/B average)
Algebra (with B average) or
ICP (with B average)

Chemistry I – Lab, Honors (3064)

(10,11,12)

2 semesters, 2 credits

This course should be considered by college bound students who are interested in taking several advanced science courses and/or those who want to major in a science college. Topics studied will include the Indiana Academic Standards, as well as advanced theoretical and mathematical applications of the content. Students who consider applying for this course should be organized and highly motivated. Good attendance is essential to success in this course, as much of the lab work and group work cannot be recreated as make up assignments.

Prerequisite:

Biology I (A average)
Algebra I (A average)
Teacher recommendation

Environmental Science AP (3012) (11,12) **2 semesters, 2 credits**
Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. Topics include the earth and its systems, energy, ecosystems, sustainability, human impacts, and social and cultural contexts of environmental issues. The course involves a large amount of reading and writing, and its pace will be equivalent to that of a college level course. Good attendance is essential to success, as many in class labs and activities cannot be made up. Students who are interested in a challenging science class that has many direct connections to daily life should consider taking this course.

Prerequisite: Biology I, Chemistry I, (with A or B). More science and math is beneficial, but not required

Environmental Science (3010) (9,10) **2 semesters, 2 credits**
This is an **introductory** science course focused on human interaction with the earth. Subjects studied include the nature of science, ecology, the earth's spheres, energy and cycles, biodiversity, sustainability and climate change. Hands on activities are stressed and include student discovery, laboratory experiments, problem solving, model building, cooperative learning, and classroom discussion. Students are introduced to the use of scientific tools and methods used for investigations.

Prerequisite: None

Integrated Chemistry-Physics (3108) (10,11,12) **2 semesters, 2 credits**
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.

Prerequisite: Algebra or concurrently

Physics I – Lab (3084) (11,12) **2 semesters, 2 credits**
This is an algebra-based course to provide a solid background in physics. It is geared for students planning on attending college or technical schools. Physics I is a laboratory-based course which students synthesize the fundamental concepts and principles related to matter and energy, including mechanics, wave motion, heat, light, electricity, magnetism, atomic and subatomic physics. Students will examine the nature and scope of physics including its relationships to other sciences, its role in history, the use of models and modeling and relate physics to personal needs and societal issues.

Prerequisite: Algebra II
Chemistry I
Recommended: Pre-calculus or concurrently

Advanced Science (3008)

Science Research Independent Study

(12)

1 semester, 1 credit

This course is an opportunity for strong students to pursue an interest in physics through a long-term experiment and project. Students will do extensive independent study.. Each student will develop a project, conduct research, and prepare a research paper or presentation.

Prerequisite:

Pre-calculus

Physics I

Lab

Recommended:

Calculus

SOCIAL STUDIES DEPARTMENT

| | | |
|---|---------------------|-------------------------------|
| Current Problems, Issues & Events (1512) | (9,10,11,12) | 1 semester, 1 credit |
| <p>Current Problems, Issues, and Events gives students the opportunity to apply investigative and inquiry techniques to the study of significant problems or issues. Students develop competence in (1) recognizing cause and effect relationships, (2) recognizing fallacies in reasoning and propaganda devices, (3) synthesizing knowledge into useful patterns, (4) stating and testing hypotheses, and (5) generalizing based on evidence. Problems in issues selected will have contemporary historical significance and will be studied from the viewpoint of the social science disciplines.</p> | | |
| Prerequisite: | | None |
| Economics (1514) | (12) | 1 semester, 1 credit |
| <p>Economics examines the allocation of resources and their uses for satisfying human needs and wants. The course analyzes economic reasoning used by consumers, producers, savers, investors, workers, voters, and government in making decisions. Key elements of the course include study of scarcity and economic reasoning, supply and demand, market structures, role of government, national income determination, and the role of financial institutions, economic stabilization, and trade. Students will explain that because resources are limited, people must make choices and understand the role that supply, demand, prices, and profits play in a market economy. The functions of government in a market economy and market structures will be examined. Students will understand economic performance, money, stabilization policies, and trade of the United States. The behavior of people, societies and institutions and economic thinking is integral to this course.</p> | | |
| Prerequisite: | | None |
| Economics Honors (1514) | (12) | 1 semester, 1 credit |
| <p>This course is taught for one period for one semester and meets the requirements for economics. The course consists of the following objectives especially designed for students with special interest and ability in economics: (1) to examine the overlap of economics on government and the government role in influencing the economy; (2) to examine controversial issues in economics and some of the conflicts therein; (3) to acquire basic concepts and skills for success in college-level economics classes.</p> | | |
| Prerequisite: | | Teacher recommendation |
| Geography & History Of the World (1570) | (9,10,11,12) | 2 semesters, 2 credits |
| <p>Geography and History of the World is designed to enable students to use the geographical skills and historical concepts 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 representations, analyzing information to determine and explain patterns and trends, and presenting and documenting findings orally and/or in writing. The historical geography concepts used to explore the global themes include change over time, origin, diffusion, physical systems, cultural landscapes, and spatial distribution and interaction. Using these skills, concepts and the processes associated with them, students are able to analyze, evaluate, and make predictions about major global developments. This course is designed to nurture perceptive, responsible citizenship, encourage and support the development of critical thinking skills and lifelong learning, and to help prepare Indiana students for the 21st Century.</p> | | |
| Prerequisite: | | None |

