

Program of Studies

Graduation Requirements

Course Listings



2019-2020



Western High School

2600 S. 600 W., Russiaville, IN 46979 765.883.5541

Introduction

Use this book to help you plan your high school program. In this book, you will find requirements for earning the type of Indiana high school diploma you choose. You'll also find the names and descriptions of all of Western High School's courses.

When selecting your courses, consider your future. What are your career goals, interests, and talents? Certain courses are requirements, but you may choose to take many others as electives. Choose electives that seem interesting, will challenge you, will help you reach your goal, and sound like fun!

We don't expect you to plan your four-year program by yourself. Counselors will meet with 9th grade students to develop a four-year plan. If you have questions, ask your counselor. We want you to have a successful high school experience!

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Mission Statement

It is the mission of WHS 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
Russiaville, Indiana 46979
Phone: 765-883-5541

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.

Academic courses not currently available or listed in our Course Description Handbook 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 HS administration. All online courses must be approved prior to taking the course for it to be applied to the HS transcript.

Western High School Graduation Requirements

- Students are strongly encouraged to attend all **eight (8)** semesters. Exceptions to this must be approved by administration.
- Students need to earn a minimum of **46** credits to graduate.
- Students must pass an End of Course assessment in Algebra I and English 10.
- Any senior new to Western needs to earn at least **ten (10)** credits at Western High School to obtain a Western diploma. Exceptions to this require principal approval.

Transfer Credits and Weighting from an Accredited School

- All eligible credits will be transferred from an accredited school.
- College Board (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 not offered 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.

- Students must complete minimum requirements for one of the following diploma options:

Indiana's 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. There are different diploma requirements for those students who entered high school in 2012-2013. As you look through the different diploma types, please make sure you are looking at the correct requirements for your student. The three approved diploma types are:

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

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.

Credit Requirements and Western Courses

English/Language Arts	8 credits	
	2 English 9 2 English 10 4 Some Combination of 4 credits in the following classes: English 11, English 12, Mass Media, Themes in Literature, Film Literature, Short Stories, etc.	
Mathematics	4 credits	
	2 credits: Algebra I A and I B 2 credits: Any Math Course	
Science	4 credits	
	2 credits: Biology I A and I B 2 credits: Any Science Course as long as at least one credit is from a Physical Science or Earth and Space Science	
Social Studies	4 credits	
	2 credits: U.S. History A and B 1 credit: U.S. Government 1 credit: Economics	
Physical Education	2 credits	Physical Education A and B
Health and Wellness	1 credit	Health and Wellness or *Option of three FACS courses
Career Academic Sequence*	6 credits	*Career Academic Sequence – Selecting electives in a deliberate manner to take full advantage of career exploration and preparation opportunities.
Flex Credit	5 credits	
	To earn 5 Flex Credits a student must complete one of the following: <ul style="list-style-type: none"> • Additional courses to extend the career academic sequence • Courses involving workplace learning, which may include the following courses: <ul style="list-style-type: none"> o Career exploration internship o Professional career internship o Business cooperative experiences o Cooperative family and consumer sciences o Industrial cooperative education o Interdisciplinary cooperative education o Marketing field experience • High school/college dual credit courses • Additional courses in: <ul style="list-style-type: none"> o Language Arts o Social Studies o Mathematics o Science o World Languages o Fine Arts 	
Technology	1 credit: Digital Citizenship (requirement ends after 2016)	
Electives	11 credits	

46 Total Credits Required

INDIANA

CORE40

Credit Requirements and Western High School Courses

English/ Language Arts	2 credits: English 9 2 credits: English 10 2 credits: English 11 2 credits: English 12	
Mathematics	6 credits 2 credits: Algebra I 2 credits: Geometry 2 credits: Algebra II In the classes of 2013-2015, all students are required to take a math or physics course during their junior or senior year. Beginning with the class of 2016, this requirement changes to all students are required to take a math or quantitative reasoning class every year in high school.	
Science	6 credits 2 credits: Biology IA and IB 2 credits: Chemistry IA & IB or Physics IA & IB or Integrated Chemistry-Physics IA & IB 2 credits: Any Science Class	
Social Studies	6 credits 2 credits: U.S. History A & B 1 credit: U.S. Government 1 credit: Economics 2 credits: World History/Civilization A & B or Geography/History of the World A & B	
Directed Electives	5 credits World Languages (French, Japanese, Spanish) Fine Arts (Band, Chorus, Visual Arts) Career/Technical (FACS, IT, Business, Agricultural Science, KACC)	
Physical Education	2 credits	Physical Education A and B
Health and Wellness	1 credit	Health and Wellness or *Option of three FACS courses
Computer Applications	1 credit	Digital Citizenship (requirement ends with 2016)
Electives	11 credits	(Career Academic Sequence Recommended)
46 Total Credits Required		

***Three FACS courses to replace Health course chosen from:**

- Adult Roles & Responsibilities
- Child Development A
- Child Development B
- Human Development & Family Wellness
- Interpersonal Relations
- Nutrition & Wellness A
- Nutrition & Wellness B
- Preparing for Colleges and Careers

CORE40 with Academic Honors CLASS OF 2013-2015 (minimum 48 credits)

- 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 one of the following:
 - A. Complete AP courses (4 credits) and corresponding AP exams
 - B. Complete IB courses (4 credits) and corresponding IB exams
 - C. Earn a combined score of 1200 or higher on the SAT critical reading and mathematics
 - D. Score a 26 or higher composite on the ACT
 - E. Complete dual high school/college credit courses from an accredited postsecondary institution (6 transferable college credits)
 - F. Complete a combination of an AP course (2 credits and corresponding exam) or an IB Standard Level course (2 credits and corresponding exam) and dual high school/college credit course(s) from an accredited postsecondary institution (3 transferable college credits)

CORE40 with Technical Honors CLASS OF 2013-2015 (minimum 48 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. Pathway designated industry-based certification or credential, or
 2. Pathway dual credits from the lists of priority courses resulting in 6 transcribed 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 one of the following,
 - A. Any one of the options (A - F) of the Core 40 with Academic Honors
 - B. Earn the following scores or higher on 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.

CORE40 with Academic Honors CLASS OF 2016 & Beyond (minimum 48 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 one of the following:
 - A. Earn 4 credits in 2 or more AP courses and take corresponding AP exams
 - B. Earn 6 verifiable transcribed college credits in dual credit courses from priority course list
 - C. Earn two of the following:
 1. A minimum of 3 verifiable transcribed college credits from the priority course 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.

CORE40 with Technical Honors CLASS OF 2016 & BEYOND (minimum 48 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. Pathway designated industry-based certification or credential, or
 2. Pathway dual credits from the lists of priority courses resulting in 6 transcribed 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 one of the following,
 - A. Any one of the options (A - F) of the Core 40 with Academic Honors
 - B. Earn the following scores or higher on 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.

Western High School Courses

Agricultural Science and Business

Introduction to Agriculture, Food, and Natural Resources (formerly Fundamentals of Agriculture Science and Business) A and B

Grade Levels: 9-10

Semesters: 2

Credits: 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.

Animal Science A and B

Grade Levels: 10-11

Semesters: 2

Credits: 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.

Natural Resources – not offered 2018-2019

Grade Levels: 10-12

Semesters: 1

Credits: 1

Prerequisite: None

Natural Resources provides students with a foundation in natural resources. Hands-on learning activities in addition to leadership development, supervised agricultural experience and career exploration encourage students to investigate areas of environmental concern. Students are introduced to the following areas of natural resources: soils, the water cycle, air quality, outdoor recreation, forestry, rangelands, wetlands, animal wildlife and safety.

Landscape Management I

Grade Levels: 10-12

Semesters: 1

Credits: 1

Prerequisite: Introduction to Agriculture

Landscape Management provides the student with an overview of the many career opportunities in the diverse field of landscape management. Students are introduced to the procedures used in the planning and design of a landscape using current technology practices, the principles and procedures of landscape construction, the determination of maintenance schedules, communications and management skills necessary in landscape operations and the care and use of equipment utilized by landscapers. Students will also participate in leadership development, supervised agricultural experience and career exploration

activities in the area of landscape management. Upon completion of the program, students have the opportunity to become Indiana Landscape Industry Certified through a state approved program.

Advanced Life Science, Animals A and B

Grade Levels: 11-12

Semesters: 2

Credits: 2

Prerequisite: *Biology I; Integrated Chemistry/Physics, or Chemistry I*

This is a standards-based, interdisciplinary science course that integrates biology, chemistry, and microbiology in an agricultural context. Students enrolled in this course formulate, design, and carry out animal-based laboratory and field investigations as an essential course component. Students investigate key concepts that enable them to understand animal growth, development, and physiology as it pertains to agricultural science. This course stresses the unifying themes of both biology and chemistry as students work with concepts associated with animal taxonomy, life at the cellular level, organ systems, genetics, evolution, ecology, and historical principles of scientific inquiry to solve problems related to biology and chemistry in highly advanced agricultural applications of animal development. This course fulfills two Core 40 science requirements.

Advanced Life Science, Plant and Soil A and B

Grade Levels: 11-12

Semesters: 2

Credits: 2

Prerequisite: *Biology I and Integrated Chemistry/Physics or Chemistry I*

Advanced Life Science, Plant and Soil, is a standards-based, interdisciplinary science course that integrates the study of advanced biology, chemistry, and earth science in an agricultural context. Students enrolled in this course formulate, design, and implement agriculturally-based laboratory and field investigations as an essential course component. These extended laboratory and literature investigations focus on the chemical reactions of matter in living and nonliving materials while stressing the unifying themes of chemistry and the development of physical and mathematical models of matter and its interactions. Using the principles of scientific inquiry, students examine the internal structures, functions, genetics and processes of living plant organisms and their interaction with the environmental. Students completing this course will be able to apply the principles of scientific inquiry to solve problems related to both biology and chemistry in the context of highly advanced agricultural applications of plants and soils.

Advanced Life Science, Foods A and B – not offered 2018-2019

Grade Levels: 11-12

Semesters: 2

Credits: 2

Prerequisite: *Biology I and Integrated Chemistry/Physics or Chemistry I*

Advanced Life Science, Foods, is a standards-based, interdisciplinary science course that integrates biology, chemistry, and microbiology in an agricultural context. Students enrolled in this course formulate, design, and carry out food based laboratory and field investigations as an essential course component. Students understand how biology, chemistry, and physics principles apply to the composition of foods, food nutrition and development, food processing, and storage. Students completing this course

will be able to apply the principles of scientific inquiry to solve problems related to biology, physics and chemistry the context of highly advanced agricultural applications of food.

Introduction to Business

Grade Levels: 9-10

Semesters: 1

Credits: 1

Prerequisite: None

Business Foundations, an introductory business course, provides the framework for all future business courses. This core course acquaints students with economics, entrepreneurship, management, marketing, law, risk management, banking personal finance, and careers in business. The importance and application of business etiquette and ethics are included.

Business Law & Ethics (formerly Business and Personal Law)

Grade Levels: 11-12

Semesters: 1

Credits: 1

Prerequisite: Introduction to Business (Recommended)

Business and Personal Law provides an overview of the legal system. Topics covered include: Basics of the Law, Contract Law, (Renting and Leasing), Employment Law, Personal Law (Marriage and Divorce), and Property Law. Both criminal and civil trial procedures are presented. Instructional strategies may include mock trials, case studies, guest speakers, and Internet projects.

