2020-2021

Western High School

Course Description Book

Western High School
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Russiaville, IN 46979
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INTRODUCTION

This course description book is provided to give students and parents an overview of courses offered at Western High School. It will also explain the different Indiana diploma options and their specific requirements. It is important for students and parents to have an understanding of course offerings and diploma options so that the proper schedule can be created for each student. Please take time to study this book.

Since Western High School builds its master schedule based on student requests, once students make their course selections for 2020-2021, very few schedule changes will be permitted. Students are given the opportunity to request the classes they wish to take for the following year with the knowledge that they are charting their courses for a full year with little chance of any changes. We are providing this course description book for students to utilize in their decision-making process.

Required courses are courses a student must take to meet his/her diploma requirements. These courses are generally within the English, Mathematics, Science, Social Studies, and Physical Education departments. However, these same departments also provide elective courses to further meet students' interests.

Elective courses are courses a student may take to meet the total number of credits needed for a diploma. These courses are generally among the choices in the Agricultural Science, Business, Family & Consumer Science, Fine Arts, Industrial Technology, and World Language departments. However, a student's extracurricular activities or diploma type may require certain courses from these departments.

A combination of required and elective courses is recommended for a student's schedule. This is the time for students to explore their varied interests. It is a time to take challenging courses to be prepared to meet college admission standards and the requirements of a global workforce.

Students and parents are encouraged to use objective test data (ISTEP, PSAT, ACT, SAT) and past academic records to select courses which will strengthen a student's academic skills. Researching college admission requirements is also important in determining the courses that will provide the necessary preparation for student post-secondary plans.

Students and parents are encouraged to utilize the services provided by the school counselors during the school year. Four year high school course planning, college admissions assistance, scholarship and financial aid information, standardized testing information, and many more resources are available in the Student Services office. All students are encouraged to visit with their school counselor during the scheduling process if they have any questions.

MISSION STATEMENT

To educate and inspire today's students for tomorrow's opportunities.

PHILOSOPHY

The faculty and staff of Western High School believe that the school should provide those experiences and opportunities which will help students to develop as individuals who are well equipped to meet the challenges of everyday living in our increasingly complex society.

We believe that, in order to enhance this development, we must encourage individual responsibility and respect for others while maintaining an appropriate academic environment. We offer a diversified curriculum which recognizes the uniqueness of each student and which will encourage development of intellectual and artistic capabilities.

We believe that formal education is not the end of the process of learning but that education continues throughout life. Therefore, we believe in stressing the joys and rewards of learning through the application of skills and talents which can create an inquiring mind desiring ongoing growth.

The faculty of Western High School encourages students to take their places as responsible citizens in society. We believe that a positive self-concept is vital to the student's emotional and physical well-being and the student's attitude towards others. We further believe that the school and home should work together in helping students develop self-discipline. We recognize that obtaining the support of the community is essential to this effort.

POLICY STATEMENT

It is the policy of the Western School Corporation not to discriminate on the basis of handicap in admission or access to, or treatment, or employment in the educational programs or activities in which it operates, in accordance with school board policy. Inquiries regarding compliance with Title IX, or sex discrimination may be directed to:

Superintendent
Western School Corporation
2600 S. 600 W.
Russiaville, IN 46979

Any student who feels that his or her rights have been violated may appeal through the procedures outlined in State Law – Section 20 – 8.1 – 5.14.

WESTERN HIGH SCHOOL GRADUATION REQUIREMENTS

- Students are strongly encouraged to attend all eight semesters. Exceptions to this must be approved by the administration.
- Students must earn one of the four Indiana diploma types, including a minimum of **46** credits to graduate. (Students with an IEP are required to earn 40 credits.)
- Students in the classes of 2021 and 2022 must pass ISTEP English and Math or meet Graduation Pathways requirements. Students in the class of 2023 and beyond will not participate in ISTEP testing and must meet Graduation Pathways requirements.
- Any senior new to Western must earn at least **10** credits at Western High School to obtain a Western diploma. Exceptions to this require principal approval.

ONLINE COURSES

Academic courses not currently available or listed in our course description book may be available through an online resource. Western requires students to take courses offered at Western first and not through an online vendor. Students exploring the possibility of taking an online course must discuss the possibility with their counselor and obtain approval from the high school administration. All online courses must be approved prior to taking the course for it to be applied to the high school transcript.

TRANSFER CREDITS AND WEIGHTING FROM AN ACCREDITED SCHOOL

- All eligible credits will be transferred from an accredited school.
- AP courses will be weighted the same as AP courses at WHS.
- Dual Credit courses will be weighted the same as Dual Credit courses at WHS.
- School courses matching courses offered at WHS (based upon course description/syllabus) will receive the same weighting.
- Credits earned in courses <u>not offered</u> at WHS (excluding AP and Dual Credit courses) will not be weighted.
- To be eligible for Valedictorian or Salutatorian, a student must be enrolled at WHS for a minimum of 3 semesters.

TRANSFER CREDITS AND WEIGHTING FROM A NON-ACCREDITED SCHOOL OR HOME SCHOOL

- Board Policy and Administrative Guidelines #5463 will be followed to determine earned credits and grade placement.
- The principal of the school the student will attend shall make the initial determination regarding the proper placement of the student and the extent to which any credit will be granted. The decision of the principal may be appealed to the Superintendent whose decision shall be final.
- If credits from a non-accredited school are granted and placed on a student's transcript, the grade entered on the transcript will be the grade determined by the local school officials conducting the review of the student’s performance while making the determination to grant credit.

INDIANA DIPLOMA REQUIREMENTS

The Indiana State Board of Education has adopted course and credit requirements for earning a high school diploma beginning with the class of 2016. Listed below, you will find diploma requirements for each of the available diploma types. As you look through the different diploma types, please make sure you are looking at the correct requirements for your student. The four diploma types are:

- Core 40
- Core 40 with Academic Honors
- Core 40 with Technical Honors
- General

The Indiana General Assembly has made completion of Core 40 a graduation requirement for all students. The legislation includes an opt-out provision for parents who determine that their student could benefit more from the General Diploma. This requires a meeting with the student's parent and counselor. The legislation also makes Core 40 a minimum college admission requirement for the state's public four-year universities.

WESTERN HIGH SCHOOL DIPLOMA REQUIREMENTS

Students must complete minimum requirements for one of the four Indiana diploma types and earn additional elective credits.

- Core 40: Western High School requires 46 credits
- Core 40 with Academic Honors: Western High School requires 48 credits
- Core 40 with Technical Honors: Western High School requires 48 credits
- General: Western High School requires 46 credits

Note: Students with an IEP are required to earn 40 credits

INDIANA
CORE 40

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

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

CORE 40 with Academic Honors *(minimum 47 credits)*

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

- Complete all requirements for Core 40.
- Earn 2 additional Core 40 math credits.
- Earn 6-8 Core 40 world language credits
  (6 credits in one language or 4 credits each in two languages).
- Earn 2 Core 40 fine arts credits.
- Earn a grade of a "C" or better in courses that will count toward the diploma.
- Have a grade point average of a "B" or better.
- Complete <u>one</u> of the following:
  - A. Earn 4 credits in 2 or more AP courses and take corresponding AP exams
  - B. Earn 6 verifiable transcripted college credits in dual credit courses from the approved dual credit list.
  - C. Earn two of the following:
    1. A minimum of 3 verifiable transcripted college credits from the approved dual credit list,
    2. 2 credits in AP courses and corresponding AP exams,
    3. 2 credits in IB standard level courses and corresponding IB exams.
  - D. Earn a combined score of 1750 or higher on the SAT critical reading, mathematics and writing sections and a minimum score of 530 on each
  - E. Earn an ACT composite score of 26 or higher and complete written section
  - F. Earn 4 credits in IB courses and take corresponding IB exams.

CORE 40 with Technical Honors *(minimum 47 credits)*

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

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

Indiana General 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: • 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.
	40 Total Credits Required

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

(Updated Dec., 2011)

INDIANA GRADUATION PATHWAYS

Optional for the classes of 2021 and 2022; REQUIRED beginning with the class of 2023

The purpose of the Graduation Pathways is to create an educated and talented workforce able not just to meet the needs of business and higher education, but able to succeed in all postsecondary endeavors. To account for the rapidly changing, global economy, every K-12 student needs to be given the tools to succeed in some form of quality postsecondary education and training, including an industry recognized certificate program, an associate's degree program, or a bachelor's degree program. The Graduation Pathways seek to ensure that every Hoosier student graduates from high school with 1) a broad awareness of and engagement with individual career interests and associated career options, 2) a strong foundation of academic and technical skills, and 3) demonstrable employability skills that lead directly to meaningful opportunities for postsecondary education, training, and gainful employment.

With the passage of Graduation Pathways, students are now able to individualize their graduation requirements to align to their postsecondary goals. No longer must all students fit into the same academic mold, but rather, they can choose the options that best meet their postsecondary needs and aspirations. Students can create pathways that serve their educational interests and prepare them for postsecondary educational and career opportunities.

Students in the graduating class of 2023 and beyond must satisfy all three of the following Graduation Requirements by completing one of the associated Graduation Pathway Options:

Graduation Requirements	Graduation Pathway Options
1.) High School Diploma	Earn credits toward one of the four diploma types: ● Core 40 ● Academic Honors ● Technical Honors ● General
2.) Learn and Demonstrate Employability Skills	Learn employability skills standards through locally developed programs. Employability skills are demonstrated by <u>one</u> of the following: ● Project-Based Learning Experience ● Service-Based Learning Experience ● Work-Based Learning Experience
3.) Postsecondary-Ready Competencies	Meet at least <u>one</u> of these competencies: ● Honors Diploma: Fulfill all requirements of either the Academic or Technical Honors diploma ● SAT: Reading/Writing 480; Math 530 ● ACT: English 18; Reading 22; Math 22; Science 23 (2 out of 4 needed with at least one in English/Reading and one in Math/Science) ● ASVAB: Minimum AFQT score of 31 ● State- and Industry-recognized Credential or Certification ● Federally-Recognized Apprenticeship

	● Career-Technical Education Concentrator: Must earn a C average in at least two non-duplicative advanced courses (courses beyond an introductory course) within a particular program or program of study ● AP/IB/Dual Credit/Cambridge International courses or CLEP Exams: Must earn a C average or higher in at least three courses ● Locally created pathway that meets the framework from and earns the approval of the State Board of Education

For more detailed information about the Graduation Pathways, please visit https://www.doe.in.gov/graduation-pathways

Questions: DOEGradPathway@doe.in.gov

GRADES & GPA

All Advanced Placement (AP) and Dual Credit courses at Western High School are on a weighted grading scale to give students a small boost to their GPA for earning a passing grade in a more rigorous class.

Regular Grading Scale		
Letter Grade	**Range**	**Grade Points**
A+	100+	4.3
A	93-99	4.0
A-	90-92	3.7
B+	87-89	3.3
B	83-86	3.0
B-	80-82	2.7
C+	77-79	2.3
C	73-76	2.0
C-	70-72	1.7
D+	67-69	1.4
D	63-66	1.0
D-	60-62	0.7
F	0-59	0

Weighted Grading Scale		
Letter Grade	**Range**	**Grade Points**
A+	100+	5.3
A	93-99	5.0
A-	90-92	4.7
B+	87-89	4.3
B	83-86	4.0
B-	80-82	3.7
C+	77-79	2.8
C	73-76	2.5
C-	70-72	2.2
D+	67-69	1.4
D	63-66	1.0
D-	60-62	0.7
F	0-59	0

FOUR YEAR PLANS

All students will meet with their counselor and create a four year high school plan. While these plans are not permanent, they should be used as a guiding tool when selecting courses each year in high school. Four year plans should reflect the student's intended goals upon graduation from high school. Below you will find a course plan for each grade level to help students decide which classes they should take each year of high school.

Freshman
English 9
Algebra I (some students are eligible for Geometry)
Biology
Geography & History of the World or AP World History
PE I and PE II
Electives: World Language, Ag Science, Fine Arts, Family & Consumer Science, Business, Industrial Technology
*College bound students should take at least two years of world language

Sophomore
English 10
Geometry
Chemistry or ICP
US History (can be taken sophomore or junior year)
Health / elective
Electives: World Language, Ag Science, Fine Arts, Family & Consumer Science, Business, Industrial Technology
*College bound students should take at least two years of world language

Junior
English 11 or AP English
Algebra II
Science (variety of options)
US History (if not taken sophomore year)
Electives: World Language, Ag Science, Fine Arts, Family & Consumer Science, Business, Industrial Technology
*Academic Honors Diploma requires at least three years of world language

Senior
English 12 or ACP English
Pre-Calculus & Trigonometry, AP Statistics, AP Calculus, Finite Math, or Business Math
Science (variety of options)
US Government and Economics
Electives: World Language, Ag Science, Fine Arts, Family & Consumer Science, Business, Industrial Technology

COLLEGE CREDIT OPPORTUNITIES

Western students have several opportunities to earn college credits while in high school:

- Advanced Placement (AP) Courses and Exams
- Ivy Tech Dual Credit Courses
- Indiana University Advance College Project (ACP) Courses
- Indiana University Kokomo On Campus Dual Credit Courses
- Indiana University Kokomo Tomorrow's Teachers
- Kokomo Area Career Center Programs

Advanced Placement (AP) Courses and Exams: Most colleges and universities in the US give advanced placement or credit to qualified AP students. The AP policies for granting course credit are unique to each institution. AP courses offered at Western include: English Literature, Calculus, Statistics, Biology, Environmental Science, Physics I, Physics II, Computer Science, United States History, World History, French, Japanese, Spanish, Music Theory, Drawing, and 3-D Art and Design

Ivy Tech Dual Credit Courses: Western High School and Ivy Tech Kokomo have partnered to offer several dual credit courses to students. No Ivy Tech tuition or fees are charged for Western students enrolling in dual credit courses taught at the high school by high school teachers. Each year our agreements with Ivy Tech are reviewed and we may delete or add courses to best fit the needs of our students. Currently, the following classes are offered for Ivy Tech dual credit:

Honors Pre-Calculus: Ivy Tech MATH 136 (3 credits)
Honors Trigonometry: Ivy Tech MATH 137 (3 credits)
Anatomy and Physiology: Ivy Tech APHY 101 (3 credits) and APHY 102 (3 credits)
Advanced Manufacturing I: Ivy Tech ADMF 101 (3 credits)
Advanced Manufacturing II: Ivy Tech ADMF 102 (3 credits)
Animal Science: Ivy Tech AGRI 103 (3 credits)
Advanced Life Science Animals: Ivy Tech AGRI 107 (3 credits)
Digital Applications and Responsibility: Ivy Tech CINS 101 (3 credits)

Indiana University Advance College Project (ACP): High school juniors and seniors who have a solid academic preparation and a desire for more advanced work are good candidates for ACP classes. The basic premise of ACP is to provide an opportunity for high school students to succeed in college coursework. Minimum 2.7 GPA required. Cost is $25 per credit hour. For more information, visit https://acp.iu.edu/. Currently, the following ACP classes are offered at Western:

Advanced English/Language Arts, College Credit: ENG W131 (3 credits)
Advanced English/Language Arts, College Credit: ENG L202 (3 credits)
Advanced Science, College Credit: CHEM C101 and CHEM C121 (5 credits)

Indiana University Kokomo On Campus Dual Credit Courses: Seniors in good academic standing have the opportunity to take one class each semester at IUK and earn both high school and college credit. Classes offered vary from semester to semester, but generally the classes are either Monday and Wednesday from 1:00-2:15 or Tuesday and Thursday from 1:00-2:15. Students/parents are responsible for IUK tuition and fees, which are discounted for Western students. Seniors taking advantage of this opportunity will be permitted to leave school after SRT each day.

Indiana University Kokomo Tomorrow's Teachers: Students enrolled in Education Professions may be eligible to participate in the Tomorrow's Teachers program through IU Kokomo. Students can earn up to 12 college credits over two years in Education Professions:

Education Professions I: EDUC F200 (3 credits) and EDUC W200 (3 credits)
Education Professions II: EDUC P214 (3 credits) and EDUC K205 (3 credits)

Kokomo Area Career Center Programs: Many programs at the career center are offered for dual credit through Ivy Tech or Vincennes University. See the KACC section of this book (beginning on page 61) for more details about dual credit classes.

Core Transfer Library: To enable students to transfer college credits, Indiana has developed the Core Transfer Library (CTL) – a list of courses that will transfer among all Indiana public college and university campuses, assuming adequate grades are earned. All CTL courses will meet the general education or free elective requirements of undergraduate degree programs, and a significant majority of CTL courses will also count as one-on-one equivalents to courses taught at the new campus. The website for the Core Transfer Library is http://transferin.net/

COLLEGE-BOUND STUDENT ATHLETES

Students aspiring to play NCAA Division I or II athletics must register with the NCAA Eligibility Center following their junior year at http://eligibilitycenter.org

To be eligible to compete in NCAA sports during your first year at a **Division I** school, you must graduate high school and meet ALL the following requirements:

- Complete 16 core courses:
    - Four years of English
    - Three years of math (Algebra I or higher)
    - Two years of natural/physical science (including one year of lab science)
    - One additional year of English, math or natural/physical science
    - Two years of social science
    - Four additional years of English, math, natural/physical science, social science, foreign language, comparative religion or philosophy
- Complete 10 core courses, including seven in English, math or natural/physical science, before your seventh semester. Once you begin your seventh semester, you may not repeat or replace any of those 10 courses to improve your core-course GPA.
- Earn at least a 2.3 GPA in your core courses.
- Earn an SAT combined score or ACT sum score matching your core-course GPA on the Division I sliding scale, which balances your test score and core-course GPA. If you have a low test score, you need a higher core-course GPA to be eligible. If you have a low core-course GPA, you need a higher test score to be eligible.

To be eligible to compete in NCAA sports during your first year at a **Division II** school, you must meet academic requirements for your core courses, grade-point average (GPA) and test scores.

You must graduate high school and meet **ALL** of the following requirements:

- Complete 16 core courses:
    - Three years of English
    - Two years of math (Algebra I or higher)
    - Two years of natural or physical science (including one year of lab science)
    - Three additional years of English, math or natural or physical science
    - Two years of social science
    - Four additional years of English, math, natural or physical science, social science, foreign language, comparative religion or philosophy
- Earn at least a 2.2 GPA in your core courses.

- Earn an SAT combined score or ACT sum score matching your core-course GPA on the Division II sliding scale, which balances your test score and core-course GPA. If you have a low test score, you need a higher core-course GPA to be eligible. If you have a low core-course GPA, you need a higher test score to be eligible.