U.S. Government (1540)**(12)****1 semester, 1 credit**

United States Government provides a framework for understanding the purposes, principles, and practices of constitutional representative democracy in the United States. Responsible and effective participation of citizens is stressed. Students will understand the nature of citizenship, politics, and governments and understand the rights and responsibilities of citizens and how these are part of local, state, and national government. Students will examine how the United States Constitution protects rights and provides the structure and functions of various levels of government. How the United States interacts with other nations and the government's role in world affairs will be examined. Using primary and secondary resources, students will articulate, evaluate, and defend positions on political issues. As a result, they will be able to explain the role of individuals and groups in government, politics, and civic activities and the need for civic and political engagement of citizens in the United States.

Prerequisite:

None

**AP U.S. Government (1560)
and Politics - Honors****(12)****1 semester/ 1 credit**

AP U.S. Government and Politics is a college-level course designed to provide students with an analytical perspective on government and politics in the United States. This course is a one-semester study of general concepts and theories pertaining to U.S. Government, typical patterns of political processes and behavior, and the institutions, groups and beliefs that comprise the American political system. One of the aspects that separate the AP Program in U.S. Government from other American government courses is the focus on politics and throughout the course students will be required to analyze various political statistical data. The course will involve challenging reading and writing assignments, data analysis, and in-class discussion and debate. It is designed to provide a college-level experience discussion and debate. It is designed to provide a college-level experience and preparation for the AP U.S. Government and Politics Examination.

Prerequisite:

Teacher recommendation

Psychology (1532)**(12)****1 semester, 1 credit**

Psychology is the scientific study of mental processes and behavior. The course is divided into six content areas and uses the scientific methods to explore research methods and ethical consideration. Developmental psychology takes a life span approach to physical, cognitive, language, emotional, social, and moral development. Cognitive aspects of the course focus on learning, memory, information processing, and language. Personality, assessment, and mental health topics include psychological disorders, treatment, personality, and assessment. Sociocultural dimensions of behavior deal with topics such as conformity, obedience, perceptions, attitudes, and influence of the group on the individual. The Biological Basis focuses on the way the brain and nervous system function, including sensation, perception, motivation, and emotion.

Prerequisite:

None

Psychology, AP (1558)
[Psych AP]

(12)

1 semester, 1 credit

Psychology, Advanced Placement is a course based on content established by the College Board. This course is designed to introduce students to the systematic and scientific study of the behavior and mental processes. Topics include: (1) history and approaches, (2) research methods, (3) biological bases of behavior, (4) sensation and perception, (5) states of consciousness, (6) learning, (7) cognition, (8) motivation and emotion, (9) developmental psychology, (10) personality, (11) testing and individual differences, (12) abnormal psychology, (13) treatment of psychological disorders, and (14) social psychology. A comprehensive description of this course can be found on the College AP Central Course description at:

<http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html>

Prerequisite:

None

- Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Sociology (1534)

(12)

1 semester, 1 credit

Sociology allows students to study human social behavior from a group perspective. The sociological perspective is a method of studying recurring patterns in people's attitudes and actions and how these patterns vary across time, cultures, and in social settings and groups. Students will describe the development of sociology as a social science and identify methods of research. Through research methods such as scientific inquiry students will examine society, group behavior, and social structures. The influence of culture on group behavior is addressed through institutions such as the family, religion, education, economics, community organizations, government, and political and social groups. The impact of social groups and institutions on group and individual behavior and the changing nature of society will be examined. Influences on group behavior and social problems are included in the course. Students will also analyze the role of individuals in the community and social problems in today's world.

Prerequisite:

None

United States History (1542)

(11)

2 semesters, 2 credits

United States History builds upon concepts developed in previous studies of U.S. History. Students are expected to identify and review significant events, persons, and movements in the early development of the nation. The course then gives major emphasis to the interaction of key events, people, and political, economic, social, and cultural influences in national developments from the late nineteenth century through the present. Students are expected to trace and analyze chronological periods and examine the significant themes and concepts in U.S. History. They will develop historical thinking and research skills and use primary and secondary sources to explore topical issues and to understand the cause for changes in the nation over time.