Digital Applications and Responsibility (formerly Information Communications and Technology)

Grade Levels: 9-12

Semesters: 1 or 2

Credits: 1 per sem.

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 process 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.

Computer Illustration and Graphics

Grade Levels: 10-12

Semesters: 1

Credits: 1

Prerequisite: Information Communication and Technology or 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 courses 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.

Computer Science I 4801 (COM SCI I) 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. • Recommended Grade Level: 10-12 • Recommended Prerequisites: Introduction to Computer Science • Credits: 2 semester course, 2 semesters required, 1 credits 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

Intro Computer Science

Grade levels: 10-12

Semesters: 1 or 2

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.

Computer Science, AP

Grade Levels: 11-12

Semesters: 1 or 2

Credits: 1 each sem

Prerequisite: Computer Programming IA & IB

Computer Science A, Advanced Placement is a business mathematics course that provides students with the content established by the College Board. The course emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development, and also includes the study of data structures, design, and abstraction. The course provides students an alternative to taking pre-calculus or calculus to fulfill the four-year math requirement for graduation. Qualifies as a quantitative reasoning course.

Personal Financial Responsibility

Grade Levels: 10-12

Semesters: 1

Credits: 1
Prerequisite: Computer Applications/Digital Citizenship

Personal Finance is a business course that focuses on personal financial planning. The content includes financial planning, income and asset protection, income and money management, and spending and credit management. Students learn the financial concepts and principles that provide a basis for avoiding financial pitfalls. This course prepares students for the roles and responsibilities of consumers, producers, entrepreneurs, and citizens. Instructional strategies may include simulations, guest speakers, Internet research, and business experiences. These standards are aligned with National Business Association (NBEA), Jump\$Start Coalition for Personal Financial Literacy, and Indiana State University – Networks Financial Institute standards and guidelines.

Accounting I A and I B

Grade Levels: 11-12

Semesters: 2

Credits: 2

Prerequisite: none

Accounting I is a business course that 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. Instructional strategies may include the use of computers, projects, simulations, case studies, and business experiences requiring the application of accounting theories and principles.

Web Design A & B

Grade Levels: 10-12

Semesters: 2

Credits: 2

Prerequisite: Information Communication and Technology

This is a two semester course that is designed to give students a background in beginning web page design. It is a course that provides instruction in the principles of web design using HTML/XHTML and current/emerging software programs. Areas of instruction include audience analysis, hierarchy layout and design techniques, software integration and publishing. Students will also evaluate web pages for content and design. By the end of the first semester course, students will be able to evaluate, create and publish a simple web page. By the end of the second semester students will have created a website in a team setting using various web design tools. This course gives students an advantage in the business world or college in designing web pages.

Business Math A and B

Grade Levels: 10-12

Semesters: 2

Credits: 2 *May fulfill up to two graduation credits of the minimum Math requirement for General Diploma.*

Prerequisite: Algebra I (recommended)

Business Math is a business course designed to prepare students for roles as entrepreneurs, producers, and business leaders by developing abilities and skills that are part of any business environment. A solid

understanding of math including algebra, basic geometry, statistics and probability provides the necessary foundation for students interested in careers in business and the skilled trade area. The content includes mathematical operations related to accounting, banking and finance, marketing, and management. Instructional strategies may include simulations, guest speakers, tours, Internet research, and business experiences.

English and Language Arts

Non-Elective English Courses

English 9 –*Meets English requirements for a Core 40 diploma*

Grade Levels: 9
Semesters: 2
Credits: 2
Prerequisite: None

English 9 emphasizes proper use of the English language in written form. Students are asked to identify the parts of a sentence. Grammar skills, such as correct use of tense and proper use of capital letters and punctuation, are stressed. Writing skills, along with the avoidance of run-on sentences and fragments, are included. They write coherent and focused essays that show a well-defined point of view and tightly reasoned argument in MLA style. Students will learn to answer writing prompts that require them to pull answers directly from the text to support a thesis statement. Students will also progress through the stages of the writing process (prewriting, writing, editing, and revising). Additionally, students will survey works of historical and cultural significance from around the world ranging from short stories, poetry, drama, nonfiction, epics, and myths. Along with reading these various texts, students will engage in understanding and analyzing character relationships and literary devices that are found in each work. Class projects that are correlated with the text are also required. Students will study many literary terms and vocabulary words on a weekly basis that are associated with each of the texts and will emphasize derivatives, word relationships, and analogies. Responses to literature projects are required both semesters.

Honors English 9 (*Weighted grading scale is used for this course.*)

Grade Levels: 9
Semesters: 2
Credits: 2
Prerequisite: *A variety of factors will be explored to determine eligibility*

English 9 Honors is an integrated English course for advanced ninth grade students. In this course, students will study language, literature, composition, and oral communication with a focus on exploring a wide variety of genres and their elements. Students identify and correctly use parts of speech, parts of the sentences, phrases, clauses and correct mechanics. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for grade 9 in classic and contemporary fiction and nonfiction. Students write narratives, responses to literature, personal, expository, and persuasive essays, research reports, business

letters, and technical documents. Students give oral presentations and access, analyze, and evaluate online information. A vocabulary program is also included which focuses on common SAT words. Responses to literature projects are required for this course each semester.

English 10

Grade Levels: 10
Semesters: 2
Credits: 2
Prerequisite: English 9 or teacher recommendation

English 10 is an integrated course which focuses on grammar, composition, vocabulary, and American literature. Grammar study includes parts of speech, parts of a sentence, phrases, clauses, punctuation, capitalization, and usage. Students will write a variety of compositions including personal writing, narratives, business letters, and persuasive essays. They will also do some evaluating of online sources, culminating in the writing of a research report. Students continue to practice the process of writing through pre-writing techniques, revision, and editing. The class includes discussions of both the literary works and the ideas that have influenced American society. Course work will involve vocabulary study from the readings, literary terms related to the selections, characteristics of various genres, universal themes across a variety of genres, and enhanced reading comprehension. Students will use literary interpretation, analysis, comparisons, and evaluation in reading and responding to literature. They will also make oral presentations and study one complete novel as part of this class. Vocabulary is studied on a regular basis. Students will also read and report on one book of their choice.

Honors English 10 (*Weighted grading scale is used for this course.*)

Grade Levels: 10
Semesters: 2
Credits: 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 is a two semester course which integrates the study of literature, grammar, composition, and oral communication. 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 a representative of historical or cultural significance in a wide variety of genres. The course involves the students writing short stories, responding to literature, developing expository and persuasive compositions, and researching a topic. Students deliver oral presentations and access, analyze, and evaluate online information. Individually, students read a classic American literature book as well as a contemporary author. A vocabulary program is also included which focuses on common SAT words.

English 11

Grade Levels: 11
Semesters: 2
Credits: 2
Prerequisite: English 9 and English 10 or teacher recommendation

English 11 is an integrated course that focuses on grammar, composition, vocabulary, and British literature. Grammar study includes parts of speech, parts of a sentence, phrases, clauses, punctuation, capitalization, sentence structure, and usage. Students will write a variety of compositions including

personal narratives, business letters, reviews, and persuasive essays. Also, students receive instruction and practice using MLA style. Students will also do some evaluating of on-line sources, culminating in the writing of a research paper. Students continue to practice the process of writing through pre-writing techniques, revision, and editing. The vocabulary aspect of the course focuses on words the students can use to improve their writing, as well as prepare them for college. This course also focuses 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 are expected to respond critically, reflectively, and imaginatively to the texts covered in this course, and are assigned various writing task in conjunction with each unit. Students also communicate orally through presentations and class participation in dramatic texts. Vocabulary and literary devices are discussed, practiced, and tested over according to the various units. Individually, students will also read and report on one book of their choice.

Honors English 11 (*Weighted grading scale is used for this course.*)

Grade Levels: 11

Semesters: 2

Credits: 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 is a year-long course that integrates advanced studies in vocabulary, language, composition, and British literature. Vocabulary is assigned and tested over on a tri-weekly basis, improving reading and writing skills, also preparing them for college entrance exams. The course offers analytical study of poetry, epics, romances, drama, short stories, novels, and other relevant works. Students are expected to respond critically, reflectively, and imaginatively to the texts covered in this course, and are assigned various writing task in conjunction with each unit. Literary devices are discussed, practiced, and tested over according to the various units. The first semester focuses on early work from British Literature stretching from the Anglo-Saxon period through the Early Enlightenment. The second semester focuses on poetry, short stories, novels, and dramatic texts from the Enlightenment through the Modern Period. Honors students read a more difficult and wider variety of texts, and their written work and oral presentations are more in-depth. They are asked to write analytical, compare/contrast, and expository essays, as well as a research paper utilizing MLA style during the second semester.

Short Stories

Grade Levels: 11-12

Semesters: 1

Credits: 1

Prerequisite: *English 9 and English 10 or teacher recommendation*

The Short Stories course focuses on the relationship between the form and meanings in the genre. This course is predominantly set up by units. The course begins with a short unit that discusses the development and history of the story. Students will also explore the distinct features of the short story analyzing the setting, plot, characters, theme, Short stories are contrasted with other literary genres and popular fiction. Issues of audience, purpose, and historical development are also considered. Students are given opportunities to express their knowledge of this genre and its co through creative and analytical writing, class discussion, and other speaking experiences. Students will also read and one book of their choice.

Film Literature

Grade Levels: 11-12

Semesters: 1
Credits: 1
Prerequisite:

Film Literature studies the diversified ideas and concepts that interact when written literature is adapted to film or when a work of literary art is originally conceived for film presentation. Students will view a variety of literary genre via video presentations. Group and individual activities will be utilized to build skill in comprehension of plots, analysis of characters, appreciation of quality literature, recall of main details, comprehension and utilization of the elements of literature, and the organization of ideas. Writing assignments and other projects will be required. Students will also read and report on a class novel.

Creative Writing

Grade Levels: 11-12
Semesters: 1
Credits: 1

Creative Writing, a course based upon the Indiana Academic Standards for English/Language Arts, offers students a series of activities and experiences designed to develop the awareness and skills essential in writing creatively. Students will experiment with various forms. Class activities will include reading models of professional writing, writing from a variety of prompts, reading personal compositions to the class, and commenting on the compositions of others. 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.

English 12

Grade Levels: 12
Semesters: 2
Credits: 2
Prerequisite: English 9, English 10, and English 11 or teacher recommendation

As preparation for four-year college degree programs, English 12 will be a rigorous course consisting of world literature, various types of essays, and a formal study of grammar, mechanics, usage, and vocabulary. Essays are based on literary analysis, and a multi-source research project using MLA style of documentation is required to receive a credit for the class. Writing assignments at this stage will include a clearly identified audience, a well-articulated purpose and thesis, and a structured body and will utilize the phases of writing (prewriting, drafting, revising, editing, and publishing). Literary works include a study of mythology, contemporary authors and multicultural fiction. Oral presentations will be required. Students will also read novels, drama, and short stories during the second semester.