Students aspiring to play at an NAIA school must register with the NAIA Eligibility Center at http://PlayNAIA.org. Keep in mind the NAIA and the NCAA are two separate associations. They have different rules and different processes, so you still need to register with the NAIA even if you have already registered with the NCAA Eligibility Center.

Students must meet two of the three criteria and graduate from high school:

1. Minimum GPA of 2.0 on a 4.0 scale
2. Minimum ACT of 18 or SAT of 970
3. Graduate in the top half of your class

Check courses carefully with your counselor each semester to make sure you are meeting NCAA or NAIA course requirements. **This is ultimately the family's responsibility.**

Agricultural Science

5056 Introduction to Agriculture, Food, and Natural Resources
Grade Level: 9-10
Semesters: 2
Prerequisite: None
This course is highly recommended as a prerequisite and foundation for all other agricultural classes. This course is designed to provide the student with a broad and basic introduction to all aspects of agricultural science. Topics to be covered include: animal science, plant and soil science, food science, horticultural science, farm and agribusiness management, landscape management, natural resources management, and supervised agricultural experience.

5008 Animal Science
Grade Level: 9-12
Semesters: 2
Prerequisite: None
This course is designed to provide students with an overview of how to select, house, feed and care for both small companion animals and large production animals. Labs, field trips, and computer software will be used to study dogs, cats, rabbits, poultry, fish, horses, llamas, ostriches, cattle, swine, and sheep. Topics to be discussed include: popular breeds, behavior, anatomy, physiology, genetics, reproduction, nutrition, digestion, feeding, common diseases and parasites, and animal welfare. This course fulfills a Core 40 Science requirement for all diplomas. Students may be eligible to receive dual credit from Ivy Tech for this course.

5070 Advanced Life Science: Animals
Grade Level: 11-12
Semesters: 2
Prerequisite: Animal Science
Advanced Life Science: Animals is a two-semester course that provides students with opportunities to participate in a variety of activities including laboratory work. Students will explore concepts related to history and trends in animal agriculture as related to animal welfare, husbandry, diseases and parasites, laws and practices relating to handling, housing, environmental impact, global sustainable practices of animal agriculture, genetics, breeding practices, biotechnology uses, and comparative knowledge of anatomy and physiology of animals used in animal agriculture. This course fulfills a Core 40 Science requirement for all diplomas. Students may be eligible to receive dual credit from Ivy Tech for this course.

5002 Agribusiness Management
Grade Level: 11-12
Semesters: 2
Prerequisite: None
Agribusiness Management provides foundation concepts in agricultural business. It is a two semester course that introduces students to the principles of business organization and management from a local and global

perspective, with the utilization of technology. Concepts covered in the course include; accounting and record keeping, business planning and management, food and fiber, forms of business, finance, management, sales and marketing, careers, leadership development. Students will demonstrate principles and techniques for planning, development, application and management of agribusiness systems through a supervised agriculture experience (work-based learning) program.

5228 Supervised Agricultural Experience (SAE)
Grade Level: 9-12
Semesters: 1 semester course, 1 credit per semester, 8 credits maximum
Prerequisite: None
Supervised Agricultural Experience (SAE) is designed to provide students with opportunities to gain experience in the agriculture field(s) in which they are interested. Students will experience and apply what is learned in the classroom, laboratory and training site to real-life situations with a standards- based plan for learning. Students work closely with their agriculture teacher(s), parents and/or employers to get the most out of their SAE program. This course can be offered each year as well as during the summer session. Curriculum content and competencies need to be varied so that school year and summer session experiences are not duplicative.

Business

4518 Introduction to Business
Grade Level: 9-10
Semesters: 1
Prerequisite: None
Introduction to Business introduces students to the world of business, including the concepts, functions, and skills required for meeting the challenges of operating a business in the twenty-first century on a local, national, and/or international scale. The course covers business management, entrepreneurship, marketing fundamentals, and business ethics and law. The course develops business vocabulary and provides an overview of business and the role that business plays in economic, social, and political environments.

4528 Digital Applications and Responsibility
Grade Level: 9-12
Semesters: 1
Prerequisite: None
This course provides instruction in software concepts that can be used at home and at school. Students use Microsoft Word, Excel, PowerPoint, and Access in the Windows environment to learn efficient and practical computer application techniques that will be applicable in job, school and home tasks. Students work on projects using each of the applications and integrating multiple applications. Second semester students will learn advanced techniques in Word, Excel and Access. They will also learn the parts of the computer by hands-on activities. Students also learn how the computer processes data and how data is stored. Students will be exposed to web coding, computer graphics and 3D animation. This course is aligned with postsecondary courses for Dual Credit Ivy Tech CINS 101 Introduction to Microcomputers.

4516 Computer Illustration and Graphics
Grade Level: 10-12
Semesters: 1
Prerequisite: Digital Applications and Responsibility
Computer Illustration and Graphics introduces students to the computer's use in visual communication. The focus of the course is on basic computer terminology and use, mastering fundamental skills, and developing efficient working styles. These skills are then developed by creating work with imaging, drawing, interactive and page layout software. The course includes organized learning experiences that incorporate a variety of visual art techniques as they relate to the design and execution of layouts and illustrations for advertising, displays, promotional materials and instructional manuals. Instruction also covers advertising theory and preparation of copy, lettering, posters, produce vector illustrations, graphics and logos, and artwork in addition to incorporation of photographic images. Communication skills will be emphasized through the study of effective methods used to design products that impart information and ideas. Advanced instruction might also include experiences in silk screening and airbrush techniques as well as activities in designing product packaging and commercial displays or exhibits.

4801 Computer Science I
Grade Level: 10-12
Semesters: 2
Prerequisite: Introduction to Computer Science
Computer Science I introduces the structured techniques necessary for efficient solution of business-related computer programming logic problems and coding solutions into a high-level language. The fundamental concepts of programming are provided through explanations and effects of commands and hands-on utilization of lab equipment to produce correct and accurate outputs. Topics include program flowcharting, pseudo coding, and hierarchy charts as a means of solving problems. The course covers creating file layouts, print charts, program narratives, user documentation and system flowcharts for business problems; algorithm development and review, flowcharting, input/output techniques, looping, modules, selection structures, file handling, and control breaks and offers students an opportunity to apply skills in a laboratory environment.

4803 Introduction to Computer Science
Grade Level: 9-12
Semesters: 1
Prerequisite: None
Introduction to Computer Science allows students to explore the world of computer science. Students will gain a broad understanding of the areas composing computer science. Additionally, there is a focus on the areas of computer programming, gaming/mobile development, and artificial intelligence/robotics.

4570 AP Computer Science A
Grade Level: 11-12
Semesters: 2
Prerequisite: Computer Science I, Algebra II
AP Computer Science A introduces students to computer science through programming. Fundamental topics include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language. AP Computer Science A is equivalent to a first-semester, college-level course in computer science. *Counts as a mathematics or elective for all diplomas, fulfills a science course requirement for all diplomas, qualifies as a quantitative reasoning course.*

4540 Personal Financial Responsibility
Grade Level: 10-12
Semesters: 1
Prerequisite: None
Personal Financial Responsibility addresses the identification and management of personal financial resources to meet the financial needs and wants of individuals and families, considering a broad range of economic, social, cultural, technological, environmental, and maintenance factors. This course helps students build skills in financial responsibility and decision making; analyze personal standards, needs, wants, and goals; identify sources of income, saving and investing; understand banking, budgeting, record-keeping and managing risk, insurance and credit card debt. A project based approach and applications through authentic settings such as Work-based observations and service learning experiences are appropriate. Direct, concrete applications of mathematics proficiencies in projects are encouraged.

4524 Introduction to Accounting
Grade Level: 10-12
Semesters: 2
Prerequisite: None
Introduction to Accounting introduces the language of business using Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting. Emphasis is placed on accounting principles as they relate to 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.

4560 Business Law & Ethics
Grade Level: 11-12
Semesters: 1
Prerequisite: None
Business Law and Ethics provides an overview of the legal system in the business setting. Topics covered include: basics of the judicial system, contract, personal, employment and property law. Application of legal principles and ethical decision-making techniques are presented through problem-solving methods, case review, and situational analyses.

5967 Introduction to Entrepreneurship
Grade Level: 9-12
Semesters: 2
Prerequisite: None
Introduction to Entrepreneurship provides an overview of what it means to be an entrepreneur. Students will learn about starting and operating a business, marketing products and services, and how to find resources to help in the development of a new venture. This course is ideal for students interested in starting their own art gallery, salon, restaurant, etc.

English/Language Arts

1002 English 9
Grade Level: 9
Semesters: 2
Prerequisite: None
English 9, an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and oral communication, focusing on literature within an appropriate level of complexity for this grade band. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and sustained research assignments. Students deliver grade-appropriate oral presentations with attention to audience and purpose and access, analyze, and evaluate online information.

1002 Honors English 9
Grade Level: 9
Semesters: 2
Prerequisite: A variety of factors will be explored to determine eligibility
Honors English 9, an integrated and advanced English course based on the Indiana Academic Standards for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and oral communication, focusing on literature within an appropriate level of complexity for this grade band. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and sustained research assignments. Students deliver grade-appropriate oral presentations with attention to audience and purpose and access, analyze, and evaluate online information.

1004 English 10
Grade Level: 10
Semesters: 2
Prerequisite: English 9
English 10, an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 9- 10, is a study of language, literature, composition, and oral communication, focusing on the study of American literature focuses on literary movements, authors, and themes. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary American literature balanced with nonfiction. Students write responses to literature, expository (informative) and argumentative/persuasive compositions, and sustained research assignments. Students deliver grade-appropriate oral presentations with attention to audience and purpose and access, analyze, and evaluate online information.

1004 Honors English 10
Grade Level: 10
Semesters: 2
Prerequisite: Minimum grade of C- in last Honors English class, or minimum grade of B and recommendation of teacher in most recent non-Honors English class
Honors English 10, an integrated and advanced English course based on the Indiana Academic Standards for English/Language Arts in Grades 9- 10, is a study of language, literature, composition, and oral communication, focusing on the study of American literature focuses on literary movements, authors, and themes. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary American literature balanced with nonfiction. Students write responses to literature, expository (informative) and argumentative/ persuasive compositions, and sustained research assignments. Students deliver grade-appropriate oral presentations with attention to audience and purpose and access, analyze, and evaluate online information.

1006 English 11
Grade Level: 11
Semesters: 2
Prerequisite: English 9 and 10
English 11, an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 11-12, is a study of language, literature, composition, and oral communication focusing on British literature with a focus on works stretching from the Anglo-Saxon Period through the Modern Period. The course offers analytical study of poetry, epics, romances, drama, short stories, novels, and other relevant works, fiction and nonfiction. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays (e.g. analytical, persuasive, expository, summary), and more sustained research assignments incorporating visual information in the form of pictures, graphs, charts and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

1006 Honors English 11
Grade Level: 11
Semesters: 2
Prerequisite: Minimum grade of C- in last Honors English class, or minimum grade of B and recommendation of teacher in most recent non-Honors English class
Honors English 11, an integrated and advanced English course based on the Indiana Academic Standards for English/Language Arts in Grades 11-12, is a study of language, literature, composition, and oral communication focusing on British literature with a focus on works stretching from the Anglo-Saxon Period through the Modern Period. The course offers analytical study of poetry, epics, romances, drama, short stories, novels, and other relevant works, fiction and nonfiction. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays (e.g. analytical, persuasive, expository, summary), and more sustained research assignments incorporating visual information in the form of pictures, graphs, charts and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

1008 English 12
Grade Level: 12
Semesters: 2
Prerequisite: English 9, 10, 11
English 12, an integrated English course based on the Indiana Academic Standards for English/Language Arts for Grades 11-12, is a study of language, literature, composition, and oral communication focusing on an exploration of point of view or perspective 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 in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays (e.g. analytical, persuasive, expository, summary), and more sustained research assignments incorporating visual information in the form of pictures, graphs, charts, and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

1124C Advanced English/Language Arts, College Credit *(IU ACP English W131)*
Grade Level: 12
Semesters: 1
Prerequisite: Minimum 2.7 GPA
Advanced English/Language Arts, College Credit, is an advanced course based on the Indiana Academic Standards for English/Language Arts in grades 11 and 12. Reading, Writing, & Inquiry I is a one-semester Indiana University course that offers instruction and practice in the critical reading and writing skills required for college-level work, with an emphasis on written assignments that call for summary, critique, analysis, and arguments based on sources. The purpose of this course is to prepare students for the rigor of writing throughout college. The focus is on scholarly investigation of sources, critical thinking and reading, learning how to recognize and utilize specific writing strategies, skills and fluency. Each unit will include preliminary work and assignments leading to a major essay to conclude. Since much work and discussion will be carried on in class, impeccable attendance and assignment submission is imperative. Books must be purchased by the student and tuition must be paid to Indiana University Kokomo, acting as an intermediary for IU Bloomington.

1124L Advanced English/Language Arts, College Credit *(IU ACP English L202)*
Grade Level: 12
Semesters: 1
Prerequisite: Minimum 2.7 GPA; C or higher in W131
Advanced English/Language Arts, College Credit, is an advanced course based on the Indiana Academic Standards for English/Language Arts in grades 11 and 12. Literary Interpretation is a one-semester Indiana University course designed to help students learn how to read, think, and write critically and cogently about literature. Students will study four genres—poetry, short story, the novel, and drama—to understand how the various elements of a work of imaginative literature cohere to impart meaning. A large portion of the course will focus on how to write; students will learn how to translate close reading skills into strong critical essays, writing three major essays as well as short assignments and quizzes. The class will be heavily discussion-based, and vigorous and insightful explorations of the poetry and fiction studied is expected. Students planning to attend IUB should be aware that ACP ENG-L202 will neither count toward the English major nor satisfy the intensive writing requirement at IUB. Books must be purchased by the student and tuition must be paid to Indiana University Kokomo, acting as an intermediary for IU Bloomington.

1058 AP English Literature and Composition
Grade Level: 11-12
Semesters: 2
Prerequisite: Teacher recommendation and B+ or higher in both semesters of most recent Honors English.
AP English Literature and Composition is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works.

1056 AP English Language and Composition
Grade Level: 11-12
Semesters: 2
Prerequisite: Teacher recommendation and B+ or higher in both semesters of most recent Honors English.
AP English Language and Composition is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The course focuses on the development and revision of evidence-based analytic and argumentative writing and the rhetorical analysis of nonfiction texts. The course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods.

1046 Short Stories
Grade Level: 11-12
Semesters: 1
Prerequisite: English 9 and 10 or teacher/counselor recommendation
Short Stories, a course based on the Indiana Academic Standards for English/Language Arts, is a study of the distinct features of the short story, such as being tightly focused narrative fiction. The course is organized by themes. Students examine short stories with modernist and contemporary themes by a variety of authors from the perspective of audience, purpose, and historical development. Students analyze what distinguishes the short story genre from other literary genres, such as the novels, epics, romances, and biographies.

1034 Film Literature
Grade Level: 11-12
Semesters: 1
Prerequisite: English 9 and 10 or teacher/counselor recommendation
Film Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of how literature is adapted for film or media and includes role playing as film directors for selected screen scenes. Students read about the history of film, the reflection or influence of film on the culture, and issues of interpretation, production and adaptation. Students examine the visual interpretation of literary techniques and auditory language in film and the limitations or special capacities of film versus text to present a literary work. Students analyze how films portray the human condition and the roles of men and women and the various ethnic or cultural minorities in the past and present.

1092 Creative Writing
Grade Level: 11-12
Semesters: 1
Prerequisite: English 9 and 10 or teacher/counselor recommendation
Creative Writing, a course based on the Indiana Academic Standards for English/Language Arts, is a study and application of the rhetorical writing strategies for prose and poetry. Using the writing process, students demonstrate a command of vocabulary, the nuances of language and vocabulary, English language conventions, an awareness of the audience, a variety of purposes, and the style of their own writing. Each student will compile a portfolio of his/her work for a final project which further demonstrates knowledge, application, and writing progress in the Creative Writing course content.

1010 Language Arts Lab
Grade Level: 9-10
Semesters: 2
Prerequisite: Teacher or counselor recommendation
Language Arts Lab is a supplemental course that provides students with individualized or small group instruction designed to support success in completing coursework aligned with the Indiana Academic Standards for English Language/Arts focusing on the writing standards. All students should be concurrently enrolled in an English course in which class work will address all of the Indiana Academic Standards.

1086 Student Media
Grade Level: 9-12
Semesters: 2
Prerequisite: Minimum grade of C- in all previous English courses; approval by Student Media adviser.
All students should take 1st semester before taking 2nd semester. To continue with 2nd semester, students must earn a minimum grade of C- in 1st semester.
Student Media is a course based on the High School Journalism Standards and the Student Media Standards. Students demonstrate their ability to do journalistic writing and design for high school media, including school newspapers, yearbooks, and a variety of other media formats. Students follow the ethical principles and legal boundaries that guide scholastic journalism. In the first semester, students will have an opportunity to write captions and headlines, conduct some interviews, compose articles, and design a layout. During the second semester, they will begin working on assignments to complete pages in the yearbook. Additionally, they will learn the basics of yearbook design and desktop publishing on computers. Students express themselves publicly with meaning and clarity for the purpose of informing, entertaining, or persuading. *This course fulfills the Fine Arts requirement for the Core 40 with Academic Honors.*

1078 Advanced Speech and Communication
Grade Level: 11-12
Semesters: 1
Prerequisite: Passing grades in both English 9 and English 10
Advanced Speech and Communication, a course based on the Indiana Academic Standards for English/ Language Arts and emphasizing the High School Speech and Communication Standards, is the study and application of skills in listening, oral interpretation, media communications, research methods, and oral debate. Students deliver different types of oral and multimedia presentations, including speeches to inform, to motivate, to entertain, and to persuade through the use of impromptu, extemporaneous, memorized, or manuscript delivery.

