



# Jasper High School

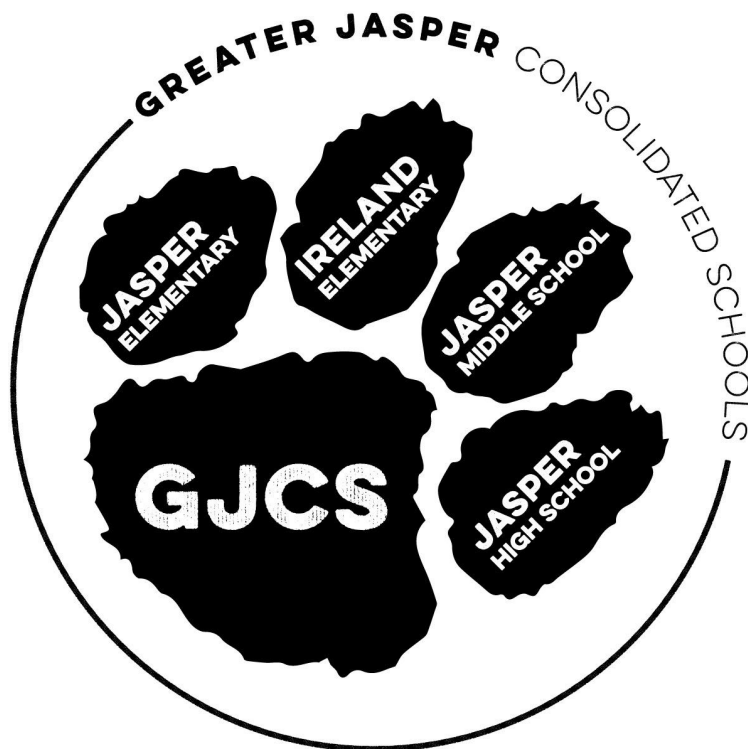
## Course Description Booklet 2021-2022

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## Jasper High School Academic Departments and Department Chairpersons

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## Course Recommendations

In an effort to make all course offerings available to our students, we have removed prerequisites from most course offerings at Jasper High School. On its merit, this move is designed to give any student an opportunity to take the most rigorous course offerings at our school. It is also designed to give students an opportunity to take the courses that best fit into their future opportunities.

The teacher of each course has built course recommendations for the curriculum required within each course. These recommendations should be taken seriously as the rigor of a course will not be adjusted to fit students who might not be academically talented enough to handle the rigor of our most challenging content offerings. **Any student failing an Honors or AP course at the end of the first semester will be moved to the next lower level course in the same subject.**

It is our belief that the student and his/her parents must have the opportunity to select course offerings that best suit the student's individual needs. It will be necessary for parents to approach the selection of courses for their student(s) with a realistic mindset.

## Agriculture Department

**IMPORTANT NOTE:** *Agricultural Education* is an active part of the curriculum for many high schools in Indiana. This program area combines the home, the school, and the community as the means of education in agriculture. The courses provide students with a solid foundation of academic knowledge and ample opportunities to apply this knowledge through classroom activities, laboratory experiments and project applications, supervised agricultural experiences, and The National FFA Organization. The programs combine classroom instruction and hands-on career focused learning to develop students' potential for premier leadership, personal growth, and career success.

The National FFA Organization is the leadership student organization that is an integral part of the instruction and operation of a total agricultural education program. As an intra-curricular organization and essential component of the total program, the local agricultural education teacher(s) serve as the FFA chapter advisors. The many activities of the FFA parallel the methodology of the instructional program and are directly related to the occupational goals and objectives. As an integral part of the instructional program, district and state level FFA activities provide students opportunities to demonstrate their proficiency in the knowledge, skills and aptitudes they have acquired through the agricultural science and agricultural business program(s). Agricultural education students demonstrating a high degree of competence in state level FFA activities are highly encouraged to represent their local communities, districts and state by participating in national FFA activities.

Instructional activities of the FFA require participation by the agricultural science and agriculture business education students as an integral part of an agricultural education course of instruction and, therefore, may be considered an appropriate use and amount of the allotted instructional time.

**AGRICULTURE POWER STRUCTURE AND TECHNOLOGY:** Like working with your hands? Then Ag. Power Structure and Technology is for you. We will look at how something is done or works then put what you learn in the classroom into practice out in the shop working on different projects to give you hands-on experience doing it. Areas covered include small engines, concrete and masonry, wood, plumbing, electricity, and metal. Students will be required to make certain projects for the class. There is a lab fee of \$25 to cover the cost of lab supplies.

**Grade Level: 10, 11, 12**

**Prerequisites: none**

**Full Year**

**2 credits**

**ANIMAL SCIENCE:** Do you like working with and learning about animals? If yes, then this class is for you! We will start the year by learning how an animal works and why it does what it does. Topics covered will include: growth and development, nutrition, digestion, meat science, genetics, and animal rights vs. welfare. The second semester will focus on different animal species including, but not limited to: dogs, cats, beef, dairy, pork, poultry, fish, and honeybees. We will learn about how to care for each of these species as well as the many products that these animals provide. Students will participate in a variety of individual and group projects throughout the year. This class is a great experience for anyone who is interested in pursuing a career related to animals.

**Grade Level: 10, 11, 12**

**Prerequisites: none**

**This course counts as a science credit**

**Full Year**

**2 credits**

**HORTICULTURE SCIENCE:** This class is for the student who likes to work hands-on and doesn't mind getting their hands dirty! We will begin the year learning how agriculture supplies our food. You will learn how plants grow and reproduce, to turn a tiny tomato seed into the ripe tomato on top of your salad. While in the lab, students will also learn how to grow and multiply plants using new techniques that most people have never tried. We will raise plants that you will take care of that you will be able to take home at the end of the year. In the springtime, students will work outside sprucing up the school landscape and learn how to develop and design your own landscape.

**Grade Level: 10, 11, 12**

**Prerequisites: none**

**Full Year**

**2 credits**

**PRINCIPLES OF AGRICULTURE:** Students who like variety will like POA because we only spend a couple of weeks on any one topic. We'll spend time learning about large and small animals, agricultural business, food science, horticulture, natural resources, crop production, ag mechanics, and much more. POA is an introduction to all areas of agriculture, so this class is mainly for freshmen and sophomores (but not limited to those) who are interested in taking an ag education class.

**Grade Level: 9, 10, 11, 12**

**Prerequisites: none**

**Full Year**

**2 credits**

**LEADERSHIP DEVELOPMENT:** is a project-based course for students that either hold a leadership role within our FFA Chapter or those interested in leadership. This course is encouraged for upperclassmen (10<sup>th</sup>-12<sup>th</sup>) with desires and motivation to become better leaders in FFA and future endeavors. Students will be required to actively participate in FFA, keep their SAE book up to date, complete a classroom project and fill out a proficiency or state degree application. Students will be working on their own to complete the course material therefore must be self-motivated to complete the course work. This course will require a minimum of 8 hours a week. **This course is mandatory for any member serving as an officer. Membership in the National FFA Organization is required.**

**Grade Level: 10, 11, 12**

**Fall/Spring**

**Prerequisites: none**

**1 credit**

**PLANT AND SOIL SCIENCE:** Do you like to be outside, plant a garden, or watch something grow from a tiny seed into a productive plant? If yes, then this class is for you! Throughout the year, students will do a variety of individual and group projects and hands-on assignments focusing on the following topics: plant taxonomy, plant growth, soil science, growing mediums, greenhouse design, hydroponics, pest and disease management, and floral arrangement.

**Grade Level: 10, 11, 12**

**Full Year**

**Prerequisites: none**

**2 credits**

**This course counts as a science credit**

**NATURAL RESOURCES:** Do you like hunting, fishing or just being outdoors? In Natural Resources we will learn about our environment and all the components of it, including wildlife, aquatics, forestry and soils. We will spend time on each of these topics learning about how we can sustain them and how we utilize our natural resources as humans. We will spend time outdoors learning in the actual environment with these different topics doing anything from water testing to tree ID and measurements. If you love outdoors and spending time in the woods you will love this class!!!

**Grade Level: 10, 11, 12**

**Full Year**

**Prerequisites: none**

**2 credits**

**This course counts as a science credit**

**SUPERVISED AGRICULTURAL EXPERIENCE (SAE):** is designed to provide students with opportunities to gain experience in the agriculture field(s) in which they are interested. Students should experience and apply what is learned in the classroom, laboratory, and training site to real-life situations. Students will be required to work 80 hours over the summer. Students will keep a record of all of their receipts and expenditures for the summer in their SAE book which will be turned in at the end of the summer. Students will also be required to complete a community service project. 2 meetings with the teacher will be required over the course of the summer. The first will be in May after school ends to start the course, the other will be an on the site job visit scheduled between the student and teacher. The job must be approved by the instructor, if the job meets the intent of this course. The job should provide new and relevant experiences, which may lead to a career after high school for the student. This course will count as your Ag. class requirement for FFA.

**Grade Level: Summer after 9, 10, 11**

**Summer**

**Prerequisites: none**

**1 credit**

**ADVANCED LIFE SCIENCE, ANIMALS (L):** This class is for the person who really enjoys science but wants to learn things from a different angle. Instead of learning about the human body, we learn about biology by studying how animals' bodies work topics include but not limited to animal taxonomy, life at the cellular level, organ systems, genetics, evolution, and ecology, historical and current issues in animal agriculture in the area of advanced life science in animals. This is an exceptional course for those interested in a career in Veterinary Science. There is a lab fee of \$25 to cover the cost of lab supplies.

**Grade Level: 10, 11, 12**

**Full Year**

**Prerequisites: Required: Animal Science. Highly recommended: Biology and Chemistry**

**2 credits**

**This course counts as a science credit**

**AGRIBUSINESS MANAGEMENT:** In Ag. Business students will learn about how businesses are organized and managed from the local to global level. We will cover topics ranging from record keeping and budgeting to business planning and management. Students will get to plan their own business and learn all of the aspects of running their own business. Students will learn about the following concepts and how they can apply these concepts to their own life and prepare themselves for the "real world": Budgets, credit, sales, marketing, financial data, record keeping, human resources, micro and macro economics. If you want to learn about how our economy functions from the side of agriculture this would be a great class for you!!

**Grade Level: 11-12**

**Full Year**

**Prerequisites: Any previous Agriculture course**

**2 Credits**

## Art Department

**ART HISTORY:** is a survey of major artists, styles, and architecture from prehistoric times through the sixteenth century. A textbook is used and is supplemented by readings from magazines and other sources. The student is introduced to the humanities as mirroring the times, events, and needs of man as a creative being in the arts. Projects relating to the periods of art history being studied may also be completed. These projects may involve painting, drawing, printmaking, or sculpture techniques. This course is offered every other year. It will be offered '21-'22 school year.

**Grade Level 10, 11, 12**

**Prerequisites: Credit earned in Intro & Adv 2D Art**

**Fall**

**1 credit**

**ADVANCED ART HISTORY:** is a continuation of Art History. This is a survey of major artists, styles, and movements in European and American art from the end of the sixteenth century to the present. A textbook is used and supplemented by additional reading material. Projects related to the periods of art history being studied are also introduced at certain times. These projects may involve painting, drawing, printmaking, or sculpture techniques. This course is offered every other year. It will be offered '21-'22 school year.

**Grade Level: 10, 11, 12**

**Prerequisites: Credit earned in Intro & Adv 2D Art and Art History**

**Spring**

**1 credit**

**INTRODUCTION TO TWO-DIMENSIONAL ART:** introduces the basic elements of art through experiences in two-dimensional work. This semester concentrates on creative thinking within an art environment. The basics of drawing by learning to sight angles and to make comparison of size relations of shapes and forms are stressed. An introduction of shading is explored observing how lines rest on the contour surface of an object. The student is taught not so much how to draw but rather how to see. The ability to think in an abstract manner to see the distortions of reality is stressed. The elements focused on in this semester are line, shape, form and value. The principles of art are used throughout the semester to help the student understand the use of the elements in their artwork. This is achieved by the introduction of a variety of drawing techniques, drawing theory and media. The many experiences and exercises are intended to provide the student with the skills necessary to be successful in the second semester course and other advanced art courses. Time is given to the basic history of drawing and the evaluation of one's artwork as well as other students and artists. This class, along with the Advanced 2D Art class require specialty supplies. To simplify getting the supplies, students must purchase the tool kit through the art department during registration. The tool kits will be distributed the first week of school. Students are also required to bring in a set of photographs from home to use for certain projects through the year. The content of these photos will be discussed in the first week of school.

**Grade Level: 9, 10, 11, 12**

**Prerequisites: None**

**Fall**

**1 credit**

**ADVANCED TWO-DIMENSIONAL ART:** reinforces the skills taught the first semester by further study of the elements already introduced. The remaining elements of space, color and texture are introduced. The study of linear and aerial perspective is made. Color theory and the mixing and blending of colors to create depth is also studied. The principles of art are used throughout the semester to help the student understand the use of the elements in their artwork. Techniques are explored to help the student understand rendering an object in both black and white as well as color. The many experiences and exercises are intended to provide the student with the skills necessary to be successful in other advanced art courses. Time is given to the basic history of drawing and the evaluation of one's artwork as well as other students and artists.

**Grade Level: 9, 10, 11, 12**

**Prerequisites: Credit earned in Intro to Two-Dimensional Art**

**Spring**

**1 credit**

**BEGINNING CERAMICS:** introduces hand building and wheel thrown construction methods. Emphasis is placed on developing original and creative forms in clay. Students become familiar with glazes, clay processing, kiln firing, and many skills related to successful work in clay. Students learn how to work on the potter's wheel and to hand build forms with several construction methods. As a result of this course students gain many skills and are able to complete at least five projects in this semester.

**Grade Level: 10, 11, 12**

**Prerequisites: Credit earned in Intro & Adv 2D Art**

**Fall**

**1 credit**

**ADVANCED CERAMICS:** This course will build upon the techniques and teachings of the first semester of ceramics. This course will focus on ceramics as a possible career. Students will learn about how to build and maintain a studio, how to begin creating a body of work that would be large and consistent enough to be shown in galleries. Students will learn about pricing art, finding show venues, photographing and displaying work. While this class will be guided by the teacher, students will be responsible for forming their own projects and building their body of work independently.