Prerequisite:

None

United States History
AP / Honors (1562)

(11)

2 semesters, 2 credits

United States History, Advanced Placement is a course based on the content established by the College Board. The course has a chronological frame from 1492 to the present and focuses on multiple causation and change in United States history over United States into larger analytical contexts. Students are expected to analyze and interpret primary sources and develop awareness of multiple interpretations of historical issues in secondary sources. Historical events and issues in U.S. history are to be examined from multiple perspectives. The course prepares students for the U.S. History A.P. exam in May. Strong scores on this test can lead to course credit at the college level. Given this goal, the course will be taught as a college level survey with intense amounts of reading from a college level textbook and many supplemental materials. Summer reading assignments should be expected. All content material will be the responsibility of the student and in-class work will focus on lecture, discussions, writing, and exam score improvement. Enrollment in this course will be at the teacher's discretion. 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>

Prerequisite:

Teacher recommendation

World History & Civilization (1548)**(9,10,11,12)****2 semesters, 2 credits**

World History emphasizes events and developments in the past that greatly affected large numbers of people across broad areas and that significantly influenced peoples and places in subsequent eras. Key events related to people and places as well as transcultural interaction and exchanges are examined in this course. Students are expected to compare and contrast events and developments involving diverse peoples and civilizations in different regions of the world. They will examine examples of continuity and change, universality and particularity, and unity and diversity among various peoples and cultures from the past to the present. Students are also expected to practice skills and process of historical thinking and research and apply content knowledge to the practice of thinking and inquiry skills and processes. There will be continuous and pervasive interactions of processes and content, skills and substance, in the teaching and learning of history.

Prerequisite:

None

WORLD LANGUAGE DEPARTMENT

French I (2020)

(9,10,11,12)

2 semesters, 2 credits

French I is an introduction to the French language and culture. A concentration on basic grammatical structures, the present and past tenses, and basic conversational vocabulary is emphasized, and customs and culture are also introduced. Students are able to apply effective strategies for language learning and show a willingness to experience various aspects of the cultures. After completing this course, students will be able to respond to and give oral directions and commands and to make routine requests in the classroom and in public places. They will be able to understand and use appropriate forms of address in courtesy expressions and be able to tell about daily routines and events. They will be able to ask and answer simple questions and participate in brief guided conversations related to their needs and interests. They will be able to read isolated words and phrases in a situational context, such as menus, signs, and schedules. They will be able to comprehend brief written directions and information and read and write short narrative texts on simple topics. Students will respond in writing to various stimuli and practice the language in skits, projects and frequent homework assignments.

Prerequisite:

None

French II (2022)

(10,11,12)

2 semesters, 2 credits

French II students will begin to study many verb tenses and vocabulary will be increased. More short reading will be done and oral proficiency is encouraged. This course enables students to participate in classroom and extracurricular activities related to the languages as well as to participate in conversations dealing with daily activities and personal interests. After completing this course, students will be able to ask questions regarding routine activities and participate in conversations on a variety of topics. They will be able to relate a simple narrative about a person, experience or event and interact in a variety of situations to meet personal needs, such as asking permission, asking for or responding to an offer for help, and using expressions pertinent to everyday life. They will also be able to understand main ideas and facts from simple texts treating familiar topics. They will be able to read aloud with appropriate intonation and pronunciation and write in response to given situations such as postcards, personal notes, phone messages, essays, and directions. They will also write letters in the appropriate culture and formal contexts, compose essays, create skits, and complete projects using the French language. Additionally, students become familiar with major geographical features, historical events, and political structures of the country or countries being studied. They will also familiarize themselves with different aspects of the culture, including the visual arts, architecture, literature and music, using the world language where appropriate.

Prerequisite:

Passing Grade in French I

French III (2024)

(11,12)

2 semester, 2 credits

French III provides instruction enabling students to understand and appreciate other cultures by continuing to build on grammar, vocabulary, and thematic areas covered in French II. In addition, the course compares social behaviors and values of people using the languages being learned. Units focus on French history from the classical period to the present. Students will become familiar with important literary, cultural, artistic, and historical figures and movements. Francophone literature will also be introduced, as well as units covering French-speaking areas of the world, notably the Caribbean, Africa, Canada, and Louisiana. Coursework will focus on the continued expansion and enhancement of oral, listening, reading and writing skills. Students will be able to initiate and participate in discussions concerning these cultures. After completing this course, students will also be able to read for comprehension from a variety of authentic materials such as advertisements in newspapers and magazines, cartoons and personal correspondence. They will read short literary selections from poetry, plays, and short stories and also be able to complete authentic forms and documents and take notes that require familiar vocabulary and structures. They will write paraphrases, summaries, and brief compositions. They will also be able to describe different aspects of the culture, using the world language where appropriate including 1) major historical events 2) political structures, 3) value systems 4) visual arts 5) architecture 6) literature and 7) music. In addition, students will be able to seek help in a crisis situation and participate appropriately at special family occasions such as birthdays, weddings, funerals, and anniversaries.