Family and Consumer Science

Health and Wellness Credit Options
The Health and Wellness credit requirement may be waived if the student earns 3 credits from the following Family and Consumer Science courses:
5330 Adult Roles and Responsibilities
5362 Child Development
5366 Human Development and Wellness
5364 Interpersonal Relationships
5342 Nutrition and Wellness
5394 Preparing for College and Careers

5330 Adult Roles and Responsibilities
Grade Level: 10-12
Semesters: 1
Prerequisite: None
Adult Roles and Responsibilities is recommended for all students as life foundations and academic enrichment, and as a career sequence course for students with an interest in family and community services, personal and family finance, and similar areas. This course builds knowledge, skills, attitudes, and behaviors that students will need as they complete high school and prepare to take the next steps toward adulthood in today's society. The course includes the study of interpersonal standards, lifespan roles and responsibilities, individual and family resource management, and financial responsibility and resources. A project-based approach that utilizes higher order thinking, communication, leadership, management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of adult roles and responsibilities. Direct, concrete mathematics and language arts proficiencies will be applied. Service learning and other authentic applications are strongly 112 Indiana Department of Education High School Course Titles and Descriptions recommended. This course provides the foundation for continuing and post-secondary education in all career areas related to individual and family life.

5362 Child Development
Grade Level: 10-12
Semesters: 1
Prerequisite: None
Child Development is an introductory course for all students as a life foundation and academic enrichment; it is especially relevant for students interested in careers that draw on knowledge of children, child development, and nurturing of children. 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 that utilizes higher order thinking, communication, leadership, management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of child development. Direct, concrete mathematics and language arts proficiencies will be applied. Authentic applications such as introductory laboratory/field 113 Indiana Department of Education High School Course Titles and Descriptions experiences with young children and/or service learning that build knowledge of children, child development, and nurturing of children are strongly recommended. This course provides the foundation for continuing and post-secondary education in all career areas related to children, child development, and nurturing of children.

5360 Advanced Child Development
Grade Level: 10-12
Semesters: 1
Prerequisite: Child Development
Advanced Child Development is for those students interested in life foundations, academic enrichment, and/or careers related to knowledge of children, child development, and nurturing of children. This course addresses issues of child development from age 4 through age 8 (grade 3). It builds on the Child Development course, which is a prerequisite. Advanced Child Development includes the study of professional and ethical issues in child development; child growth and development; child development theories, research, and best practices; child health and wellness; teaching and guiding children; special conditions affecting children; and career exploration in child development and nurturing. A project-based approach that utilizes higher order thinking, communication, leadership, management, and fundamentals to college and career success is recommended in order to integrate these topics into the study of child development. Direct, concrete mathematics and language arts proficiencies will be applied.

5408 Education Professions I *(Tomorrow's Teachers at IU Kokomo)*
Grade Level: 11-12
Semesters: 2
Prerequisite: Admission to IU Kokomo (for dual credit)
Education Professions I provides the foundation for employment in education and related careers and prepares students for study in higher education. An active learning approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate suggested topics into the study of education and related careers. The course of study includes, but is not limited to: the teaching profession, the learner and the learning process, planning instruction, learning environment, and instructional and assessment strategies. Exploratory field experiences in classroom settings and career portfolios are required components. A standards-based plan guides the students' field experiences.

5404 Education Professions II *(Tomorrow's Teachers at IU Kokomo)*
Grade Level: 12
Semesters: 2
Prerequisite: Education Professions I; Admission to IU Kokomo (for dual credit)
Education Professions II prepares students for employment in education and related careers and provides the foundation for study in higher education in these career areas. An active learning approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate suggested topics into the study of education and related careers. The course of study includes, but is not limited to: the teaching profession, the learner and the learning process, planning instruction, learning environment, and instructional and assessment strategies. Extensive field experiences in one or more classroom settings, resumes, and career portfolios are required components. A standards-based plan guides the students' field experiences. Students are monitored in their field experiences by the Education Professions II teacher. Articulation with post-secondary programs is encouraged.

5366 Human Development and Wellness
Grade Level: 10-12
Semesters: 1
Prerequisite: None
Human Development and Wellness is valuable for all students as a life foundation and academic enrichment; it is especially relevant for students interested in careers impacted by individuals' physical, social, emotional, and

moral development and wellness across the lifespan. Major topics include principles of human development and wellness; impacts of family on human development and wellness; factors that affect human development and wellness; practices that promote human development and wellness; managing resources and services related to human development and wellness; and career exploration in human development and wellness. Life events and contemporary issues addressed in this course include (but are not limited to) change; stress; abuse; personal safety; and relationships among lifestyle choices, health and wellness conditions, and diseases. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate the study of these topics. Authentic applications through service learning are encouraged.

5364 Interpersonal Relationships
Grade Level: 9-12
Semesters: 1
Prerequisite: None
Interpersonal Relationships is an introductory course that is especially relevant for students interested in careers that involve interacting with people. It is also valuable for all students as a life foundation and academic enrichment. This course addresses the knowledge and skills needed for positive and productive relationships in career, community, and family settings. Major course 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. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of interpersonal relationships. Direct, concrete language arts proficiencies will be applied. Service learning and other authentic applications are strongly recommended. This course provides a foundation for continuing and post-secondary education for all career areas that involve interacting with people both inside and outside of a business/organization, including team members, clients, patients, customers, and the general public.

5342 Nutrition and Wellness
Grade Level: 9-12
Semesters: 1
Prerequisite: None
Nutrition and Wellness is an introductory course valuable for all students as a life foundation and academic enrichment; it is especially relevant for students interested in careers related to nutrition, food, and wellness. This is a nutrition class that introduces students to the basics of food preparation so they can become self-sufficient in accessing healthy and nutritious foods. Major course topics include nutrition principles and applications; influences on nutrition and wellness; food preparation, safety, and sanitation; and science, technology, and careers in nutrition and wellness. A project-based approach that utilizes higher order thinking, communication, leadership, management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of nutrition, food, and wellness. Food preparation experiences are a required component. Direct, concrete mathematics and language arts proficiencies will be applied. This course is the first in a sequence of courses that provide a foundation for continuing and post-secondary education in all career areas related to nutrition, food, and wellness.

5340 Advanced Nutrition and Wellness
Grade Level: 9-12
Semesters: 1
Prerequisite: Nutrition and Wellness
Advanced Nutrition and Wellness is a course which provides an extensive study of nutrition. This course is recommended for all students wanting to improve their nutrition and learn how nutrition affects the body across the lifespan. Advanced Nutrition and Wellness is an especially appropriate course for students interested in careers in the medical field, athletic training and dietetics. This course builds on the foundation established in Nutrition and Wellness, which is a required prerequisite. This is a project based course; utilizing higher-order thinking, communication, leadership and management processes. Topics include extensive study of major nutrients, nutritional standards across the lifespan, influences on nutrition/food choices, technological and scientific influences, and career exploration in this field. Laboratory experiences will be utilized to develop food handling and preparation skills; attention will be given to nutrition, food safety and sanitation. This course is the second in a sequence of courses that provide a foundation for continuing and post-secondary education in all career areas related to nutrition, food, and wellness.

5394 Preparing for College and Careers
Grade Level: 9
Semesters: 1
Prerequisite: None
Preparing for College and Careers addresses the knowledge, skills, and behaviors all students need to be prepared for success in college, career, and life. The focus of the course is the impact of today's choices on tomorrow's possibilities. Topics to be addressed include twenty- first century life and career skills; higher order thinking, communication, leadership, and management processes; exploration of personal aptitudes, interests, values, and goals; examining multiple life roles and responsibilities as individuals and family members; planning and building employability skills; transferring school skills to life and work; and managing personal resources. This course includes reviewing the 16 national career clusters and Indiana's College and Career Pathways, in-depth investigation of one or more pathways, reviewing graduation plans, developing career plans, and developing personal and career portfolios. A project based approach, including computer and technology applications, cooperative ventures between school and community, simulations, and real life experiences, is recommended.

Fine Arts -- Music

4200 Applied Music
Grade Level: 9-12
Semesters: 1
Prerequisite: None
Applied Music is based on the Indiana Academic Standards for High School Choral or Instrumental Music. Applied Music offers high school students the opportunity to receive small group or private instruction designed to develop and refine performance skills. A variety of music methods and repertoire is utilized to refine students' abilities in performing, creating, and responding to music. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.

4146 Dance Performance
Grade Level: 9-12
Semesters: 1 (This course may be taken for successive fall semesters)
Prerequisite: Teacher recommendation based on audition
This class stresses choreographed movement with simultaneous use of upper and lower body. Participants learn to express themselves through this activity. Students are taught to understand musical phrasing, rhythmic structure and meter as it relates to dance. Performances outside of the academic day are mandatory. Auditions are held during the spring for the following school year, and summer conditioning sessions are required prior to the beginning of school as a prerequisite.

4160 Concert Band A (Fall semester)
Grade Level: 9-12
Semesters: 1
Prerequisite: Teacher recommendation; participation in instrumental music or dance during fall semester
Concert Band A is a co-curricular course which requires attendance at rehearsals and performances that take place outside of the regular school day, including summer months. The function of the course is to maintain a marching ensemble that will incorporate music, marching and choreography into a competitive group activity that can represent the Western community around the state of Indiana. Enrollment in the class obligates students to participate in all scheduled activities of the band including evenings and weekends. These activities will include: home football games, parades, marching competitions and basketball games.
This course covers advanced topics in ensemble performance and expands upon foundational skills and concepts that were previously learned in lower grades. To enroll in high school band, students must have participated in middle school band or pass an audition with the directors/staff before enrolling in the course.

4168 Concert Band B (Spring semester)
Grade Level: 9-12
Semesters: 1
Prerequisite: Teacher recommendation; participation in instrumental music or dance during fall semester
Concert Band B is a co-curricular course which also requires attendance at rehearsals and performances that take place outside of the regular school day. Performances will include Pep Band, Concert Band, Howard County Music Festival, Spring Contest and Spring Parade. Course work will include developing skills in reading, listening and producing music on chosen instruments as well as studying historically significant styles

of band literature. Students will also be encouraged to participate in Solo and/or Ensembles at the ISSMA District and State Contest levels as well as participate in ISSMA Organizational Contest. To enroll in high school band, students must have participated in middle school band or pass an audition with the directors/staff before enrolling in the course.

4210 AP Music Theory
Grade Level: 10-12
Semesters: 2
Prerequisite: One year of participation in band or choir and permission from the instructor; students who study music outside of school only must pass a placement exam to make sure they have the foundational music literacy skills needed for the course
AP Music Theory explores foundational musical concepts that would be studied in a first-year college music theory course. As part of this class, students will use written, aural, and visual musical skills and techniques as vehicles to better understand the music that they engage with on a daily basis, both in their music classes and in their daily lives. Students develop ear training and dictation skills, compose works that illustrate mastered concepts, understand harmonic structures and analysis, understand modes and scales, study a wide variety of musical styles, study traditional and nontraditional music notation and sound sources as tools for musical composition, and receive detailed instruction in other basic elements of music. Primary emphasis will be placed on the music and styles from the Common Practice Era (1600-1750), but relevant music from all genres and styles will be used frequently throughout the course. *Fulfills a Fine Arts requirement for the Core 40 with Academic Honors Diploma.*

4182 Beginning Chorus
Grade Level: 9-12
Semesters: 2
Prerequisite: None
This is a training choir open to all female students. No audition is necessary, yet an interest in music and singing is required. Students learn the basics of music performance, including proper breath support, intonation, diction, vowel placement, and other performance skills. Participation in solo and ensemble contest is encouraged, and outside performances are required.

4186 Intermediate Chorus
Grade Level: 9-12
Semesters: 2
Prerequisite: Teacher recommendation
Intermediate Chorus is based on the Indiana Academic Standards for High School Choral Music. Students taking Intermediate Chorus develop musicianship and specific performance skills through ensemble and solo singing. This class includes the study of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Chorus classes provide opportunities for performing, creating, and responding to music. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

4188 Advanced Chorus
Grade Level: 9-12
Semesters: 2
Prerequisite: Teacher recommendation
This is an advanced choir open to students in grades 9-12 by audition only. Students study advanced choral music from various time periods, styles and cultures. Essential elements of musicianship are developed and reinforced including tone production, technical skills, rhythm, intonation, music reading, perceptive listening, structural analysis and music history. Students perform, with expression and technical accuracy, a large varied repertoire of literature that is developmentally appropriate. Participation in solo and ensemble contest is encouraged, and outside performances are required.

4206 Music History and Appreciation (Rock & Roll)
Grade Level: 9-12
Semesters: 1
Prerequisite: None
Music History and Appreciation is based on the Indiana Academic Standards for Music and standards for this specific course. Students receive instruction designed to explore music and major musical styles and periods through understanding music in relation to both Western and Non-Western history and culture. Activities include analyzing and describing music; evaluating music and music performances; and understanding relationships between music and the other arts, as well as disciplines outside of the arts.

Fine Arts -- Visual

4000 Introduction to Two-Dimensional Art
Grade Level: 9-12
Semesters: 1
Prerequisite: None
This is a beginning level art course designed to give the student experiences with various techniques and materials. Students will study design, still-life drawing, watercolor, etc. This course will provide students with basic skills needed for additional and more advanced art classes. Students will be introduced to art history, art criticism and aesthetics as they relate to two-dimensional art.

4002 Introduction to Three-Dimensional Art
Grade Level: 9-12
Semesters: 1
Prerequisite: None
This is an introductory art course that will cover three-dimensional art such as ceramics, paper relief, and sculpture. Students will develop problem solving and creative thinking skills. This is a hands-on class to prepare students for advanced three-dimensional work with the introduction of clay projects. Art history, art criticism and aesthetics will be introduced to the students.

4060 Drawing A
Grade Level: 9-12
Semesters: 1
Prerequisite: Minimum grade of C in Introduction to Two-Dimensional Art
Drawing is a basic way a person can record visual ideas for artistic expression. An emphasis on accurately seeing and recording objects from life is the foundation for studies of art. Students will use various tools and processes to create drawings such as sketching, rendering, contour, portraits, and perspective drawing. Art history, art criticism, and aesthetics will be discussed as they relate to the individual projects.

4060B Drawing B
Grade Level: 10-12
Semesters: 1
Prerequisite: Minimum grade of C in Drawing A
This course is a continuation of Drawing A. It will focus on an additional variety of drawing mediums and techniques. Rendering objects, surface characteristics and sketching will be emphasized. The student will be applying creative drawing, and art historical approaches to their projects. Written and verbal critiques will be a part of the course.

4060C Drawing C
Grade Level: 11-12
Semesters: 1
Prerequisite: Minimum grade of C in Drawing B
This drawing course is an advanced level of study for students that have a high degree of interest in visual art. It will include drawing experiences designed to develop in-depth skills with a variety of techniques. Portfolio development and a higher level of quality drawings are expected outcomes. The student will be encouraged to

work on a more independent level and individual goals for the course will be determined by the student and teacher. Individual written critiques based on aesthetics and design will be required.

4064 Painting A
Grade Level: 10-12
Semesters: 1
Prerequisite: Minimum grade of C in Introduction to Two-Dimensional Art
This course is an introduction to the basic concepts of painting. Students will be introduced to various methods of painting concentrating on watercolor, tempera and acrylic. Students will be working from life as well as working on individual creative projects. Emphasis on color, form and composition will assist students to explore various expressive possibilities of the medium. As part of the class experience famous artists and art movements will be related to students' works. Individual and group art criticism will also be a part of the class.

4064B Painting B
Grade Level: 10-12
Semesters: 1
Prerequisite: Minimum grade of C in Painting A
This course is a continuation of Painting A. Various mediums will be explored including oil, acrylic, tempera, and watercolor. Exploration with combining mediums will also be encouraged. Emphasis will be on developing skills in art expression through painting that can provide an enriched background for future accomplishments. Group and individual critiques will be included in this course.

4064C Painting C
Grade Level: 11-12
Semesters: 1
Prerequisite: Minimum grade of C in Painting B
This course is an advanced level of study in painting for students that have a high degree of interest in visual art. It will include experiences designed to develop in-depth skills in a variety of painting techniques. Portfolio development and a higher level of quality artwork are expected outcomes. The student will be encouraged to work on a more independent level with painting. A historical approach to expression through painting will also be stressed. The student's individual painting goals for the course will be determined by the student and teacher. Individual written critiques based on aesthetics and design will be required.

4040 Ceramics A
Grade Level: 9-12
Semesters: 1
Prerequisite: Minimum grade of C in Introduction to Three-Dimensional Art
Ceramics allows the exploration of design in the three-dimensional media of clay. Projects may be functional or sculptural in nature. The basic methods of pinch, coil and slab will be introduced, as well as some experience with the potter's wheel. Emphasis will be on hand-built pieces. Students will be introduced to clay decorating techniques and commercial glazes. Art history, art criticism and aesthetics will be emphasized in written critiques and discussions as related to student work.

4040B Ceramics B
Grade Level: 10-12
Semesters: 1
Prerequisite: Minimum grade of C in Ceramics A

This course is a continuation of Ceramics A. The students will experience a variety of clay building techniques, which will include a combination of hand built pottery, sculpture, and using the potter's wheel. Various decorating and glazing processes will be emphasized. The class should enable the student to achieve a more professionally designed ceramic project. Emphasis will be placed on the cultural and historical connections to the students' ceramic pieces.

4040C Ceramics C
Grade Level: 10-12
Semesters: 1
Prerequisite: Minimum grade of C in Ceramics B
This is an advanced level course for the student that has a high degree of interest in the production of ceramics. The student will be under the direction of the teacher, but must have the maturity and desire to work in a self-directed manner. Students will be required to write about their creative processes and relate it to cultural and historical connections.

4006 Advanced Three-Dimensional Art
Grade Level: 10-12
Semesters: 1 (This course may be taken for successive semesters)
Prerequisite: Minimum grade of C in Introduction to Three-Dimensional Art
Students in advanced three-dimensional art will continue to study design through a variety of three dimensional media. Students will be introduced to various cultures as they study the art history behind the projects they develop.

4048 AP Drawing
Grade Level: 11-12
Semesters: 2
Prerequisite: Minimum grade of C in Drawing A and Drawing B
AP Drawing is designed to address a very broad interpretation of drawing issues and media. Light and shade, line quality, rendering of form, composition, surface manipulation, and illusion of depth are drawing issues that can be addressed through a variety of means, which could include painting, printmaking, mixed media, etc. Abstract, observational, and inventive works may demonstrate drawing competence. Any work that makes use of (appropriate) other artists' works (including photographs) and/or published images must show substantial and significant development beyond duplication. This is demonstrated through manipulation of the formal qualities, design, and/or concept of the source.

4052 AP 3-D Art and Design
Grade Level: 11-12
Semesters: 2
Prerequisite: Minimum grade of C in Ceramics A and Ceramics B
AP 3-D Design is a course established and copyrighted by the College Board. Portfolios allow flexibility of coursework while guiding students to produce college-level quality, artistic investigation, and breadth of work. The 3-D Design portfolio involves decision making about how to use the elements and principles of art as they relate to the integration of depth, space, volume, and surface, either actual or virtual. Students' portfolios demonstrate skills and ideas developed, refined, and applied throughout the course to produce visual compositions. Students may choose to submit any or all of the portfolios. Portfolios are evaluated based on standardized scoring descriptors aligned with skills and understanding developed in college foundation courses. The portfolio will have two sections: Sustained Investigation and Selected Works.