Advanced English College Credit (ADV ENG CC): ACP English Composition (W131) *(Weighted grading scale is used for this course.)*

Grade Level: 12
Semester: 1
Credit: 1 (3 dual credits are available)
Prerequisite: Approval from Indiana University

Elementary composition 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. This is an Indiana University course. 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. Points will be accumulated from homework, in-class assignments, participation, and final written assignments. Since much work and discussion will be carried on in class, impeccable attendance and assignment submission is imperative. Additionally, students will be required to read an independent novel as per English departmental policy. Books must be purchased by the student and tuition must be paid to Indiana University at Kokomo, acting as an intermediary for IU Bloomington. IU: ADV ENG CC-W131 3 college credits

Advanced English College Credit (ADV ENG CC): ACP Literature (L202) (*Weighted grading scale is used for this course*)

Grade Level: 12

Semester: 1

Credit: 1 (3 dual credits are available)

Prerequisite: Approval from Indiana University

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. Additionally, students will also be required to read an independent novel as per English departmental policy. Books must be purchased by the student and tuition must be paid to IU at Kokomo, acting as an intermediary for IU Bloomington. IU: ADV ENG CC-L202 3 college credits.

AP English Literature and Language Composition (*Weighted grading scale is used for this course.*)

Grade Level: 12

Semesters: 2

Credits: 2

Prerequisite: Recommendation of the English 11 Honors teacher. Recommendation: B+ or higher semester grades in English 11 Honors

AP English is a college-level course in literature, designed to engage students in college-level work while still in high school. Summer reading and related projects are required for this course. Great works of literature are studied in chronological order, beginning with Greek myths and extending to early Twentieth Century. In this seminar course, the study and analysis of literature is reflected in many different kinds of writing, both in and out of class. As in any seminar course, oral participation is required. Additionally, formal oral presentations are required in several units. Students may take one or both of the AP tests, one in Literature and Composition and one in Language and Composition, in May for the opportunity to earn college credit.

English Elective Courses

Language Arts/English LAB

Grade Levels: 9-12

Semesters: 2

Credits: 1-8

Prerequisite: none

This course is offered as an extension and supplement to a student's non-elective English course. It is designed to provide individualized or small group instruction to acquire the required skills which should ensure success in completing English course work aligned with Indiana's Academic Standards for English/Language Arts in grades 9-12 and the common Core State Standards for English Language Arts.

Standards for English/Language Arts, focusing on the Writing Standards (Standards 4, 5 and 6). This course is for students who need additional support in all of the areas of English/Language Arts (reading, writing, speaking and listening) and is scheduled back-to-back with the non-elective English course.

Student Media, Journalism IA and IB

Grade Levels: 9-12

Semesters: 1-2

Credits: 1-2

Prerequisite: Minimum grade of C- in all previous English courses; approval by publications adviser
All students must take IA before taking IB.
To continue with IB, students must earn minimum grade of C- in IA.

In this course, students will discuss journalism practices for style, articles, editing, photography, design, and advertising. In first semester, students will have an opportunity to write captions and headlines, conduct some interviews, compose articles, and design a layout. During 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. During the study of design, students will examine a variety of media formats. They will discuss and follow the ethical principles and legal boundaries that guide school journalism. Through their written assignments, students will clearly express themselves as they inform, entertain, and persuade their audience. **NOTE: This course fulfills the Fine Arts requirement for the Core 40 with Academic Honors.**

Student Media, Journalism IIA & IIB; IIIA & IIIB; IVA & IVB

Grade Levels: 10-12

Semesters: 1-4

Credits: 1-46

Prerequisite: Minimum grade of C- in Student Publications IA
To continue in subsequent semesters, minimum grade of C- and adviser approval

Throughout the year, students will be responsible for producing the yearbook. They will also study advertising, censorship, fairness, libel, and privacy. As they use computers to design yearbook pages, students will examine a variety of media formats and become proficient in using desktop publishing software. Through their written assignments, students will clearly express themselves as they inform, entertain, and persuade their audience. **NOTE: This course fulfills the Fine Arts requirement for the Core 40 with Academic Honors**

Advanced Speech and Communication A and B

Grade Levels: 11-12

Semesters: 1-2

Credits: 1-2

Prerequisite: Passing grades in both English 9 and English 10 courses

Advanced Speech and Communication is designed for the student who wants to improve public speaking skills. These courses deal with communication theory, the principles and process of organization of thought through outlining, and a wide variety of specialized speeches. The student will learn to use the voice and body to communicate effectively through speeches that further the four basic speech purposes: to inform, to persuade, to inspire, and to entertain.

Adult Roles and Responsibilities

Grade Levels: 11-12

Semesters: 1

Credits: 1

Prerequisite: None

This class is designed to help students develop their ability to maximize personal satisfaction from their approaching goals as independent adults. This course deals with getting a job, buying a car, choosing insurance, and providing for basic needs of food, clothing, and housing. Financial planning is simulated by setting up a realistic budget and creation of a check book simulation. This course is one of the 6 courses that can be taken as part of a sequence of courses to meet the Health requirement.

Child Development and Parenting A

Grade Levels: 9-12

Semesters: 1

Credits: 1

Prerequisite: None

Students study the development of the child from the decision of parenting through the birth of the baby. To help students prepare for responsible adulthood they study human reproduction, birth defects, and rights of children. Students research parenting-related resources, services, and agencies. This course is one of the 6 courses that can be taken as part of a sequence of courses to meet the Health requirement.

Advanced Child Development

Grade Levels: 9-12

Semesters: 1

Credits: 1

Prerequisite: *Child Development and Parenting A*

Advanced Child development allows discovery in knowledge, skills, attitudes, and behavior associated with child care and parenting skills. Recognition of the physical, mental, social and emotional development of each age group helps students better understand children and the care they require at each age, creation of a book for a preschool child. Special topics covered include teen pregnancy/parenthood and child care related careers. This course is one of the 6 courses that can be taken as part of a sequence of courses to meet the Health requirement.

Cadet Teaching/Early childhood education

Grade Levels: 11-12

Semesters: 1-3

Credits: 1-6

Prerequisite: *(Recommended): Child Development and Parenting A*

This one credit course and is recommended for juniors and seniors with interests in early childhood, education, and services career paths and provides the foundation for study in higher education that leads to child-related and/or education careers. Study includes: planning and guiding developmentally appropriate activities for young children or school-age children; developmentally appropriate practices of guidance and discipline; application of basic health and safety principles when working with children; overview of management and operation of licensed child care facilities or educational settings; Indiana state child care regulations and licensing requirements or regulations related to school-age children; and employability skills. The course provides laboratory/field experiences with young children in the school setting as each cadet will be assigned to a Host teacher in Western's Primary/Intermediate Building. This class can be extended to two periods per day.

EDUCATION PROFESSIONS I 5408

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 instructions, 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. Students are monitored in their field experiences by the Education Professionals teacher.

EDUCATION PROFESSIONS II 5404

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 teacher. Articulation with postsecondary programs is encouraged.

Human Development and Family Wellness

Grade Levels: 10-12

Semesters: 1

Credits: 1

Prerequisite: None

In this class, students increase their understanding of themselves and their priorities in relation to their future responsibilities when they choose to marry and establish their own families. Students will analyze the factors involved in selecting a mate, building a strong marriage, budgeting for family needs, parenting and aging in an effective family unit. Roles of family members are explored as they relate to the success of family relationships. Class members plan and participate in a mock wedding. This course is one of the 6 courses that can be taken as part of a sequence of courses to meet the Health requirement.

Interpersonal Relations

Grade Levels: 9-12

Semesters: 1

Credits: 1

Prerequisite: None

Increased understanding of the basic skills in getting along with others is the focus of this course. Greater awareness of one's own values and behavior, understanding human needs, and development of insight into the values and goals of self and others contribute to more effective relationships and better communication skills. Students explore how eating and dressing habits affect personal appearance and self-esteem. This course is one of the 6 courses that can be taken as part of a sequence of courses to meet the Health requirement.

Nutrition and Wellness A

Grade Levels: 9-12

Semesters: 1

Credits: 1
Prerequisite: None

This course examines eating habits and their effect on health and appearance. Students consider nutritional values when studying how to buy food, store food, prepare it properly, and serve it attractively. Principles of food preparation are applied in the laboratory, followed by evaluation of the products. The major project is a class Thanksgiving meal. This course is one of the 6 courses that can be taken as a part of a sequence of courses to meet the Health requirement.

(Students who plan to take Nutrition and Wellness B are strongly encouraged to schedule it the same year as this course.)

Advanced Nutrition and Wellness

Grade Levels: 9-12
Semesters: 1
Credits: 1
Prerequisite: Nutrition and Wellness , 2nd semester seniors may take the course without the prerequisite with teacher approval

This course explores the principles of meal planning and factors influencing meal preparation and artistic meal service. Creative talents are applied to adapting recipes and planning menus to assist persons with a variety of medical conditions and experience multicultural cooking. Students study and experiment with work efficiency procedures as related to potential career development skills. The major project is a themed party inviting outside guests. This course is one of the courses that can be taken as part of a sequence of courses to meet the Health requirement.

Preparing for Colleges and Careers (formerly titled Career Planning and Success Skills)

Grade Levels: 9-10
Semesters: 1
Credits: 1
Prerequisite: none

Career Planning and Success Skills is a career and technical education business course that is designed to address the knowledge, skills, and behaviors all students need to live, plan, and work successfully in today's society. This course includes exploring career clusters, developing leadership/teamwork skills, researching/collecting labor market data, and developing career plans. The employment process is explored through searching for employment opportunities, completing applications, developing resumes, participating in interviews, gaining job-survival skills, and understanding employee evaluations. Extensive practice in reading, writing, listening, and speaking skills is provided. Thinking skills such as decision making, problem solving, and reasoning are utilized through research, report writing, technical writing, and interpreting data.

Fine Arts, Visual and Music

Visual Arts

All art students are encouraged to take Introduction to Two-Dimensional Design and Introduction to Three-Dimensional Design. These courses provide a broad range of experiences in preparation for other art courses. The Academic Honors Diploma candidate may substitute Art Appreciation and History for one of these introductory art courses to meet the fine arts credits requirement.

Art History

Grade Levels: 10-12
Semesters: 1(Sem. 1)
Credits: 1
Prerequisite: None

Students will study works of art and artifacts from world cultures and focus on art from the cave man period. This class encompasses art history, art criticism, aesthetics, and production. Short studio experiences are included with lessons. Students have the opportunity to earn dual credit from Ivy Tech.

Advanced Art History

Grade Levels: 10-12
Semesters: 1(Sem 2)
Credits: 1
Prerequisite: Art History

Students continue to study works of art and artifacts from late 15th century to present day art trends. They build on knowledge and skills developed in Art History. Short studio experiences are included with lessons. Art History, art criticism, aesthetics and production are all involved in the class. Students have the opportunity to earn dual credit from Ivy Tech.

Art History , Advanced Placement

Grade Levels: 9-12
Semesters: 2
Credits: 2
Prerequisite: None

Art History, Advanced Placement is a course based on the content established by the College Board. Art History is designed to provide the same benefits to secondary school students as those provided by an introductory college course in art history: an understanding and knowledge of architecture, sculpture, painting, and other art forms within diverse historical and cultural contexts. Students examine major forms of artistic expression from the past and the present from a variety of cultures. They learn to look at works of art critically, with intelligence and sensitivity, and to analyze what they see. This course incorporates research, extensive reading, and analytical writing.

Introduction to Two-Dimensional Art

Grade Levels: 9-12
Semesters: 1
Credits: 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.