Prerequisite:

Passing Grade in
French II

French IV (2026)**(12)****2 semesters, 2 credits**

In French IV we will pursue a survey on excerpts from French literature from various French-speaking lands including Europe, French Canada, Africa, and the Caribbean. Various genres of literatures including magazines, newspapers, short stories, novels, plays, intellectual works, and poetry will be covered and the material will be drawn from the works of different centuries. Students will also regularly write essays, skits, short stories and poems, as well as critiques and response essays to works read. Oral and aural skills will also be further developed and a variety of audio-visual media will be used in class. Students will continue to learn about French-speaking countries, their cultures, and histories. In addition, students will continue adding to their speaking, listening, reading, writing, and grammatical skills and how to function in contemporary situations in French-speaking areas. Skits, projects, dialogues and other oral, aural, written and reading assignments will be used to assess student progress and performance.

Prerequisite:Passing Grade in
French III**Spanish I (2120)****(9,10,11,12)****2 semesters, 2 credits**

Spanish I students are introduced to basic grammar, present and past tenses with sufficient vocabulary to be able to communicate in Spanish, both in a verbal and written manner. These aspects of the language are reinforced through individual or group projects and skits in class. Students also write short paragraphs and essays. Students are able to apply effective strategies for language learning and show a willingness to experience various aspects of the culture. Within this context, the course provides students with opportunities to respond to and give oral directions and commands. They will be able to make routine requests in the classroom and in public places. They will also be able to understand and use appropriate forms of address in courtesy expressions and be able to talk about daily routines and events. They will be able to ask and answer simple questions and participate in brief guided conversations related to their needs and interests. Students will be able to read isolated words and phrases in a situational context, such as menus, signs, and schedules and comprehend brief written directions and information. They will read short narrative texts on simple topics and be able to write familiar words and phrases in appropriate context and respond in writing to various stimuli. By second semester the class will be conducted 75% in Spanish.

Prerequisite:

None

Spanish II (2122)**(9,10,11,12)****2 semesters, 2 credits**

Spanish II continues with the inclusion of more verb tenses, grammar, and vocabulary. These are integrated with video projects, skits and plays. Music videos, Spanish television programs and projects over Spanish countries and cultures are included throughout the year. This course enables students to participate in language studies as well as to participate in conversations dealing with daily activities and personal interests. Students are able to ask questions regarding routine activities and participate in conversations on a variety of topics that relate a simple narrative about a person, experience or event. They will be able to interact in a variety of situations to meet personal needs, such as asking permission, asking for or responding to an offer of help, and expressions pertinent to everyday life. They will understand main ideas and facts from simple texts over familiar topics and read aloud with appropriate intonation and pronunciation. They will write briefly in response to given situations. Additionally, students become familiar with different aspects of the culture, including the visual arts, architecture, literature and music, using the world language where appropriate. They will be able to extend and respond to hospitality as a host or a guest.

Prerequisite:Passing Grade In
Spanish I

Spanish III (2124)**(11,12)****2 semesters, 2 credits**

Spanish III concentrates on Latin American and Spanish cultures and current problems. The various content areas include the rain forest, human rights, political problems, and famous people of Latin America, art, music, and Hispanics in the United States. Grammar is reviewed and continued but the main focus of the class is the development of reading, speaking, and writing skills in Spanish. Level III world language course provides instruction enabling students to understand and appreciate other cultures by comparing social behaviors and values of people using the languages being learned. Students are willing to initiate and participate in discussions concerning these cultures. In addition, students are able to read for comprehension from a variety of authentic materials such as advertisements in newspapers and magazines, and cartoons and personal correspondence. They also will be able to read short literary selections of poetry, plays, and short stories and be able to complete authentic forms and documents and take notes that require familiar vocabulary and structures. They will write paraphrases, summaries, and brief compositions and be able to describe different aspects of the culture, using the world language where appropriate including 1) major historical events 2) political structures, 3) value systems 4) visual arts 5) architecture 6) literature and 7) music. Student will be able to seek help in a crisis situation and participate appropriately at special family occasions such as birthdays, weddings, funerals, and anniversaries.