Health and Physical Education

3506 Health and Wellness Education
Grade Level: 9-12
Semesters: 1
Prerequisite: None
Health and Wellness Education provides the basis for continued methods of developing knowledge, concepts, skills, behaviors, and attitudes related to student health and well-being. This course includes the major content areas in a planned, sequential, comprehensive health education curriculum. The ten areas of study include: (1) Growth and Development; (2) Mental and Emotional Health; (3) Community and Environmental Health; (4) Nutrition; (5) Family Life; (6) Consumer Health; (7) Personal Health; (8) Alcohol, Tobacco, and Other Drugs; (9) Intentional and Unintentional Injury; and (10) Health Promotion and Disease Prevention. Students are provided with opportunities to explore the effect of health behaviors on an individual's quality of life. This course assists students in understanding that health is a lifetime commitment of analyzing individual risk factors and health decisions that promote health and prevent disease. Students are also encouraged to assume individual responsibility for becoming competent health consumers.

3508 Current Health Issues: Alcohol and Other Drugs
Grade Level: 9-12
Semesters: 1
Prerequisite: Health and Wellness Education
Current Health Issues, an elective course that can be aligned to Indiana's Academic Standards for Health & Wellness, focuses on specific health issues and/or emerging trends in health and wellness, but not limited to: personal health and wellness; non-communicable and communicable diseases; nutrition; mental and emotional health; tobacco-prevention; alcohol and other drug-prevention; human development and family health; health care and/or medical treatments; and national and/or international health issues. This course provides students with the knowledge and skills of health and wellness core concepts, analyzing influences, accessing information, interpersonal communication, decision-making and goal-setting skills, health-enhancing behaviors, and health and wellness advocacy skills.

3542 Physical Education I
Grade Level: 9-12
Semesters: 1
Prerequisite: None
Physical Education I focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provides students with opportunities to actively participate in at least four of the following: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all of which are within the framework of the skills, knowledge and confidence needed by the student for a lifetime of healthful physical activity and fitness. Ongoing assessment includes both written and performance-based skill evaluation.

3544 Physical Education II
Grade Level: 9-12
Semesters: 1
Prerequisite: None

Physical Education II focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provides students with opportunities to actively participate in four of the following areas that were not included in Physical Education I: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all of which are within the framework of the skills, knowledge and confidence needed by the student for a lifetime of healthful physical activity and fitness. Ongoing assessment includes both written and performance-based skill evaluation.

3560 Elective Physical Education: Athletic Weights (formerly Advanced Physical Conditioning)
Grade Level: 9-12
Semesters: 1
Prerequisite: Participation in a high school sport, or teacher permission
In this course students learn proper form and technique of weight lifting. Individual and circuit training programs are discussed and implemented into various specific workouts. Students will create individualized training programs designed to help them achieve their fitness goals. Plyometrics, the development of power and strength through drills without weights or machines, are also included in the workouts. This course is designed for athletes to systematically train during the school year. The objective is to enhance the various components necessary for improved athletic performance. Students will engage in a program that enhances power, speed, and reduces the risk of athletic injury. The students will be expected to possess a level of conditioning which allows them to actively participate in the class with a high degree of intensity and motivation. We also offer **Athletic Weights Female**, which is for girls only.

3560 Elective Physical Education: Total Body and Strength (formerly Lifetime Fitness)
Grade Level: 10-12
Semesters: 1
Prerequisite: Participation in a high school sport, or teacher permission
This class is designed to promote all health related components concentrating on personal weight and fitness workouts that include weight training, circuit training, cardiovascular fitness, muscle strength and endurance, and body composition. Activities will include aerobics both on land and in the pool, aerobic tape workouts and lifetime sports.

3560 Elective Physical Education: Co-Ed Recreational Games (formerly Advanced PE)
Grade Level: 10-12
Semesters: 1
Prerequisite: PE I and PE II
This course is designed for students who have met their required PE credits and want to participate in tournaments of all varieties of sport. The course will build on the intermediate curriculum including such activities as volleyball, basketball, badminton, flag football, softball, and soccer as well as other activities both team and individual. This course will push students to the next level of competition and will demand a high level of participation and effort.

3560 Elective Physical Education: Lifeguarding
Grade Level: 10-12
Semesters: 1
Prerequisite: PE I and PE II; must be 15 years old by the completion of the course
The goals of this course are to provide the opportunity for each student to acquire a Red Cross Lifeguarding Certificate, become familiar with the techniques of teaching basic level swimming skills, and improve their recreational and competitive swimming skills.

Swimming prerequisites:

- Swim 500 yards continuously, using each of these strokes in the following order: 200 yards front crawl/freestyle, 100 yards breaststroke, 200 yards of either front crawl or breaststroke or a mixture of both. Note: There is no time limit for this skill, but the 500 yards must be continuous.
- Swim 20 yards using the front crawl or breaststroke, surface dive to a depth of 7-10 feet, retrieve a 10 pound object, return to the surface, and swim 20 yards back to the starting point with the object. Note: When returning to the starting point the candidate must hold the object with both hands and must keep their face out of the water.

Upon completion of this course with a passing grade of 80% or better on the American Red Cross written tests, as well as practical tests in CPR, AED, First Aid and Lifeguarding, the student will hold American Red Cross certifications in all of the above. Holding these certifications will allow the student job opportunities as a lifeguard at a public or private pool.

PE Sport Credit

Students participating in Marching Band or a school sport during their 9th or 10th grade year may use the activity to earn a PE Sport Credit to cover one of the required PE courses. The student must have signatures from the coach and must be in contact with the PE department chair. Students will be given material to study and are required to take and pass two quizzes in order to determine course completion and grade. PLEASE NOTE: Students are required to earn two credits in PE for graduation and one of those PE credits must be from: PE I, PE II, or PE SPORT CREDIT.

Which PE Class is Right for Me?

PE I and PE II: for students who want to get their two required PE credits done.

PE Sport Credit: for athletes and marching band students who want to take one PE class and use their sport season or marching band participation as their other PE credit.

Athletic Weights: ideal for athletes in football, boys basketball, baseball, and wrestling. *This can be used as one of the two required PE credits.*

Athletic Weights Female: ideal for female athletes in volleyball, girls basketball, softball, and soccer. *This can be used as one of the two required PE credits.*

Total Body and Strength: ideal for athletes in cross country, tennis, golf, swimming, and track. This class also suits students who are interested in fitness and nutrition. *This can be used as one of the two required PE credits.*

Co-Ed Recreational Games: for competitive students who want to play in tournaments of all varieties of sport.

Lifeguarding: for students who want to become certified in Lifeguarding, First Aid, CPR, and AED.

Industrial Technology and Engineering

Manufacturing Pathway

4784 Introduction to Manufacturing
Grade Level: 9-12
Semesters: 2
Prerequisite: None
This course specializes in how people use modern manufacturing systems with an introduction to manufacturing technology and its relationship to society, individuals, and the environment. An understanding of manufacturing provides a background toward developing engineering & technological literacy. 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: metallics; polymers; ceramics; and composites. After gaining a working knowledge of these materials, students will study six major types of material processes: casting and molding; forming; separating; conditioning; finishing; and assembling.

5608 Advanced Manufacturing I (3 Ivy Tech Dual Credits)
Grade Level: 10-12
Semesters: 2
Prerequisite: Recommended - Introduction to Manufacturing
Advanced Manufacturing I introduces students to the technology, skills, and knowledge needed in today's modern, high-tech, advanced manufacturing and logistics environments. Using the Manufacturing Skills Standards Council (MSSC) curriculum, students will gain a working knowledge of safety and quality in the manufacturing field. Safety instruction covers topics including; Safety Data Sheets (SDS), confined space, lock out/tag out, zero energy state, hazardous materials, storage of flammable materials, storage of fuel gas and high-pressure gas cylinders, portable powered tool safety, hand tool safety, record keeping, training, employer enforcement of safety regulations and right to know. This course also covers current quality control concepts and techniques in industry with emphasis on modern manufacturing requirements. Topics of instruction include basic statistical and probability theory, sampling techniques, process control charts, nature of variation, histograms, attributes and variable charts. Students have the opportunity to develop the characteristics employers seek, earn nationally-recognized industry certificates, and get college credit.

5606 Advanced Manufacturing II (3 Ivy Tech Dual Credits)
Grade Level: 11-12
Semesters: 2
Prerequisite: Advanced Manufacturing I
Advanced Manufacturing II prepares students for careers in Indiana's largest industry: Advanced Manufacturing. Advanced Manufacturing II continues to use MSSC curriculum, which features online instruction, virtual simulators, and classroom projects. Students will continue their route to certification and learn about manufacturing processes and basic mechanical, electrical, and fluid power principles and practices used in manufacturing environments. Topics include; types of production, production materials, machining and tooling, manufacturing planning, production control, and product distribution will be covered. Students will be expected to understand the product life cycle from conception through distribution. This course also focuses on technologies used in production processes. Basic power systems, energy transfer systems, machine operation and control will be explored. Students will have the opportunity to earn college credit and complete their industry certificate.

Engineering Pathway

4802 Introduction to Engineering Design (Project Lead The Way)
Grade Level: 9-12
Semesters: 2
Prerequisite: Recommended - Algebra I (or must be currently enrolled in Algebra I)
Introduction to Engineering Design is a fundamental pre-engineering course where students become familiar with the engineering design process. Students work both individually and in teams to design solutions to a variety of problems using industry standard sketches and current 3D design and modeling software to represent and communicate solutions. Students apply their knowledge through hands-on projects and document their work with the use of an engineering notebook. Students begin with completing structured activities and move to solving open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. Ethical issues related to professional practice and product development are also presented.

5644 Principles of Engineering (Project Lead The Way)
Grade Level: 10-12
Semesters: 2
Prerequisite: Introduction to Engineering Design
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.

5538 Digital Electronics (Project Lead The Way) **Available in 2021-2022 pending approval*
Grade Level: 11-12
Semesters: 2
Prerequisite: Introduction to Engineering Design and Principles of Engineering
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.

Semester Courses

4782 Construction Systems
Grade Level: 9-12
Semesters: 1
Prerequisite: None
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 buildings 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.

4786 Transportation Systems
Grade Level: 9-12
Semesters: 1
Prerequisite: None
Transportation Systems is a course that specializes in the study of the transportation systems used to support commerce and the logistics for the efficient movement of goods and people. In this course, students will explore the systems, techniques and vehicles used to move people and cargo on land, water, air, and space. Activities allow students to understand a variety of transportation systems and investigate the energy, power and mechanical systems used to move people and products from one location to another.

4806 Technology Enterprises
Grade Level: 11-12
Semesters: 1
Prerequisite: Two courses from the Manufacturing Pathway or two courses from the Engineering Pathway
Technology Enterprises is an application course that allows students to apply technological, engineering, and managerial principles in organizing, financing, and operating a company to produce a product, structure, or service. Students learn how enterprises are developed and operated in an efficient manner. The key focus of this course is to allow students to structure and operate a real-life enterprise within the classroom environment. Students learn about the kinds of productive enterprises; principles of management; how to develop products and services; how to organize an enterprise; how to operate an enterprise; the delivery of products or services; the marketing of products or services and the closing of an enterprise.

Mathematics

2516 Algebra I Lab
Grade Level: 9-12
Semesters: 2
Prerequisite: Recommendation of 8th grade math teacher
Algebra I Lab is a mathematics support course for Algebra I. Algebra I Lab is taken while students are concurrently enrolled in Algebra I. This course provides students with additional time to build the foundations necessary for high school math courses, while concurrently having access to rigorous, grade-level appropriate courses. The five critical areas of Algebra I Lab align with the critical areas of Algebra I: Relationships between Quantities and Reasoning with Equations; Linear and Exponential Relationships; Descriptive Statistics; Expressions and Equations; and Quadratic Functions and Modeling. However, whereas Algebra I contains exclusively grade-level content, Algebra I Lab combines standards from high school courses with foundational standards from the middle grades.

2560 Mathematics Lab
Grade Level: 10-12
Semesters: 2
Prerequisite: Concurrent enrollment in either Geometry or Algebra II preferred
Mathematics Lab provides students with individualized instruction designed to support success in completing mathematics coursework aligned with Indiana's Academic Standards for Mathematics. Mathematics Lab is to be taken in conjunction with a Core 40 mathematics course, and the content of Mathematics Lab should be tightly aligned to the content of its corresponding course. Mathematics Lab should not be offered in conjunction with Algebra I or Integrated Mathematics I; instead, schools should offer Algebra I Lab or Integrated Mathematics I Lab to provide students with rigorous support for these courses.

2520 Algebra I
Grade Level: 9-12
Semesters: 2
Prerequisite: 8th grade mathematics
Algebra I formalizes and extends the mathematics students learned in the middle grades. Algebra I is made up of six 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. These 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. Students will also engage in methods for analyzing, solving, and using quadratic functions. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

2531 Math 10
Grade Level: 10-11
Semesters: 2
Prerequisite: Students who have attempted a complete year of Algebra I
Math 10 is a two-semester course designed to reinforce and elevate the Algebra I and 8th grade geometry knowledge and skills necessary for students to successfully complete high school mathematics courses

beyond Algebra I. This course also emphasizes essentials needed for passing the state's graduation qualifying exam in mathematics. Enrollment should be contingent upon the recommendation of the Algebra I or Integrated Math I teacher based on diagnostic results of performance in Algebra I and/or mathematics competency assessments. The standards for this course are aligned to the state standards that students need to master the state's graduation qualifying exam in mathematics and the next level math courses. Emphasis is on a variety of instructional methods designed to meet each student's needs and content is delivered through competency-based units. Pre- and post-assessment data should be analyzed on a continuous basis to drive instructional design and delivery.

2532 Geometry
Grade Level: 9-12
Semesters: 2
Prerequisite: Algebra I
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. Seven 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. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

2532 Honors Geometry
Grade Level: 9-10
Semesters: 2
Prerequisite: Minimum grade of B- in Algebra I, teacher recommendation
This course covers the same topics as regular Geometry but in more detail. 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. Seven 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. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. *Students who do not maintain a grade average of B- in Honors Geometry may be moved to regular.*

2522 Algebra II
Grade Level: 10-12
Semesters: 2
Prerequisite: Algebra I and Geometry *(Algebra II can be taken concurrently with Geometry with teacher recommendation)*
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 the properties of logarithms. Algebra II is made up of seven strands: Complex Numbers and Expressions; Functions; Systems of Equations; Quadratic Equations and Functions; Exponential and Logarithmic Equations and Functions; Polynomial, Rational and Other Equations and Functions; and Data Analysis, Statistics and Probability. The eight Process Standards for Mathematics apply throughout the course.

Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

2522 Honors Algebra II
Grade Level: 10-12
Semesters: 2
Prerequisite: Average grade of A- or higher in Algebra I and Geometry *or* average grade of B- or higher in Honors Geometry; teacher recommendation *(Honors Algebra II can be taken concurrently with Honors Geometry with teacher recommendation)*
This course covers the same topics as regular Algebra II but in more detail. 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 the properties of logarithms. Algebra II is made up of seven strands: Complex Numbers and Expressions; Functions; Systems of Equations; Quadratic Equations and Functions; Exponential and Logarithmic Equations and Functions; Polynomial, Rational and Other Equations and Functions; and Data Analysis, Statistics and Probability. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. *Students who do not maintain a grade average of B- in Honors Algebra II may be moved to regular.*

2564 Pre-Calculus
Grade Level: 11-12
Semesters: 1
Prerequisite: Geometry and Algebra II
Pre-Calculus extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to sequences and series. The course provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Pre-Calculus: Algebra is made up of five strands: Functions; Quadratic, Polynomial, and Rational Equations and Functions; Exponential and Logarithmic Functions and Equations; Sequences and Series; and Conics. The 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 strong foundations for calculus and other higher-level math courses. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

2564 Honors Pre-Calculus (3 Ivy Tech Dual Credits)
Grade Level: 11-12
Semesters: 1
Prerequisite: Average grade of A- or higher in regular Geometry and Algebra II *or* average grade of B- or higher in Honors Geometry and Honors Algebra II; teacher recommendation
This course covers the same topics as regular Pre-Calculus but in more detail. Pre-Calculus extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to sequences and series. The course provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Pre-Calculus: Algebra is made up of five strands: Functions; Quadratic, Polynomial, and Rational Equations and Functions;

Exponential and Logarithmic Functions and Equations; Sequences and Series; and Conics. The 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 strong foundations for calculus and other higher-level math courses. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

2566 Trigonometry
Grade Level: 11-12
Semesters: 1
Prerequisite: Pre-Calculus
Trigonometry provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Trigonometry provides the foundation for common periodic functions that are encountered in many disciplines, including music, engineering, medicine, finance, and nearly all other STEM disciplines. Trigonometry consists of six strands: Unit Circle; Triangles; Periodic Functions; Identities; Polar Coordinates and Complex Numbers; and Vectors. Students will also advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer programming. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

2566 Honors Trigonometry (3 Ivy Tech Dual Credits)
Grade Level: 11-12
Semesters: 1
Prerequisite: Honors Pre-Calculus
This course covers the same topics as regular Trigonometry but in more detail. Trigonometry provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Trigonometry provides the foundation for common periodic functions that are encountered in many disciplines, including music, engineering, medicine, finance, and nearly all other STEM disciplines. Trigonometry consists of six strands: Unit Circle; Triangles; Periodic Functions; Identities; Polar Coordinates and Complex Numbers; and Vectors. Students will also advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer programming. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

2530 Finite Mathematics
Grade Level: 12
Semesters: 2
Prerequisite: Algebra II
Finite Mathematics is a collection of mathematical topics, frequently used in business or public policy contexts. It is a course designed for students who will undertake higher-level mathematics in college that may not include calculus. Finite Math is made up of five strands: Sets; Matrices; Networks; Optimization; and Probability. The skills listed in these strands indicate what students should know and be able to do in Finite Math. The eight Process Standards for Mathematics apply throughout the course. Together with the content

standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

2570 AP Statistics
Grade Level: 11-12
Semesters: 2
Prerequisite: Algebra II (preferably Honors Algebra II)
AP Statistics is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The AP Statistics course is equivalent to a one semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding.