**Grade Level: 11 & 12**

**Prerequisites: Credit in Intro. & Adv. 2D, Beg. Ceramics**

**Fall**

**1 Credit**

**AP STUDIO ART, DRAWING/2D DESIGN:** is based on content established by the College Board. The AP Drawing/2D Design course corresponds with college foundation courses in which students will develop artwork based on the core elements of art and the principles of art. The course will develop a college ready portfolio through flexible coursework with instructor provided guidance. The portfolio will be completed with college level quality, artistic investigation, and a breadth of work. Currently the cost of the AP exam is \$95, students enrolled in this class are required to take the exam to receive the credit.

**Grade Level: 10, 11, 12**

**Prerequisites:** Credit in Intro. and Adv. 2D art (A- or higher recommended)

**Drawing 1 & 2, Painting 1 & 2 (highly beneficial)**

**Full Year**

**2 Credits**

**DRAWING I:** expands on the basic drawing skills presented in Introduction and Advanced Two-Dimensional Art. Light source, composition, rendering, and portraiture are the subjects selected for study. A concentration of detailed, in-depth studies of the human figure is made. A concentration is made on black and white studies rather than color. Since this is a skills course, the assignments generally involve keeping a sketchbook and practicing drawing. Classroom assignments are directed at a range of skills related to linework and shading in a variety of media. Some history of drawing techniques is included.

**Grade Level: 10, 11, 12**

**Prerequisites: Credit earned in Intro & Adv 2D Art**

**Fall**

**1 credit**

**DRAWING II:** is a continuation of the drawing course. A concentration of detailed, in-depth studies of the human figure is made. Color is introduced as a drawing media. The emphasis is on drawing as a means of expression rather than as a sketch or study. Work is done from models and still life, on location, and from imagination. Daily class work is coupled with discussion/explanations of lessons. Some history of drawing techniques is included.

**Grade Level 10, 11, 12**

**Prerequisites: Credit earned in Intro & Adv 2D Art and Drawing I**

**Spring**

**1 credit**

**FIBER ARTS:** introduces woven, printed, knotted and dyed fabric. Woven fabrics are produced by means of frame and four harness table and floor looms. Fibers may be knotted and constructed by different means to create wall hangings of two or three-dimensional nature. The major emphasis is on the creative use of fibers to develop basic skills and then use those skills to complete several projects. This course is offered every other year. It will be offered '21-'22 school year.

**Grade Level: 10, 11, 12**

**Prerequisites: Credit earned in Intro & Adv 2D Art**

**Fall**

**1 credit**

**INTRODUCTION TO THREE-DIMENSIONAL ART:** encourages students to develop their artistic expression and to realize that satisfying results can be produced with the simplest of materials, sufficient imagination, and a sensitive feeling for quality. An awareness of basic design elements and principles, good craftsmanship, and originality is developed through the students' participation in projects such as metal enameling, metal tooling, calligraphy, jewelry making, and book-binding.

**Grade Level: 10, 11, 12**

**Prerequisites: Credit earned in Intro & Adv 2D Art**

**Spring**

**1 credit**

**PAINTING I:** Students are introduced to basic techniques, materials, and approaches that are fundamental to painting. Tempera, watercolor, oil pastel, and mixed media are the media available for the students to explore. Discussions of student work and works chosen from modern art history are included. This course is offered every other year. It will be offered '22-'23 school year.

**Grade Level: 10, 11, 12**

**Prerequisites: Credit earned in Intro & Adv 2D Art**

**Fall**

**1 credit**

**PAINTING II:** is a continuation of the painting course. A more detailed, in-depth study of painting techniques and approaches is made. There is a greater concentration on the media of acrylic and oil. If time allows, the process of fresco painting may be explored. Painting is done from still life, on location, and from compositions originated by the student. Some history of painting techniques and discussion of selected works is included. The course is offered every other year. It will be offered '22-'23 school year.

**Grade Level: 10, 11, 12**

**Prerequisites: Credit earned in Intro & Adv 2D Art and Painting I**

**Spring**

**1 credit**

**PRINTMAKING:** four major areas of printmaking are studied. Students design and complete prints using the methods of etching, linoleum block or wood block, lithograph process, and calligraphy. If time allows, the process of silk-screening may be explored. Some information of the history of printmaking is also presented. This course is offered every other year. It will be offered '22-'23 school year.

**Grade Level: 10, 11, 12**

**Prerequisites: Credit earned in Intro & Adv 2D Art**

**Spring**

**1 credit**

**SCULPTURE:** introduces several basic methods of constructing sculpture as well as introducing students to the basic elements and principles of design. Emphasis is placed on developing the students' original ideas in three-dimensional forms. Students become familiar with construction from wood, clay, light metal, plaster, glass, and also "found" materials from which structures are assembled. Students learn how to use electric and hand tools to manipulate the materials to express their ideas as effectively as possible. As a result of this course, students learn to put ideas into three-dimensional form. At least five major projects are completed during this semester.

**Grade Level: 10, 11, 12**

**Prerequisites: Credit earned in Intro & Adv 2D Art**

**Spring**

**1 credit**

## **AV Technology and Communication**

**PRINCIPLES OF RADIO AND TV:** This course provides an introduction to the fundamentals of digital production. Students will develop basic skills in digital production techniques for audio, video, studio, and field production.

**Grade: 9, 10, 11**

**Prerequisites: none**

**Full Year**

**2 Credits**

**RADIO AND TELEVISION 1:** focuses on communication, media and production. Emphasis is placed on career opportunities, production, programming, promotions, 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 operating abilities, and integrate teamwork skills. Instructional strategies may include a hand-on school-based enterprise, real and/or simulated occupational experiences, job shadowing, field trips, and internships. Offers VU Dual Credit MCOM 102, and Project Based Learning opportunities.

**Grade Level: 10, 11, 12**

**Prerequisites: None**

**Full Year**

**2-4 Credits**

**RADIO AND TELEVISION 2:** prepares students for admission to television production programs at institutions of higher learning, or to go straight into the media workforce. Students train on professional equipment creating a variety of video projects. Students enrolling in this program should have successfully completed Radio and Television 1. During this second-year program, students integrate and build on first-year curriculum while mastering advanced concepts in production, lighting and audio. This is also the class that manages the 93.7 "The Scratch" radio station. Students will be responsible for several important regular filming/broadcasts inside and outside the school grounds. This includes but is not limited to; A weekly or daily school news show, varsity sporting events, and other school-based activities or events. Offers VU Dual Credit BCST 120, BCST 140, along with Work Based and Project Based Learning opportunities.

**Grade Level: 11, 12**

**Prerequisites: Radio/TV 1**

**Full Year**

**2 Credits**

**AV TECH AND COMMUNICATION; MEDIA LAB:** is an extended learning experience for advanced photojournalism or radio/tv students seeking advancement and specialization of skills for media careers. This work-based learning experience is designed to give students the opportunity to learn and practice technical skills while working on a variety of specific tasks and projects inside and outside JHS. Throughout the course, students will also focus on learning about employment opportunities and obtaining the knowledge, skills, and attitudes essential for success in chosen occupations. Certification and dual credit opportunities may be available.

**Grade Level: 11, 12**

**Course Prerequisites: Successful completion of Radio/TV 1, or Photojournalism.**

**Full Year**

**2 Credits**

**PRINCIPLES OF VISUAL COMMUNICATION:** This course introduces students to fundamental design theory and fundamental computer graphics in visual communications. Investigations into design theory and color dynamics will provide experiences in applying design theory, ideas and creative problem solving, critical peer evaluation, and presentation skills. This course will include basic computer terminology and use, mastering fundamental skills, and developing efficient working styles. These skills are further developed through work with vector-based, raster-based, and page layout software used in the professional visual communications industry.

Recommended Grade: 9, 10, 11

Required Prerequisites: none

Full Year

2 Credits



**INTERACTIVE MEDIA- PHOTOJOURNALISM:** Students develop skills in; photography, journalistic writing, and graphic design for high school media, including The J yearbook, JHSMedia.org and social media outlets. Focus is placed on camera operation and composition related to traditional photographic principles along with 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. Students will be required to attend different school functions in order to gather information, news, and compelling/interesting photos in a journalistic fashion, all while meeting deadlines. Creative planning, marketing techniques, classroom collaboration, and individual effort inside and outside of the school is a must while enrolled in this course.

**Grade Level: 10, 11, 12**

**Full Year**

**Recommended Prerequisites: Intro to Communications, or recommendation from english teacher or yearbook advisor.**

**2 Credits**

## **Business Department**

**PRINCIPLES OF BUSINESS:** introduces students to the world of business, including the concepts, functions, and skills required for meeting the challenges of operating a business in the twenty-first century on a local, national, and international scale. The course covers business management, entrepreneurship in a market economy, marketing fundamentals, and business ethics and law. The course develops business vocabulary and provides an overview of business and the role that business plays in economic, social, and political environments. Students will have the opportunity to participate in several projects.

**Grade Level: 9, 10, 11, 12**

**Full Year**

**Prerequisites: none**

**2 credits**

**INTRODUCTION TO COMPUTER SCIENCE:** allows students to explore the world of Computer Science. This discovery class is designed to emphasize problem solving, creation, collaboration, while introducing students to the many ways computer science impacts their lives. This course is meant to be engaging for all students, regardless of background or prior knowledge/experience. It provides students opportunities to engage with culturally and personally relevant topics in a wide variety of computer science related fields. This class is a great course to take before enrolling in AP- Computer Science Principles.

**Grade Level: 9, 10, 11, 12**

**Spring or Fall**

**Prerequisites: none**

**1 credit**

**AP COMPUTER SCIENCE PRINCIPLES:** designed to be equivalent to a first-semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computation tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course is unique in its focus on fostering student creativity. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while using computer software and other technology to explore questions that interest them. They will also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society, and the world.

**Recommended Grade Level: 10, 11, 12**

**Full Year**

**Required Prerequisite: Algebra**

**2 credits**

**This course counts as a science credit**

**ACCOUNTING FUNDAMENTALS:** introduces the language of business using Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and corporations using double-entry accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision-making. Students will participate in a culminating, real-world simulation at the end of second semester.

**Grade Level: 10, 11, 12**

**Full Year**

**Prerequisites: None**

**2 credits**

**ADVANCED ACCOUNTING:** expands on the Generally Accepted Accounting Principles (GAAP) and procedures for corporations using double-entry accounting covered in Introduction to Accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision-making. Students are provided opportunities to explore the Accounting Cycle in more depth as it relates to departmentalized businesses, accounting adjustments and valuation, general accounting adjustments, corporation accounting, and management accounting.

**Grade Level: 11 or 12**

**Full Year**

**Prerequisites: Accounting I**

**2 credits**

**PRINCIPLES OF ENTREPRENEURSHIP:** provides an overview of what it means to be an entrepreneur. Students will learn about starting and operating a business, marketing products and services, and how to find resources to help in the development of a new venture. This course is ideal for students interested in starting their own art gallery, salon, restaurant, etc. Students will spend much of their time in this course developing a business plan for a fictitious business that they will “open.” A presentation will be given on this business at the end of the semester. This course is offered every other year. It is scheduled to be offered in the ‘22-’23 school year.

**Grade Level: 9, 10, 11, 12**

**Full Year**

**Prerequisites: None**

**2 credits**

**MARKETING FUNDAMENTALS:** 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.

**Grade Level: 9, 10, 11, 12**

**Fall or Spring**

**Prerequisites: None**

**1 credit**

**STRATEGIC MARKETING:** builds upon the foundations of marketing and applies the functions of marketing at an advanced level. Provides an overview of various strategies for building and sustaining a competitive advantage in the marketplace. Topics include organization’s mission and goals, identifying and framing organizational opportunities, formulating product market strategies, budgeting, and controlling the marketing effort. Students will study the basic principles of consumer behavior and examine the application of theories from psychology, social psychology, and economics. The relationship between the consumer behavior and marketing activities are reviewed. Students will help plan and implement promotional events for athletic and other events at the school to encourage student involvement in these activities. Students will use these event experiences to better understand consumer behavior and what drives purchase decisions. This course is offered every other year. It is scheduled to be offered in the ‘22-’23 school year.

**Grade Level: 11, 12**

**Full Year**

**Required Prerequisite: Principles of Marketing**

**2 credits**

**CYBERSECURITY:** is a full-year course. The design of the course exposes high school students to the ever growing and far reaching field of cybersecurity. Students accomplish this through problem based learning, where students role-play as cybersecurity experts and train as cybersecurity experts do. Cybersecurity gives students a broad exposure to the many aspects of digital and information security, while encouraging socially responsible choices and ethical behavior. It inspires algorithmic thinking, computational thinking, and especially, “outside-the-box” thinking. Students explore the many educational and career paths available to cybersecurity experts, as well as other careers that comprise the field of information security. The course contains the following units of study: Personal Security, System Security, Network Security, and Applied Cybersecurity. This course is offered every other year. It is scheduled to be offered in the ‘21-’22 school year.

**Grade Level: 11, 12**

**Full Year**

**Required Prerequisite: none**

**2 Credits**

**This course counts as a science credit**

## **English Department**

**CCRB LITERACY READY:** students selected for enrollment in CCRB Literacy Ready will work on the basic Indiana standards for purposes of remediation, credit recovery, or preparation for the Indiana Course Assessment testing program. Emphasis will be placed on remediating students in the basic skills and preparing the student to be successful on the Indiana ECA/ISTEP+ assessment through the examination and concentration of student weaknesses. Placement to be recommended by faculty or guidance department personnel.

**Grade Level: 10**

**Counts as English credit**

**Full Year**

**Prerequisites: Teacher/Counselor recommendation**

**2 credits**

**ENGLISH 9:** introduces freshmen to the four aspects of communication – reading, writing, speaking, and listening – with major emphasis placed on literature and writing. Particular pieces of literature, certain authors, and literary terms are studied, and various genres (short story, novel, drama, poetry, and essay) are introduced. In addition, students study grammar lessons and become familiar with the steps of writing an essay by brainstorming, organizing, developing, and proofreading their ideas. As a result of this course, students gain an understanding of literary concepts, the writing process, effective study habits, vocabulary skills, and communication in general.