Prerequisite:

Passing Grade in Spanish II

Spanish IV: AP Language (2132)**(11,12)****2 semesters, 2 credits**

Spanish Language, Advanced Placement is a course based on content established by the College Board. It emphasizes the use of the Spanish language for active communication, advanced listening comprehension using Spanish television, plays and movies, reading without the use of a dictionary, expanded conversational skills, fluent and accurate written expression, and strong command of vocabulary and structure of the Spanish language. Course content includes modern literature from Latin American and Spain and other content that best reflect interests shared by the students and the teacher, e.g. the arts, current events, sports, etc. Genres covered include fiction (short stories, novels and plays) as well as non-fiction in the form of authentic articles, essays and narratives. Course content Spanish Language AP seeks to develop language skills that are useful in themselves and that can be applied to various activities and disciplines rather than being limited to any specific body of subject matter. Students are required adjust speech appropriate to a situation, and/or audience, and be able to participate appropriately in Spanish with both native and non-native speakers. Extensive practice in the organization and writing of both informal essays and formal compositions is also emphasized. The AP Spanish Language course should help prepare students to demonstrate their level of Spanish proficiency across three communicative modes: interpersonal, interpretive, and presentational and the five goal areas outlined in the *Standards for Foreign Language Learning in the 21st Century*: communication, cultures, connections, comparisons, and communities. There may be an additional cost incurred by the student for taking the AP test. Classes will be conducted in the Spanish language.

Prerequisite:

Completion of Spanish III with C or better.

Spanish V: AP Literature (2134)**(11,12)****2 semesters, 2 credits**

Spanish Literature Advanced Placement is a course based on the content established by the College Board, Spanish Literature, Advanced Placement is designed to be comparable to that of a third-year college course in Peninsular and Latin American literature; it focuses on speaking and writing in the target language at that advanced level. The course is designed to introduce students to the formal study of a representative body of Peninsular and Latin American literary texts. It is based on a comprehensive and inclusive reading list, exposing students to a wide variety of genres and types of discourse. Reading list selections trace the history of Spanish prose from Dona Juan Manuel to modern times, including required reading from medieval and golden age literature, nineteenth-century literature, and twentieth century literature. Through this course, students will develop skills that allow for in-depth poetry, thematic, and text analyses. Class will be conducted solely in the Spanish Language. Summer reading in preparation for the course will be required.

Prerequisite:

Teacher approval

Course may be taken concurrently with Spanish IV AP Language only as a senior

Spanish for Heritage Speakers (2190)**(9,10,11,12)****2 semesters, 2 credits**

Spanish for Spanish Speakers is a course of monolingual and emerging bilingual Hispanic students who wish to continue developing their Spanish skills to facilitate immersion into Language Arts classes in English. The objectives of the course are to develop written communication skills, including punctuation, spelling and accentuation, research, critical thinking skills and self-expression. The class also concentrates on improving reading fluency in order to foster an enjoyment of reading and to gain skills in oral communication and presentation. The class prepares students for further study of language arts in the English language (English 9,10,11,12). Opportunities will be offered to explore short stories and novels, read and write poetry, participate in debate and perform a play.

Prerequisite:

The student is a native Spanish-speaker. The student is determined, by English level testing, to be a level 3 or lower, and enrolled in an ENL class. The student may be enrolled in a regular English class concurrently.

CAREER AND TECHNICAL EDUCATION (CTE)

Advanced Manufacturing I (5608) **Southmont High School**

(11,12)

2 semesters, 6 credits

Advanced Manufacturing I is a hands-on class that introduces the basic principles of Safety and Quality as they are used in manufacturing environments. Safety instruction covers topics including: Material Safety Data Sheets (MSDS), lockout/tag out, safety audit, hazardous materials, storage of flammable materials, storage of fuel gas and high pressure gas cylinders, portable power tools safety, machine tool safety, safety enforcement practices and right to know. Students will perform manufacturing simulations and apply basic statistical controls on process, process flows, sampling, and variable charting. The course will use well equipped labs for all design, production and automation related activities. Lecture, lab, online simulation and programming will be used to prepare students for Certified Production Technician Testing through the Manufacturing Skills Standards Council (MSSC). In addition, this course will also include an online OSHA 10 hour certification program which leads to students earning their OSHA General Industry Certification.

Prerequisite:

Recommended, not required: Industrial Tech, PLTW, Intro to Manuf. courses.