2562 AP Calculus AB
Grade Level: 12
Semesters: 2
Prerequisite: Minimum grade of B- in Algebra I, Honors Geometry, Honors Algebra II, Honors Pre-Calculus, and Honors Trigonometry *or* minimum grade of A- in regular Algebra I, Geometry, Algebra II, Pre-Calculus, and Trigonometry; teacher recommendation
AP Calculus AB is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. AP Calculus AB is equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. This course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

4512 Business Math
Grade Level: 10-12
Semesters: 2
Prerequisite: Algebra I
Business Math is a course designed to prepare students for roles as entrepreneurs, producers, and business leaders by developing abilities and skills that are part of any business environment. A solid understanding of math including algebra, basic geometry, statistics, and probability provides the necessary foundation for students interested in careers in business and skilled trade areas. The content includes mathematical operations related to accounting, banking and finance, marketing, and management. Instructional strategies should include simulations, guest speakers, tours, Internet research, and business experiences. *Fulfills a Mathematics requirement for the General Diploma or Certificate of Completion only.*

Science

3024 Biology
Grade Level: 9-12
Semesters: 2
Prerequisite: None
Biology is a full-year course that deals with basic principles governing all living things and methods used by biologists to examine life. Areas of study include structure and composition of cells, tissues and related processes, cell growth and development, basic ecology and conservation, plant development, evolution, and the science of classification. The principles of genetic materials are studied including the role of DNA, gene action and population genetics. Lab investigations are correlated with units of study.

3024 Honors Biology
Grade Level: 9
Semesters: 2
Prerequisite: Minimum grade of B in 8th grade Science and/or recommended for Honors Biology by 8th grade Science teacher. Students must maintain an Honors Biology grade of C- or higher in the first semester to remain in Honors Biology for the second semester.
Honors Biology is a full-year course that deals with basic principles governing all living things and methods used by biologists to examine life. Areas of study include structure and composition of cells, tissues and related processes, cell growth and development, basic ecology and conservation, plant development, evolution, and the science of classification. The principles of genetic materials are studied including the role of DNA, gene action and population genetics. Lab investigations are correlated with units of study. Students will be engaged in a more in-depth study of the topics presented in Biology, and will also have a stronger lab component included in the course.

3108 Integrated Chemistry-Physics
Grade Level: 10-12
Semesters: 2
Prerequisite: Algebra I or current enrollment in Algebra I. Students who have passed Chemistry may not take the chemistry semester of this course.
Integrated Chemistry and Physics is a full-year course that surveys topics of chemistry and physics while ensuring mastery of the basics in each discipline. Students cultivate their understanding of chemistry and physics through inquiry-based investigations as they explore these topics: motion, forces, energy, waves, electricity, magnetism, particle behavior, chemical changes and reactions, and nuclear energy. Students will become scientifically literate citizens who are capable of using their understanding of physical science to analyze and solve real-world problems.

3064 Chemistry
Grade Level: 10-12
Semesters: 2
Prerequisite: Biology; minimum grade of C- in Algebra I
Chemistry is a full-year course that addresses chemical-related technological issues currently confronting our society and the world. Each issue serves as a basis for introducing the chemistry needed to understand and analyze it, through a variety of laboratory experiences and student-oriented activities. The course is designed to help students: realize the important roles that chemistry will play in their personal and professional lives, use

chemistry knowledge to think through and make informed decisions about issues involving science and technology, develop a lifelong awareness of the potential and limitations of science and technology. Students must pass the first semester of Chemistry to continue to the second semester.

3064 Honors Chemistry
Grade Level: 10-12
Semesters: 2
Prerequisite: Recommended that student maintains an Honors Chemistry grade of C- or higher in the first semester to remain in Honors Chemistry for the second semester; student can petition to remain.
Honors Chemistry is a full-year course that follows a traditional approach to chemistry in which students will study the basic theories and concepts of atoms and chemical interactions. Reinforcement of these theories and concepts requires participation in classroom discussions, laboratory work, and nightly coursework. Students will gain an insight into the chemical nature of the world around them. This course covers the major topics of chemistry at a rapid pace and is intended to prepare students to pursue chemistry on a more advanced level. The course requires strong algebra skills, good work ethics, and development of acceptable laboratory techniques. All Indiana Academic Core Standards for Chemistry I are taught and fulfill the Indiana Core 40 and Academic Honors graduation requirements. The goal of this course is to provide exploratory experiences, laboratory and real-life applications in the chemical sciences for the student with a strong interest and background in science that, perhaps, will be pursuing further study in some area of science in the future. Laboratory investigations are an integral part of this course and include the use of scientific research, measurement, laboratory technologies, and advanced process skills through inquiry experiences and independent work.

5276 Anatomy and Physiology (6 Ivy Tech Dual Credits)
Grade Level: 11-12
Semesters: 2
Prerequisite: Biology, Algebra I, Integrated Chemistry-Physics OR Chemistry (must have a C- or higher in Biology and Chemistry)
Anatomy and Physiology is a full-year course that covers the structure and function of organs and organ systems. Student must be willing to do the dissection of a pig, rat and various other structures from sheep and cows. A background in Biology and Chemistry is needed and topics from these courses will be reviewed quickly during the first semester. The systems studied will include the integumentary, skeletal, muscle, and endocrine systems during semester one. Digestive, respiratory, circulatory, reproductive, excretory, immune, and nervous systems will be studied during semester two.

3044 Earth and Space Science
Grade Level: 9-12
Semesters: 2
Prerequisite: This course is intended for students that need a third year of science and struggle with other science courses; it is not intended for students that generally take advanced level courses.
Earth and Space Science is a full-year course focused on the following core topics: study of the earth's layers; atmosphere and hydrosphere; structure and scale of the universe; the solar system and earth processes. Students analyze and describe earth's interconnected systems and examine how earth's materials, landforms, and continents are modified across geological time. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures.

3012 AP Environmental Science
Grade Level: 11-12
Semesters: 2
Prerequisite: Biology and Chemistry
AP Environmental Science is a full-year course based on content established and copyrighted by the College Board. Students enrolled in AP Environmental Science investigate the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. At the conclusion of this course, students take the AP Environmental Science Exam. Students who earn qualifying scores on this exam may earn college credit.

3090 Advanced Science, College Credit *(IU ACP Chemistry)*
Grade Level: 11-12
Semesters: 2
Prerequisites: Algebra I and II, Biology, and Chemistry (Must have a B or higher in Chemistry)
To earn credit from Indiana University, the student must pay the required fees and pass the course. This course may be taken for high school credit only if the student does not wish to pay the college credit fees. ACP Chemistry deals with all of the topics covered in Chemistry and Honors Chemistry, but at a faster pace and much more in-depth. It focuses on college-preparedness, so that when the student receives credit and/or steps on campus, they are ready to succeed in college chemistry. There is a major focus on lab techniques/work. Topics of study include, but are not limited to, components of matter, measurement, chemical reactions, gases, thermochemistry, atomic structure, electron configurations, bonding, molecular geometry, and intermolecular forces. This class will mirror a college chemistry course to the fullest extent possible.

3020 AP Biology
Grade Level: 11-12
Semesters: 2
Prerequisite: Minimum grade of B in Biology; Algebra II or currently enrolled in Algebra II
AP Biology is a full-year course designed for the student who is interested in the possibility of earning college credit for Biology. Areas of study include: scientific reasoning and thinking, biochemistry, cell structure and function, cell communication and division, genetics, evolution, and ecology. This course includes labs and out-of-class research to supplement classroom work. At the conclusion of this course, students take the AP Biology Exam. Students who earn qualifying scores on this exam may earn college credit.

3080 AP Physics 1: Algebra-Based
Grade Level: 11-12
Semesters: 2
Prerequisite: Algebra I
AP Physics 1 is a full-year course that is the equivalent of a first-semester introductory college course in algebra-based physics. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion, electric charge and electric force, DC circuits, and mechanical waves and sound. At the conclusion of this course, students take the AP Physics 1 Exam. Students who earn qualifying scores on this exam may earn college credit.

3081 AP Physics 2: Algebra Based
Grade Level: 11-12
Semesters: 2
Prerequisite: AP Physics 1: Algebra-Based
AP Physics 2 is a full-year course that is the equivalent of a second-semester introductory college course in algebra-based physics. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: fluids, thermodynamics, electrical force, field, and potential, electric circuits, magnetism and electromagnetic induction, geometric and physical optics, and quantum, atomic, and nuclear physics. At the conclusion of this course, students take the AP Physics 2 Exam. Students who earn qualifying scores on this exam may earn college credit.

3084 Physics
Grade Level: 10-12
Semesters: 2
Prerequisite: Algebra II or currently enrolled in Algebra II
Physics is a full-year algebra-based introductory high school level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: motion, forces, energy, momentum, waves, and circuits. Students will develop skills to analyze and solve problems by designing and conducting experiments.

Social Studies

1516 Ethnic Studies
Grade Level: 9-12
Semesters: 1
Prerequisite: None
Ethnic Studies provides opportunities to broaden students' perspectives concerning lifestyles and cultural patterns of ethnic groups in the United States. This course will either focus on a particular ethnic group or groups, or use a comparative approach to the study of patterns of cultural development, immigration, and assimilation, as well as the contributions of specific ethnic or cultural groups. The course may also include analysis of the political impact of ethnic diversity in the United States.

1518 Indiana Studies
Grade Level: 9-12
Semesters: 1
Prerequisite: None
Indiana Studies is an integrated course that compares and contrasts state and national developments in the areas of politics, economics, history, and culture. The course uses Indiana history as a basis for understanding current policies, practices, and state legislative procedures. It also includes the study of state and national constitutions from a historical perspective and as a current foundation of government. Examination of individual leaders and their roles in a democratic society will be included and students will examine the participation of citizens in the political process. Selections from Indiana arts and literature may also be analyzed for insights into historical events and cultural expressions.

1512 Current Problems, Issues and Events
Grade Level: 9-12
Semesters: 1
Prerequisite: None
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 or issues selected will have contemporary historical significance and will be studies from the viewpoint of the social science disciplines. Community service programs and internships within the community may be included.

1514 Economics
Grade Level: 12
Semesters: 1
Prerequisite: None
Economics examines the allocation of resources and their uses for satisfying human needs and wants. The course analyzes economic reasoning and behaviors of consumers, producers, savers, investors, workers, voters, institutions, governments, and societies in making decisions. Students 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. Key elements of the course include the study of scarcity and economic reasoning; supply

and demand; market structures; the role of government; national economic performance; the role of financial institutions; economic stabilization; and trade.

1540 United States Government
Grade Level: 12
Semesters: 1
Prerequisite: None
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 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 examine how the United States Constitution protects the rights and provides the structure and functions of various levels of government. Analysis of how the United States interacts with other nations and the government's role in world affairs is included in this course. 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.

1532 Psychology
Grade Level: 11-12
Semesters: 1
Prerequisite: None
Psychology is the scientific study of human and animal behavior. Topics studied include biology and behavior, sensation, and perception. The study of consciousness including sleep, dreams, hypnosis, and meditation will be explored. Different theories of learning, intelligence, and personality will be studied along with child, adolescent, and adult development. The course is concluded with the study of motivation and emotion, stress, frustration, conflict, psychological disorders, and methods of therapy.

1534 Sociology
Grade Level: 11-12
Semesters: 1
Prerequisite: None
Sociology studies human society and social behavior; social interaction and how people relate to and influence others' behavior. Sociology examines social facts or events which help a person gain new perspective concerning one's self and the world, and do so more objectively. Studying sociology increases our sense of what is possible; to see beyond our doorstep; to think and act in new and different ways, to help us find acceptable balance between personal desires and demands of the environment; to help us view our lives in a larger social and historical context; and to see connections between the larger world and our personal lives.

1562 AP United States History
Grade Level: 11
Semesters: 2
Prerequisite: Students should be able to read a college level textbook and write grammatically correct, complete sentences.
The AP program in United States History is designed to give students skills and factual knowledge necessary to critically address the problems and materials in United States history. This program prepares students for college courses by making demands upon them equivalent to those of full-year introductory college courses. Upon finishing the course the students will be able to evaluate historical materials and determine their

relevance to a given problem and their importance in the bigger scope of US History. The first semester will begin with the Age of Discovery and end with the Civil War/Reconstruction. The second semester will cover the period from the Civil War to the 2000s. At the beginning of May, students will take the Advanced Placement exam in United States History.

1542 United States History
Grade Level: 10-12
Semesters: 2
Prerequisite: None
This course is a review of the exploration and colonization of North America, the struggle to gain our independence, the establishment and launching of our government under the constitution, and the expansion of the United States to the Pacific Ocean. There will be in-depth study of immigration and the contributions of the immigrants, the rise of the United States to a world power, World War I and the Great Depression, World War II and the Cold War, the Civil Rights struggle, modern Presidents, the Gulf War, and all events and people that lead up to the present time.

1570 Geography and History of the World
Grade Level: 9-10
Semesters: 2
Prerequisite: None
This course is designed to increase your political, cultural, historical, and physical understanding of the world in which you live. As residents of the United States, we live in a global environment and it is very important for us as citizens to be informed and knowledgeable about our place and role as a world power. The first semester of this course covers Western Europe, Eastern Europe, the Middle East, North Africa, East and South Africa, and West and Central Africa. The second semester of this course covers North America, Central and South America, Central Asia, South Asia, and East Asia.

1612 AP World History Modern
Grade Level: 9-10
Semesters: 2
Prerequisite: Students should be able to read a college level textbook and write grammatically correct, complete sentences.
AP World History Modern is designed to be the equivalent of a two-semester introductory college or university world history course. According to the College Board, AP World History Modern students “investigate significant events, individuals, developments, and processes in historical periods from approximately 1200 CE to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; making historical comparisons; utilizing reasoning about contextualization, causation, and continuity and change over time; and developing historical arguments. The course provides five themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures.

World Languages

2020 French I
Grade Level: 8-12
Semesters: 2
Prerequisite: It is recommended that students have at least a C- in English courses, as well as maintain a C- to continue to the second semester of the course.
French I students learn to communicate about things like animals, numbers, our families, school, what we like or dislike, food, and clothes. Additionally, we learn about six Parisian monuments, Famous French people and different types of French food. We memorize and recite a poem, read a chapter book about a student who studies overseas and act out fun stories that we study along the way. Finally, we learn how to deal with verbs in French, making them make sense when used in a sentence.

2022 French II
Grade Level: 9-12
Semesters: 2
Prerequisite: Students must complete French I with a C- or higher before taking this course, as well as maintain a C- to continue to the second semester of the course.
French II picks up where French I leaves off. Students learn to communicate about their homes and yards, farms, countryside, beach and park. They also learn how to tell time. Students continue their study of monuments and Famous French people, while also doing an in depth study of photographer Robert Doisneau and poet Jacques Prevert. They go further into grammar learning how to communicate about the past, as well as how to use different types of pronouns and make comparisons.

2024 French III
Grade Level: 10-12
Semesters: 2
Prerequisite: Students must complete French II with a C- or higher before taking this course, as well as maintain a C- to continue to the second semester of the course.
French III shifts focus where French is the primary classroom language in learning about topics such as fashion, fairy tales, Impressionism and World War 2. Students watch *La Belle et la Bête*, *Au Revoir Les Enfants* and *Sarah's Key*. They also continue to study vocabulary (both from texts and from lists), as well as grammar, nailing down how to talk about the future, hypotheticals and the subjunctive tense.

2026 Honors French IV
Grade Level: 11-12
Semesters: 2
Prerequisite: Students must complete French III with a C- or higher before taking this course, as well as maintain a B- or higher to continue to the second semester of the course.
Honors French IV students study a number of topics ranging from Medieval History to the role of humor in various genres of literature. We read *The Count of Monte Cristo* and *The Little Prince* as well as a number of shorter works, including *le Petit Nicolas*. Our grammar study goes more in depth with figuring out how to use several other past and future tenses. Students will complete additional readings and projects furthering their knowledge and understanding of Francophone culture.

2032 AP French Language and Culture
Grade Level: 12
Semesters: 2
Prerequisite: Students must complete Honors French IV with a B- or higher before taking this course, as well as maintain a B- or higher to continue to the second semester of the course.
AP French Language and Culture is a continuation of Honors French IV. Students study a number of topics that enrich their literary, technical, and personal vocabulary for use that would support them when living or studying abroad. The grammar study goes more in depth with different verbal tenses and moods. Students will complete additional readings and projects furthering their knowledge and understanding of Francophone culture. The College Placement Exam, AP Exam, and SAT French Exam materials are available for preparation for those tests.

2060 Japanese I
Grade Level: 8-12
Semesters: 2
Prerequisite: It is recommended that students have at least a C- in English courses, as well as maintain a C- to continue to the second semester of the course.
Japanese I is designed to introduce the student to the basics of the Japanese language and culture. Students will participate in speaking and listening activities, learn the first two alphabets (Hiragana and Katakana) for basic reading and writing. The course begins with all speaking done in informal speech, as one would speak his/her first language when first learning; then the student begins to speak more formally, and recognize the situations in which to use more formal styles. By the end of the course, students should be at a Novice Low proficiency level.

2062 Japanese II
Grade Level: 9-12
Semesters: 2
Prerequisite: Students must complete Japanese I with a C- or higher before taking this course, as well as maintain a C- to continue to the second semester of the course.
Japanese II is designed to continue teaching the student the basics of the Japanese language and culture, but with a more formal style. Students will participate in speaking and listening activities, as well as learning 80 kanji characters for reading and writing. The course begins with a review of Japanese I material, but in formal style. Students learn more about family life, special celebrations, and daily life in Japan. By the end of the course, students should be at a Novice Mid proficiency level.

2064 Japanese III
Grade Level: 10-12
Semesters: 2
Prerequisite: Students must complete Japanese II with a C- or higher before taking this course, as well as maintain a C- to continue to the second semester of the course.
Japanese III is designed to expand the students' Japanese language abilities into more detailed uses. Students will participate in speaking and listening activities, as well as learn 80 new kanji characters for reading and writing. Students learn more about Japan as a nation with history and culture, as well as learning some essential phrases and material for traveling long-term or living in Japan. By the end of the course, students should be at a Novice High proficiency level.

2066 Honors Japanese IV
Grade Level: 11-12
Semesters: 2
Prerequisite: Students must complete Japanese III with a C- or higher before taking this course, as well as maintain a B- to continue to the second semester of the course.
Honors Japanese IV is designed to provide the students with abilities that would allow them to attend school or live in Japan. Students will participate in speaking and listening activities, as well as learn 80 new kanji characters for reading and writing. Students learn to conduct themselves respectfully in situations they may find themselves in when visiting, traveling, or living in Japan. By the end of the course, students should be at an Intermediate Low proficiency level.