**Grade Level: 9**

**Full Year**

**2 credit**

**ENGLISH 9, HONORS:** includes all of the requirements for the regular English 9 class and more—with major emphasis being placed on the reading of classic world literature texts. Students in the honors class will write extensively, and all written work must exceed normal expectations in terms of creativity, development, clarity, structure, and mechanical precision. Vocabulary development will concentrate on an extensive study of Greek and Latin derivatives as preparation for the SAT. Students in this class will participate in several projects and engage in a variety of speaking situations. It must be clearly understood that honors students will be held to a higher academic standard overall. Students who cannot work independently, those who do not complete assignments correctly or on time, and those who do not wish to participate fully in the spirit of the class should not enroll. Honor students are defined by their exceptional reading ability and their enjoyment of and competence in writing. Successful students must be mature individuals who are willing to put in the time necessary to do quality work. A summer reading assignment is required for this course. This course is NOT required for the academic honors diploma.

**Grade Level: 9**

**Full Year**

**Recommendation: Grade of A in English/ Language Arts, Pass + score on 8<sup>th</sup> grade ISTEP**

**2 credits**

**ENGLISH 10:** This course provides a balance of literary reading and writing with authentic, real-world application projects. Students will complete a minimum of three major works during the year as well as several large essays. Exploring multi-cultural literature, a central component of the course, helps students to abandon prejudices, communicate effectively with members of all cultural groups, and learn cooperation and tolerance in an ever-changing global community. Students will also complete a career-oriented project-based learning assignment which will introduce a practical approach to communication skills and future planning. Several activities are geared toward the workplace – researching suitable careers, composing business documents, and learning to work in teams. As a result of this course, students gain knowledge of possible careers, read independently, build vocabulary, write effective essays that persuade and inform, and learn presentation skills.

**Grade Level: 10**

**Full Year**

**2 credits**

**ENGLISH 10, HONORS:** This Pre-AP course requires students read a mixture of world and American texts as they explore culture through an in-depth study of literature. Students will investigate essential historical ages and events while reading poems, stories, plays, and novels that describe or are derived from that era. Students will work to hone their research, analytical writing, and communication skills. One of the goals for this course is to further develop critical thinking skills and the ability to apply knowledge through verbal and written communication. The course emphasizes close reading and in-depth analysis of texts. Students will read a minimum of eight major works and complete several significant essay assignments. In addition to all of the established rigor of the course, students will also complete a career-oriented Project Based Learning assignment to meet graduation requirements.

It must be clearly understood that honors students will be held to a higher academic standard overall. Students who cannot work independently, those who do not complete assignments correctly or on time, and those who do not wish to participate fully in the spirit of the class should not enroll. Students should expect regular homework assignments and outside reading requirements. Honor students are defined by their exceptional reading ability and their enjoyment of and competence in writing. Successful students must be mature individuals who are willing to put in the time necessary to do quality work.

This course requires a summer enrichment activity that must be completed by the start of school. This assignment requires students to read two assigned texts, complete supplementary reading material, and write an essay over their reading. Students who do not complete the summer enrichment are not eligible to take the course.

This course is NOT required for the academic honors diploma.

**Grade Level: 10,**

**Full Year**

**Recommendation: B or above in Honors English 9 or an A in English 9.**

**2 credits**

**ENGLISH 11:** introduces students to American literature and authors. Students read, analyze, evaluate, critique, and actively respond to a wide variety of literary genres that reflect American culture, including quality works of various ethnic and cultural minorities. Students compare readings from literature, history, and other subjects by demonstrating how the ideas and concepts presented in the works are interconnected, distinctly American, and important to an understanding of the development of the current culture. Students will gain an understanding of the process and conventions of oral communications and written expression by creating focused, coherent written responses and multimedia presentations that convey clear messages and use vocabulary appropriate to the audience and purpose. As a result of this course, students gain an understanding of the values and ideals that continue to shape the American culture. Emphasis is also placed on SAT vocabulary words.

**Grade Level: 11**

**Full Year**

**2 credits**

**TECHNICAL COMMUNICATIONS:** the study and application of the processes and conventions needed for effective technical writing and communication. The focus is on business-oriented skills and effective communication for the workplace, such as emailing, writing step-by-step instructions, resume-writing, career research, interview skills, and other documents utilized in the workplace. Using the writing process, students demonstrate a command of vocabulary, English language conventions, research and organizational skills, an awareness of the audience, the purpose for writing, and style. This course is geared towards students who will enter the workforce directly after high school, or are following the Career & Technical Education (CTE) pathway and will count towards the graduation pathways requirement for employability skills.

**Grade Level: 11, 12**

**Semester 1  
1 Credit**

**GENRES OF LITERATURE:** is a course based on the Indiana Academic Standards for English/Language Arts, is a study of various literary genres, such as dramas, novels, short stories, biographies, journals, diaries, essays, and others. Students examine a set or sets of literary works written in different genres that address similar topics or themes. Students analyze how each genre shapes literary understanding or experiences differently, how different genres enable or constrain the expression of ideas, how certain genres have had a stronger impact on the culture than others in different historical time.

**Grade Level: 11, 12**

**Semester 2  
1 Credit**

**SPEECH/ADVANCED SPEECH AND COMMUNICATION:** Speech and Advanced Speech and Communication, a course based on Indiana's Academic Standards for English/Language Arts and emphasizing the High School Speech and Communication Standards, is the study and application of skills in listening, oral interpretation, media communications, research methods, and oral debate. Students deliver different types of oral and multimedia presentations, including speeches to inform, to motivate, to entertain, and to persuade through the use of impromptu, extemporaneous, memorized, or manuscript delivery. Advanced Speech and Communication Projects: Students complete projects, such as multimedia presentations that are reflective, reports or historical investigations, responses to literature, or persuasive arguments, which demonstrates knowledge, application, and speaking progress in the Advanced Speech and Communication course content. This is a dual college credit course.

**Grade Level: 11**

**Recommendation:** grade of A or B in English 10 or English 10 Honors

**Full Year  
2 Credits**

**AP ENGLISH LANGUAGE AND COMPOSITION:** covers selected works in literature. Emphasis is placed on historical background, cultural context, and literary analysis of selected non-fiction, prose, poetry, novels, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. A variety of activities including writing, speaking, and listening, observing, inquiry, and technology as communication will be utilized to provide an advanced, cohesive package of literature and language arts instruction. This is an advanced placement course based on content established by the College Board. An AP course in English Language and Composition engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way conventions and the resources of language contribute to effectiveness in writing. It must be clearly understood that honors students will be held to a higher academic standard overall. Students who cannot work independently, those who do not complete assignments correctly or on time, and those who do not wish to participate fully in the spirit of the class should not enroll. Honor students are defined by their exceptional reading ability and their enjoyment of and competence in writing. Successful students must be mature individuals who are willing to put in the time necessary to do quality work. A summer reading assignment is required for this course. This course is NOT required for the academic honors diploma.

This is a college-level course with students being required to take the AP Language and Comp test in May. Current cost of the exam is \$95 (subject to change by CollegeBoard).

This course is worth 3 hours of college credit.

**Grade Level: 11**

**Recommendation: B- or above in Honors English 10 and Honors English 9.**

**All other students should have a grade of A in English 10 and English 9.**

**Full Year  
2 credits**

**ENGLISH 12:** this course is a study of literature, composition, communication, and film focusing on an exploration of thematic elements across a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read, view, and respond to representative works of historical or cultural significance in classic and contemporary literature and film as well as in nonfiction. In addition, students examine the visual interpretation of literary techniques and auditory language in film and the limitations or special capacities of film versus text to present a literary work. Students analyze how literature, film, and nonfiction portray the human condition and the roles of men and women and the various ethnic or cultural minorities in the past and present. Emphasis is placed on the practical application of the language, especially in the workplace environment. As a result of this course, students gain an understanding of how English relates to their present and future lives.

**Grade Level: 12**

**Full Year  
2 credits**

**English 12, HONORS:** this course is an **advanced, college-level** course in the study of formal composition writing and British literature. In this course emphasis is placed on techniques used to develop full-length compositions. All papers must be typed or word-processed. Narration, description, cause-effect, comparison-contrast, exemplification, classification-division, definition, and essay response writing are studied in depth. At least one of the papers is done as a research project, and one or two major speeches will be assigned. Students also undertake an extensive study of vocabulary words selected for the college-bound student. In the literature course, students become familiar with the major literary periods beginning with the Anglo-Saxon Age and continuing with the Medieval Period, the Elizabethan Age, the Jacobean Age, the Puritan Age, the Restoration, the Age of Pope, the Age of Johnson, the Romantic Age, and the Victorian Age. Certain major works are studied in depth. Students who cannot work independently, those who do not complete assignments correctly or on time, and those who do not wish to participate fully in the spirit of the class should not enroll. Successful students must be mature individuals who are willing to put in the time necessary to do quality work. Full course (2 semesters) is available for 3 hours of college credit in composition.

**Grade Level: 12**

**Full Year**

**Recommendation: B or higher in previous English class**

**2 credits**

**AP ENGLISH LITERATURE AND COMPOSITION:** is an advanced placement course based on content established by the College Board. An AP English course in Literature and Composition engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller scale elements as the use of figurative language, imagery, symbolism, and tone. The course includes intensive study of representative works from various genres and periods, concentrating on works of recognized literary merit. It must be clearly understood that honors students will be held to a higher academic standard overall. Students who cannot work independently, those who do not complete assignments correctly or on time, and those who do not wish to participate fully in the spirit of the class should not enroll. Honor students are defined by their exceptional reading ability and their enjoyment of and competence in writing. Successful students must be mature individuals who are willing to put in the time necessary to do quality work. A summer reading assignment is required for this course. This course is NOT required for the academic honors diploma.

This is a college-level course with students being required to take the AP Literature and Comp test in May. Current cost of the exam is \$95 (subject to change by College Board).

The course is available for 3 hours of college credit.

**Grade Level: 12**

**Full Year**

**Recommendation: B- or above in AP Language and Comp, Honors English 10 and Honors English 9.**

**2 credits**

**All other students should have a grade of A in American Literature, English 10 and English 9**

**ENGLISH AS A NEW LANGUAGE:** provides Limited English Proficiency (LEP) students with instruction in English to improve their proficiency in listening, speaking, reading, and writing. Emphasis is placed on helping students to function within the regular school setting and within an English-speaking society.

**Grade Level: 9, 10**

**Full Year**

**Prerequisites: Limited English Proficiency**

**2 credits**

## **Family and Consumer Science Department**

**CHILD DEVELOPMENT SEMESTER 1:** studies children from conception through birth. This course includes: the history of child development from the past to the present; genetic and environmental hazards that could interfere with a healthy pregnancy and the development of the fetus (such as fetal alcohol syndrome and drug affected babies); basic sex education as it applies to the human reproductive system, sexual pressures and STDs with a focus on abstinence; parenting and caregiving skills: discipline, parenting styles, family structures, abuse and neglect; childbirth, labor and delivery and the postnatal period; hands-on projects. Students enrolled in this class will have to take care of a simulator baby for 48 hours (special situations will be addressed individually in which students could be offered an alternative project).

This class is recommended for future caregivers and those who plan careers which involve children. By law\*, guardians are required to sign a permission slip approving their children to take this class.

\* SEA 65 requires schools to allow parents to inspect instruction material on human sexuality and requires seeking consent from parents prior to instruction.

1. Parents have 21 days to consent or decline.
2. After 21 days, the school must issue a second notice to parents who have not responded.
3. If no response within 10 days of the second notice, the school may provide instruction.

**Grade Level: 10, 11, 12**

**Fall**

**Prerequisites: None**

**1 credit**

**ADVANCED CHILD DEVELOPMENT SEMESTER 2** : studies children from infancy through age 18. This course builds on the Advanced Child Development A course, which is a prerequisite. Advanced Child Development B includes the study of career exploration in child development and nurturing; professional and ethical issues in child development; child growth, development and disabilities; child development theories, research, and best practices; child health and wellness; teaching and guiding children; special conditions affecting children (death, divorce, child abuse and neglect); other situational stresses that arise within the family. This course contains research projects, lab experiences, notes, and textbook work.

**Grade Level: 10, 11, 12**

**Prerequisites: Must take first semester before second**

**Spring**

**1 credit**

**PRINCIPLES OF HOSPITALITY:** is designed to offer the beginning student the basics of kitchen organization and management, nutrition, and food preparation. Students become more knowledgeable about food choices available to them based on nutrition, Choose Myplate, and new technology. Health care needs of family members, with emphasis on understanding the means of protecting health, detecting symptoms of illness, and caring for the ill patient, are discussed. Food preparation includes meats, dairy products, fruits, vegetables, eggs, and grains. Careers in the foodservice industry are explored. Principles of Hospitality is designed to develop an understanding of the hospitality industry and career opportunities, and responsibilities in the food service and lodging industry. Comparing at home food preparation with restaurant style preparation prices will also be examined. It presents laws and regulations related to safety, fire, and sanitation and how to adhere to them in the food service operation. There is a lab fee of \$40 per semester to cover the costs for the food labs. This class contains activities such as: research papers, presentations, in class assignments and other hands-on labs. There will be notes covering topics in this class. I have a -50% on late assignments. This class has a teacher assist, not always teacher led approach. This approach allows for more room to grow and leads students to learn more self-discipline.

**Grade Level: 11, 12**

**Prerequisites: Must take first semester before second**

**Full Year**

**2 credits**

**PRINCIPLES OF TEACHING:** provides a general introduction to the field of teaching. Students will explore educational careers, teaching preparation, and professional expectations as well as requirements for teacher certification. Current trends and issues in education will be examined. A volunteer experience of a minimum of 20 hours is required for successful completion of this course. This course has been approved to be offered for dual credit. Students pursuing this course for dual credit are still required to meet the minimum prerequisites for the course and pass the course with a C or better in order for dual credit to be awarded.