Introduction to Three-Dimensional Art

Grade Levels: 9-12
Semesters: 1
Credits: 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.

Drawing A

Grade Levels: 9-12

Semesters: 1

Credits: 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.

Drawing B

Grade Levels: 10-12

Semesters: 1

Credits: 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.

Drawing C

Grade Levels: 12

Semesters: 1

Credits: 1

Prerequisite: Minimum grade of C Drawing A and 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.

Painting A

Grade Levels: 10-12

Semesters: 1

Credits: 1

Prerequisite: Intro 2-D

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.

Painting B

Grade Levels: 10-12
Semesters: 1
Credits: 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.

Painting C

Grade Levels: 12
Semesters: 1
Credits: 1
Prerequisite: *Minimum grade of C in Painting A and 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.

Visual Communications

Grade Levels: 10-12
Semesters: 1
Credits: 1
Prerequisite: *Minimum grade of C in Introduction to Two-Dimensional Art*

Projects are oriented to art careers in areas such as advertising, logo design, and commercial illustration. Emphasis will be on design, lettering, and problem solving. Computer work will be involved with most projects. Art history, art criticism and aesthetics will be included in the study of visual communication.

Ceramics A

Grade Levels: 9-12
Semesters: 1
Credits: 1
Prerequisite: *Minimum grade of C in Introduction to Three-Dimensional Design*

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.

Ceramics B

Grade Levels: 10-12
Semesters: 1
Credits: 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.

Ceramics C

Grade Levels: 10-12

Semesters: 1

Credits: 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.

Advanced Three-Dimensional Art

Grade Levels: 10-12

Semesters: 1

Credits: 1

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.

AP Studio Art (2D Design Portfolio)

Grade Levels: 11-12

Semesters: 2

Credits: 2

Prerequisite: Drawing A and Drawing B

This portfolio is intended to address two-dimensional (2-D) design issues. Design involves purposeful decision making about how to use the elements and principles of art in an integrative way. The principles of design articulated through the visual elements help guide artists in making decisions about how to organize the elements on a picture plane in order to communicate content. For this portfolio, students are asked to demonstrate proficiency in 2-D design through any two-dimensional medium or process, including, but not limited to, graphic design, digital imaging, photography, collage, fabric design, weaving, illustration, painting, and printmaking. Any work that makes use of (appropriates) other artists' works (including photographs) and/or published images must show substantial and significant development beyond duplication.

AP Studio Art (Drawing Portfolio)

Grade Levels: 11-12

Semesters: 2

Credits: 2

Prerequisite: Drawing A and Drawing B

Drawing Portfolio 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 High School Approved Course Titles & Descriptions Indiana Department of Education 20 2015-2106 School Year July 15, 2015 Edition 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.

Musical Arts

Applied Music

Grade Level: 10, 11, or 12 • Laboratory course

Semesters: 2

Credits: 1 per semester

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. • Credits: a 1-semester course for 1 credit. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized. • Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma • Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dance Performance *(Meets Academic Honors Fine Arts requirement)*

Grade Levels: 9-12

*Semesters: 1 This course may be taken for successive **fall** semesters*

Credits: 1-4

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.

Concert Band A, B Intermediate and Advanced *(Meets Academic Honors Fine Arts requirement)*

Grade Levels: 9-12

Semesters: 1 This course may be taken for successive semesters

Credits: 1-12

Prerequisite: Teacher recommendation; participation in instrumental music or dance during fall semester

Students taking this course are provided with a balanced comprehensive study of music through the concert band, which develops skills in the psychomotor, cognitive and affective domains. Instruction is designed to that students are enabled to connect, examine, imagine, define, try to extend, and refine music. Efforts are made to integrate music study into subject areas. Ensemble and solo activities are designed to develop elements of musicianship including, but not limited to: 1) tone production, 2) technical skills, 3) intonation, 4) music reading skills, 5) listening skills, 6) analyzing music, and 7) studying historically significant styles of literature. Experiences include, but are not limited to, improvising, conduction, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer's intent in order to connect the performer with the audience. Time outside of

the school day may be scheduled for dress 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. In addition, students perform with expression and technical accuracy, a large and varied repertoire of concert band literature that is developmentally appropriate. Evaluation of music and performances is included. Participation in solo and ensemble contest is encouraged with the ultimate goal of attaining “Group I” level. Participation in performances outside of the academic day may include contests, athletic events, parades, contests and concerts. Students participate in summer rehearsals and in the summer camp prior to the beginning of school.

Beginning Chorus (*Meets Academic Honors Fine Arts requirement*)

Grade Levels: 9-12

Semesters: 1 *This course may be taken for successive semesters*

Credits: 3

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.

Intermediate Chorus (*Meets Aca Hon Fine arts requirement*)

Grades: 9-12

Semesters: 2

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. • Recom

Advanced Chorus, Varsity A, B (*Meets Academic Honors Fine Arts requirement*)

Grade Levels: 9-12

Semesters: 1 *This course may be taken for successive semesters:*

Credits: 1-12

Prerequisite: Teacher recommendation based on audition

This is an honor 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.

Music Theory and Composition

Grade Levels: 11-12

Semesters: 1

Credits: 1

Prerequisite: 1 year in HS Band or Choir

Students taking this course develop skills in the analysis of music and theoretical concepts. Students: 1) develop ear training and dictation skills, 2) compose works that illustrate mastered concepts, 3) understand harmonic structures and analysis, 4) understand modes and scales, 5) study a wide variety of musical styles, 6) study traditional and nontraditional music notation and sound sources a stools for musical composition, and 7) receive detailed instruction in other basic elements of music. Students have the opportunity to experience live performances by professionals during and outside of the school day.

Music History and Appreciation

Grade levels: 9-12

Semesters: 1 Or 2 semesters

Credits: 1 per semester

Prerequisite: Teacher recommendation based on audition

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.

- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Health and Physical Education

Health and Wellness *(Required course for ALL diplomas unless choosing FACS option)*

Grade Levels: 10-12

Semesters: 1

Credits: 1

Prerequisite: None

Health and Wellness 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.

Current Health Issues

Grade Levels: 9-12

Semesters: 1

Credits: 1

Prerequisite: Health and Wellness

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.

Physical Education A and B (*Required course for ALL diplomas*)

Grade Levels: 9-12

Semesters: 2

Credits: 2

Prerequisite: None

This class emphasizes health-related fitness and developing the skills and habits necessary for a lifetime of activity. This program includes skill development and the application of rules and strategies of complex difficulty in at least three of the following movement forms: Health related fitness, aerobic exercise, team sports, individual and duel sports, gymnastics, and outdoor recreation

Elective Physical Education: Advanced PE

Grade Levels: 10-12

Semesters: 1

Credits: 1

Prerequisite: Physical Education A and B

This 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. Students will also be introduced to advanced strategies and officiated and rule development and adaptation.

Elective Physical Education: Advanced Physical Conditioning

Grade Levels: 10-12

Semesters: 1 per
semester

Credits: 1

Prerequisite: Physical Education A and B

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 allow them to actively participate in the class with a high degree of intensity and motivation.

Elective Physical Education: Lifetime Fitness Skills

Grade Levels: 10-12

Semesters: 1

Credits: 1

Prerequisite: Physical Education A and B

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.

Elective Physical Education: Lifeguarding/Advanced Swimming

Grade Levels: 10-12

Semesters: 1

Credits: 1

Prerequisite: Physical Education A and B; must be 15 years old by the completion of the course

Course goals: 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-PR, 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. If the student does not pass the Red Cross standards, course credit but not certification is also possible.

PE-SPORT-

Students participating in Marching band or a 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 CREDITS MUST BE FROM EITHER: A. FRESHMAN PE, B. PE-SPORT, OR C. ADV PE. THE APC COURSES CAN ONLY BE USED FOR ONE OF THE TWO REQUIRED PE COURSES.

Industrial Technology

Advanced Manufacturing I (3 Ivy Tech Dual Credits Possible)

Grade Levels: 10-12

Semesters: 2

Credits: 2

Prerequisite: Recommended - Introduction to Manufacturing or Computers in Design and Production

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.

Advanced Manufacturing II (3 Ivy Tech Dual Credits Possible)

Grade Levels: 11-12

Semesters: 2

Credits: 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.

Technology Enterprises

Grade Level: 10-12

Semesters: 1

Credits: 1

Prerequisite: Intro to Manufacturing, Advanced Manufacturing I or Advanced Manufacturing II

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 through this course 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.

Introduction To Communications– not offered 2018-2019

Grade Levels: 9-12

Semesters: 2

Credits: 2

Prerequisite: None

This course specializes in identifying and using modern communication to exchange messages and information. This course explores the application of the tools, materials, and techniques used to design, produce, use, and assess systems of communication. Students will produce graphic and electronic media as they apply communication technologies. This course will also explore the various technical processes used to link ideas and people through the use of electronic and graphic media. Using the base knowledge student will use the design process to solve design projects in each communication area.

Construction Systems

Grade Levels: 9-12

Semesters: 1

Credits: 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.

Introduction To Manufacturing

Grade Levels: 9-12

Semesters: 2

Credits: 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.

Computers in Design and Production

Grade Levels: 9-12

Semesters: 2

Credits: 2

Prerequisite: None

This course focuses on using computer systems in producing mechanical and architectural drawings and print design, design documentation using CAD systems and 3-D modeling of products or structures. AutoCAD, Autodesk Inventor and Autodesk Revit software will be used in class. Emphasis is

placed on using modern technologies and on developing career related skills for technological career pathways.

Transportation Systems

Grade Levels: 9-12

Semesters: 1

Credits: 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.

Math

ALGEBRA I LAB

Grade Levels: 9-12

Semesters: 2

Credits: 2

Prerequisite: Recommendation of 8th grade math teacher

Algebra Lab is a mathematics support course for *Algebra I*. The course provides students with additional time to build the foundations necessary for high school math courses, while concurrently having access to rigorous, grade-level appropriate courses. The five critical areas of *Algebra 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.

- Counts as a Mathematics Course for the General Diploma only or as an Elective for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- *Algebra I Lab* is designed as a support course for *Algebra I*. As such, a student taking *Algebra I Lab* must also be enrolled in *Algebra I* during the same academic year.

MATHEMATICS LAB

2560 (MATH LAB)

Grade Levels: 10-12

Semesters: 2

Credits: 1-8

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. It is recommended that Mathematics Lab is 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 Enrichment or Integrated Mathematics Enrichment to provide students with rigorous support for these courses.

- Credits: A one to eight credit elective course
- Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Clarifying information can be appended to the end of the course title to denote the content covered in each course
- Example: Mathematics Lab used to support students in Algebra II can be recorded on the transcript as Mathematics Lab – Algebra II.

ALGEBRA I A and 1B

Grade Levels: 9-12

Semesters: 2

Credits: 2

Prerequisite: 8th grade mathematics

Algebra I formalizes and extends the mathematics that students learned in the middle grades. Algebra I is made up of 5 strands: Real Numbers and Expressions; Functions; Linear Equations, Inequalities and Functions; Systems of Equations and Inequalities; Quadratic and Exponential Equations and Functions; and Data Analysis and Statistics. ; 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, and students engage in methods for analyzing, solving, and using quadratic functions. The Mathematical Practice Standards apply throughout each course and, together with the content 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 must earn a grade higher than F in Algebra 1 A to take Algebra 1 B.