2074 AP Japanese Language and Culture
Grade Level: 12
Semesters: 2
Prerequisite: Students must complete Honors Japanese IV with a B- or higher before taking this course, as well as maintain a B- to continue to the second semester of the course. *Students who have completed Japanese III with an A- or higher and wish to take AP Japanese must have teacher permission and complete/test over a supplementary information packet done over the summer.*
AP Japanese Language and Culture is designed to provide the students with abilities that would allow them to attend school or live in Japan. Students will participate in speaking and listening activities, as well as learn 80 new kanji characters for reading and writing. Students learn to conduct themselves respectfully using *keigo* (honorific) and humble forms, expressing their opinions, and discussing topics abstractly. Students will also practice their Japanese abilities frequently in practice exercises designed to prepare them for the AP exam in the spring semester. All AP students are expected to take the AP exam. By the end of the course, students should be at an Intermediate Mid proficiency level.

2120 Spanish I
Grade Level: 8-12
Semesters: 2
Prerequisite: It is recommended that students have at least a C- in English courses, as well as maintain a C- to continue to the second semester of the course.
Students will:

- Study Spanish using activities of Speaking, Listening, Reading, and Writing
- Communicate orally in Spanish, using questions and statements on a variety of subjects such as, student life, daily family life including home, family members and meals, and social situations
- Identify and locate on a map the 21 Spanish-speaking countries and their capitals.
- Discuss and explore Hispanic holidays and traditions
- Begin to develop an understanding of Hispanic culture through music, literature, art, and history
- Enrich learning through singing, games, acting in skits, and cooking
- Develop study skills appropriate to learning styles
- Learn basic pronunciation rules
- Learn basic grammatical structures such as, present tense, subject-verb agreement, noun-adjective agreement, gender and number of nouns/adjectives, the alphabet, and numbers 0-100

2122 Spanish II
Grade Level: 9-12
Semesters: 2
Prerequisite: Students must complete Spanish I with a C- or higher before taking this course, as well as maintain a C- to continue to the second semester of the course.
Students will:

- Study Spanish using activities of Speaking, Listening, Reading, and Writing
- Communicate in written and spoken Spanish using vocabulary on daily life, school, sports, and travel
- Explore Hispanic Culture through music, art, history, cooking, dance, videos, games, and drama with an emphasis on Central and South America
- Continue to improve pronunciation by presentations and reading aloud in class
- Enrich student learning through research of Hispanic countries and through the use of video and other media resources
- Demonstrate proficiency in present and past tenses and advanced sentence structure

2124 Spanish III
Grade Level: 10-12
Semesters: 2
Prerequisite: Students must complete Spanish II with a C- or higher before taking this course, as well as maintain a C- to continue to the second semester of the course.

- Students study Spanish using activities of Speaking, Listening, Reading, and Writing
- Storytelling techniques increase vocabulary and fluency
- Hispanic Culture is explored through music, art, history, cooking, dance, videos, games, and drama with an emphasis on Mexico and Spain
- Grammar structures presented include preterite, imperfect, future, conditional and perfect tenses, commands, object pronouns, and adjective – noun agreement
- Language proficiency is strengthened using media resources
- Story and vocabulary themes include cooking and restaurants, costume parties, bank robberies, travel, world of work, doctors and hospitals, hiking, firefighting, adventures with animals, competitions, and various sports

2126 Honors Spanish IV
Grade Level: 11-12
Semesters: 2
Prerequisite: Students must complete Spanish I with a C- or higher before taking this course, as well as maintain a B- to continue to the second semester of the course.

- Students study Spanish through activities in conversation, grammar, drama, composition, and literature
- Vocabulary and fluency growth is guided by storytelling techniques and student generated speeches
- Subjunctive mood is studied as well as a comprehensive review of grammar
- Hispanic Culture is explored through music, art, history, cooking, dance, videos, games, and drama with an emphasis on Spain

- Media resources are implemented to strengthen listening skills
- College Placement Exam practice is encouraged
- Advanced Placement and SAT Spanish Exam practice materials are available for independent study
- Speaking and using Spanish in tutoring, civic projects, and social activities is promoted
- Students will also further their language acquisition and their knowledge of Hispanic culture through advanced reading and speaking activities

2122 AP Spanish Language and Culture
Grade Level: 12
Semesters: 2
Prerequisite: Students must complete Honors Spanish IV with a B- or higher before taking this course, as well as maintain a B- to continue to the second semester of the course.
The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish. The AP Spanish Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions).

Kokomo Area Career Center

The following section describes the programs and courses available at the Kokomo Area Career Center (KACC) located on the Kokomo High School campus. These career and technical education courses are available to high school students in all Howard County school districts, as well as Maconaquah and Tri-Central high schools.

Several of the KACC programs provide opportunities for students to earn technical certificates or college credit—without additional cost—in addition to high school credit.

Western students can earn between two and four credits per semester for KACC courses that are completed successfully. Students must enroll in KACC programs for a full year at a time. Students who do not fulfill the full year are responsible for the cost of the program.

Mid-year graduates from Western who plan to continue at KACC after the end of the fall semester are responsible for all costs of completing their KACC program.

To be eligible to attend KACC, Western High School students must:

- Be a junior or senior
- Have completed a minimum of 22 credits or principal's approval to attend as a junior or a minimum of 34 credits or principal's approval to attend as a senior
- Provide their own transportation to KACC classes and job training sites.
- Be recommended by his/her counselor for admission to KACC

Freshmen and sophomores are encouraged to research any KACC programs of interest to them and to select Western courses that will help them prepare for entry into KACC's program. Students are urged to make arrangements to visit the career center.

Additional information and applications are available in the Student Services office.

Kokomo
Area
Career
Center

Career and Technical Education

Exciting and rewarding opportunities exist for all students in Career and Technical education! There are classes listed on the following pages to meet many career interest areas. Students are encouraged to select classes based on their career pathway and interests.

Technology changes rapidly, therefore the income opportunities and the demand for skilled, capable, thinking workers is increasing. To be competitive for the high-skill, high-wage career opportunities you must demonstrate employable skills and academic success. In addition, you need to have work experience or volunteer experience in your area of study. All of this can be achieved at the Kokomo Area Career Center.

CAREER & COLLEGE PREPARATION
AVAILABLE AT KACC

The career and college preparation programs available at the Kokomo Area Career Center cover a wide variety of career and job clusters. Students have the opportunity to learn new skills, practice those skills in a real-life lab situation, and demonstrate their skills in an actual work experience. Kokomo Area Career Center students also have the opportunity to begin their college career (most at no additional cost) while still in high school.

Upon Graduation, Kokomo Area Career Center students may earn not only a diploma, but also a technical certificate, and/or a college transcript. These accomplishments, along with the lab and work experience related to their program of study prepare KACC graduates for any challenge they wish to pursue after high school.
Taking advantage of the opportunities available within the Kokomo Area Career Center is one of the best ways a student can prepare for his/her future.

KOKOMO AREA CAREER CENTER PATHWAYS

AGRICULTURE

AGRIBUSINESS MANAGEMENT provides foundation concepts in agricultural business. It is a two-semester course that introduces students to the principles of business organization and management from a local and global perspective, with the utilization of technology. Concepts covered in the course include; accounting and record keeping, business planning and management, food and fiber, forms of business, finance, management, sales and marketing, careers, leadership development. Students will demonstrate principles and techniques for planning, development, application and management of agribusiness systems through a supervised agriculture experience (work based learning) programs.

Recommended Grade Level: 11-12
Recommended Prerequisite: Introduction to Agriculture, Food and Natural Resources
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as an Elective or Directed Elective for all diplomas
Qualifies as a quantitative reasoning course

AGRICULTURE POWER, STRUCTURE AND TECHNOLOGY is a two semester, up to six credits, lab intensive course in which students develop an understanding of basic principles of tool selection, operation, maintenance, and management of agricultural equipment in concert with the utilization of technology. Topics covered include: safety, problem solving/troubleshooting, electricity, plumbing, concrete, carpentry, metal technology, engines, emerging technologies, leadership development, supervised agricultural experience, and career opportunities in the area of agriculture power, structure, and technology.

Recommended Grade: 10, 11, 12
Required Prerequisites: none
Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
Credits: 2 semester course, 2 semesters required, 1-3 credit(s) per semester, 6 credits maximum
Counts as a Directed Elective or Elective for all diplomas

ARTS, AV TECHNOLOGY & COMMUNICATIONS

COMMERCIAL PHOTOGRAPHY I is an organized learning experience that includes theory, laboratory, and studio work as each relates to all phases of camera use, photographic processing, and electronic photographic editing. Instruction covers the topics of composition and color dynamics; contact printing and enlarging; developing film; lighting techniques and meters; large and medium format cameras and other current photographic equipment used for portrait, commercial, and industrial photography. Focus is placed on camera operation and composition related to traditional photographic principles and also tools and creative effects for editing and/or enhancing photographs. Instruction emphasizes the planning, development, and production of materials that visually communicate ideas and information.

Recommended Grade Level: 10-12
Recommended Prerequisite: Interactive Media
Credits: 2 credits per semester, maximum of 2 semesters, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual Credit possible
Additional cost: approximately $15 (flash drive)

COMMERICAL PHOTOGRAPHY II is a continuation of Commercial Photography I. Students will further their study of camera use, electronic photographic editing and study various type of photography.

Recommended Grade level: 11-12
Required Prerequisite: Commercial Photography I
Credits: 1 credit per semester, maximum of 2 semesters
Counts as a Directed Elective or Elective for the General, Core 40, core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Additional cost: approximately $15 (flash drive)

GRAPHIC DESIGN & LAYOUT (Graphic Design II) includes organized learning experiences that incorporate a variety of visual art techniques as they relate to the design and execution of layouts and illustrations for advertising, displays, promotional materials, and instructional manuals. Instruction also covers advertising theory and preparation of copy, lettering, posters, and artwork in addition to incorporation of photographic images. Communication skills will be emphasized through the study of effective methods used to design commercial products that impart information and ideas. Advanced instruction might also include experiences in silk screening and air brush techniques as well as activities in designing product packaging and commercial displays or exhibits.

This course provides the opportunity for dual credit for students who meet postsecondary requirements for earning dual credit and successfully complete the dual credit requirements of this course.

Recommended Grade Level: 11-12
Prerequisite: Computer Illustrations & Graphics
Credits: 2 credits per semester, maximum of 2 semesters, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
No additional cost

GRAPHIC IMAGING TECH I (Graphic Design I) introduces students to the computer's use in visual communication. The focus of the course is on basic computer terminology and use, mastering fundamental skills, and developing efficient working styles. These skills are then developed by creating work with imaging, drawing, interactive, and page layout software. The course includes organized learning experiences that incorporate a variety of visual art techniques as they relate to the design and execution of layouts and illustrations for advertising, displays, promotional materials, and instructional manuals. Instruction also covers advertising theory and preparation of copy, lettering, posters, produce vector illustrations, graphics and logos, and artwork in addition to incorporation of photographic images. Communication skills will be emphasized through the study of effective methods used to design products that impart information and ideas. Advanced instruction might also include experiences in silk screening and air brush techniques as well as activities in designing product packaging and commercial displays or exhibits.

Recommended Grade Level: 10-12
Recommended Prerequisite: Interactive Media
Credits: 2 credits per semester, maximum of 2 semesters, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
Additional cost: approximately $15 (flash drive)

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

Recommended Grade Level: 9-12
Recommended Prerequisite: None
Credits: 2 credits per semester, maximum of 2 semesters, maximum of 6 credits

Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Additional Cost: approximately $15 (flash drive)
Dual credit possible

INTRODUCTION TO COMMUNICATION is a course that specializes in identifying and using modern communication to exchange messages and information. This course explores the application of the tools, materials, and techniques used to design, produce, use, and access systems of communication. Students will produce graphic and electronic media as they apply communication technologies. This course will also explore the various technical processes used to link ideas and people through the use of electronic and graphic media. Major goals of this course include an overview of communication technology; the way it has evolved, how messages are designed and produced, and how people may profit from creating information services and products. Students will explore mass media communication processes including radio and television broadcasting, publishing and printing activities, telecommunication networks, recording services, computer and data processing networks, and other related systems. Using the base knowledge student will use the design process to solve design projects in each communication area.

Recommended Grade Level: 9-12
Credits: 1 credit per semester, maximum of 2 semesters, maximum of 2 credits

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RADIO & TELEVISION I (TV Production I) focuses on communication, media and production. Emphasis is placed on career opportunities, production, programming, promotion, sales, performance, and equipment operation. Students will also study the history of communication systems as well as communication ethics and law. Students will develop oral and written communication skills, acquire software and equipment operation abilities, and integrate teamwork skills. Instructional strategies may include a hands-on school-based enterprise, real and/or simulated occupational experiences, job shadowing, field trips, and internships.
Recommended Grade Level: 10-12
Recommended Prerequisite: Interactive Media
Credits: 2 credits per semester, maximum of 2 semesters, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
Additional cost: approximately $15 (flash drive)

RADIO & TELEVISION II (TV Production II) prepares students for admission to television production programs at institutions of higher learning. Students train on professional equipment creating a variety of video projects. Students enrolling in this

program should have successfully completed Radio and Television I. During this second-year program students integrate and build on first-year curriculum while mastering advanced concepts in production, lighting and audio.

Recommended Grade Level: 11- 12
Prerequisite: Radio & Television I
Credits: 2 credits per semester, maximum of 2 semesters, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
Additional cost: approximately $15 (flash drive)

RADIO & TELEVISION III (TV Production III) continues the training on professional equipment and student continue on personal and school-assigned projects.

Recommended Grade Level: 12
Prerequisite: Radio & Television II
Credits: 2 credits semester 1. Semester 2 is WBL: Multiple for 2 credits
Counts as a Directed Elective or Elective for the General, core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Additional cost: approximately $15 (flash drive)

ARCHITECTURE & CONSTRUCTION

ARCHITECTURAL DRAFTING & DESIGN I will provide students with a basic understanding of the detailing skills commonly used by a drafting technician. Areas of study include: lettering, sketching, proper use of equipment, geometric constructions with emphasis on orthographic (multi-view) drawings that are dimensioned and noted to ANSI standards. This course includes the creation and interpretation of construction documents. Methods of geometric construction, three dimensional drawing techniques, and sketching will be presented as well as elementary aspects of residential design and site work. Areas of emphasis will include print reading and drawing. Another purpose of this introductory course is to provide students with a basic understanding of the features and considerations associated with the operation of a computer-aided design (CAD) system. Students will gain valuable hands-on experience with Auto CAD. They will be expected to complete several projects relating to command topics. Topics include: 2D drawing commands, coordinate systems, editing commands, paper and model space, inquiry commands, layers, plotting, text, and basic dimensioning. This course will also include Basic Architectural AutoCAD practices.

Recommended Grade Level: 9-12
Credits: 2 credits per semester, 2 semesters max, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible

No additional cost

ARCHITECTURAL DRAFTING & DESIGN II presents a history and survey of architecture and focuses on creative design of buildings in a studio environment. Covers problems of site analysis, facilities programming, space planning, conceptual design, proper use of materials, selection of structure and construction techniques. Develops presentation drawings, and requires oral presentations and critiques. Generation of form and space is addressed through basic architectural theory, related architectural styles, design strategies, and a visual representation of the student's design process. This course will focus on advanced CAD features, including fundamentals of three-dimensional modeling for design. Includes overview of modeling, graphical manipulation, part structuring, coordinate system, and developing strategy of modeling. Advanced CAD will enable the student to make the transition from 2D drafting to 3D modeling. Various Architectural software packages and applications may be used.

Recommended Grade Level: 10-12
Prerequisite: Architectural Drafting and Design I
Credits: 2 credits per semester, maximum of 2 semesters, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
No additional cost, Qualifies as quantitative reasoning class

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CONSTRUCTION TRADES I includes classroom and laboratory experiences concerned with the formation, installation, maintenance, and repair of buildings, homes, and other structures. A history of building construction to present-day applications emphasizing future trends and construction as a career. Provides instruction and practice in the use of working drawings and applications from the print to the work. Includes relationship of views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, materials list, architectural plans, geometric construction, three dimensional drawing techniques, and sketching will be presented as well as elementary aspects of residential design and site work. Areas of emphasis will include print reading and drawing, room schedules and plot plans. Examines the design and construction of floor and wall systems and student develops the skill needed for layout and construction of floor and wall systems from blueprints and professional planning documents. Instruction will be given in the following areas, administrative requirements, definitions, building planning, foundations, wall coverings, roof and ceiling construction, and roof assemblies. Students will develop an understanding and interpretation of the Indiana Residential Code for one and two-family dwellings and safety practices including Occupational Safety and Health Administration’s Safety & Health Standards for the construction industry.

Recommended Grade Level: 10-12
Recommended Prerequisite: Introduction to Construction

Credits: 3 credits per semester, maximum of 2 semesters, maximum of 6 credits
2 credit per semester option is also available for the AM
Counts as a Directed Elective or Elective for the General, Core 40, core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
Additional cost: tools, warm clothes—cost will vary depending on what items student already has

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CONSTRUCTION TRADES II includes classroom and laboratory experiences concerned with the formation, installation, maintenance, and repair of buildings, homes, and other structures including recent trends in residential construction industry. Information is presented concerning materials, occupations, and professional organizations within the industry. Develops basic knowledge, skills, and awareness of interior trim. Provides training in installation of drywall, moldings, interior doors, kitchen cabinets, and baseboard moldings. Develop skills in the finishing of the exterior of a building. The student obtains skills in the installation of the cornice, windows, doors and various types of sidings used in today's market place. Studies the design and construction of roof systems. Use of the framing square for traditional rafter and truss roofing.

Recommended Grade Level: 11-12
Prerequisite: Construction Technology I
Credits: 3 credits per semesters, maximum of 2 semesters, maximum of 6 credits
2 credit per semester option is also available for the AM
Counts as a Directed Elective or Elective for the General, Core 40, core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Additional cost: tools, warm clothes-cost will vary depending on what items student already has

CONSTRUCTION TRADES: ELECTIRCAL I includes classroom and laboratory experiences focused on the installation and repair of the electrical and wiring systems of physical structures. This course includes instruction on the reading of technical drawings and their application in construction processes. Topics include the relationship between views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, material lists, architectural plans, room schedules and plot plans. This course covers both AC and DC circuits. Studies include electron theory, Ohm's Law, Watt's Law, Kirchhoff's Law, series circuits, series-parallel circuits, and other electrical concepts. Students will use the underlying scientific principles related to electricity, to complete construction projects. Mathematical principles will be used to solve electrical problems. Students will also interpret health, safety, and welfare standards and codes as dictated by local, state or federal agencies.