**Grade Level: 9, 10, 11,**

**Prerequisites: None**

**Full Year**

**2 credits**

**PRINCIPLES OF HUMAN SERVICES:** Principles of Human Services explores the history of human services, career opportunities, and the role of the human service worker. Focuses on target populations and community agencies designed to meet the needs of various populations. Course includes a required job shadowing project in a Human Services setting. This course will also encourage cultural awareness and appreciation of diversity. Focuses on cultural variations in attitudes, values, language, gestures, and customs. Includes information about major racial and ethnic groups in the United States.

**Grade Level: 9, 10, 11, 12**

**Prerequisites: none**

**Full Year**

**2 credits**

## Mathematics Department

<b>Math Pathways</b>					
<b>9<sup>th</sup> Grade</b>	Algebra I	Algebra I	Algebra I, Honors	Geometry, Honors	Algebra I, Honors
<b>10<sup>th</sup> Grade</b>	Geometry	Geometry	Geometry, Honors	Algebra II, Honors	Geometry, Honors & Algebra 2, Honors
<b>11<sup>th</sup> Grade</b>	Algebra II	Algebra II	Algebra II, Honors	Pre-Calculus	Pre-Calculus
<b>12<sup>th</sup> Grade</b>		Trig./Prob. And Stats	Pre-Calculus	AP Calc. or AP Stats.	AP Calculus or AP Statistics

**Students must be enrolled in a Math course their freshmen and sophomore year.**

**ALGEBRA I:** provides a formal development of the algebraic skills and concepts necessary for students who will take a geometry course and other advanced college-preparatory courses. In particular, the instructional program in this course provides for the use of algebraic skills in a wide range of problem-solving situations. The concept of function is emphasized throughout the course. Topics include properties of real numbers, solution and evaluation of equations and inequalities, graphing of linear and quadratic equations and inequalities and systems of equations and inequalities, use of exponents, polynomials and factoring, radicals, and introductory topics from statistics and probability.

**Grade Level: 9, 10**

**Prerequisites: None**

**Full Year**

**2 credits**

**ALGEBRA I, HONORS:** provides a challenge to students by covering the state standards in greater depth. In addition to the topics in Algebra I, students will be challenged with decimal and fractional equations, exponential functions, matrices, more challenging algebraic applications, and an introduction to geometry. It is considered a preparatory class to continue on in the honors math classes, pre-calculus and possibly AP Calculus or AP Statistics.

**Grade Level: 8, 9, 10**

**Prerequisites: Teacher recommendation is encouraged**

**Full Year**

**2 credits**

**GEOMETRY:** provides students with the basic knowledge of our state standards. These standards will include concepts and applications about lines, planes, angles, triangles, polygons and also circles. Inductive reasoning, basic geometric proofs, spatial sense, mathematical reasoning, geometric constructions and logical thinking are more in depth concepts that will be covered. Three dimensional figures such as cubes, pyramids, prisms, and spheres are some of the more complicated shapes discussed.

**Grade Level: 11, 12**

**Prerequisites: Algebra I,**

**Full Year**

**2 credits**

**GEOMETRY, HONORS:** will challenge our students by covering our state standards in greater depth. More difficult applications in lines, angles, planes, polygons, and circles will be discussed. Reasoning, spatial applications, deductive reasoning, and mathematical reasoning are also an intricate part of this class. Two column, flow, paragraph, and indirect proofs will be covered. Geometric constructions, proving theorems, trigonometric functions, and understanding the properties that go along with geometric drawings are more advanced applications covered in this class.

**Grade Levels: 9, 10, 11**

**Prerequisites: Highly recommended to have:  
C- or better in Algebra I, Honors;  
B or better in Algebra I  
45 or better on Geometry Prognosis Test**

**Full Year**

**2 credits**

**ALGEBRA II:** expands on the topics in Algebra I and provides further development of the concept of a function. The concepts of linear, polynomial, exponential, logarithmic, and rational functions will be discussed, including their graphs and application to the real world. The study of probability, series, and sequences will also be covered.

**Grade Level: 10, 11, 12**

**Prerequisites: Algebra I**

**Full Year**

**2 credits**

**ALGEBRA II, HONORS:** expands on the topics of Algebra I, Honors and provides further development of the concept of a function. The concepts of linear, polynomial, exponential, logarithmic, rational, and trigonometric functions will be discussed, including their graphs and application to the real world. The study of conics, probability, series, sequences, and trigonometry will also be covered.

**Grade level: 10, 11, 12**

**Prerequisites: Highly recommended C- or better in Geometry, Honors**

**\*\*Note: For a student to double Geometry, Honors and Algebra II, Honors, they should have earned an A- or better in Algebra I, Honors or have teacher referral. These students should have the intention of taking higher level math their senior year.**

**Full Year**

**2 credits**

**PROBABILITY AND STATISTICS:** Probability and Statistics includes the concepts and skills needed to apply statistical techniques in the decision-making process. Topics include: (1) descriptive statistics, (2) probability, and (3) statistical inference. Practical examples based on real experimental data are used throughout. Students plan and conduct experiments or surveys and analyze the resulting data. The use of graphing calculators and computer programs is encouraged.

**Recommended Prerequisite: Algebra II and Geometry**

**Semester 2**

**1 Credit**

**PRE-CALCULUS: TRIGONOMETRY:** Trigonometry provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Trigonometry provides the foundation for common *periodic* functions that are encountered in many disciplines, including music, engineering, medicine, and finance (and nearly all other STEM disciplines). 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. Students may not receive a credit in Trigonometry if they have received 2 credits in Pre-Calculus/Trigonometry Honors

**Recommended Prerequisite: Algebra II and Geometry**

**1 Credit**

**Semester 1**

**PRE-CALCULUS: ALGEBRA:** provides students with all the concepts and skills that must be mastered prior to enrollment in a college-level calculus course. A functional approach provides for the integration of the properties of functions, the algebra of functions, the language of functions, the graphs of functions and data analysis utilizing functions. These functions include those that are linear, polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric and piece-wise defined. Trigonometry and analytic geometry with rectangular and polar coordinates is included. The use of graphing technology is required.

**Grade Level: 11, 12**

**Full Year**

**Prerequisites: Highly recommended C- or better in Algebra II Honors**

**2 credits**

**AP CALCULUS (AB):** provides students with the content that has been established by the College Board for Calculus AB. Students will take the AP Calculus AB exam in May. Through the use of unifying themes of derivatives, integrals, limits, approximation, and applications and modeling, the course becomes a cohesive whole rather than a collection of unrelated topics. Functions and their analysis are represented graphically, numerically, analytically and verbally. The use of graphing technology is required to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results. This is a college-level course with students being required to take the AP exam offered in May. Currently the cost of the exam is \$95 but is subject to change by the College Board. In recent years the state of Indiana has paid for certain tests in the areas of math and science, but this could change in the future.

**Grade Level: 11, 12**

**Full Year**

**Prerequisites: Highly recommended C- or better in Pre-Calculus/Trig Honors**

**2 credits**

**AP CALCULUS (BC):** provides students with the content that has been established by the College Board for Calculus BC. Students will take the AP Calculus BC exam in May. Calculus BC is an introductory college-level calculus course. Students cultivate their understanding of differential and integral calculus through engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions. The use of graphing technology is required. In recent years the state of Indiana has paid for certain tests in the areas of math and science, but this could change in the future.

Grade level: 12

Full year

Prerequisite: AP Calculus AB

**AP STATISTICS:** is 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. This is a college-level course with students being required to take the AP exam offered in May. Currently the cost of the exam is \$95 but is subject to change by the College Board. In recent years the state of Indiana has paid for certain tests in the areas of math and science, but this could change in the future. Students may double-up in Pre-Calculus and AP Statistics as a Junior or Senior.

**Grade Level: 11, 12**

**Full Year**

**Prerequisites: Highly recommended C- or better in Pre-Calculus/Trig Honors**

**2 credits**

## **Music Department**

**MUSIC THEORY AND COMPOSITION:** is designed for the student planning to major in music in college. The course studies the fundamentals of notation, scales, tonality, key, intervals, transposition, chords, cadences, voice leading, dominant and non-dominant seventh chords, secondary dominants, leading-tone chords, and the study of musical periods: medieval, renaissance, baroque, classical, romantic, 20<sup>th</sup> century. This is a year-long course.

**Grade Level: 11, 12**

**Full Year**

**Prerequisites: Two years high school band, or two years high school choir,**

**2 credits**

**Or by written pretest and five years demonstrable piano skills and teacher recommendation.**



**CHOIR 1:** is open to all interested students. Previous experience in choral performance is not required. Students develop musicianship and specific performance skills through ensemble and solo singing. Instruction is provided in creating, performing, conducting, listening to, and analyzing different styles of music. Classroom learning includes improvement of basic singing skills through various choral music genres. Students should expect to do daily homework. Students should be available for all performances, regardless of sports and or work outside of school. Students may be admitted and/or dismissed at the director's discretion.

**Grade Level: 9, 10, 11, 12**

**Prerequisites: None**

**Full Year**

**2 credits**

**CHOIR 2:** When offered, women's choir is available to auditioned students only and provides students with opportunities to develop musicianship and specific performance skills through ensemble and solo singing. Activities create the development of quality repertoire in the diverse styles of choral literature that is appropriate in difficulty and range for the students. Chorus classes provide instruction in creating, performing, conducting, listening to, and analyzing, in addition to focusing on the specific subject matter. Additional emphasis is placed on sight-reading, critical listening skills, and vocal technique. These students should expect to participate in solo and ensemble and a variety of after-school service activities. This course is a one year course. It should not be taken for one semester. Students may be accepted and/or dismissed at the director's discretion.

**Grade Level: 9, 10, 11, 12 by audition and/or director selection**

**Prerequisites: choir**

**Full Year**

**2 credits**

**CHOIR 3 (Ambassador Singers):** consists of top quality vocal students in choral music. Class work focuses on difficult, high-standard choral literature representing various choral genres. All accepted students are required to perform at all set choral functions. Community performances will also be required. These students may be dismissed from the course, with a failing grade, at any time due to lack of participation or commitment. Some performances involve other and sometimes all of the JHS Choral Department. . These students should expect to participate in solo and ensemble and a variety of after-school service activities. Chorus classes provide instruction in creating, performing, conducting, listening to, and analyzing, in addition to focusing on the specific subject matter. Students develop the ability to understand and convey the composer's intent in order to connect the performer with the audience. Mastery of basic choral technique must be evident. Areas of refinement include a cappella singing, sight-reading, and critical listening skills. This is a year-long course. Students may be accepted and/or dismissed at the director's discretion.

**Grade Level: 9, 10, 11, 12**

**Prerequisites: Selected by director and/or audition**

**Full Year**

**2 credits**

**DANCE PERFORMANCE:** Learning activities in choreography are sequential and systematic and allow students to express themselves. A wide variety of materials and experiences are used in order to provide students with the knowledge, skills, and appreciation of the multi styled and multicultural dance expressions. Activities are designed to develop students' ability: translate ideas, images, emotions, perceptions, and personal experiences into movement; improvise, using immediate and spontaneous responses; experiment and apply concrete and abstract concepts; produce a concept and design using a selection of style, content, and accompaniment; understand musical phrasing, rhythmic structures, meters, and musical application within choreography; use actual or created performing space to design and develop a dance form; research production and technical skills required for an actual performance; and make interpretive decisions. Students enrolled in this class do not play a musical instrument in the band and will also have the option of continuing into the Jasper Winter Guard after successfully completing this course. This group performs with flags with the Jasper Band in field shows and parades, performs at home football games and makes other public appearances. All performances and rehearsals are considered a part of the course.

**Grade Level: 9, 10, 11, 12**

**Prerequisites:** Attendance at spring and summer workshops, summer marching band rehearsals, and summer marching band camp.

**Fall**

**1 credit**

**BEGINNING CONCERT BAND:** provides a balanced comprehensive study of music, which develops skills in the psychomotor, cognitive, and affective domains. Instruction is designed to enable students to connect, examine, imagine, define, try, extend, refine, and integrate music study into other subject areas. Ensemble and solo activities are designed to develop elements of musicianship including, but not limited to: tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, and studying historically significant styles of literature. Students are given opportunities to develop the ability to understand and convey the composer's intent in order to connect the performer with the audience. Students are required to participate in performance opportunities, outside of the school day, that support and extend learning in the classroom. The band competes in field shows and parades, performs at home football games, and makes other public appearances. All performances and rehearsals are considered a part of the course.

**Grade Level: 9, 10, 11, 12**

**Prerequisites:** Enrollment in a band class at the HS or MS during the most recent semester.

Exceptions might be made in extreme and/or unusual circumstances, but only at the director's discretion.

**Fall**

**1 credit**

**INTERMEDIATE CONCERT BAND:** provides a balanced comprehensive study of music that develops skills in the psychomotor, cognitive, and affective domains. Instruction is designed so that students are enabled to connect, examine, imagine, define, try, extend, refine, and integrate music study into other subject areas. Ensemble and solo activities are designed to develop elements of musicianship including: tone production, technical skills, intonation, music reading skills, listening skills, analyzing music and studying historically significant styles of literature. 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 music performances is included. Students receive group training on music reading, instrumental technique, and ensemble coordination. The band performs at public concerts during the school year in addition to organization festivals. All performances are considered a part of the course.

**Grade Level: 9, 10, 11, 12**

**Spring**

**Prerequisites:** Enrollment in a band class at the HS or MS during the most recent semester.

**1 credit**

Exceptions might be made in extreme and/or unusual circumstances, but only at the director's discretion.

**ADVANCED CONCERT BAND:** provides students with a balanced comprehensive study of music that develops skills in the psychomotor, cognitive, and affective domains. Instruction is designed so that students are enabled to connect, examine, imagine, define, try, extend, refine, and integrate music study into other subject areas. Ensemble and solo activities are designed to develop elements of musicianship including: tone production, technical skills, intonation, music reading skills, listening skills, analyzing music and studying historically significant styles of literature. Band repertoire must be of the highest caliber. Mastery of advanced wind band technique must be evident. Areas of refinement consist of advanced techniques including, but not limited to: intonation, balance and blend, breathing, tone production, tone quality, technique, rhythm, sight-reading, and critical listening skills. Evaluation of music and music performances is included. Students receive group training on music reading, instrumental technique, and ensemble coordination. The band performs at public concerts during the school year in addition to organization festivals. All performances are considered a part of the course.