MATH 10 A and B

Grade levels: 9-10

Semesters: 2, 1 cr per semester

Math 10 is a new 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 and essentials for passing the state's graduation qualifying exam in mathematics. Enrollment will be contingent upon recommendation of the Algebra teacher based on diagnostic results of performance in Algebra I and/or math competency assessments. The standards for this course are aligned to the state standards that students need to master for success with the state's graduation qualifying exam in mathematics and the next level math course. Emphasis on a variety of instructional methods designed to meet each student's needs and delivered through competency-based units with frequent pre and post assessment data analyzed to drive instructional design and delivery.

GEOMETRY A and B

Grade Levels: 9-12
Semesters: 2
Credits: 2
Prerequisite: Algebra 1 A & 1 B

Geometry formalizes and extends students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. Five critical areas comprise the *Geometry* course: Logic and Proofs; Points, Lines, Angles and Planes; Triangles; Quadrilaterals and Other Polygons; Circles; Transformations; and Three dimensional Solids. The Mathematical Process Standards apply throughout each course and, together with the content 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 must earn a grade higher than F in Geometry 1 A to take Geometry 1 B.

HONORS GEOMETRY A and B (Weighted grading scale is used for this course.)

Grade Levels: 9-10
Semesters: 2
Credits: 2
Prerequisite: Minimum grade of B in Algebra 1, 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. Five critical areas comprise the *Geometry* course: Logic and Proofs; Points, Lines, Angles and Planes; Triangles; Quadrilaterals and Other Polygons; Circles; Transformations; and Three dimensional Solids. The Mathematical Process Standards apply throughout each course and, together with the content 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 C in Honors Geometry may be changed to regular if their schedule permits.

ALGEBRA II A and II B

Grade Levels: 10-12
Semesters: 2
Credits: 2

Prerequisite: Algebra and Geometry

*** (Algebra 2 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 5 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 Mathematical Process Standards apply throughout each course and, together with the content 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 must earn a grade higher than F in Algebra II A to take Algebra II B.

Honors ALGEBRA II A and II B (Weighted grading scale is used for this course.)

Grade Levels: 10-12

Semesters: 2

Credits: 2

Prerequisite: Average grade of A- in Algebra and regular Geometry or average grade of B or higher in Honors Geometry, teacher recommendation

*** (Honors Algebra 2 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 5 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 Mathematical Process Standards apply throughout each course and, together with the content 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 C in Honors Algebra II may be changed to regular if their schedule permits.

TRIGONOMETRY

Grade Levels: 11-12

Semesters: 1

Credits: 1

Prerequisite: Precalculus

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 many disciplines, including music, engineering, medicine, and finance (and

nearly all other STEM disciplines). Trigonometry consists of seven strands: Conics, Unit Circle, Geometry, Periodic Functions, Identities, Polar Coordinates, and Vectors. Students will also advance their understanding of 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.

HONORS TRIGONOMETRY

<i>Grade Levels:</i>	<i>11-12</i>
<i>Semesters:</i>	<i>1</i>
<i>Credits:</i>	<i>1</i>
<i>Prerequisite:</i>	<i>Hon Precalculus</i>

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 many disciplines, including music, engineering, medicine, and finance (and nearly all other STEM disciplines). Trigonometry consists of seven strands: Conics, Unit Circle, Geometry, Periodic Functions, Identities, Polar Coordinates, and Vectors. Students will also advance their understanding of 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.

PRE-CALCULUS

<i>Grade Levels:</i>	<i>11-12</i>
<i>Semesters:</i>	<i>1</i>
<i>Credits:</i>	<i>1</i>
<i>Prerequisite:</i>	<i>Geometry and Algebra II</i>

Pre-Calculus extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to higher-level sequences and series. The course provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Pre-Calculus is made up of five strands: Polar Coordinates and Complex Numbers; Functions; Quadratic, Polynomial, and Rational Equations and Functions; Exponential and Logarithmic Equations and Functions; and Parametric Equations. Students will also advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. 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.

Students must earn a grade higher than F in Pre-Calculus A to take Pre-Calculus B.

Honors PRE-CALCULUS/ (Weighted grading scale is used for this course.)

Grade Levels: 11-12

Semesters: 1

Credits: 1

Prerequisite: Average grade of A- 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 higher-level sequences and series. The course provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Pre-Calculus is made up of five strands: Polar Coordinates and Complex Numbers; Functions; Quadratic, Polynomial, and Rational Equations and Functions; Exponential and Logarithmic Equations and Functions; and Parametric Equations. Students will also advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. 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.

Students who do not maintain a grade average of C in Honors Pre-Calculus may be changed to regular if their schedule permits.

FINITE MATHEMATICS

Grade Levels: 12

Semesters: 1

Credits: 1

Prerequisite: Algebra II

Finite Mathematics is an umbrella of mathematical topics. 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.

PROBABILITY AND STATISTICS

Grade Levels: 12

Semesters: 1

Credits: 1

Prerequisite: Algebra II

Probability and Statistics are made up of three strands: Data Analysis, Experimental Design, 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.

STATISTICS, ADVANCED PLACEMENT

Grade Levels: 11-12

Semesters: 2

Credits: 2

Prerequisite: Algebra II (preferably Honors Algebra II)

Statistics, Advanced Placement is a course based on content established by the College Board. The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics include: (1) exploring data: describing patterns and departures from patterns (2) sampling and experimentation: planning and conducting a study, (3) anticipating patterns: exploring random phenomena using probability and simulation, and (4) statistical inference: estimating population parameters and testing hypotheses. The use of graphing calculators and computer software is required. 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 must pass the first semester of AP Statistics to take the second semester. In addition to regular final exams, students will take the Advanced Placement Statistics exam.

CALCULUS AB, AP or ACP CALCULUS (Weighted grading scale is used for this course.)

Grade Levels: 12

Semesters: 2

Credits: 2

Prerequisite: Minimum grade of B- in Algebra I, Honors Geometry, Honors Algebra II, Honors Pre-Calculus, minimum of A- in Regular Algebra I, Geometry, Algebra II, Pre-Calculus, teacher recommendation

Calculus AB, Advanced Placement is a course based on content established by the College Board. *Calculus AB* is primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations also are important. Topics include: (1) functions, graphs, and limits; (2) derivatives; and (3) integrals. Technology should be used regularly by students and teachers to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in

interpreting results. Calculus is made up of five strands: Limits and Continuity; Differentiation; Applications of Derivatives; Integrals; and Applications of Integrals. 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 must pass the first semester of ACP Calculus to take the second semester. In addition to regular final exams, students will take the Advanced Placement Calculus exam or ACP Calculus Final.

Advanced Mathematics, College Credit:

Advanced Mathematics, College Credit is a title covering (1) any advanced mathematics course offered for credit by an accredited postsecondary institution • Recommended Prerequisite: Algebra II and Geometry or Integrated Mathematics III • Credits: 1 credit per semester. May be offered for successive semesters • Counts as a Mathematics Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas • This course may be used for multiple dual credit college courses in mathematics • Actual course title and university name may be appended to the end of the course title on the student transcript • Courses that use this title are most often those taught through the post-secondary campus, taught either online or in traditional settings or a combination; and taught by higher education faculty • Courses that use this title are those that do not meet specific high school standards for a corresponding high school course, as they are standards beyond what is taught in the high school. Ivy Tech: 2544 ADV MTH CC MA136, MA137 MA211

BUSINESS MATH

Grade Levels: 10-12

Semesters: 2

Credits: 2 Fulfills a Mathematics requirement for the General Diploma only

Prerequisite: Algebra I

Business Math is a business course designed to prepare students for roles as entrepreneurs, producers, and business leaders by developing abilities and skills that are part of any business environment. A solid understanding of math including algebra, basic geometry, statistics and probability provides the necessary foundation for students interested in careers in business and skilled trade areas. The content includes mathematical operations related to accounting, banking and finance, marketing, and management. Instructional strategies should include simulations, guest speakers, tours, Internet research, and business experiences.

Multidisciplinary

Humanities

Grade Level: 9-12

Semesters: 1 semester ,

Credits: 2

A course in humanities provides for the study of content drawn from history, philosophy, literature, languages, and the arts. This course also includes an in-depth study of specific disciplines in these and related subject areas that could include: (1) linguistics; (2) archeology; (3) jurisprudence; (4) the history, theory, and criticism of the arts; (5) the history and philosophy of science; (6) ethics; (7) comparative religions; and (8) other aspects of the social sciences which relate to understanding life and the world.

The emphasis of the course work is on developing an understanding of the content of the course and how to actually apply it to the human environment. Particular attention is given to the relevance of these applications in regard to the current conditions of life.

Career Information and Exploration

Grade Level: 11-12

Semesters: 1 or 2

Credits: 1 per semester, up to 2 credits

Career Information and Exploration provides students with opportunities to learn about themselves and about various traditional and nontraditional occupations and careers. Students also gain an awareness of the type of occupational preparation or training needed for various occupations and careers. Students develop skills in: (1) employability, (2) understanding the economic process, and (3) career decision making and planning. Opportunities are provided for students to observe and participate in various job situations through field trips, internships, mock interviews, and guest speakers. Resume development experience and career-related testing are also provided to students.

Peer Tutoring

Grade Level: 10,11,12

Semesters : 1 or 2

Credits: Up to 2 credits

Peer Tutoring provides high school students with an organized exploratory experience to assist students in kindergarten through grade twelve (k-12), through a helping relationship, with their studies and personal growth and development. The course provides opportunities for the students taking the course to develop a basic understanding of individual differences and to explore career options in related fields. **Participation is limited in this course and students must go through an application process.**

Career Exploration Internship

Grade Level: 11,12

Semesters: 1 or 2

Credits: Up to 2 credits—students must explore a different career area in the second semester

The Career exploration internship provides workplace learning in an area of student career interest. The course is intended to expose students to broad aspects of a particular industry or career cluster area by rotating through a variety of work sites or departments. **Participation is limited in this course and students must go through an application process.**

Science

Biology A and B

Grade Levels: 9-12

Semesters: 2

Credits: 2

Prerequisite: None

Biology 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.

Honors Biology A and B *(Weighted grading scale is used for this course.)*

Grade Levels: 9

Semesters: 2

Credits: 2

Prerequisite: Minimum grade of A in 8th grade Science and/or recommended for Honors Biology by 8th grade Science teacher. Students must maintain an Honors Biology I grade of B- or above in the first semester to remain in Honors Biology I for the second semester.

This is an accelerated study of the nature of science (matter, energy, and chemical processes of life), cells (biology, reproduction, and communication), genetics (principles, molecular basis, diversity, and biotechnologies), levels of organization (classification, and taxonomy), structure, function, and reproduction of plants, animals, and microorganisms, behavior of organisms, (interdependence of organisms, humans, and the environment), biological selection, adaptations, and changes through time, and also agricultural, food, and medical technologies and careers in biological fields. All Indiana Academic Core Standards for Biology 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 biological 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 safety procedures. Emphasis is placed on science literacy through various critical reading and writing activities as well as on advanced process skills through inquiry experiences and independent work.

Integrated Chemistry-Physics A and B

Grade Levels: 10-12

Semesters: 2

Credits: 2

Prerequisite: Algebra I or current enrollment in Algebra I. Students who have passed Chemistry I may not take the chemistry semester of this course.