Dual Credit/ Ivy Tech
Lafayette
ADVM 101 (3hrs)

Advanced Manufacturing II (5606) **Southmont High School**

(12)

2 semesters, 6 credits

Advanced Manufacturing II introduces students to manufacturing processes and basic mechanical, electrical, electronic and fluid power principles associated with the manufacturing environment. Topics include: types of production, production materials, machining and tooling, manufacturing planning, production control, and product distribution. Students will be expected to perform simulation activities from product conception through distribution. basic power, energy transfer, machine operations and control strategies will be explored with both traditional and automated equipment. This course will also use lecture, lab, online simulation and programming to prepare students for Certified Production Technician Testing through the Manufacturing Skills Standards Council (MSSC). A student who successfully completes the C.P.T. will carry Certifications in Safety, Manufacturing Processes & production, Quality Practices & Measurement, and Maintenance awareness. The C.P. T. is an industry recognized entry level credential for front line workers from entry to first line supervision.

Prerequisite:

Recommended, not required: Industrial Tech, PLTW, Intro to Manuf, Advanced Manufacturing I courses

Dual Credit / Ivy Tech
Lafayette ADVM 102
(3 hrs)

Automotive Services Technology I (5510) (11) 2 semesters, 6 credits
Off-site Location

This course is the initial year of the two-year vocational program covering the entire automobile. During the two year program, eight major areas of the automobile will be studied. These areas include: brakes, drivability including diesels, manual transmissions and rear axles, automatic transmissions, engine overhauls, front suspension and alignment, electrical systems, heating and air conditioning systems. Four of the major areas will be studied each year on a rotating basis. Classroom work as well as extensive laboratory work will be required. Non-traditional students are encouraged to take this course.

Prerequisite: Interview with Teacher
 Dual Credit / Ivy Tech
 AUTC 100, AUTC 107

Automotive Services Technology II (5546) (12) 2 semesters, 6 credits
Off-site Location

This course is a continuation of Auto-Diesel Mechanics 1-2. Four major areas of the automobile will be studied in-depth using both classroom and extensive laboratory methods. This two-year program will prepare students for an entry level auto technician's job.

Prerequisite: Vocational Auto-Diesel
 Mechanics, Beginning:
 Teacher interview
 Dual Credit / Ivy Tech
 AUTC 113, AUTC 122

Construction Technology: HVAC I (5496) (11,12) 2 semester, 6 credits
Crawfordsville

This two year course will include classroom and laboratory experiences which focus on gas, oil, and electric residential and light commercial heating and air conditions systems. Hands on experience is provided on natural gas, LP, electric, and oil furnaces in addition to air conditioners, heat pumps, and refrigeration equipment. Second year students will learn sheet metal ductwork design, fabrication, and installation. Off-campus projects are offered to second year students and may include complete replacements and/or installations of furnaces, air conditioners, and ductwork. Students are required to provide their own transportation from CHS to these off-campus projects. Certifications offered are: Environmental Protection Agency (EPA) Section 608 Refrigerant Transition and Recovery, R-410a Refrigerant Certification, Occupational Safety and Health Association (OSHA) Workplace Safety Certification, and HVAC Excellence Certification. Students are also encouraged to participate in SkillsUSA, a national student organization focused towards Career and Technical Education students which allow students to compete in their career training area. Relations with many area and distant HVAC contractors allow qualifying students to gain entry level positions. Many students go on to pursue a college or technical school degree. Both male and female students are encouraged to participate in this ever-growing career opportunity.

**** First year class starts at 8:00 a.m.**

Prerequisite: Industrial Tech.
 courses recommended
 but not mandatory

Dual Credit / Ivy Tech
 HEAT 101 Heating
 HEAT 103 Refrigeration
 HEAT107 Duct Heating
 Fabrication & Installation

Construction Technology HVAC II (6498) (12) 2 semesters, 6 credits

Criminal Justice I [Law Enforcement] (5822) (11,12) 2 semesters, 6 credits
South Montgomery

The program will provide male and female students with an in-depth study of criminal justice system, laws, law enforcement, courts, corrections and security. The curriculum and a range of the activities introduce and prepare students for further education and entry level employment in careers related to law enforcement. While the primary classroom will be located at Southmont High School, the class will be held off-site at a law enforcement/criminal justice facility (police station, court house, jail, etc.) when possible. The course will be taught by a current or retired police officer with other law enforcement personnel serving as guest speakers. Students will need to provide their own transportation.

Prerequisite:

Good Attendance
Criminal history check
possible interview with
screening committee

LAW 100, LAW 160
Ivy Tech – pending

Criminal Justice II (5824C-5824D)

Early Childhood Education (5412) (11,12) 2 semesters, 6 credits

Early Childhood Education (ECE) prepares students for employment and/or further education which leads to early childhood education or other child-related careers. The course of study includes: planning and guiding developmentally appropriate activities for young children; developmentally appropriate practices of guidance management and operation of licensed child care facilities or educational setting; child care regulations and licensing requirements or regulations related to education of the young; and employability skills. This course is recommended for students with interests in early childhood education and related career paths and provides a foundation for study in higher education that leads to early childhood education and/or child-related careers.