**Grade Level: 9, 10, 11, 12**

**Spring**

**Prerequisites:** Appointment by directors based on students' abilities and achievements, and also on the instrumentation needs of the ensemble.

**1 credit**

Enrollment in a band class at the HS or MS during the most recent semester.

Exceptions might be made in extreme and/or unusual circumstances, but only at the director's discretion.

## Physical Education Department

**HEALTH AND WELLNESS:** High school health education provides the basis for continued methods of developing knowledge, concepts, skills, behaviors, and attitudes related to student health and well-being. This course includes the major content areas in a planned, sequential, comprehensive health education curriculum as expressed in the Indiana Health Education Standards guide: (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 by 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. A variety of instructional strategies, including technology, are used to further develop health literacy.

**Grade level: ANY**

**Fall or Spring**

**Prerequisites: None**

**1 credit**

**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. This course can be taken in addition to Health and Wellness but cannot be taken in place of Health and Wellness as a graduation requirement.

**Grade level: ANY**

**Fall or Spring**

**Prerequisites: None**

**1 Credit**

**PHYSICAL EDUCATION I:** continues the emphasis on 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 different movement forms: (1) health-related fitness activities (cardiorespiratory endurance, muscular strength and endurance, flexibility, and body composition), (2) aerobic exercise, (3) team sports, (4) individual and dual sports, (5) gymnastics, (6) outdoor pursuits, (7) self-defense, (8) aquatics, (9) dance, and (10) recreational games. Ongoing assessment includes both written and performance-based skill evaluations. A Jasper High School uniform is required.

**Grade Level: ANY**

**Prerequisites: None**

**Fall, Spring, Summer**

**1 credit**

**ACTIVITY PHYSICAL EDUCATION** -May be used for PE II to count towards the high school diploma.

Any student who finishes the following seasons as a member in good standing of the team may receive the 2nd required physical education credit. Members of the marching band, flag corps, or any fall athletic team will be awarded a physical education II credit following the first semester. Any student who completes the winter sports, winter guard, springs sports, cheerleading, or dance team season as a member of the activity/sport in good standing will earn the physical education II credit following the second semester. The student will be responsible for submitting an Athletic PE waiver form within 2 weeks of the conclusion of the activity. All decisions of the principal shall be final. Students must complete PE I before using the activity option for PE II. This class WILL NOT count towards athletic eligibility.

Activities for First Semester:

Football, Cross Country, Volleyball, Golf, Tennis, Marching Band, Flag Corps

Activities for Second Semester:

Basketball, Swimming, Wrestling, Winter Guard, Cheerleading, Baseball, Softball, Track, Tennis, Golf

**ELECTIVE PHYSICAL EDUCATION – STRENGTH AND CONDITIONING:**

**Adv. S/C Regular or Adv. S/C FA-Female**

This class emphasizes a maximum performance in physical fitness activities and a personal commitment to lifetime activity and fitness for enjoyment, challenge, self-expression, and social interaction. Designed primarily for the physically active student, this course provides students with opportunities to achieve and maintain a high health enhancing level of physical fitness and increase their knowledge of fitness concepts. It includes strength and conditioning training in a concentrated area and includes at least three different movement forms without repeating those offered in Physical Education I. Movement forms may include: (1) health-related fitness activities (cardiorespiratory endurance, muscular strength and endurance, flexibility, and body composition), (2) aerobic exercise, (3) team sports, (4) individual and dual sports, (5) gymnastics, (6) outdoor pursuits, (7) self-defense, (8) aquatics, (9) dance, and (10) recreational games. Ongoing assessment includes both written and performance-based skill evaluations. This course will also include a discussion of related careers. This class can be taken multiple times. **Any student participating in a sport must have a physical on file.**

**Grade Level: 9,10, 11, 12**

**Prerequisite: PE I**

**Fall or Spring**

**1 credit**

## Science Department

**BIOLOGY I:**

Biology is the study of life. In this course students will be introduced to the scientific method, cytology, genetics, ecology, taxonomy, evolution, chemistry, and microbiology. This course will give students a foundation of knowledge for beginning biology concepts by using course work, lab work, and examinations. Students will study the structures and functions of living organisms and their interactions with their environment. This study explores the functions and processes of cells, tissues, organs and systems within various species of living organisms and the roles and interdependencies of organisms within populations, communities, ecosystems, and the biosphere. Students have an opportunity to gain an understanding of the development of biological knowledge, to explore the uses of biology in various careers, and to cope with the biological questions and problems related to personal needs and social issues. This course will prepare students for future science courses. This course meets the high school competencies for Biology I approved by the Indiana State Board of Education. Lab fee of \$15 per year.

**Grade Level: 9**

**Full Year**

**2 credits**

**BIOLOGY I, HONORS:** designed for college-bound students who want to prepare for science-related careers. This course presents a challenging biology curriculum and an increased laboratory experience. The student will know developmental biology and organisms through laboratory experiences, oral and written presentations, dissections and reports, and class discussions. Students will observe the function of living organisms based on the physical and chemical behavior of matter and explore their complex interdependence. This course will delve deeply into the historical perspectives of biology. Two one-semester projects will be completed to foster a true understanding of ecology and genetics. If taking it in high school, it is strongly encouraged to have received at least a B- in 8th-grade science. Lab fee is \$15 per year.

**Grade Level: 8, 9**

**Full Year**

**2 credits**

**INTEGRATED CHEMISTRY-PHYSICS (ICP):** introduces the fundamental concepts of scientific inquiry, the structure of matter, chemical reactions, forces, motion, and the interactions between energy and matter. The course will serve students as a laboratory-based introduction to possible future coursework in chemistry or physics while ensuring a mastery of the basics of each discipline. The assignments for this class will be primarily online. Students will have to complete the assignments in a prescribed pathway. There will also be in class labs weekly or more often. 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 walls. Lab fee is \$10 per year.

**Grade Level: 10**

**Prerequisites: Biology**

**Full Year**

**2 credits**

**CHEMISTRY I:** This course is designed to be a first-year high school chemistry course and introduces students to the science of chemistry. It is geared towards those students who need a chemistry background, but do not plan to take future college level science courses. Emphasis is placed on the following topics: matter and energy; measurements of chemistry; changes in matter; atomic structures; chemical bonding; chemical composition; chemical equations; stoichiometry; gas laws; ionization; and acids, bases and salts. Students will study the historical perspective of chemistry and learn how to apply basic mathematical concepts to chemistry. The course encourages students to think abstractly concerning the theoretical aspects of chemistry. Students obtain a basic knowledge and understanding of chemistry that can be used in their everyday experience. This course satisfies the requirement for college admission. It is highly recommended that the student has successfully completed Algebra I. The lab fee is \$10 per year.

**Grade Level: 9, 10, 11, 12**

**Full Year**

**2 credits**

**CHEMISTRY I, HONORS:** This course is designed to be a first-year high school chemistry course and gives the student a rigorous foundation in chemistry in order to prepare him or her for a college-level course. The course covers matter and energy; measurements of chemistry; changes in matter; atomic structures; chemical bonding; chemical composition; chemical equations; gas laws; ionization; acids, bases and salts; and introduction to organic chemistry. Students will cover an in-depth study of the historical perspective of chemistry. Students learn how to apply basic mathematical concepts to chemistry as well as to think abstractly concerning the theoretical aspects of chemistry. It is highly recommended that the student has successfully completed Algebra I Honors with a B or higher. The lab fee is \$10 per year

**Grade Level: 9, 10**

**Full Year**

**2 credits**

**AP CHEMISTRY:** This course is designed to be the equivalent of a freshman general chemistry college class. In keeping with this objective, both the course work and the laboratory work are much more independent and rigorous than in Chemistry I Honors. Topics include atomic theory, bonding, and an in-depth study of the states of matter, reaction types, stoichiometry, equilibrium, kinetics, thermodynamics, electrochemistry and nuclear chemistry. The treatment of most topics is heavily mathematical to prepare students for the AP examination. Students will be required to take the AP Chemistry examination in May. The curriculum is aligned with College Board guidelines. It is highly recommended that the student be currently enrolled or have successfully completed Pre-Calculus with a B or higher. Lab Fee: \$40 per year which includes personal goggles and AP prep book

**Grade Level: 11, 12**

**Full Year**

**2 credits**

**AP BIOLOGY:** is equivalent to a college foundation course in biology. Course topics will be the chemistry of life, cell structure and function, cellular energetics, cell communication and cell cycle, heredity, gene expression and regulation, natural selection, and ecology. Students will be expected to do additional scientific readings and research beyond the text. Labs will include such areas as DNA technology, aquatic ecosystem sampling, and animal behavior. Due to the complexity of the course, class time outside of the normal school day is required. It is strongly recommended that AP Biology students have taken Biology I Honors, Chemistry I Honors and earned at least a C+ in those courses. Taking AP Chem prior to AP Bio is encouraged but not mandatory. This is a college-level course with students being required to take the AP Biology test in May. The curriculum is aligned with the latest College Board guidelines. Lab fee is \$15 per year.

**Grade Level: 11, 12**

**Full Year**

**2 credits**

**ADVANCED SCIENCE, ANATOMY & PHYSIOLOGY:** This course is a study of the human body and its functions. The course begins with the body at the cellular level and proceeds to the study of the human body by its systems (for example, skeletal and muscular systems). Throughout the course, dissection of the fetal pig, frog and various organs from chicken, pigs, and cows will be performed. Experiments involving measurement of the student's own body functions will be done (for example, measuring lung capacity, heart rate, etc.). The curriculum is aligned with Indiana's Academic Standards for Science. This course is comparable with a 100 level college Anatomy and Physiology class. The curriculum is taught using college level textbook and resources, but will be taught at a high school pace. Anatomy & Physiology is essential for any student interested in a medical or health care profession. Lab fee is \$30 per year.

**Grade Level: 10, 11, 12**

**Suggested Prerequisites: Biology and Chemistry**

**Full Year**

**2 credits**

**AP ENVIRONMENTAL SCIENCE(APES):** This is an intensive study of the Earth and its system, equivalent to a one-semester introductory college science course. The goal of the APES course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. This class will require collaboration with other students, research, and innovation over an extended time. In the spring, all students are required to take the AP Exam. This class may require prerequisite work over the summer prior to the school year, and completion of the AP test during the first week of May. Lab fee of \$20 per year.

**Grade Level: 10,11, 12**

**Full Year**

**Suggested Prerequisites: Biology, Algebra 1, Chemistry, or Physics (C or better)**

**2 credits**

**PHYSICS:** This course is designed to be a first-year high school physics course. This class gives the student a foundation in physics improving their laboratory experiences in order to prepare him or her for a college-level course. The course covers kinematics, Newton's laws, energy, momentum, angular motion, electricity, and wave motion. Students will also cover historical perspectives of physics. Students learn how to apply mathematical concepts to physics as well as to think abstractly concerning the theoretical aspects of physics. It is recommended that the student has successfully completed Algebra I Honors. This course is an excellent introduction for any student thinking about taking AP Physics 1. Lab fee is \$10 per year.

**Grade Level: 10, 11, 12**

**Full Year**

**2 credits**

**AP PHYSICS I:** This course is designed to be the equivalent of a freshman algebra based physics college class. In keeping with this objective, both the course work and the laboratory work are much more independent and rigorous than Physics I. Topics include Newtonian Mechanics, Electrostatics, Electric Circuits, and Wave Motion. The treatment of most topics is heavily mathematical to prepare students for the required AP examination in May. The curriculum is aligned with College Board guidelines. It is strongly recommended that students have taken Algebra II Honors with a C+ or better. It is NOT required to have already taken Physics to be in this class. Lab fee is \$20 per year.

**Grade Level: 11, 12**

**Full Year**

**2 credits**

## Biomedical Sciences

Completion of **PRINCIPLES OF BIOMEDICAL SCIENCE** and **HUMAN BODY SYSTEMS** will count as the Health requirement for all students. Students registering for the **PRINCIPLES OF BIOMEDICAL SCIENCES** will not be required to sign-up for Health. Students using **PRINCIPLES OF BIOMEDICAL SCIENCES** and **HUMAN BODY SYSTEMS** as their Health requirement will not receive a grade or credit for a traditional Health class. Students completing **PRINCIPLES OF BIOMEDICAL SCIENCES** without completing **HUMAN BODY SYSTEMS** will be required to take a one semester Health class in a traditional manner.

All PLTW Biomedical classes count as a life science credit towards the General, Core 40, and Academic Honors Diploma.

**PRINCIPLES OF THE BIOMEDICAL SCIENCES (PROJECT LEAD THE WAY):** This is a project-based course providing an introduction to the biomedical sciences field through “hands-on” projects and problems. Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students will study the biomedical sciences through 4 different units of study.

Unit 1: Medical Investigation - students engage in forensic science and medical examination investigations to explore biological and forensic science careers and gain experience in experimental design and data analysis. Through the investigation of a mysterious death, students learn about body systems and the introduction to how the body works. In Unit 2 Clinical Care - Students assume the role of different medical professionals working through the schedule of patients in a family care clinic. Over the course of the unit, students will explore medical careers, practice professional communication, gain experience collecting, recording, and interpreting physiological data, learn how to perform routine medical tests and evaluate results. In Unit 3: Outbreaks and Emergencies - Working as public health officials and then as emergency responders, students are presented with a series of events they must address while exploring careers in epidemiology, public health, microbiology, and emergency medicine. Students have opportunities to develop their professional communication and presentation skills. In Unit 4: Innovation - Welcome to PLTW Innovation, Inc., an incubator for innovation where some of the best minds in science and engineering endeavor to solve some of the world’s most pressing biomedical challenges. Students tour PLTW Innovation, Inc. labs and engage in experiences designed to build their engineering and experimental design process skills and to create solutions to current and emerging issues both on and off this earth. Students will build their computer science skills by using computer-aided design (CAD) and geographic information systems (GIS) and unite these skills with their science and engineering experiences to innovate the future of medicine. This unit demonstrates that solutions to biomedical science problems rely on collaboration between professions. The course is designed to provide an overview of all courses in the Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses: Human Body Systems, and Medical Interventions. Students will work at the same rigor as an introductory college course. Students that take PLTW Principles of the Biomedical Sciences could take Human Body Systems and Medical Interventions to complete their Biomedical Sciences Pathway. There is a lab fee of \$20 per year.