This course introduces the fundamental concepts of scientific inquiry, the structure of matter, chemical reactions, forces, motion and the interactions between energy and matter. This course surveys chemistry and physics while ensuring a mastery of the basics of each discipline. The ultimate goal of the course is to produce scientifically literate citizens capable of using their knowledge of physical science to solve real-world problems and to make personal, social and ethical decisions that have consequences beyond the classroom.

Chemistry I A and I B

Grade Levels: 10-12

Semesters: 2

Credits: 2

Prerequisite: Biology I; minimum grade of C- in Algebra I

Chemistry I 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 earn a grade above F in Chemistry I A to continue with Chemistry I B.

Honors Chemistry IA and IB*(Weighted grading scale is used for this course.)*

Grade Levels: 10-12

Semesters: 2

Credits: 2

Prerequisite: Recommended that student maintains an Honors Chemistry I grade of B- or above in the first semester to remain in Honors Chemistry I for the second semester, student can petition to remain.

This course 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.

Anatomy/Physiology-dual credit through Ivy Tech*(Weighted grading scale is used for this course.)*

Grade Levels: 11-12

Semesters: 2

Credits: 2

Prerequisite: *Biology I; Algebra I; Integrated Chemistry-Physics OR Chemistry I*

Prerequisites: Biology I, Chemistry I, & Algebra I (MUST HAVE A C- OR HIGHER IN BIOLOGY AND CHEMISTRY)

This course will deal with the structure and function of organs and organ systems. Student must be willing to do the dissection of a pig a rat and various other structures from sheep and cows. Knowledge gained from this work will be used as a starting point for a description of the different body systems in man and other animals. The systems studied will include in animals the integumentary, skeletal, muscle, and nervous systems during semester one. Digestive, respiratory, circulatory, reproductive, excretory, immune, and hormone systems will be studied during semester two.

Earth Space Science

Grade Levels: 9-12

Semesters: 2

Credits: 2

Earth and Space Science I is a 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.

AP Environmental Science

Grade Levels: 11-12

Semesters: 2

Credits: 2

AP Environmental Science is a course based on content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. 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

ACP Chemistry – Dual Credit through Indiana University *(Weighted grading scale is used for this course.)*

Grade Levels: 11-12

Semesters: 2

Credits: 2

Prerequisites: Algebra I and II, Biology I, and Chemistry I (Must have a B or higher in Chem I)

To earn credit to Indiana University, the student must pay the requisite fees, and pass the course. It corresponds to C105 at any Indiana University campus. This is an Honors Diploma course, and CAN be taken just for HS credit, if the student does not want to pay the college credit fees.

This course deals with all of the topics covered in Regular/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.

Advanced Placement Biology A and B *(Weighted grading scale is used for this course.)*

Grade Levels: 11-12

Semesters: 2

Credits: 2

Prerequisite: Minimum grade of B in Biology; Genetics/Biochemistry, Microbiology and Algebra II OR enrollment during the same year

This course is designed for the student who is interested in the possibility of place out of a college biology course. Areas of study include: scientific method, molecular biology, botany, ecology and classification. Upon successful completion of this course, students may be recommended to take the Advanced Placement test. This course includes labs and out-of-class research to supplement classroom work. *(Students who receive below a C- after first semester, must seek approval to remain in the class for second semester)*

AP Physics 1: Algebra Based

Grade Levels: 11-12

Semesters: 2

Credits: 2

Pre-requisite: Algebra I

AP Physics 1 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 Physics 1: Algebra-based is equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits.

AP Physics 2: Algebra Based

Grade Levels: 11-12

Semesters: 2

Credits: 2

Pre-requisite: AP Physics I: Algebra based

AP Physics 2 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 Physics 2: Algebra-based is equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics.

Physics I A and I B

Grade Levels: 10-12

Semesters: 2

Credits: 2

Prerequisite: Algebra II (Concurrent)

Physics I is a course focused on the following core topics: motion and forces; energy and momentum; temperature and thermal energy transfer; electricity and magnetism; vibrations and waves; light and optics; and nuclear and subatomic particles. Students learn that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations and communicating the results of those investigations. Students must earn a grade higher than F in Physics I A to continue with Physics I B.

Social Studies

Ethnic Studies

Grade Levels: 9-12

Semesters: 1

Credits: 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.

Indiana Studies

Grade Levels: 9-12

Semesters: 1

Credits: 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 student 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.

Current Problems, Issues and Events

Grade Levels: 9-12

Semesters: 1

Credits: 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 studied from the viewpoint of the social science disciplines. Community service programs and internships within the community may be included.

Economics *(Required for all high school diplomas)*

Grade Levels: 12

Semesters: 1

Credits: 1

Prerequisite: None

Students study such topics as scarcity, factors of production, economic systems, market, structure, money and banking, the government as a taxing and spending power, supply and demand, inflation and deflation, monetary and fiscal policy, and the stock market.

Government (*Required course for all high school diplomas*)

Grade Levels: 12

Semesters: 1

Credits: 1

Prerequisite: None

Students study the American concept of government and the role of the American citizen in government. Topics covered include: voting behavior, election system, presidential role, congressional role, judicial, bureaucratic role, and the constitution.

Psychology

Grade Levels: 11-12

Semesters: 1

Credits: 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.

Sociology

Grade Levels: 11-12

Semesters: 1

Credits: 1

Prerequisite: None

Sociology studies human society and social behavior; social interaction and how people relate to and influence other's 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.

AP United States History A and B

Grade Levels: 11

Semesters: 2

Credits: 2

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 the students will take the Advanced Placement exam in United States History.

United States History A and B *(Required course for all high school diplomas)*

Grade Levels: 10-12

Semesters: 2

Credits: 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. In-depth study is made 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 event and people that lead up to the present time.

Geography and History of the World IA

Grade Levels: 9-12

Semesters: 1

Credits: 1

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 US 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. This course covers Western Europe, Eastern Europe, the Middle East, North Africa, East and South Africa, and West and Central Africa

Geography and History of the World IB *(While it is strongly encouraged that students take the semesters in order, students may take B before A)*

Grade Levels: 9-12

Semesters: 1

Credits: 1

Prerequisite: None

This course is designed to increase your physical, cultural, historical, and political 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. This course covers North America, Central and South America, Central Asia, South Asia and East Asia.

World History and Civilizations IA

Grade Levels: 9-12

Semesters: 1

Credits: 1

Prerequisite: None

This course is designed to increase your understanding of the world in which you live through the knowledge of your past. 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. This course covers the beginnings of human society, early civilizations in Egypt and Mesopotamia, classic civilizations in Greece and Rome, the development of Medieval Europe, the Rise of Western Civilization, and the Renaissance.

World History and Civilizations B *(While it is strongly encouraged that students take the semesters in order, students may take World History B before A)*

Grade Levels: 9-12

Semesters: 1

Credits: 1

Prerequisite: None

This course is designed to increase your understanding of the world in which you live through the knowledge of your past. 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. This course is the second part of World History and starts with European expansionism, covers the Enlightenment, French Revolution, Imperialism World Wars I and II, the Cold War, and goes up to the 21st century.

World Languages

French IA and IB

Grade Levels: 8-12

Semesters: 2

Credits: 2

Prerequisites:

It is recommended that students have at least a C- in language arts courses. As well as maintain a c- to continue to the second semester of the course.

Course Description:

French 1 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.

French IIA and IIB

Grade Levels: 9-12

Semesters: 2

Credits: 2

Prerequisites:

Students must complete French Level 1 with a C- or higher before taking this course. As well as maintain a c- to continue to the second semester of the course.

Course Description

French 2 picks up where French 1 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.

French IIIA and IIIB

Grade Levels: 10-12

Semesters: 2

Credits: 2

Prerequisites:

Students must complete French Level 2 with a C- or higher before taking this course. As well as maintain a c- to continue to the second semester of the course.

Course Description

French 3 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.

Honors French IVA and IVB

Grade Levels: 11-12

Semesters: 2

Credits: 2

Prerequisite:

- *Students must complete French Level 3 with a C- or higher before taking this course.*
- *Students must complete French Level 3 with a B- or higher before taking this course for Honors credit, as well as maintain a B- or higher at the end of the first semester.*

Course Description

French 4 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. Honors students will complete additional readings & projects furthering their knowledge & understanding of Francophone culture.

AP French

Grade Levels: 12

Semesters: 2

Credits: 2

Prerequisite:

- *Students must complete French Level 4 with a B- or higher before taking this course for Honors credit, as well as maintain a B- or higher at the end of the first semester.*

Course Description

AP French is a continuation of 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. Honors students will complete additional readings & projects furthering their knowledge & understanding of Francophone culture. The College Placement Exam, AP Exam, and SAT French Exam materials are available for preparation for those tests.

Japanese IA and IB

Grade Levels: 8-12

Semesters: 2

Credits: 2

Prerequisites:

It is recommended that students have at least a C- in language arts courses. As well as maintain a C- to continue to the second semester of the course.

Course Description

Japanese Level 1 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.

Japanese IIA and IIB

Grade Levels: 9-12

Semesters: 2

Credits: 2

Prerequisites:

Students must complete Japanese Level 1 with a C- or higher before taking this course. as well as maintain a C- or higher at the end of the first semester.

Course Description

Japanese Level 2 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 Year 1 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.

Japanese IIIA and IIIB

Grade Levels: 10-12

Semesters: 2

Credits: 2

Prerequisites:

Students must complete Japanese Level 2 with a C- or higher before taking this course. as well as maintain a C- or higher at the end of the first semester.

Course Description

Japanese Level 3 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 (160 total) 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.

Honors Japanese IVA and IVB

Grade Levels: 11-12

Semesters: 2

Credits: 2

Prerequisites:

- *Students must complete Japanese Level 3 with a C- or higher before taking this course.*
- *Students must complete Japanese Level 3 with a B- or higher before taking this course for Honors credit, as well as maintain a B- or higher at the end of the first semester.*

Course Description

Japanese Level 4 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 (240 total, 320 total for honors) 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.

AP Japanese

Grade Levels: 12

Semesters: 2

Credits: 2

Prerequisites:

- *Students must complete Japanese Level 4H with a B- or higher before taking this course for AP credit, as well as maintain a B- or higher at the end of the first semester.*
- *Students who have completed Japanese Level 3 with an A- or higher and wish to take the AP section of this course must have teacher permission and complete/test over a supplementary information packet done over the summer.*

Course Description

Japanese Level AP 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 (320 total, 480 total for honors) 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 taking the course for AP credit will also practice their Japanese abilities frequently in practice exercises designed to prepare them for the AP examination in the spring semester. All AP students are expected to take the AP examination.

By the end of the course, students should be at an Intermediate Mid proficiency level.

Spanish I A and I B

Grade Levels: 8-12

Semesters: 2

Credits: 2

Prerequisites:

It is recommended that students have at least a C- in language arts courses. as well as maintain a C- or higher at the end of the first semester.

Course Description:

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

Spanish II A and II B

Grade Levels: 9-12

Semesters: 2

Credits: 2

Prerequisites:

Students must complete Spanish Level 1 with a C- or higher before taking this course. as well as maintain a C- or higher at the end of the first semester.

Course Description

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

Spanish III A and III B

Grade Levels: 10-12

Semesters: 2

Credits: 2

Prerequisites:

Students must complete Spanish Level 2 with a C- or higher before taking this course. as well as maintain a C- or higher at the end of the first semester.