Recommended Grade: 11, 12
Required Prerequisites: none
Recommended Prerequisites: Introduction to Construction

Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
Counts as a Directed Elective or Elective for all diplomas

CONSTRUCTION TRADES: HVAC I includes classroom and laboratory experiences focused on heat generation, ventilation, and cooling/refrigeration systems. This course introduces scientific and mathematical principles applicable in the installation, operation, and maintenance of HVAC systems. Types of units, parts, basic controls, functions, and applications will be covered. Additional topics include tool and meter use, temperature measurement, heat flow, the combustion process, and pipe installation practices. This course also emphasizes health, safety, and welfare standards and codes as mandated by professional and governmental agencies

Recommended Grade: 11, 12
Required Prerequisites: none
Recommended Prerequisites: Introduction to Construction
Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
Counts as a Directed Elective or Elective for all diplomas
Dual credit possible

CONSTRUCTION TRADES: HVAC II builds on concepts introduced in HVAC I. This course will emphasize reading blueprints and other technical documents, as well as troubleshooting common mechanical and electrical problems encountered when servicing HVAC systems. Additional topics include: combustion testing, venting and air requirements, electrical control systems, and electrical motor basics. Students will hone their science and math skills in HVAC system installation, maintenance, or repair projects.

Recommended Grade: 12
Required Prerequisites: Construction Trades: HVAC I
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
Counts as a Directed Elective or Elective for all diplomas
Qualifies as a quantitative reasoning course
Dual credit possible

MECHANICAL DRAFTING & DESIGN I provides students with a basic understanding of the detailing skills commonly used by a drafting technician. Areas of study include: lettering, sketching, proper use of equipment, geometric constructions with emphasis on orthographic (multi-view) drawings that are dimensioned and noted to ANSI standards. Another purpose of this course is to provide students with a basic understanding of the

features and considerations associated with the operation of a computer-aided design (CAD) system. Students will gain valuable hands-on experience with Auto CAD. They will be expected to complete several projects (increasing in difficulty) relating to command topics. Topics include: 2D drawing commands, coordinate systems, editing commands, paper and model space, inquiry commands, layers, plotting, text, and basic dimensioning.

Recommended Grade Level: 9-12
Recommended Prerequisite: None
Credits: 2 credits per semester, 2 semesters maximum, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
No additional cost

MECHANICAL DRAFTING & DESIGN II covers working with drawings in both detailing and assembly. Presents fastening devices, thread symbols and nomenclature, surface texture symbols, classes of fits, and the use of parts lists, title blocks and revision blocks. This course will also focus on advanced CAD features, including fundamentals of three-dimensional modeling for design. Includes overview of modeling, graphical manipulation, part structuring, coordinate system, and developing strategy of modeling. Advanced CAD will enable the student to make the transition from 2D drafting to 3D modeling. Students will draw and calculate three dimensional problems. Theory and methods include graphic developments and the relationships between points, lines and planes, curved lines and surfaces, intersections, and development. Computer software and hardware experiences, as they relate to technology students, will be covered.

Recommended Grade Level: 10-12
Prerequisite: Mechanical Drafting and Design I
Credits: 2 credits per semester, maximum of 2 semesters ,maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
No additional cost
Qualifies as quantitative reasoning class

BUSINESS & MARKETING

INTRODUCTION TO BUSINESS introduces students to the world of business, including the concepts, functions, and skills required for meeting the challenges of operating a business in the twenty- first century on a local, national, and/or international scale. The course covers business management, entrepreneurship, marketing fundamentals, and

business ethics and law. The course develops business vocabulary and provides an overview of business and the role that business plays in economic, social, and political environments.

Recommended Grade: 9, 10
Required Prerequisites: none
Recommended Prerequisites: none
Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum
Counts as a Directed Elective or Elective for all diplomas

INTRODUCTION TO ENTREPRENEURSHIP provides an overview of what it means to be an entrepreneur. Students will learn about starting and operating a business, marketing products and services, and how to find resources to help in the development of a new venture. This course is ideal for students interested in starting their own art gallery, salon, restaurant, etc.

Recommended Grade: 9, 10
Required Prerequisites: none
Recommended Prerequisites: none
Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum
Counts as a Directed Elective or Elective for all diplomas

ADMINISTRATIVE & OFFICE MANAGEMENT prepares students to plan, organize, direct, and control the functions and processes of a firm or organization and to perform business-related functions. Students are provided opportunities to develop attitudes and apply skills and knowledge in the areas of business administration, management, and finance. Individual experiences will be based upon the student's career and educational goals. Students will have both classroom and lab experiences.

Recommended Grade Level: 12
Required Prerequisite: Principles of Business Management or Principles of Marketing
Credits: 2 semester course, 2 semesters required, 1-2 credits per semester, 4 credits maximum
Counts as a Directed Elective or Elective for all diplomas
Dual credit possible

ENTREPRENEURSHIP & NEW VENTURES CAPSTONE introduces entrepreneurship, and develop skills and tools critical for starting and succeeding in a new venture. The entrepreneurial process of opportunity recognition, innovation, value proposition, competitive advantage, venture concept, feasibility analysis, and "go to" market strategies will be explored through mini-case studies of successful and unsuccessful entrepreneurial start-ups. Additionally, topics of government and legal restrictions, intellectual property, franchising location, basic business accounting, raising startup funding, sales and revenue forecasting, and business plan development will be presented through extensive use of word processing, spreadsheet and presentation

software. Students will learn these concepts and skills and then APPLY. The KACC Entrepreneurship class will run its own business. Students will be responsible for product concept, business plan, marketing, production and execution of delivery of goods. This will be a hands-on Entrepreneurship class. It is preferred that students have previously taken a business or graphic design class. This class will meet at KACC.

Recommended Grade Level: 11 & 12
Recommended Prerequisite: Principles of Business Management or Principles of Marketing
Credits: 2-semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
Counts as a Directed Elective or Elective for all diplomas

KOKOMOCEO (ENTREPRENEURSHIP & NEW VENTURES CAPSTONE) is a yearlong course designed to utilize partnerships that provide an overview of business development and processes. The local business community partners with area schools to create project based experiences for students by providing funding, expertise, meeting space, business tours and one-on-one mentoring. Students visit area businesses, learn from guest speakers, participate in a class business, write business plans, and start and operate their own business. Business concepts learned through the experiential CEO-Entrepreneurship class are critical; the 21st century skills of problem solving, teamwork, self-motivation, responsibility, higher order thinking, communication and inquiry are at the heart of student development throughout the course. The class meets for 1 ½ hours each school day from 7:30 AM- 9:00 AM in a variety of businesses. The class is facilitated by a licensed teacher and completely supported financially by our CEO Business Investors.
MUST APPLY FOR PROGRAM- see your counselor.

Recommended Grade Level: Grade 12
Recommended Prerequisite: Principles of Business Management or Principles of Marketing
Credits: 2 credits per semester, 2-semester class
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

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PRINCIPLES OF BUSINESS MANAGEMENT focuses on the roles and responsibilities of managers as well as opportunities and challenges of ethically managing a business in the free enterprise system. Students will attain an understanding of management, team building, leadership, problem solving steps and processes that contribute to the achievement of organizational goals. The management of human and financial resources is emphasized.

Recommended Grade Level: Grade 11-12
Recommended Prerequisite: Introduction to Business
Credits: 1 credit per semester, maximum of 2 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible

PRINCIPLES OF MARKETING introduces the scope and importance of marketing in the global economy. Emphasis is placed on oral and written communications, mathematical applications, problem solving, and critical thinking skills as they relate to advertising/promotion/selling, distribution, financing, marketing-information management, pricing, and product/service management.

Recommended Grade Level: Grade 9-12
Recommended Prerequisite: None
Credits: 1 credit per semester, maximum of 2 semesters, maximum of 2 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
No additional cost
Dual credit possible

STRATEGIC MARKETING builds upon the foundations of marketing and applies the functions of marketing at an advanced level. Students will study the basic principles of consumer behavior and examine the application of Indiana Department of Education 76 High School Course Titles and Descriptions theories from psychology, social psychology, and economics. The relationship between consumer behavior and marketing activities will be reviewed.

Recommended Grade Level: 12
Recommended Prerequisite: Principles of Business Management or Principles of Marketing
Credits: 2-semester course, 2 semesters required, 1-2 credits per semester, 4 credits maximum
Counts as a Directed Elective or Elective for all diplomas
Dual credit possible

WORK BASED LEARNING is an instructional strategy that can be implemented as a stand--alone course or a component of any CTE course that prepares students for college and career. This strategy builds students' skills and knowledge in their chosen career path or furthers their study within the area of interest. A standards based training plan is developed by the student, teacher, and workplace mentor to guide the student's work based learning experiences and assist in evaluating achievement and performance, whether WBL is a stand--alone course or a component of a discipline-

-specific CTE course. In the stand--alone WBL courses, students have the opportunity to apply the concepts, skills, and dispositions learned in previous coursework in their pathways in real world business and industry settings. Therefore, at least two courses in a student's pathway would be prerequisite to the student enrolling in the stand--alone WBL courses. There are several models of Work Based Learning. A school may choose to use a single model or differentiate instruction by using multiple models depending on a student's pathway and career objectives. The models are:
Apprenticeship
Cooperative
Internship
School Based Enterprise
Service Learning Based

Please Note: Depending on the model used, there are federal and state student employment and cooperative education laws that must be followed.
The following Work Based Learning courses are available:
5974 Work Based Learning Capstone

ENGINEERING
Project Lead the Way

DIGITAL ELECTRONICS (DE) 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.

Recommended Grade Level: 10-12
Recommended Prerequisite: Introduction to Engineering Design, Principles of Engineering
Credits: 1 credit per semester, 2 semester maximum, maximum of 2 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Qualifies as a quantitative reasoning course for General, AHD & THD
Dual credit possible
No additional cost

INTRODUCTION TO ENGINEERING DESIGN (IED) 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).

Recommended Grade Level: 9-12
Recommended Prerequisites: none
Credits: 1 credit per semester, 2 semester maximum, maximum of 2 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
No additional cost

PRINCIPLES OF ENGINEERING (POE) 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.

Recommended Grade Level: 10-12
Recommended Prerequisite: Introduction to Engineering Design
Credits: 1 credit per semester, 2 semester maximum, maximum of 2 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Qualifies as a quantitative reasoning course for General, AHD & THD
Dual credit possible
No additional cost

HEALTH SCIENCE

ANATOMY & PHYSIOLOGY is a course in which students investigate concepts related to Health Science, with emphasis on interdependence of systems and contributions of each system to the maintenance of a healthy body. Introduces students to the cell, which is the basic structural and functional united of all organisms, and covers tissues, integument, skeleton, muscular and nervous systems as an integrated unit. Through instruction, including laboratory activities, students apply concepts associated with Human Anatomy & Physiology. Students will understand the structure, organization and

function of the various components of the healthy body in order to apply this knowledge in all health related fields.

Recommended Grade Level: 11-12
Recommended Prerequisite: Biology, Health Science Education I
Credits: 1 credit per semester, maximum of 2 semesters, maximum of 2 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Fulfills a Core 40 Science course requirement for the General, Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas or counts as an Elective or Directed Elective for any diploma_
Additional cost: approximately $0

DENTAL CAREERS I prepares the student for an entry-level dental assisting position. Emphasis is placed on the clinical environment, chair-side assisting, equipment/instrument identification, tray set-ups, sterilization, and characteristics of microorganisms and disease control. In addition, oral, head and neck anatomy, basic embryology, histology, tooth morphology, charting dental surfaces, and illness are all introduced. Simulated in-school laboratories and/or extended laboratory experiences are also included to provide opportunities for students to further develop clinical skills and the appropriate ethical behavior. Leadership skills are developed and community service provided through HOSA. Students have the opportunity to compete in a number of competitive events at both the state and national level.

Recommended Grade Level: 11
Recommended Prerequisite: Health Science Education I
Credits: 2 credits per semester, maximum of 2 semesters, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Additional cost: approximately $60

DENTAL CAREERS II is a course designed to provide the dental assisting student with specific knowledge of the administrative planning, bookkeeping, recall programs, banking, tax records, computer software, insurance, office practice and management as related to the dental office. In addition, students will practice Oral and Maxillofacial Surgery, Periodontics, Endodontics, Prosthodontics, Pediatric Dentistry, and Orthodontics. Opportunity for increased skill development in clinical support and business office procedures is routinely provided. The importance of the clinical behavior of materials and biological factors are also stressed. Leadership skills are developed and community service provided through HOSA. Students have the opportunity to compete in a number of competitive events at both the state and national level.

Recommended Grade Level: 12
Prerequisite: Dental Careers I
Credits: 2 credits per semester, maximum of 2 semester, maximum of 6 credits

Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
No additional cost

HEALTH SCIENCE II-C.N.A. is a two-semester program with the focus on preparing qualified students for entry-level placement in a long-term care facility. Students will have the opportunity to apply concepts, skills and work attitudes taught in this related class. Students are placed at facilities under direct supervision of a licensed nurse with a predetermined training plan. Upon completion of 75 clinical hours, students will be qualified to take the State Certification Exam.

Recommended Grade Level: 11-12, must have transportation 2nd semester to clinical site
Recommended Prerequisite: Health Science I
Credits: 2 credits per semester, 2 semester maximum
Counts as Directed elective or Elective for the General, Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas
STATE LICENSE: CERTIFIED NURSING ASSISTANT
Dual credit possible
Additional costs: approximately $150 (includes cost of C.N.A. State Exam)

HEALTH SCIENCE II- PHYSICAL THERAPY builds on content and skills of Health Science Education I and prepares students with the knowledge, skills and attitudes essential for physical therapy careers. Extended laboratory experiences provide students the opportunity to assume and practice technical skills previously learned in the classroom in clinical settings under the direction of licensed physical therapists. Content includes an overview of the health care delivery systems and employment opportunities at a variety of entry levels. In addition students will learn skills specific to physical therapy including observing patient progress, helping patients with specific exercises, using massage and stretching for treatment, aiding patients with devices for movement, educating patients and families, basic assistance in cleaning treatment areas and clerical work. This course also provides students with the knowledge, attitudes, and skills needed to make the transition from school to work in health science careers, including self-analysis to aid in career selection, job seeking and job maintenance skills, personal management skills, and application processes for admission into a postsecondary program.

Recommended Grade Level: 11-12
Recommended Prerequisite: Health Science I
Credits: 2 per semester, 2 semester maximum
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors diplomas
Additional costs: approximately $40

HEALTH SCIENCE EDUCATION I content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, an introduction to health care systems, anatomy, physiology, and medical terminology. Leadership skills developed through HOSA participation are also included. Lab experiences are organized and planned around the activities associated with the student's career objectives. Job seeking and job maintenance skills, personal management skills, self-analysis to aid in career selection and completion of the application process for admission into a post-secondary program of their choice are also included in this course.

Recommended Grade Level: 9- 12
Recommended Prerequisite: None
Credits: 2 credits per semester, maximum of 2 semesters, maximum of 6 credits.
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
Additional cost: approximately $35

HEALTH SCIENCE EDUCATION II: SPECIAL TOPICS is an extended laboratory experience designed to address the advancement and specialization of healthcare careers through the provision of a specialized course for a specific healthcare workforce need in the school’s region. Practicum is at a qualified clinical site, and is designed to give the student the opportunity to practice technical skills previously learned in the classroom; all while working under the direction of the appropriately licensed healthcare professional. Throughout the course, students will focus on learning about the healthcare system and employment opportunities at a variety of entry levels; an overview of the healthcare delivery systems, healthcare teams, and legal and ethical considerations; and obtaining the knowledge, skills and attitudes essential for providing basic care in a variety of healthcare settings. Additionally, students will build their essential job related skills for providing basic care appropriate for their healthcare setting and audience. Course standards and curriculum must be tailored to the specific healthcare profession, preparing students to advance in this career field, and where applicable, provide students with opportunities for certification or dual credit. This course also provides students with the knowledge, attitudes, and skills needed to make the transition from high school, to post-secondary opportunities, and to work in a variety of health science careers. Students are encouraged to focus on self-analysis to aid in their career selection. Job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a post-secondary program are also areas of focus. Participation in HOSA encourages the development of leadership, communication and career related skills, and opportunities for community service.

Recommended Grade Level: 12
Required Prerequisite: 4 credits and a GPA of C or higher in a Health Science class (Anatomy and Physiology, Health Care Systems I, PLTW Biomedical Sciences (PBS, HBS, MI), any Health Science II (C.N.A, Physical Therapy, Veterinary Careers) or Dental Assisting I
Credits: 2 credits per semester; maximum of 6 credits
Counts as a Directed Elective and Elective for the Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas
Additional cost: approximately $115

HUMAN BODY SYSTEMS *(PLTW)* (HBS) is a course designed to engage students in the study of basic human physiology and the care and maintenance required to support the complex systems. Using a focus on human health, students will employ a variety of monitors to examine body systems (respiratory, circulatory, and nervous) at rest and under stress, and observe the interactions between the various body systems. Students will use appropriate software to design and build systems to monitor body functions.
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 data collection requirements.

Recommended Grade Level: 10-12
Recommended Prerequisite: Principles of the Biomedical Sciences
Credits: 1 credit per semester, 2 semester maximum, maximum of 2 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Fulfills a Core 40 Science elective requirement for the General, Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas or counts as an Elective or Directed Elective for any diploma
Additional cost: approximately $25

MEDICAL INTERVENTIONS *(PLTW)* (MI) is a course that studies medical practices including interventions to support humans in treating disease and maintaining health. Using a project-based learning approach, students will investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Students will also study the design and development of various interventions including vascular stents, cochlear implants, and prosthetic limbs. Lessons will cover the history of organ transplants and gene therapy with additional readings from current scientific literature addressing cutting edge developments. Using 3-D imaging software, students will design and build a model of a therapeutic protein. 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 data collection requirements.

Recommended Grade Level: 11-12
Recommended Prerequisite: Principles of the Biomedical Sciences and Human Body Systems
Credits: 1 credit per semester, 2 credits maximum
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Fulfills a Core 40 Science elective requirement for the General, Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas or counts as an Elective or Directed Elective for any diploma
Additional cost: approximately $25

MEDICAL TERMINOLOGY prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study 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 and written information. Students have the opportunity to acquire skills in interpreting medical records and communications accurately and logically. Emphasis is on forming a foundation for a medical vocabulary including meaning, spelling, and pronunciation. Medical abbreviations, signs, and symbols are included.