**Grade Level: 9, 10, 11, 12**

**Full Year**

**Prerequisites: none**

**2 credits**

**This class counts as a science credit**

**HUMAN BODY SYSTEMS (PROJECT LEAD THE WAY):** Students examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries. There is a lab fee of \$30 per year.

**Grade Level: 10, 11, 12**

**Full Year**

**Prerequisites: none**

**2 credits**

**Suggested Prerequisites: Principles of the Biomedical Sciences**

**This class counts as a science credit**

**MEDICAL INTERVENTIONS (PROJECT LEAD THE WAY):** investigate a variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the life of a fictitious family. The course is a “How-To” manual for maintaining overall health and homeostasis in the body. Students explore how to prevent and fight infection; screen and evaluate the code in human DNA; prevent, diagnose and treat cancer; and prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. There is a lab fee of \$75 per year.

**Grade Level: 10, 11, 12**

**Full Year**

**Suggested Prerequisites: Principles of the Biomedical Sciences and Human Body Systems**

**This class counts as a science credit.**

## Social Studies Department

**WORLD HISTORY:** provides for a study of selected world cultures, past and present. The students will develop a basis to compare and analyze patterns of culture, emphasizing both the diversity and commonality of human experience and behavior. This course emphasizes the interaction of local cultures with the natural environment, as well as the connections among civilizations from the earliest times to the present. This course is designed to focus on: (1) prehistory; (2) early world civilizations, including the rise of civilizations of the Middle East, Africa, and Asia; (3) the classical civilizations of Europe, Asia, Africa, and Latin America; and (4) the development of modern societies. The students will also trace important themes in human history.

**Grade Level: 10**

**Prerequisites: None**

**Full Year**

**2 credits**

**AP WORLD HISTORY MODERN:** This course is equivalent to an introductory college level course with content that has been established by the College Board. Students will be expected to learn historical facts, use advanced thinking skills, and write well. This course relies heavily on college-level resources including a textbook, primary sources, and historical articles. The class will be taught at the college level, so students will need to be committed and willing to work hard. Students will be required to keep up with reading outside of class, complete approximately one hour of homework each day, and participate in class discussions and presentations. Summer assignments will be given to students and must be completed by the first day of school. Students will regularly be asked to compare and contrast societies, analyze change over time, and analyze primary sources and point of view. Students will write many essays to prepare for the AP World History test that is required in May. The test is mandatory as part of the course and the test cost is approximately \$95.

**Grade Level: 10**

**Prerequisites: a good understanding of the rigor and expectations of an AP course**

**Full Year**

**2 credits**

**UNITED STATES HISTORY:** emphasizes national development in the late nineteenth and the twentieth centuries and builds upon concepts developed in previous studies of American history. Students in this course also identify and review significant events, figures, and movements in the early development of the nation. After providing such a review, the course gives a major emphasis to the interaction of historical events and geographic, social, and economic influences on national development in the late nineteenth and twentieth centuries. A chronological, and comparative approach is used in developing themes from America's past as they relate to life in Indiana and the United States today.

Students demonstrate the ability to trace and analyze chronological periods and examine the relationships of significant themes and concepts in United States history. Students will be able to sequence historical events, examine cause and effect, identify different perspectives, and relate historical situations to current issues. Opportunities are given to develop inquiry skills by gathering and organizing information from primary source material and a variety of historical and contemporary sources, accounts, and documents. Investigation of themes and issues include analysis of the importance of cultural pluralism and diversity of opinion in American society. Students learn to exercise their skills as citizens in a democratic society by engaging in problem solving and civic decision-making in the classroom, school, and community settings.

**Grade Level: 11**

**Prerequisites: None**

**Full Year**

**2 credits**

**AP UNITED STATES HISTORY:** This course is designed to be the equivalent of a two-semester introductory college or university U.S. history course. In AP U.S. History students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; making historical comparisons; utilizing reasoning about contextualization, causation, and continuity and change over time; and developing historical arguments. The course also provides seven themes that students explore throughout the course in order to make connections among historical developments in different times and places: American and national identity; migration and settlement; politics and power; work, exchange, and technology; America in the world; geography and the environment; and culture and society. Students who register for AP U.S. History will be expected to read, write about, analyze, and discuss U.S. History at an advanced level in order to be prepared for the mandatory AP U.S. History exam that will be given in May. The test is mandatory as part of the course and the test cost is approximately \$95.

**Grade Level: 11**

**Prerequisites: a good understanding of the rigor and expectations of an AP course**

**Full Year**

**2 credits**

**GOVERNMENT:** examines the principles upon which government is founded as well as its organization and function on the national level. This course conveys basic information and concepts as a foundation for intelligent citizenship. Students develop an understanding of the state and local systems of government. Emphasis is placed on the history, organization, and functions of Indiana government.

**Grade Level: 12**

**Prerequisites: None**

**Fall or Spring**

**1 credit**

**GOVERNMENT, We The People:** In addition to the regular Government course content students will cover the *We The People* Curriculum. The primary goal of *We the People: The Citizen and the Constitution* program is to promote civic competence and responsibility among Indiana's elementary, middle and high school students. The program includes an instructional component, focused on enhancing students' understanding of the institutions of American constitutional democracy and discovering the contemporary relevance of the Constitution and Bill of Rights, and a culminating activity of a simulated congressional hearing in which students "testify" before a panel of judges. Students demonstrate their understanding of constitutional principles and have opportunities to evaluate, take, and defend positions on relevant historical and contemporary issues. This class meets the Government class graduation requirement for an Indiana high school diploma

**Grade Level: 12**

**Fall**

**Prerequisites: None**

**1 credit**

**INDIANA STUDIES:** 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.

**Grade Level: 12**

**Fall or Spring**

**Prerequisites: None**

**1 Credit**

**ETHNIC STUDIES:** Ethnic Studies provides a framework to broaden students' perspectives concerning historical and contemporary lived experiences and cultural practices of ethnic and racial groups in the United States. This course may either focus on a particular ethnic or racial group or take a comparative approach across multiple groups. The course may include an analysis of the economic, intellectual, social, and political contributions of an ethnic or racial group(s), as well as the socio-political and economic forces that create systemic challenges to accessing resources and opportunities. As a result, this course will better prepare students for an increasingly diverse, global community and participation in a democratic society.

**Grade Level: 11, 12**

**Fall or Spring**

**Prerequisites: None**

**1 Credit**

**ECONOMICS:** introduces students to four broad areas: the fundamentals of economics; company, labor, and government responsibilities; domestic and international markets; and money and the role of financial institutions. Microeconomic and macroeconomic theory and application are given attention in this course. Community business volunteers give students the opportunity to experience the application of economic theory. Students examine basic models of decision-making at various levels and in different areas including decisions made as a consumer, producer, saver, investor, and voter; business decisions to maximize profits; and public policy decisions in specific markets dealing with output and prices in the national economy.

**Grade Level: 12**

**Fall or Spring**

**Prerequisites: None**

**1 credit**

**ECONOMICS HONORS:** introduces students to four broad areas: the fundamentals of economics; company, labor, and government responsibilities; domestic and international markets; and money and the role of financial institutions. Microeconomics and macroeconomic theory and application are given attention in this course. Community business volunteers give students different opportunities to experience the application of economic theory. Students examine basic models of decision-making at various levels and in different areas including decisions made as a consumer, producer, saver, investor, and voter; business decisions to maximize profits; and public policy decisions in specific markets dealing with output and prices in the national economy. This course is an honors class and will therefore require students to do more writing, research, and reading. Students will be required to read outside of class, including current events articles from newspapers. There will be multiple projects in this course including political/economic cartoons, budget calculations, tax plans, savings plans and researching an entrepreneur. Tests will always cover multiple chapters and will consist of essay questions. The class moves at a fast pace and excellent work is expected.

**Grade Level: 12**

**Fall or Spring**

**Prerequisites: None**

**1 credit**

**PSYCHOLOGY:** This course will focus on the history of Psychology from the ancient Greeks through modern day theory. This course will study a variety of past civilizations and current cultures. Students will also examine ways in which past societies have shaped the modern world and how ideas from these cultures continue to mold and direct modern life. The emphasis will be on psychology as a science. As such, each student will design, perform and report (both written and orally) an experiment related to topics in psychology. This course is a dual credit class and will therefore require students to do more writing, research, and reading. Students will write weekly article responses, daily journals and complete a major research paper (twenty-two pages in APA format) as part of the final examination. Multiple projects will be completed, films include character analysis papers. Students will be required to read outside of class and should be aware that daily work is in the form of essay questions and essay responses will be required on tests. Tests will occasionally cover a unit rather than one chapter. Turn-it-in will be utilized for grading of major papers. Plagiarism will not be tolerated.

**Grade Level: 12**

**Fall or Spring**



**Prerequisites: None**

**1 credit**

**AP PSYCHOLOGY:** is a course based on the content established and copyrighted by the College Board. The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas. Topics include: History and Approaches; Research Methods; Biological Bases of Behavior; Sensation and Perception; States of Consciousness; Learning; Cognition; Motivation and Emotion; Developmental Psychology; Personality; Testing and Individual Differences; Abnormal Behavior; Treatment of Abnormal Behavior; and Social Psychology.

**Grade Level: 12**

**Prerequisites: Students should be able to read a college level textbook and write grammatically correct, complete sentences.**

**Full Year**

**2 Credits**

**ETHICS, Adv. Social Sciences:** This course will focus on the enduring ethical issues across the span of history to current event issues. This course will study a variety of past civilizations and current cultures, trying to discover universals. Students must be self-disciplined, both during class discussion and outside of class. Daily reading will be required. The student will be required to understand James Rachels (text: The Elements of Moral Philosophy) theories and positions and be able to compare and contrast his ideas against the students own ideas regarding enduring ethical issues. This course is a college level class and will therefore require students to do much writing, research, and reading. Students will write several papers each semester. Multiple projects will be completed including the large project at the end of the semester in which the student develops his own ethical theory and applies it to three contemporary issues. Current events projects require students to read the newspaper or watch the news outside of school and prepare for in-class discussion. Tests will occasionally cover multiple chapters and theories. Essay questions only make up the exams. Students should be aware that this course covers many controversial topics: any ethical topic will be considered for discussion. The student must have an ability to be respectful and open-minded toward others and be willing to elaborate on his own well-developed ideas. Turn-it-in will be utilized for grading of major papers. Plagiarism will not be tolerated.

**Grade level: 12**

**Prerequisites: None**

**Fall or Spring**

**1 Credit**

**SOCIOLOGY:** the study of sociology is about people. To study people or human social behavior refers to everything related to the interaction of people in groups. Thus, students study people's beliefs, values, and rules as well as their ways of organizing families, educational systems, religions, etc. They also look at the positions and roles people assume within these systems. Topics include Society and culture; Social Structure – roles and classes; Social Institutions – family, religion, and education; Socialization – adolescence; Continuity and Change – social movements; and Social Problems – minorities, crime.

**Grade Level: 12**

**Prerequisites: None**

**Fall or Spring**

**1 credit**

**AP UNITED STATES GOVERNMENT AND POLITICS:** is a course based on content established by the College Board. It will give students an analytical perspective on government and politics in the United States. Topics include: (1) constitutional underpinnings of United States government, (2) political beliefs and behaviors, (3) political parties, interest groups, and mass media, (4) institutions of national government, (5) public policy, and (6) civil rights and civil liberties. This is a college-level course with students being required to take the AP U.S. Government and Politics test in May. Current cost of the exam is \$95 (subject to change by College Board).

**Grade Level: 12**

**Prerequisites: None**

**Spring**

**1 credit**

## Technology/Engineering Department

**INTRODUCTION TO CONSTRUCTION:** With the heavy need for jobs to be filled in the wood manufacturing industry and construction industry this course will allow students an opportunity to learn important skills that relate to these trades. Students will begin the year learning the basics including but not limited to: measurement, following building plans, safe machine operation, and how to take a project from start to finish. Students will learn and apply these skills specifically geared toward wood projects. Some projects to be completed will be a customized plate shelf, a pen, a customized cutting board, and a customized picture and frame. In addition students will learn about types of fasteners in woodworking, different joints in woodworking, what types of finishes that can be applied in woodworking, and identification of types of lumber and wood. The second portion of the year we will cover basic construction practices as we build different construction modules and possibly a complete backyard shed for a member of the faculty if time allows. Students will learn how to: frame floors, walls; including openings for windows and doors, how to install windows and doors, how to frame a gable roof and a hip roof using rafters, how to install sheathing, and how to put shingles on a roof, drywall installation and finish, painting, basic residential plumbing, basic residential electrical wiring, and basic bricklaying, surveying. If time and resources allow we will also learn about the different types of flooring and siding installation and types. Students will also get a basic understanding of project material and cost estimation, and basic land surveying. This will be a very hands on course. Students may be able to bring in their own materials for projects of their own at years end. This class will be very hands-on. Approximate fee : \$45

**Grades: 9, 10, 11, 12**

**Full Year**

**Prerequisite: None**

**2 Credits**

**INTRODUCTION TO MANUFACTURING I:** This class introduces students to metal working and is specifically geared toward the skilled trades industry. Students have the opportunity to develop skills in the following areas; multiple types of welding for different applications, plasma cutting, metal grinding and cutting using a variety of tools, basic machining skills using both mill and lathe machinery, and tool and die operation and use all while developing characteristics employers seek. Some projects that will be completed include; many types of different welds using different positions and types of welders, a benchtop vice, an aluminum meat tenderizer, and an angle iron box. Students will also take multiple field trips to local manufacturing industries if time allows. This course will be very hands-on. Students could be required to bring in materials at certain times. 1 year course. Approximate fee will be \$45.