Prerequisite:

Child Development and
Parenting, Preparing for
College Careers, Nutrition
& Wellness or Advanced
Child Development

Early Childhood Education II (5406) (12) 2 semesters, 6 credits

Early Childhood Education II prepares students for employment in early childhood education and related careers that involve working with children from birth to 8 years (3rd grade) and provides the foundations for study in higher education that leads to early childhood education and other child-related careers. ECE II is a sequential course that builds on the foundational knowledge and skills of Early Childhood Education I, which is a required prerequisite. In ECE II students further refine, develop, and document the knowledge, skills, attitudes and behaviors gained in the foundational course. Major topics of ECE II include: overview of the Child Development Associate (CDA) credential safe and healthy learning environment, physical and intellectual competence, social and emotional development, relationships with families, program management, and professionalism.

Prerequisite

Early Childhood Education I

Fire & Rescue I (5820) II (5826) (11,12) 2 semesters, 6 credits
Course Time is 12:35 - 3:00 daily at Southmont High School
(Formerly Fire Science EMS)

Fire Rescue I and II includes instruction in the chemistry of fire; the use of water and other materials in fighting fires; the various kinds of firefighting equipment such as extinguishers, pumps, hoses, ropes and ladders, SCBA, hydrants, standpipes and sprinkler systems; methods of entry, rescue principles, practices and equipment; fire and arson investigation; and inspection techniques. Additional training in hazardous materials and technical rescue can also be incorporated in this area. The first trimester of this course will be devoted to the Indiana Emergency Medical Responder course which will entail CPR, basic first aid and rescue techniques. Pending acceptance from Ivy Technical Institute the students will also receive up to fifteen (15) credit hours for completion of Firefighter I and II, and the EMR program. Fire & Rescue I and II is a college level course that will incorporate weekly homework and one-line independent study courses needed to complete for state certification. A strong work ethic, both physically and mentally is a requirement to be successful in this class.

Prerequisite None

Health Science Education I (5282) (11,12) 2 semesters, 4 credits
Crawfordsville

Introduction To Health Care Systems introduces students to various aspects of the health care industry. Students have the opportunity to explore a number of health related disciplines, learn associated entry level skills, and compare the educational requirements, credentialing and opportunities of each with their personal abilities and interests as a means to making career choices. Instructional strategies and technologies are used to introduce medical terminology, anatomy and physiology. The course places emphasis on a healthy lifestyle, wellness, health maintenance and disease prevention. Students may also be introduced to one of the state youth organizations (HOSA or Skills USA) which promote technical and leadership skill development. Students can obtain CPR certification. Students will need to provide their own transportation.

Prerequisite: Above average student with strong interest in a Health Career; Teacher Recommendations/ Committee Approval

Recommended: Biology I & Chemistry I Dual Credit / Ivy Tech HLHS 100

**Health Science (5214)
Education II: Pharmacy**

(12)

2 semesters, 2 credits

(Formerly known as Introduction to Pharmacy)

Health Science Education II: Pharmacy is an online course which introduces students to the field of pharmacy and prepares them to take the Federal Pharmacy Tech Exam. It provides opportunity for exploration of career options within the discipline. Instructional strategies and technologies are used to help students gain insight into the roles and responsibilities of the pharmaceutical team, state and federal regulations, pharmaceutical agents, prescription processing, pharmacy maintenance, retail sales, and the impact of pharmaceuticals on the delivery of health care in society. Students may have the opportunity to compete in a variety of competitive events at both the state and national level.

Prerequisite:

None

Recommended:

Biology, Chemistry,
Computer Applications,
Algebra II (or concurrently);
Recommendation;
Core 40 Curriculum

Career Internship Exploration (0530)

(12)

**1 semester, 1-2 credits
per semester**

This course provides a unique opportunity for senior students to experience work-based activities in career areas of interest. The internship will occur during school hours and vary from student to student. Documentation of weekly time sheets, attendance, performance reviews and completion of required activities will determine the final grade. The experience will provide for post-secondary placement. This experience is an extension of the normal academic school program on a voluntary basis and is not for pay. Enrolled students must be on a Core 40 or Core 40 with Academic Honors diploma tract.

Prerequisite:

Permission of the WBL
Program coordinator

- This program is only open to students that have been accepted into a two-or-four year post-secondary institution with plans to pursue a degree in a professional field. This course may be taken for an additional semester to allow students to explore a second career area. 150 hours of workplace and classroom activities are required for the two credits. Of the 150 hours, 18 to 36 hours must be spent in related classroom instruction. This course is exploratory in nature and, as such, does not qualify for reimbursement under the career technical (vocation) funding formula.