Course Description

- 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

Honors Spanish IVA and IVB

Grade Levels: 11-12

Semesters: 2

Credits: 2

Prerequisite:

- *Students must complete Spanish Level 3 with a C- or higher before taking this course.*
- *Students must complete Spanish Level 3 with an B- or higher before taking this course for Honors credit, as well as maintain an B- or higher at the end of the first semester.*

Course Description

- 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
- *Honors students will also further their language acquisition and their knowledge of Hispanic culture through advanced reading and speaking activities.*

AP Spanish Language and culture

Grade Levels: 12

Semesters: 2

Credits: 2

Prerequisite:

- *Students must complete Spanish Level 4 with an B- or higher before taking this course for Honors credit, as well as maintain an B- or higher at the end of the first semester.*

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 fall trimester 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 investigate 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 plan 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 and 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 (some at no additional cost) while still in high school.

Upon Graduation, Kokomo Area Career Center students can be awarded 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 Academies

Arts, AV Technology & Communication

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”.

- *DOE Code: 5232*
- *Recommended Grade Level: Grade 9-12*
- *Recommended Prerequisites: None*
- *Credits: 2 credit 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*
- *No Additional Cost*

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.

- *DOE Code: 5986*
- *Recommended Grade Level: Grade 10-12*
- *Recommended Prerequisites: 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*
- *This course is aligned with postsecondary courses for Dual Credit:*

- University of Southern IN;RTV150; 1 credit;\$80/cr; GPA min.
- University of Southern IN; RTV 151; 3 credits; \$80/cr; GPA min.
- Additional cost: approx. \$15

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.

- DOE Code: 5992
- Recommended Grade Level: Grade 11- 12
- Prerequisites: 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
- This course is aligned with postsecondary courses for Dual Credit:
Additional Cost: Approximately \$15

Computer Illustration and Graphics (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.

- DOE Code: 4516
- Recommended Grade Level: Grade 10-12
- Recommended Prerequisites: 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
- This course is aligned with postsecondary courses for Dual Credit:
Ivy Tech: VISC 115 Introduction to Computer Graphics
Vincennes University: DESN 120 Computer Illustration-fee for dual credits
- No Additional Cost

Graphic Design and 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.

Dual Credit 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.

- DOE Code: 5550
- Recommended Grade Level: Grade 11-12
- Prerequisite: Computer Illustration & 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
- This course is aligned with postsecondary courses for Dual Credit:
Ivy Tech: reevaluate for 13-14-expected dual credits
Vincennes University: reevaluate for 13-14-expected dual credits
- No Additional Cost

Commercial Photography 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.

- DOE Code: 5570
- Recommended Grade Level: Grade 10-12
- Recommended Prerequisites: 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
- This course is aligned with postsecondary courses for Dual Credit:
Ivy Tech: PHOT 104 Basic Photography—agreement in process for 13-14
- No Additional Cost

3D Computer Animation prepares students to use computer applications and related visual and sound imaging techniques to create and manipulate images and information. The course includes instruction in three-dimensional solid model creation, sketching and storyboarding, time and motion study, color and lighting studies, and camera positioning. Using current computer animation software that reflects industry standards, students will produce projects for commercial applications in one or more of the following areas: engineering, architectural, or industrial design; marketing, video production; internet design; electronic gaming and education and training.

- DOE Code: 5530
- Recommended Grade Level: 10-12
- Recommended Prerequisite: Interactive Media
- Credits: 2 credits 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
- No additional costs

Architecture & Construction

***Building & Facilities Management I** is an instructional program that prepares students to service a variety of structures including commercial and institutional buildings. This course provides instruction in basic maintenance and repair skills related to air conditioning, heating, plumbing, electrical, and other mechanical systems. Additional activities should include classroom and laboratory experiences concerned with all phases of the care and cleaning of buildings, fixtures, and furnishings including all types of building interiors such as linoleum, plastic, terrazzo, tile, and wood floors; rugs; and, plastic, wood panel, paint, and synthetic wall coverings. Emphasis should be placed on the use of hand and power tools and selection and use of professional supplies needed for care, repair and maintenance. Students will reinforce their mathematical skills through the practical study of measurement units, ratios, area, and volume calculations. Scientific knowledge will be enhanced through the emphasis on environmental concerns and chemical and electrical safety instruction. Language skills will be strengthened through oral and written work intended to improve students' abilities to communicate with supervisors, colleagues, and clients.

- DOE Code: 5592
- Recommended Grade Levels: 9-12
- Recommended Prerequisites: None
- Credits: 2 per semester, 2 semesters maximum, 6 total credits maximum
- The nature of this course allows for a second year of instruction provided that content and standards address higher levels of knowledge.
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Construction Technology 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.

- DOE Code: 5580
- Recommended Grade Level: Grade 10-12
- Recommended Prerequisites: Introduction to Construction
- Credits: 3 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
- This course is aligned with postsecondary courses for Dual Credit:
Ivy Tech: CONT 101 – Introduction to Construction
 - Additional cost: tools, warm clothes—cost will vary depending on what items student already has

Construction Technology 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.

- DOE Code: 5578
- Recommended Grade Level: Grade 11-12
- Prerequisites: Construction Technology I
- Credits: 3 credits per semesters, 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
- This course is aligned with postsecondary courses for Dual Credit:
Ivy Tech: BCOT 113 – Interior Trim
 - Additional Cost: tools, warm clothes—cost will vary depending on what items student already has

Architectural Drafting and 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.

- DOE Code: 5640
- Recommended Grade Level: Grade 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
- This course is aligned with postsecondary courses for Dual Credit
Ivy Tech: DESN 102- Technical Graphics: DESN 103- CAD Fundamentals

Vincennes University: ARCH 102- Architectural Drawing: ARCH 141- Introduction to Architectural CAD

- No Additional Cost

Architectural Drafting and 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.

- DOE Code: 5652
- Recommended Grade Level: Grade 10-12
- Prerequisites: 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
- This course is aligned with postsecondary courses for Dual Credit:
Ivy Tech: DESN 105-Architectural Design I: DESN 113-Intermediate CAD

Vincennes University: ARCH 221- Advanced Architectural Software Applications

- No Additional Cost

Mechanical Drafting and 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.

- DOE Code: 4836
- Recommended Grade Level: Grade 9-12
- Recommended Prerequisites: 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
- No Additional Cost

Mechanical Drafting and Design II covers working drawings both in 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.

- DOE Code: 4838
- Recommended Grade Level: Grade 10-12
- Prerequisites: 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
- No Additional Cost

Health Science

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.

- DOE Code: 5282
- Recommended Grade Level: Grade 9- 12

- Recommended Prerequisites: 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
- This course is aligned with the following Post-Secondary courses for Dual Credit:
Ivy Tech: HLHS 100 Introduction to Health Careers
- Additional Cost: Approximately \$70

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.

- DOE Code: 5274
- Recommended Grade Level: Grade 10-12
- Recommended Prerequisites: 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
- This course is aligned with postsecondary courses for Dual Credit:
Ivy Tech : HLHS 101 Medical Terminology—MUST have qualifying scores
Additional Cost: Approximately \$35

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 unit 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.

- DOE Code: 5276
- Recommended Grade Level: Grade 11-12
- Recommended Prerequisites: 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 \$25

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.

- DOE Code: 5284
- 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
- This course is aligned with postsecondary course for Dual Credit

Ivy Tech: HLHS 107-C.N.A. Preparation

- **STATE LICENSE: CERTIFIED NURSING ASSISTANT**
- **Additional costs: approximately \$200**

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.

- DOE Code: 5215
- Recommended Grade Level: 11-12
- Recommended Pre-requisite: 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 cost; approx. \$100

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.

- DOE Code: 5203
- Recommended Grade Level: Grade 11
- Recommended Prerequisites: 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 \$260 – this includes textbook purchase

Dental Careers II is a course designed to provide the dental assisting student with specific knowledge of the administrative planning, book-keeping, 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.

- DOE Code: 5204
- Recommended Grade Level: Grade 12
- Prerequisites: 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

***Principles of the Biomedical Sciences (PLTW)** provides an introduction to this field through “hands-on” projects and problems. Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, hypercholesterolemia, and infectious diseases. A theme through the course is to determine the factors that led to the death of a fictional person. 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.

- DOE Code: 5218
- Recommended Grade Level: 10-12
- Prerequisites: 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: to be determined

Manufacturing - Project Lead the Way

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).

- DOE Code: 4812
- Recommended Grade Level: Grade 9-12
- Recommended Prerequisites: none
- 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
- This course is aligned with postsecondary courses for Dual Credit
Ivy Tech: DESN 102 - Technical Graphics

Purdue University; School of Technology; 3cr; Must pass ECA

- No Additional Cost

Project Lead the Way

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

- DOE Code: 4814

- Recommended Grade Level: Grade 10-12
- Recommended Prerequisites: Introduction to Engineering Design
- 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
 - Qualifies as a quantitative reasoning course for General, AHD & THD
- This course is aligned with postsecondary courses for Dual Credit
Ivy Tech: DESN 104 Mechanical Graphics (pending)

Purdue University; School of Technology; 3cr; Must pass ECA

- No Additional cost

Project Lead the Way

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

- DOE Code: 4826
- Recommended Grade Level: Grade 10-12
- Recommended Prerequisites: Introduction to Engineering Design, Principles of Engineering
- 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
 - Qualifies as a quantitative reasoning course for General, AHD & THD
- This course is aligned with postsecondary courses for Dual Credit
Ivy Tech: EECT 112 Digital Fundamentals (pending)
Purdue University; School of Technology; 3cr; Must pass ECA
- No Additional cost

Project Lead the Way

Computer Integrated Manufacturing (CIM) is a course that applies principles of rapid prototyping, robotics, and automation. This course builds upon the computer solid modeling skills developed in Introduction of Engineering Design. Students will use computer controlled rapid prototyping and CNC equipment to solve problems by constructing actual models of their three-dimensional designs. Students will also be introduced to the fundamentals of robotics and how this equipment is used in an automated manufacturing environment. Students evaluate their design solutions using various techniques of analysis and make appropriate modifications before producing their prototypes

- DOE Code: 4810

- Recommended Prerequisites: Introduction to Engineering Design, Principles of Engineering
- 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
 - Qualifies as a quantitative reasoning course for General, AHD & THD
- This course is aligned with postsecondary courses for Dual Credit
Ivy Tech: ADMF 116 – Automation & Robotics in Manufacturing I
Purdue University; School of Technology; 3cr; Must pass ECA
 - No Additional cost

Project Lead the Way

Aerospace Engineering should provide students with the fundamental knowledge and experience to apply mathematical, scientific, and engineering principles to the design, development, and evolution.. of aircraft, space vehicles and their operating systems. Emphasis should include investigation and research on flight characteristics, analysis of aerodynamic design, and impact of this technology on the environment. Classroom instruction should provide creative thinking and problem-solving activities using software that allows students to design, test, and evaluate a variety of air and space vehicles, their systems, and launching, guidance and control procedures.