**Grade Level: 9, 10, 11, 12**

**Full Year**

**Prerequisites: none**

**2 Credits**

**INTRODUCTION TO TRANSPORTATION:** Ever wonder how engines and power systems operate and function? In this class we will explore the different machinery we use to transport and create anything and everything and the systems, fuels, and chemicals that are used in them for proper operation. Main areas of study will be 4 stroke gas engines, 2 stroke engines, diesel engines, and electric motors. Students will bring in their own small four stroke gas engine and do a complete teardown and rebuild to learn the pieces and operation of a common 4 stroke gas engine. Once the engine is rebuilt we will go through and learn how to troubleshoot small engine issues and how to fix them. We will also explore and do small engine servicing. If time and resources allow we will also explore general vehicle maintenance and servicing including, but not limited to changing oil, changing brake pads, replacing a battery, changing spark plugs and spark plug wires, locating the fuse box and changing fuses, air filter location and cleaning, rotating tires etc. This will be a very hands on course. Students will be required to bring in a small engine of their own. The engine does NOT need to work. 1 semester course. Approximate fee will be \$10.

**Grade Level: 9, 10, 11, 12**

**1 Semester**

**Prerequisites: None**

**1 credit**

**INTRODUCTION TO ENGINEERING DESIGN (PROJECT LEAD THE WAY):** develops student problem solving skills with emphasis placed on the development of three-dimensional solid models. Students will work from sketching simple geometric shapes to applying a solid modeling computer software package. They will learn a problem solving design process and how it is used in industry to manufacture a product. A commonly used design process will also be used to analyze and evaluate the product design. The techniques learned, and equipment used, is state of the art and is currently being used by engineers throughout the United States. This course is a college preparation course as part of a pre-engineering program. Students are also expected to complete a college preparatory sequence of courses in mathematics.

**Grade Level: 9, 10, 11, 12**

**Project Lead The Way (PLTW) Program**

**Full Year**

**Prerequisites: Algebra I or enrolled in Algebra I**

**2 credits**

**PRINCIPLES OF ENGINEERING (PROJECT LEAD THE WAY):** helps students understand the field of engineering and engineering technology and its career possibilities. Students will develop engineering problem solving skills that are involved in postsecondary education programs and engineering careers. They will also learn how engineers address concerns about the social and political consequences of technological change.

**Grade Level: 10, 11, 12**

**Project Lead The Way (PLTW) Program**

**Full Year**

**Prerequisites: IED PLTW**

**2 credits**

**This course counts as a science credit**

**DIGITAL ELECTRONICS (PROJECT LEAD THE WAY):** 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 provide opportunities for students to design, construct, test, and analyze simple and complex digital circuitry.

**Grade Level: 10, 11, 12**

**Project Lead The Way (PLTW) Program**

**Full Year**

**Prerequisites: IED PLTW**

**2 credits**

**COMPUTER INTEGRATED MANUFACTURING (PROJECT LEAD THE WAY):** 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 will evaluate their design solutions using various techniques of analysis and make appropriate modifications before producing their prototypes.

**Grade Level: 10, 11, 12**

**Project Lead The Way (PLTW) Program**

**Full Year**

**Prerequisites: IED PLTW**

**2 credits**

**CIVIL ENGINEERING AND ARCHITECTURE (non-PROJECT LEAD THE WAY):** is a course where students are introduced to the fundamental design and developmental aspects of civil engineering and architectural planning activities. Students will learn the history of Civil Engineering and Architecture, career and college opportunities in the fields of Civil Engineering and Architecture, how buildings are constructed, how to create quality floor plans, design and create their own buildings and communities using 3d software, and learn to survey land masses using surveying equipment. Students will have a large margin for creative thinking in this class as they complete many team building activities and hands on modeling using real life materials and 3d software. Great for students considering a career in Civil Engineering, Architecture, Interior Design, or Construction Management. The computer program that is used in this course is very up to date and is being used by many colleges who offer any of the degrees listed above. Knowing this program can give the student a huge leg up when college comes around. Students will have the opportunity to earn up to 3 dual credits through Ivy Tech. 1 year course. Grade Level: 10, 11, 12. Approximate fee will be \$30.

**Grade Level: 10, 11, 12**

**Project Lead The Way (PLTW) Program**

**Full Year**

**Prerequisites: IED PLTW**

**2 credits**

## Theatre Arts

**MUSICAL THEATRE/TECH THEATRE:** is based on the Indiana Academic Standards for General Music and Theatre. Students in this course study general music and the history of musical theatre as well as its place in today's society. Students may participate in music, music appreciation, staging, basic acting technique, choreography, improv, stage directions, rehearsing, and performing as well as all facets of live performance. Students will also be immersed in theatre and music vocabulary study. This class will be taught collaboratively among music, theatre, and dance. These activities will incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies. This is a hands-on course where participation in class activities, as well as speaking, will be required. In-class performance is required, but outside class performance and school performances will not be not required. Additionally, students explore career opportunities in the theatre, attend and critique theatrical productions, and recognize the responsibilities and the importance of individual theatre patrons in their community.

**Recommended Grade Level: 9**

**Full Year**

**Recommended Prerequisites: none**

**2 credits**

**Fulfills a Fine Arts requirement**

**THEATRE ARTS I and II:** enables students to speak clearly and expressively with appropriate articulation, pronunciation, volume, stress, rate, pitch, inflection, and intonation. Using knowledge gained through the study of technical theatre and scripts, students focus on solving the problems faced by actors, directors, and technicians. They also refine their abilities to collaborate on performances, and they learn to constructively evaluate their own and others' efforts. Students also improvise and write plays or scenes; imaginatively express thoughts, feelings, moods, and characters; and apply techniques involving voice, gesture, facial expression, and body movement to reproduce the subtleties of language and voice inflection in conveying emotion and meaning. Students are also introduced to warm-up activities for body and voice, including mime activities. As part of this course, performances and after school rehearsals are required.

**Grade Level: 10, 11, 12**

**Full Year**

**Prerequisites: Musical Theatre and participation in school performances**

**2 credits**

**Fulfills a Fine Arts requirement**

**ADVANCED THEATRE ARTS I and II:** builds upon skills developed in the Theater Arts course. Students explore the historical tradition of the theater, and they engage in a broad range of activities. They improvise dialogue which produces characterizations in a variety of settings and forms. Students also identify the physical, social, and psychological dimensions and qualities of characters in texts of plays. Students demonstrate analytical skills by explaining roles and by comparing various forms of artistic expression and interpretation. They learn to resolve conflicts effectively and discuss cultural values and historical contexts. Students also create videos for production and contests. As part of this course, performances and after school rehearsals are required.

**Grade Level: 11, 12**

**Full Year**

**Prerequisites: Musical Theatre, Theatre Arts, and participation in school performances**

**2 credits**

**Fulfills a Fine Arts Requirement**

**THEATRE PRODUCTION I and II:** further develops skills and abilities related to the broad spectrum of theatrical work. Students write scripts for theater, film, or television, in both traditional and new forms. They create consistent characters, either in class or in informal productions, demonstrating effective management of emotions for individuals and as characters. Students also construct personal meanings from a variety of performances, including the self-evaluation of personal work. In addition, they aim to understand interrelationships among the functions of playwrights, directors, actors, designers, producers, and technicians, and they refine interpersonal and collaborative skills. As part of this course, performances and after school rehearsals are required.

**Grade Level: 12**

**Full Year**

**Prerequisites: Musical Theatre, Theatre Arts, Adv. Theatre Arts and participation in school performances** 2 Credits

**Fulfills a Fine Arts Requirement**

## **World Languages Department**

**Due to the information learned in the first semester being a foundation for the second semester, please note that any student failing the first semester of the course will be removed from the course for second semester.**

Expectations for all language classes include: Cumulative retention of material from previous units/courses; Homework is to be completed on time; Class participation is mandatory and conducive to a learning environment - including with assigned partners.

**FRENCH, GERMAN, SPANISH I:** A level I foreign language class introduces students to effective strategies for beginning language learning, and to various aspects of the culture. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to basic requests and questions, understand and use appropriate greetings and forms of address, participate in brief guided conversations on familiar topics, and write short passages with guidance. This course also emphasizes the development of reading and listening comprehension skills, such as reading isolated words and phrases in a situational context and comprehending brief written or oral directions. Additionally, students will examine the practices, products and perspectives of the culture; recognize basic cultural norms of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across content areas and the application of understanding the language and culture outside of the classroom.

**Grade Level: 8, 9, 10, 11, 12**

**Full Year**

**Prerequisites: C or above in English recommended, Passing score on ISTEP Eng/LA**

**2 credits**

**FRENCH, GERMAN, SPANISH II:** Expects an adequate retention of first year material. Level II foreign language courses build upon effective strategies for language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course focuses on interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and questions in expanded contexts, participate independently in brief conversations on familiar topics, and write cohesive passages with greater independence using appropriate formats. This course also emphasizes the development of reading and listening comprehension skills, such as using contextual clues to guess meaning and comprehending longer written or oral directions. Students will address the presentational mode by presenting prepared material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will describe the practices, products and perspectives of the culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and understanding the language and culture outside of the classroom.

**Grade Level: 9, 10, 11, 12**

**Full Year**

**Prerequisites: French, German or Spanish I with a grade of C or above recommended**

**2 credits**

**FRENCH, GERMAN, SPANISH III:** Expects an adequate retention of second year material. Level III foreign language courses build upon effective strategies for language learning by facilitating the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to initiate, sustain and close conversations; exchange detailed information in oral and written form; and write cohesive information with greater detail. This course also emphasizes the continued development of reading and listening comprehension skills, such as using cognates, synonyms and antonyms to derive meaning from written and oral information, as well as comprehending detailed written or oral directions. Students will address the presentational mode by presenting student-created material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will continue to develop an understanding of the culture through recognition of the interrelations among the practices, products and perspectives of the target culture; discussion of significant events in the target culture; and investigation of elements that shape cultural identity in the target culture. This course further emphasizes making connections across content areas and understanding the language and culture outside of the classroom.

**Grade Level: 10, 11, 12**

**Full Year**

**Prerequisites: French, German or Spanish I and II with C or above recommended**

**2 credits**

**FRENCH, GERMAN, SPANISH IV:** Expects an adequate retention of third year material. Level IV foreign language courses encourage development of language skills and cultural understanding within other content areas and the community. The skill sets that apply to the exchange of written and oral information are expanded through emphasis on practicing speaking and listening strategies that facilitate communication, such as the use of circumlocution, guessing meaning in familiar and unfamiliar contexts, and using elements of word formation to expand vocabulary and derive meaning. Additionally, students will continue to develop an understanding of the factors that influence the practices, products, and perspectives of the target culture; reflect on cultural practices of the target culture; and compare systems of the target culture to the student's own culture. This course further emphasizes making connections across content areas through activities and materials that integrate the target language and culture with concepts and skills from other content areas. The use and influence of the language and culture in the community is explored through the identification and evaluation of resources intended for native speakers.

**Grade Level: 11, 12**

**Full Year**

**Prerequisites: French, German or Spanish I, II and III with C or above recommended**

**2 credits**

**AP French, German, Spanish:** AP level courses take a holistic approach to language proficiency and recognize the complex interrelatedness of comprehension and comprehensibility, vocabulary usage, language control, communication strategies, and cultural awareness. They strive to promote both fluency and accuracy in language use and not to overemphasize grammatical accuracy at the expense of communication.

The College Board establishes the content that is to be taught within any AP course. AP Language courses are centered around thematic units. These units include: global challenges, science and technology, contemporary life, personal and public identities, families and communities, and beauty and aesthetics. Within each of these units students explore ideas, vocabulary, and structure that are used in communicating verbally and in writing about each of the themes.

AP Language courses engage students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of products, both tangible (e.g., tools, books) and intangible (e.g., laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions that underlie both practices and products).

It must be clearly understood that AP students are held to higher academic standards. Students who do not wish to participate fully in class assignments and activities should not enroll. Summer work and daily assignments are required. Class participation is mandatory, including speaking in groups, individually initiating conversations and responding to other conversations. In order to best facilitate the study of each language and culture, these courses are taught exclusively in the target language. This is a college-level course with students being required to take the AP Language test in May. Current cost of the exam is \$95 (subject to change by the College Board).

**Grade Level: 12**

**Full Year**

**Recommendation: B- or higher in previous language class**

**2 credits**

## Career Preparation Programs

<http://patokavalleycte.com/>

Patoka Valley Career and Technical Cooperative

The Patoka Valley Career and Technical Cooperative is a cooperative effort by North Spencer County School Corporation, Northeast Dubois School Corporation, Southeast Dubois School Corporation, Southwest Dubois School Corporation, Pike County School Corporation, East Gibson School Corporation, and Greater Jasper Consolidated School Corporation to provide high school students with an opportunity to select areas of learning which provide them with career experiences and transferable skills to postsecondary institutions such as colleges and apprenticeship programs.

Career Preparation courses and their locations for 2020-2021 are the following:

Administrative Office Management  
Automotive Services Technology I and II, Southridge  
Aviation Operations; Huntingburg Airport  
Cyber Security  
Health Science Education, VUJ  
Health Science Education; Pharmacy, VUJ  
Accelerated Health Science Education, VUJ  
Medical Terminology, VUJC  
Health Science I CNA (Certified Nursing Assistant), VUJ  
Welding Technology I and II, Pike Central  
EMT/EMS, VUJ  
Fire Science, Otwell Learning Center  
Computer Tech Support I and II, VUJ  
Industrial Automation and Robotics I and II, VUJ  
Criminal Justice I and II, Pike Central  
Precision Machine Technology I and II, Pike Central  
Work Based Learning, Jasper  
Culinary Arts and Hospitality, Northeast Dubois  
Education Professions, Jasper  
Construction Trades I and II, VUJ

\*\*\*Students provide their own transportation to and from programs outside our school corporation.

Students will be assigned to a location based on the enrollments of the host school.