Interdisciplinary Cooperative Education (5902) (12)

2 semesters, 2-6 credits

ICE is a work-based learning program that combines classroom and workplace instruction. The two components are the in-school related class and on-the-job training in the community. The program encompasses all fourteen Indiana career clusters; whereby students can acquire the knowledge, skills, and work behaviors related to the individual student's career goals. The ICE program enables students to develop career skills, adjust to the workplace environment, and advance in the career of their choice. Students may also choose to participate in a career and technical education youth organization. This program is divided into two areas: Related Classroom instruction and on-the-job training. The related class, which the student will take during their half-day in school, will earn the one (1) credit per semester. The on-the-job training will earn the student two (2) credits per semester for a total of six (6) credits for the year. **The student will work an average of 15 hours per week or more.** Students participating in these structured experiences will follow class, school, State, and Federal guidelines. Students will be paid in accordance with all State and Federal Laws pertaining to employment.

Prerequisite:

Preparing for College and Careers and a minimum of 4 credits in a logical sequence of courses related to the student's pathway. Permission of the ICE Coordinator.

- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors.

Radio/TV II (5992)

Work-Based Learning Capstone Internship (5974) (12)

**1 or 2 semesters,
2-4 credits**

The academic apprenticeship; internship, or service learning based experience offers the opportunity to spend time during the school day with a professional or business person in an occupation related to the student's chosen field. Students may be paid for the internship and are expected to attend a minimum of one class per day at Crawfordsville High School. Students will be required to complete an application, approval of internship site, and complete all required paperwork during 2nd semester. Students will be required to provide their own transportation. Students will meet as a class one time a week with the Work Based learning program coordinator. Students will be required to intern a minimum 140 hours for completion of the course. Enrolled students must be on a Core 40 with Technical Honors diploma track.

Prerequisite:

Permission of the WBL Program coordinator. Core 40 with Technical Honors. This program is only open to students that have been accepted into an apprenticeship, certificate program, or two or four year post-secondary institution.

Medical Terminology (5274)
(MED TERMS)

(11,12)

2 semesters, 2 credits

Medical Terminology prepares students with language skills necessary for effective, independent use of health and medical abbreviations, symbols, and Greek and Latin word part meanings taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal or written information. Students have the opportunity to acquire skills in interpreting medical records and communications accurately and logically. Materials should invite students to enjoy and be curious about words in their work and personal lives, thus serving as a foundation for enlarging personal vocabularies.

Prerequisite:

Above average student with strong interest in a Health Career; Teacher Recommendations / Committee Approval

Recommended:

Biology I & Chemistry 1 Dual Credit / Ivy Tech HLHS 100

Radio & Television I (5986)
Western Boone

(11,12)

2 semesters, 6 credits

The Radio/TV Broadcasting program at Western Boone High School is a 1 or 2 year program. Students become an employee of a TV station as this mostly hands-on class teaches all aspects of the Radio and TV Industry. Emphasis is placed on broadcast news, radio and film/movie production. Students will produce a daily LIVE newscast; create radio shows along with the production of a music video and a horror movie. Dual Credit opportunities are offered through Vincennes University. Students are encouraged, but not required to be on-air. Students will have access and learn Adobe Premiere editing software. Each student will receive their own HP laptop and video camera to use through the year.

Prerequisite:

Submit application and Interview with Teacher

Dual Credit Vincennes, MCOM 102, MDIA 140

Welding Technology I (5776)
Fountain Central

(11,12)

2 semesters, 6 credits

Welding Technology I includes classroom and laboratory experiences that develop a variety of skills in oxy-fuel cutting and Shielded Metal Arc welding. This course is designed for individuals who intend to make a career as a Welder, Technician, Sales, Designer, Researcher or Engineer. Emphasis is placed on safety at all times. OSHA standards and guide lines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for college and career success. Welding Technology I counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas. This course is aligned with postsecondary courses for Dual Credit.

Prerequisite:

Interview with teacher and CTE Director

Welding Technology II (5778)
Fountain Central

(12)

2 semesters, 6 credits

Welding Technology II builds on Gas Metal Arc welding, Flux Cored Arc Welding, Gas Tungsten Arc welding, Plasma Cutting and Carbon Arc skills covered in Welding Technology I. Emphasis is placed on safety at all times. OSHA standards and guide lines endorsed by the American Welding society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercised that teach students how to weld and be prepared for college and career success. Welding Technology II counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas. This course is aligned with postsecondary courses for Dual Credit.

Prerequisite:

Welding Technology I

Project Lead the Way (Descriptions listed in the Engineering and Technology Department)

I Introduction to Engineering (4812)

II Principles of Engineering (4814)

III Digital Electronics (5538)

IV Biotechnical Engineering (5648)