Recommended Grade Level: 10-12
Recommended Prerequisite: Health Science Education I
Credits: 1 credit per semester, maximum of 2 semesters, maximum of 2 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
Additional cost: approximately $0

PRINCIPLES OF BIOMEDICAL SCIENCES *(PLTW)* (PBS) introduces this field through “hands-on” projects and problems. Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, hypercholesterolemia, and infectious diseases. A theme through the course is to determine the factors that led to the death of a fictional person. After determining the factors responsible for the death, the students investigate lifestyle choices and medical treatments that might have prolonged the person’s life.
Key biological concepts included in the curriculum are: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease. Engineering principles such as the design process, feedback loops, fluid dynamics, and the relationship of structure to function will be included where appropriate. The course is designed to provide an overview of all courses in the Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses. Schools must agree to be part of the Project Lead the Way network and follow all training and data collection requirements. 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 data collection requirements.

Recommended Grade Level: 9-12
Prerequisite: Biology I or concurrent enrollment in Biology I is required
Credits: 1 credit per semester, 2 semesters maximum, maximum of 2 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Fulfills a Core 40 Science elective requirement for the General, Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas or counts as an Elective or Directed Elective for any diploma
Additional cost: approximately $25

VETERINARY CAREERS I is a lab intensive course that introduces students to animal care and veterinary medicine while using field experiences to attain necessary skills. Students will learn and demonstrate standard protocols used in veterinary careers. This course also provides students with the knowledge, attitudes, and skills needed to make the transition
from school to work in health science careers, including self- analysis to aid in career selection, job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a post- secondary program. Participation in FFA or HOSA encourages development of leadership, communication, community service and career related skills.

Recommended Grade Level: 11
REQUIRED Prerequisite: 75% or higher is BOTH Algebra I and Biology I
Recommended Prerequisites: Animal Science; Advanced Life Science Animals, HSE I
Credits: 2 credits per semester, 2 semester class
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Additional cost: approximately $50

VETERINARY CAREERS II is designed as an extended laboratory experience at the student's choice of clinical site; usually clinics, animal hospitals, or research laboratories, designed to provide students the opportunity to assume the role of a veterinary assistant and practice technical skills previously learned in the classroom, including information on the health care system and employment opportunities at a variety of entry levels, an overview of the health care delivery systems, health care teams and legal and ethical considerations. It prepares students with the knowledge, skills and attitudes essential for providing basic care in extended care facilities, hospitals and home health agencies under the direction of licensed veterinarians. In addition, students will learn skills for monitoring and caring for animals before and after surgery, maintain and sterilize surgical instruments, clean and disinfect kennels and operating rooms, provide emergency first aid to animals, give medication, do routine lab tests, feed and bathe animals, and collect fluid or tissue samples. This course also

provides students with the knowledge, attitudes, and skills needed to make the transition from school to work in health science careers, including self-analysis to aid in career selection, job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a post-secondary program. Participation in HOSA or FFA encourages development of leadership, communication, community service and career related skills

Recommended Grade Level: 12
Recommended Prerequisite: Veterinary Careers I
Credits: 2 semester course, 2 semesters required, 2 credits per semester, maximum of 4 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diploma High School

HOSPITALITY & HUMAN SERVICES

CULINARY ARTS: BAKING & PASTRY is an area of concentration within the Culinary Arts field. Students enrolled in this class will specialize in the area of baking, pastries, and elegant deserts. Students will also learn about different career areas involving Culinary Arts and their specialty area. This class also affords students who have taken Culinary Arts I and II a chance to extend their knowledge and develop a specialized skill. There are no pre-requisites for this class.

Recommended Grade Level: Grade 10-12
Required Prerequisite: Culinary Arts I
Credits: 2 credits per semester, 2 semesters maximum, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
Additional cost: approximately $40

CULINARY ARTS & HOSPITALITY prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the hospitality industry. This course builds a foundation that prepares students to enter the Advanced Culinary Arts or Advanced Hospitality courses. Major topics include: introduction to the hospitality industry; food safety and personal hygiene; sanitation and safety; regulations, procedures, and emergencies; basic culinary skills; culinary math; and food preparation techniques and applications. Instruction and laboratory experiences will allow students to apply principles of purchasing, storage, preparation, and service of food and food products; apply basic principles of sanitation and safety in order to maintain safe and healthy food service and hospitality environments; use and maintain related tools and equipment; and apply management principles in food service or hospitality operations.

Intensive laboratory experiences with commercial applications are a required component of this course of study. Student laboratory experiences may be either school-based or "on-the-job" or a combination of the two. Work-based experiences in the food industry are strongly encouraged. A standards-based plan guides the students' laboratory experiences. Students are monitored in their laboratory experiences by the Culinary Arts and Hospitality teacher. Articulation with postsecondary programs is encouraged.

Recommended Grade Level: 9-12
Recommended Prerequisite: None
Credits: 2 credits per semester, 2 semester maximum, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Must be grade 11-12 for dual credit. This course is aligned with the following Post-SERVE SAFE CERTIFICATION
Dual credit possible
Additional cost: approximately $40

CULINARY ARTS & HOSPITALITY II prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the food industry, including (but not limited to) food production and services; food science, dietetics, and nutrition; and baking and pastry arts. Major topics for this advanced course include: basic baking theory and skills, introduction to breads, introduction to pastry arts, nutrition, nutrition accommodations and adaptations, cost control and purchasing, and current marketing and trends. Instruction and intensive laboratory experiences include commercial applications of principles of nutrition, aesthetic, and sanitary selection; purchasing, storage, preparation, and service of food and food products; using and maintaining related tools and equipment; baking and pastry arts skills; managing operations in food service, food science, or hospitality establishments; providing for the dietary needs of persons with special requirements; and related research, development, and testing. Intensive laboratory experiences with commercial applications are a required component of this course of study. Student laboratory experiences may be either school-based or "on-the-job" or a combination of the two. Advanced Culinary Arts builds upon skills and techniques learned in Culinary Arts and Hospitality Management, which must be successfully completed before enrolling in this advanced course. Work-based experiences in the food industry are strongly encouraged. A standards-based plan guides the students' laboratory and work-based experiences. Students are monitored in these experiences by the Advanced Culinary Arts teacher. Articulation with postsecondary programs is encouraged.

Recommended Grade Level: 10-12
Prerequisite: Culinary Arts and Hospitality Management
Credits: 2 credits per semester, 2 semester maximum, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with

Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
Additional cost: approximately $40

CULINARY ARTS & HOSPITALITY II: HOSPITALITY MANAGEMENT prepares students for employment in the hospitality industry. It provides the foundations for study in higher education that leads to a full spectrum of hospitality careers. This is a broad-based course that introduces students to all segments of hospitality, what it includes, and career opportunities that are available; provides a survey of management functions, highlighting basic theories and facts; and exposes students to current trends and current events within the industry. Three major goals of this course are for students to be able to: Identify current trends in hotel and restaurant management, distinguish the difference between hospitality and tourism, and state differences in front of the house versus back of the house. Intensive experiences in one or more hospitality industry settings are a required component of the course. A standards-based plan for each student guides the industry experiences. Students are monitored in their industry Indiana Department of Education 94 High School Course Titles and Descriptions experiences by the Advanced Hospitality Management teacher. Industry experiences may be either school-based or “on the job” in community-based hospitality settings, or in a combination of the two.

Recommended Grade Level: 12
Required Prerequisite: Culinary Arts and Hospitality I
Credits: 2-semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
Counts as a Directed Elective or Elective for all diplomas

COSMETOLOGY I offers an introduction to cosmetology with emphasis on basic practical skills and theories including roller control, quick styling, shampooing, hair coloring, permanent waving, facials, manicuring business and personal ethics, and bacteriology and sanitation. In the second semester, greater emphasis is placed on the application and development of these skills. State of Indiana requires a total of 1500 hours of instruction for licensure.

Recommended Grade Level: Grade 11
Recommended Prerequisite: None
Credits: 3 credits per semesters, max of 2 semesters, maximum of 6 credits
Counts as Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
STATE COSMETOLOGY LICENSE AT COMPLETION OF 2 YEARS
Dual credit possible
Additional Cost: approximately $600

COSMETOLOGY II emphasis will be toward the development of advanced skills in styling, hair coloring, permanent waving, facials and manicuring. Students will also study anatomy and physiology, professionalism, and salon management in relation to cosmetology
Recommended Grade Level: Grade 12
Prerequisite: Cosmetology I
Credits: 3 credits per semesters, max of 2 semesters, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
STATE COSMETOLOGY LICENSE UPON COMPLETION
Dual credit possible
Additional cost: approximately $30

HUMAN AND SOCIAL SERVICES I is an introductory/exploratory course for students interested in careers in human and community services and other helping professions. Areas of exploration include family and social services, youth development, and adult and elder care, and other for- profit and non-profit services. This project-based course will help students integrate higher order thinking, communication, leadership, and management processes to conduct investigations in human and social services at the local, state, national, or global/world level. Research and development, interdisciplinary projects, and/or collaboration with post-secondary faculty, community agencies or organizations, or student organizations are appropriate approaches. Students will be introduced to human and social services professions through presentations from a variety of guest speakers, job shadowing, field trips and introductory and exploratory field experiences. Case studies, role play, and application of professional codes of ethics will be utilized reflecting the challenges of working in diverse communities. Service learning experiences are highly recommended. Achievement of applicable FACS, academic, and employability competencies will be documented through a student portfolio.

Recommended Grade: 11, 12
Required Prerequisites: none
Recommended Prerequisites: Nutrition and Wellness, Interpersonal Relationships, Child Development or Human Development and Wellness
Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
Counts as a Directed Elective or Elective for all diplomas

MANUFACTURING

ADVANCED MANUFACTURING I is a course that includes classroom and laboratory experiences in two broad areas: Industrial Technology/Software Controls and Manufacturing Trends. Domains include safety and impact, electricity, manufacturing essentials, fluid power principals, mechanical principals, lean manufacturing, and careers in advanced manufacturing. Hands-on projects and team activities will allow

students to apply learning on the latest industry technologies. Students take this course with the goal of being a skilled machine operator, repair technician, or working in management at any company that produces goods and services using advanced manufacturing techniques. Work-based learning experiences and industry partnerships are highly encouraged for an authentic industry experience. Students will also receive instruction in Welding.

Recommended Grade Level: 11-12
Recommended Prerequisite: Introduction to Advanced Manufacturing
Credits: 2 semester course, 2 semesters required, 1 credit per semester
Counts as a Directed Elective or Elective for all diplomas

ADVANCED MANUFACTURING II builds on classroom and lab experiences students experienced in Advanced Manufacturing I. Domains include safety and impact, drafting principles, manufacturing programming, CAD/CAM and CNC technologies, automation and robotics, and careers in advanced manufacturing. Hands-on projects and team activities will allow students to apply learning on the latest industry technologies. Students continue this course with the goal of being a skilled machine operator, repair technician, or management at any company that produces goods and services using advanced manufacturing techniques. Work-based learning experiences and industry partnerships are highly encouraged for an authentic industry experience.

Recommended Grade Level: 12
Required Prerequisite: Advanced Manufacturing I
Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
Counts as a Directed Elective or Elective for all diplomas
Qualifies as a quantitative reasoning course

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 seeking careers in Welding, Technician, Sales, Design, Research or Engineering. 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.

Recommended Grade Level: 9-12
Recommended Prerequisite: None
Credits: 2 credits per semester, 2 semester maximum, maximum of 6 credits.
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual credit possible
No additional cost

WELDING TECHNOLOGY II includes classroom and laboratory experiences that develop a variety of skills in Gas Metal Arc welding, Flux Cored Arc Welding, Gas Tungsten Arc welding, Plasma Cutting and Carbon Arc. This course is designed for individuals who intend to pursue careers as a Welders, Technicians, Sales, Design, Research or Engineering. 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.

Recommended Grade Level: 10-12
Prerequisite: Welding Technology I
Credits: 2 credits per semester, 2 semester maximum, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
No additional cost

WELDING TECHNOLOGY III continues the classroom and laboratory experiences that students began in years one and two. Students may also have the opportunity to work independently on projects presented to the Welding Technology program.

Recommended Grade Level: 11-12
Prerequisite: Welding Technology II
Credits: 2 credits semester 1. Semester 2 is WBL: Multiple for 2 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
No additional cost

PUBLIC SAFETY

CRIMINAL JUSTICE I Introduces specialized classroom and practical experiences related to public safety occupations such as law enforcement, loss prevention services, and homeland security. This course provides an introduction to the purposes, functions, and history of the three primary parts of the criminal justice system as well as an introduction to the investigative process. Oral and written communication skills should be reinforced through activities that model public relations and crime prevention efforts as well as the preparation of police reports. This course provides the opportunity for

dual credit for students who meet postsecondary requirements for earning dual credit and successfully complete the dual credit requirements of this course.

Recommended Grade Level: Grade 10-12
Recommended Prerequisite: None
Credits: 2 credits per semester, maximum of 2 semesters, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
Additional cost: $0

CRIMINAL JUSTICE II introduces students to concepts and practices in controlling traffic as well as forensic investigation at crime scene. Students will have opportunities to use mathematical skills in crash reconstruction and analysis activities requiring measurements and performance of speed/acceleration calculations. Additional activities simulating criminal investigations will be used to teach scientific knowledge related to anatomy, biology, and chemistry as well as collection of evidence and search for witnesses, developing and questioning suspects, and protecting the integrity of physical evidence found at the scene and while in transit to a forensic science laboratory. Procedures for the use and control of informants, inquiries keyed to basic leads, and other information-gathering activity and chain of custody procedures will be reviewed.

Recommended Grade Level: Grade 11-12
Prerequisite: Criminal Justice I
Credits: 2 credits per semester, maximum of 2 semesters, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
No additional cost

TRANSPORTATION

AUTOMOTIVE COLLISION REPAIR TECHNOLOGY I includes classroom and laboratory experiences concerned with all phases of the repair of damaged vehicle bodies and frames, including metal straightening; smoothing areas by filing, grinding, or sanding; concealment of imperfections; painting; and replacement of body components including trim. Students examine the characteristics of body metals including the installation of moldings, ornaments, and fasteners with emphasis on sheet metal analysis and safety. Course coverage also includes instruction in personal and environmental safety practices as related to OSHA and other agencies that affect individuals working in the ground transportation technology areas. Additional instruction is given in the course on measurement principles and automotive fasteners. Instruction should also emphasize computerized frame diagnosis, computerized color mixing, and computerized estimating of repair costs. Additional academic skills taught in this course

include precision measurement and mathematical calibrations as well as scientific principles related to adhesive compounds, color mixing, abrasive materials, metallurgy, and composite materials.

Recommended Grade Level: 9-12
Credits: 2 credits per semester, maximum of 2 semesters, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
Additional cost: $0

AUTOMOTIVE COLLISION REPAIR TECHNOLOGY II Introduces concepts in auto paint considerations with emphasis on the handling of materials and equipment in modern automotive technologies. Instruction should also emphasize computerized frame diagnosis, computerized color mixing, and computerized estimating of repair costs. Additional academic skills taught in this course include precision measurement and mathematical calibrations as well as scientific principles related to adhesive compounds, color mixing, abrasive materials, metallurgy, and composite materials.
Recommended Grade Level: 10-12
Prerequisite: Automotive Collision Repair Technology I
Credits: 2 credits per semester, 2 semesters maximum, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
Additional cost: $0

AUTOMOTIVE COLLISION REPAIR TECHNOLOGY III continues the instruction from Automotive Collision Repair II. Students may also have the opportunity to work on projects presented to the Automotive Collision Repair program.

Recommended Grade Level: 11-12
Prerequisite: Automotive Collision Repair Technology II
Credits: 2 credits semester 1. Semester 2 is WBL: Multiple for 2 credits
Counts as a Directed Elective or elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Additional cost: $0

AUTOMOTIVE SERVICES TECHNOLOGY I is a one-year course that encompasses the sub topics of the NATEF/ASE identified areas of Steering and Suspension and Braking Systems. This one-year course offering may be structured in a series of two topics per year offered in any combination of instructional strategies of semester based or yearlong instruction. Additional areas of manual transmissions and differentials, automatic transmissions, air conditioning, engine repair as time permits. This one-year

offering must meet the NATEF program certifications for the two primary areas offered in this course. This course provides the opportunity for dual credit for students who meet postsecondary requirements for earning dual credit and successfully complete the dual credit requirements of this course. Mathematical skills will be reinforced through precision measuring activities and cost estimation/calculation activities. Scientific principles taught and reinforced in this course include the study of viscosity, friction, thermal expansion, and compound solutions. Written and oral skills will also be emphasized to help students communicate with customers, colleagues, and supervisors.

Recommended Grade Level: 9-12
Credits: 2 credits per semester, maximum of 2 semesters, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
Additional cost: approximately $125

AUTOMOTIVE SERVICES TECHNOLOGY II is a one-year course that encompasses the sub topics of the NATEF/ASE identified areas of Electrical Systems and Engine Performance. This one year course offering may be structured in a series of two topics per year offered in any combination of instructional strategies of semester based or yearlong instruction. Additional areas of manual transmissions and differentials, automatic transmissions, air conditioning, engine repair as time permits. This one-year offering must meet the NATEF program certifications for the two primary areas offered in this course. Mathematical skills will be reinforced through precision measuring activities and cost estimation/calculation activities. Scientific principles taught and reinforced in this course include the study of
viscosity, friction, thermal expansion, and compound solutions. Written and oral skills will also be emphasized to help students communicate with customers, colleagues, and supervisors.

Recommended Grade Level: 10-12
Prerequisite: Automotive Services Technology I
Credits: 2 credits per semester, maximum of 2 semesters, maximum of 6 credits
Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Dual credit possible
Additional cost: $0 (will already have tools from Auto Service Tech I)

AUTOMOTIVE SERVICES TECHNOLOGY III continues to build on skills and knowledge from Automotive Services Technology II. Students may have the opportunity to participate in an internship or cooperative experience within the work force.

Recommended Grade Level: 11-12
Prerequisite: Automotive Services Technology II

Credits: 2 credits semester 1. Semester 2 is WBL: Multiple for 2 credits
Counts as Directed Elective or Elective for the General. Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
Additional cost: $0 (will already have tools from Auto Service Tech I, II)