- DOE Code: 4816
- Recommended Grade Level: Grade 11-12
- Recommended Prerequisites: Introduction to Engineering Design, Principles of Engineering
- 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
- Qualifies as a quantitative reasoning course for General, AHD & THD

Project Lead the Way

Civil Engineering and Architecture (CEA) introduces students to the fundamental design and development aspects of civil engineering and architectural planning activities. Application and design principles will be used in conjunction with mathematical and scientific knowledge. Computer software programs should allow students opportunities to design, simulate, and evaluate the construction of buildings and communities. During the planning and design phases, instructional emphasis should be placed on related transportation, water resource, and environmental issues. Activities should include the preparation of cost estimates as well as a review of regulatory procedures that would affect the project design.

- DOE Code: 4820
- Recommended Grade Level: Grade 10-12
- Recommended Prerequisites: Introduction to Engineering Design, Principles of Engineering
- 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

- Qualifies as a quantitative reasoning course for General, AHD & THD
- This course is aligned with postsecondary courses for Dual Credit
Ivy Tech: DESN 105 – Architectural Design I

Applications

Purdue University; School of Technology; 3cr; Must pass ECA

- No Additional cost

Electronics and Computer Technology I introduces students to the fundamental electronic concepts necessary for entry into an electronic and computer systems career pathway, which will culminate with industry certifications or additional post-secondary education. Classroom and laboratory experiences will allow students begin their career preparation in the fundamental electronics concepts of Jobsite Skills, DC Basics, AC Basics, and Personal Computer Design, and will incorporate safety, technical writing, mathematical concepts, and customer service.

- DOE Code: 5684
- Recommended Grade Level: Grade 10-12
- Recommended Prerequisites: Algebra I
- Credits: 2 credits per semester, 2 semesters maximum, 6 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
- This course is aligned with postsecondary courses for Dual Credit:

Ivy Tech—pending review of new course outline

- No Additional cost

Electronics and Computer Technology II provides the opportunity for students to continue with foundational electronic concepts including circuit analysis and digital electronics modules. After completing the two additional foundational modules, student may choose to focus on one of the optional modules that can include more intense instruction, research, specialized projects, and internships. The optional modules include industrial technology, emerging electronic technologies, residential and commercial electronic communication, and automation. The content of this class is designed to provide the State of Indiana with a trained workforce in emerging technologies career pathways that will make a significant contribution to the Indiana economy. Industry certifications and additional post-secondary education are critical components of this pathway. Classroom, laboratory, and work-based experiences in the fundamental electronics concepts of circuit analysis and digital electronics as well as one of the optional modules will incorporate safety, technical writing, mathematics, and customer service.

- DOE Code: 5694
- Recommended Grade Level: Grade 11-12
- Prerequisites: Electronics and Computer 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
- No Additional cost

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

- DOE Code: 5230
- Recommended Grade Level: Grade 9-12
- Recommended Prerequisites: 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
- No Additional Cost

Advanced Manufacturing I is a course that includes classroom and laboratory experiences in two broad areas: Industrial Technology/Software Controls and Manufacturing Trends. Industrial Technology and Software Controls covers wiring and schematic diagrams used to design, install, and repair electrical/electronic equipment such as wireless communication devices, programmable controllers. Course content will include basic theories of electricity, electronics, digital technology, and basic circuit analysis. Activities include experiences in: soldering; use of an oscilloscope, meters, signal generators and tracers; breadboarding; circuit simulation software; and troubleshooting. Understanding and using the underlying scientific principles related to electricity, electronics, circuits, sine waves, and Ohm's Law are integral to this course. Manufacturing Trends covers basic concepts in manufacturing operations and plant floor layout in the production environment. Applications of Computer Numerical Control (CNC), and lathe and turning operations are developed as a foundation for machining operations. Coordinate system concepts are introduced as relevant to machining processes, as well as fluid and mechanical power, welding, and lean manufacturing. Fluid power concepts will include hydraulic components and circuits, laws and principles, fluid power controllers, and the construction of systems. In the mechanical power portion of the course, students will learn about machine specifications, basic forces, friction, simple machines, motors, and motor controls. Students will also be introduced to lean manufacturing where they will study concepts including: lean goals, product quality, eliminating waste, cost effectiveness, lean concepts, resource planning, continuous improvement, and the various advantages of lean manufacturing. This course includes MSSC concepts required to earn MSSC certification.

- DOE Code: 5608
- Recommended Grade Level: Grade 11-12
- Recommended Prerequisites: Introduction to Advanced Manufacturing
- 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
- This course is aligned with the following Post-Secondary courses for Dual Credit:

Ivy Tech: ADMF 101- Key Principles of ADMF: ADMF 102- Technology in ADMF
ADMF 113- Electrical and Electronic Principles of Manufacturing
PENDING

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.

- DOE Code: 5776
- Recommended Grade Level: Grade 9-12
- Recommended Prerequisites: 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
- This course is aligned with postsecondary courses for Dual Credit:

Ivy Tech: INDT 114- Introductory Welding: WELD 108- Shielded Metal Arc

- 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.

- DOE Code:5778
- Recommended Grade Level: Grade 10- 12
- Prerequisites: Welding 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
- This course is aligned with postsecondary courses for Dual Credit:

Ivy Tech: WELD 207-Gas Metal Arc (MIG) Welding: WELD 100-Welding Processes

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.

- DOE Code: 5514
- Recommended Grade Level: Grade 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
- This course is aligned with postsecondary courses for Dual Credit:
Ivy Tech: AUBR 101- Body Repair Fundamentals
Vincennes University: AUTO 105- Transportation Fundamentals
BODY 100/L-Body Repair I, Body Repair Lab
- Additional cost: Approximately \$30

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.

- DOE Code: 5544
- Recommended Grade Level: Grade 10-12
- Prerequisites: 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
- Additional cost: approximately \$30

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.

- DOE Code: 5510
- Recommended Grade Level: Grade 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
- This course is aligned with postsecondary courses for Dual Credit:
Ivy Tech: AUTC 101-Suspension and Steering: AUTC 121-Brakes
Additional Cost: approximately \$45

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.

- DOE Code: 5546
 - Recommended Grade Level: Grade 10-12
 - Prerequisites: 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
 - This course is aligned with postsecondary courses for Dual Credit
Ivy Tech: AUTC 113- Electrical Systems: AUTC 109- Engine Performance
 - Additional Cost: approximately \$45
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Hospitality & Human Services

Culinary Arts and Hospitality Management 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.

- DOE Code: 5440
- Recommended Grade Level: Grade 9-12
- Recommended Prerequisites: 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
- This course is aligned with the following Post-Secondary courses for Dual Credit:

Ivy Tech: HOSP 101 Sanitation and First Aid: HOSP 102 Basic Food Theory and Skills

Vincennes University: REST 120 Food Service Sanitation

- **SERVE SAFE CERTIFICATION**
- Additional cost: approximately \$80

Advanced Culinary Arts 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.

- DOE Code: 5436
 - Recommended Grade Level: Grade 10- 12
 - Prerequisites: Culinary Arts and Hospitality Management
 - 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
 - This course is aligned with the following Post-Secondary courses for Dual Credit:
Ivy Tech: HOSP 104 Nutrition: HOSP 105 Introduction to Baking
Vincennes University: REST 100 Intro to Hosp Management: REST 155 Quantity Food Purchasing
- Additional cost: approximately \$80

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.

- DOE Code: 5802
 - 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
 - This course is aligned with postsecondary courses for Dual Credit:
Vincennes University: COSM 100: COSM 150—MUST HAVE QUALIFYING SCORES
- **STATE COSMETOLOGY LICENSE AT COMPLETION OF 2 YEARS**
 - 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

- DOE Code: 5806
- Recommended Grade Level: Grade 12
- Prerequisites: 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
- This course is aligned with postsecondary courses for Dual Credit:
Vincennes University: COSM 200 Cosmetology III: COSM 250 Cosmetology IV

- STATE COSMETOLOGY LICENSE AT COMPLETION
- Additional Cost: approximately \$30

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.

- DOE Code: 5822
- Recommended Grade Level: Grade 10-12
- Recommended Prerequisites: 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
- This course is aligned with postsecondary courses for Dual Credit:
Vincennes University: LAWE 100- Survey Criminal Justice: LAWE 150-Intro to Criminology
 - Additional cost: approximately \$35

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 also be reviewed.

- DOE Code: 5824
- Recommended Grade Level: Grade 11-12
- Prerequisites: 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
- This course is aligned with postsecondary courses for Dual Credit:

- No Additional cost

Business & Marketing

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

- DOE Code: 5914
- Recommended Grade Level: Grade 9-12
- Recommended Prerequisites: 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

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

- DOE Code: 5984
- Recommended Grade Level: Grade 9-12
- Recommended Prerequisites: Principles of Marketing
- 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

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 theories from psychology, social psychology and economics. The relationship between consumer behavior and marketing activities are reviewed.

- DOE Code: 5918
- Recommended Grade Level: Grade 11-12

- Recommended Prerequisites: Principles of Marketing
- Credits: 3 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
- No Additional cost

Agriculture Pathway

HORTICULTURE SCIENCE 5132 (HORT SCI) Horticulture Science is designed to give students a background in the field of horticulture and its many career opportunities. It addresses the biology and technology involved in the production, processing and marketing of plants and its products. Topics covered include: reproduction and propagation of plants, plant growth, growth media, management practices for field and greenhouse production, marketing concepts, production of plants of local interest and pest management. Students participate in a variety of activities to include extensive laboratory work usually in a school greenhouse, leadership development, supervised agricultural experience and learning about career opportunities in the area of horticulture science.

- Recommended Grade Level: 10, 11
- 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
- Fulfills a Life Science or Physical Science requirement for the General Diploma

AGRIBUSINESS MANAGEMENT 5002 (AG BUS MGMT) Agribusiness Management provides foundational concepts in agribusiness. This course introduces students to the principles of business organization and management from a local and global perspective while incorporating technology. Concepts covered in the course include food and fiber, forms of business, finance, marketing, management, sales, leadership development, supervised agricultural experience career opportunities in the area of agribusiness management.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: 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

These two courses **MUST** be taken together. Students will learn about the biology, growth and management of plants. They will apply this knowledge to a field plot and will care for, market and harvest their product.

IUK Computer Science at KACC

Kokomo Area Career Center and Indiana University Kokomo have partnered to offer a Computer Science class for 2018-2019. This class will occur during third period. Students can earn four (4) dual credits per semester in this class. Dual credits are available in CSC 100 and CSC 101.

Qualifications to take class:

- Grade 11 or 12
- Top 50% of class
- SAT score of 1030 or ACT score of 20

If a student does not enroll for the class until August 6, 2018 (ie: International students) they will have the opportunity to take the SAT at IUK. The SAT they take will ONLY count for enrollment purposes of this class. They will not be able to use this score for any other purpose.

This class is listed in Power School as Comp Sci I; code 4801IUK.

Veterinary Careers 2018-2019 Requirements

Enrollment requirements: first year

-students may in enroll as Sophomores, *however*, Juniors will have priority

-first year students must meet the following requirements for enrollment:

75%+ in Algebra I and 75%+ in Biology I

Veterinary Pathway: Three-year program

Year 1: Students will be in classroom. Receive academic and skills training

Year 2: Students will continue with academic and skills training in classroom and will also participate in Job Shadows

Year 3: Students will participate in Work Based Learning program

YEAR 2 AND YEAR 3 STUDENTS MUST HAVE TRANSPORTATION IN ORDER TO FULFILL JOB SHADOW AND WBL REQUIREMENTS