**AUTOMOTIVE SERVICES TECHNOLOGY I AND II:** is a two-year program that meets at Pike Central or Southridge High School. Both courses meet for three hours a day. Students receive six credits per year for Auto Services Technology. This course equips students with the training and skills needed to perform competently a broad range of motor vehicle services work specifically designed to meet Automotive Service Excellence (ASE) specifications. Areas of instruction covered during the two-year program are safety, brakes, electrical, steering & suspension, engine repair, and engine performance. Students can earn 12 credit hours from Ivy Tech at no cost. Articulation agreements are in place with United Technical Institute, University Northwestern Ohio, Lincoln College of Technology, and Nashville Auto Diesel College. Most careers in automotive services will require additional college training.

**Grade Level: 11, 12**

**Full Year**

**Prerequisites: Must have own means of transportation**

**6 credits**

**AVIATION OPERATIONS:** This program is designed for students interested in pursuing a career as a pilot, air traffic controller, aviation dispatcher, or airport operations. Students will be in class 2- 3 days per week earning VU Credit in Intro to Aviation and Air Transportation. This course will focus on providing a broad-based introduction to the aviation industry. Course activities include: familiarization with the Department of Aviation, technology in aviation, historic overview of the field of aviation, overview of the current aviation environment, careers and employment opportunities in aviation, including discussions relative to aircraft manufacturing, airline operations, general aviation, air freight, airport management, government service. In addition, this course will provide an introduction to areas of aviation safety, human factors, regulations, and certifications. Students will complete an embedded internship at the Huntingburg Airport 2-3 days per week.

**Grade Level: 11, 12**

**Full Year**

**Prerequisites: Must have own means of transportation**

**6 credits**

**CYBER SECURITY:** Students will earn dual credit for the following classes. This is a 3 block class. Pds. 5-7 at JHS.

**COMP 177 – Intro to Programming Logic and Design**

Introductory programming course that orients students to programming concepts and logic without assuming any previous programming experience. Fundamental concepts of flow charting and pseudocode will be covered along with

**CNET 146 - Introductions to Network Operations and Security -** Students will learn how networked hosts and applications communicate across networks. Emphasis is placed on security at the beginning of the SDLC (Systems Development Life Cycle)

**CNET 246 - Fundamentals in Network Operations and Security -** Students will learn how data travels across networked hosts to provide services to the enterprise. Emphasis is placed on security throughout the entire SDLC (Systems Development Life Cycle). \*\*CNET 146/246 includes hands-on use with technology, and configuring hardware to keep outside hackers at bay.

Upon completing CNET 146/246, students have the opportunity for CCNA Certification. CCNA covers a broad range of fundamentals based on the latest technologies, software development skills, and job roles.

**CNET 151 - Information Data Security I -** Students will acquire the fundamentals of information and data security and understand the vulnerability most organizations have in their security systems with an emphasis on firewalls, security plans and Virtual Private Networks (VPNs). Discussions will include data security methods, authentication, network attacks, malicious code and viruses, wireless security, e-mail and web security and disaster recovery.

**CNET 251 - Information Data Security II -** This course builds upon the concepts and foundations presented in CNET 151. Students will continue exploring many aspects of information and data security and specifically focus on the managerial aspects of information security and assurance. Topics covered include access control models, information security governance, and information security program assessment and metrics. Coverage on the foundational and technical components of information security is included to reinforce key concepts, such as security planning and contingencies, security policies, security management models and practices and ethics.

**Occupations/Job Placement:** This Degree option is ideal for students wanting to work in a variety of Information Technology Jobs such as: Information Technology Support Technician, Network Administrator, Cyber Security Analyst, Security Specialist.

**Benefits of taking the class:** Students will learn how to protect information systems from threats such as malware, social engineering, phishing attacks and Cyber Attacks. Additionally, students will learn how to administer servers and how to build, repair, and troubleshoot computers and servers. Students will learn both the Forensic Investigative side of Cyber, as well as the Information and Network Security side. To combat Cyber Crime, the public and private sectors must work together. Cyber Crime is illegal and today's IT Professionals must understand that in order to respond.

**INTERDISCIPLINARY COOPERATIVE EDUCATION (ICE):** ICE is a senior level course designed to provide a valuable work-based learning experience in manufacturing, finance/business, marketing, or service industries. The course consists of work time and a classroom portion. The ICE instructor teaches a variety of career success skills for the classroom portion. Much of the classroom instruction is delivered on-line thus students are not be required to be in class every day. Students are required to work in a paid job a minimum of 15 hours per week; the course will be three periods per day. Work hours are typically during the school day, however other arrangements may be made depending on circumstances. Students will be required to complete an application prior to the beginning of class. The purpose of the application is to ensure that the student is in good standing in other classes required for graduation. Also the student must not have a record of discipline issues at school. A student currently working may have that job approved by the instructor if the job holds the rigor of the intent of this course. The job should provide new and relevant experiences, which may lead to a career for the student after high school. Personal transportation and a work permit are required.

**Grade Level:12**

**Full Year**

**Prerequisites: Must have own means of transportation**

**6 credits**

**WORK BASED LEARNING (Internship):** The Work Based Learning Program is a course of work experience in which the student is provided an opportunity to experience a variety of job related activities that are associated within a specific career. Work Based Learning recognizes that classroom learning provides only part of the skills and knowledge students need to succeed in college or a career. By creating opportunities to learn in the workplace, students are provided work experiences that allow them to explore or ensure their college or career choice is the right one for them. As the student completes his or her job shadow, hands on, and work experiences they will be under the supervision of the internship coordinator. The internship coordinator will work closely with the professional or master craftsman to make sure that the school, the student, and internship provider is carrying out all responsibilities of the internship. Students will be required to complete an application prior to the beginning of class. The purpose of the application is to ensure that the student is in good standing in other classes required for graduation and that prior classes relate to the student's internship choice. Internships typically are not paid. Note that students pursuing experiences in the medical field should do so through the Health Occupations class, students in Professional Career Internship will not be placed in medical training stations.

**Grade Level:12**

**Full Year**

**Prerequisites: Must have own means of transportation**

**4 credits**

**INFORMATION TECH SUPPORT 2:** is a career and technical education business and information technology course that will prepare students for careers in business and industry working with network systems. Students will acquire skills needed to plan, design, install, maintain, and manage network solutions used in business and industry. Students will develop an understanding of IT professionalism including the importance of ethics, communication skills, and knowledge of the “virtual workplace.” Skills acquired will assist students in obtaining related networking systems certifications; e.g., Cisco CCNA and CCNP, Security+, CompTIA A+Essentials and CompTIA A+ Practical Applications, Novell CNA and CNE, Microsoft MCSE, etc. Essential skill areas include but are not limited to: Computer Hardware Maintenance; Network Operations; Network Administration; Basic Network Design Theory; Network Troubleshooting; Network Security; and Wireless Communications.

**Grade Level: 12**

**Full Year**

**Prerequisites: Computer Tech Support, must have own means of transportation**

**6 credits**

**INFORMATION TECH SUPPORT 1:** will prepare students for careers dealing with information technology deployment. Students will gain necessary skills to implement computer systems and software, provide technical assistance, and manage information systems. Skills needed to acquire certifications, such as CompTIA A+ Essentials and CompTIA A+ Practical Applications, will be an integral part of this program. A+ Certification means that a person possesses the knowledge and skills essential to become a successful computer repair technician. This certification provides industry-recognized credentials, independent of specific product or vendor knowledge, and is recognized by both companies and vendors worldwide. To become A+ certified, students must pass two test modules: the A+ Hardware Essentials Exam and the A+ Operating Systems Exam module.

**Grade Level: 11, 12**

**Full Year**

**Prerequisites: Algebra I, must have own means of transportation**

**6 credits**

**HEALTH SCIENCE EDUCATION:** (HOSA) is an extended laboratory experience at the student's choice of clinical sites designed to provide students the opportunity to shadow healthcare professionals. Students will learn in the classroom, including information on the health care system and employment opportunities at a variety of entry levels, an overview of the health care delivery systems, health care teams and legal and ethical considerations. It prepares students with the knowledge, skills and attitudes essential for providing basic care in extended care facilities, hospitals and home health agencies under the direction of licensed nurses. These knowledge and skills include recording patient medical histories and symptoms, providing medicine and treatments, consulting doctors, operating and monitoring medical equipment, witnessing first hand the jobs/roles of providers by allowing students to select rotations in seven different areas of their choosing. This course also provides students with the knowledge, attitudes, and skills needed to make the transition from school to advance in their future medical careers, including self analysis to aid in career selection, job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a post secondary program.

**Grade Level: 12**

**Full Year**

**Prerequisites: Must have own means of transportation**

**6 credits**

**Recommended Coursework: BioMed courses, Anat and Phys., AP Bio**

**MEDICAL TERMINOLOGY (ONLINE ONLY):** This course is offered online only for those with a strong desire to learn about the language of health care professionals. This course builds skills in pronunciation, spelling (with 100% accuracy), and defining new words encountered in verbal and/or written information. Medical terms and abbreviations, pathology, pharmacology, diagnosis and treatment options will be taught using a body systems approach. Students **must** have time management skills, a strong work ethic and strong study skills, be intrinsically motivated all while working in an independent learning environment. Time dedicated **DAILY** must be **1.5 hours** minimum to achieve success. Students will be held to a college course standard. Grades will consist of exams and research projects only.

**Grade Level: 12**

**Full Year**

**Prerequisites: Must be enrolled in HOSA**

**2 credits**

**EMS/EMT:** Emergency Medical Services prepares students for a state certification which could lead to a career in Emergency Medical Services such as an Emergency Medical Technician or a Paramedic. This course is designed for persons desiring to perform emergency medical care. Students will learn to recognize the seriousness of the patient's condition, use the appropriate emergency care techniques and equipment to stabilize the patient, and transport them to the hospital. This course also addresses the handling of victims of hazardous materials accidents. It covers theories, techniques, and operational aspects of pre-hospital emergency care with the scope and responsibility of the **basic emergency medical technician**. It requires laboratory practice and clinical observation in a hospital emergency room and ambulance.

**Grade Level: 12**

**Semester 2**

**4 credits**



**HEALTH SCIENCE EDUCATION I: NURSING (CNA):** The certified nurse aide (CNA) program at Jasper High School, a partnership with Memorial Hospital and Healthcare Center, is a fall semester class and clinical rotation. A minimum of 30 hours in the classroom and 75 hours in clinical setting must be done in the fall semester. After these requirements have been fulfilled with a passing grade, students will have the opportunity to set for the exam, becoming a certified nursing assistant, authorizing a student to work in this capacity in a healthcare facility. Becoming a CNA will provide great working experience for students desiring to pursue a career in healthcare and/or nursing.

\*After completion of the CNA program and successful achievement of the certification exam, students have the opportunity to enter into the Interdisciplinary Cooperative Education (ICE) program, a work-based learning option, in the spring semester.

**Grade Level: 12** **Full Year**  
**Spring semester will be work based learning** **6 credits**

**HEALTH SCIENCE I: PHARMACY:** Student specifically pursuing a career as a pharmacist.

**Grade Level: 12** **Full Year**  
**Prerequisites: Must be enrolled in HOSA** **2 credits**

**CRIMINAL JUSTICE:** is a one-year program for senior students who have an interest and a career objective in criminal justice or public safety. Training will include specialized classroom and practical experiences designed to supplement the training provided by officially designated law enforcement agencies. Instruction will focus on: acquiring and maintaining the uniform; patrolling on foot or in an automobile during the day or at night; dealing with misdemeanors, felonies, traffic violations, and accidents; making arrests; testifying in court; and emergency services. Major curriculum components will be drawn from the International Association of Chiefs of Police training Keys (web address: [www.theiacp.org](http://www.theiacp.org).)

**Grade Level: 11, 12** **Full Year**  
**Prerequisites: Must have own means of transportation** **2 credits**

**WELDING TECHNOLOGY 1 AND 2:** is a two-year program that meets three hours per day at Pike Central High School. Students receive six credits per year. Upon completion of the program, successful students may qualify for American Welding Society (AWS) Level I Certification. Students in this program gain experience in safety, electricity, material properties, blue print reading, SMAW (shielded metal arc welding), GMAW (gas metal arc welding), GTAW (gas tungsten arc welding), FCAW (flux cored arc welding), OAW (oxy-acetylene welding) and cutting, brazing, air carbon arc cutting, and plasma arc cutting. Students who successfully complete the two programs are often selected into competitive apprenticeship programs such as the Plumbers & Steamfitters and Boilermakers. Full time employment for persons with welding skills is almost guaranteed. Students can earn 15 credits from Ivy Tech at no cost or credits from Vincennes University at a reduced cost.

**Grade Level: 11, 12** **Full Year**  
**Prerequisites: Must have own means of transportation** **6 credits/year**

**EDUCATION PROFESSIONS 1 and 2:** is a course that prepares students for employment in education and related careers and provides the foundation for study in higher education that leads to teaching and other education-related careers. Students will explore educational careers, teaching preparation and professional expectations (creating a resume and a teacher portfolio) as well as requirements for teacher certification. Students will participate in online videos, discussions, and projects. Students enrolled in this class will travel to their elementary, middle or high school placement for two periods a day, everyday of the week, for intensive laboratory or field experiences in one or more classroom settings. Students are required to have a driver's license and reliable transportation to be able to go to their placement schools. This course has been approved to be offered for dual credit. Students pursuing this course for dual credit are required to meet the minimum prerequisites for the course and pass the course with a C or better in order for dual credit to be awarded.

**Grade Level: 11, 12** **Full Year**  
**Prerequisites: Must have own means of transportation** **2 credits**

**FIRE SCIENCE:** Students will earn VU credits related to fire safety. The classroom will include coursework as well as labwork. The instructor will be a certified fire instructor which will allow students to complete the Fire Safety Exam. This program will partner with local fire departments to conduct training exercises.

**Grade Level: 11, 12** **Full Year**

**Prerequisites: Must have own means of transportation**

**3 credits**

**PRECISION MACHINE TECHNOLOGY 1 AND 2:** is a two-year program that meets three periods per day at Pike Central High School. Students receive six High School credits per year. The course includes a wide range of classroom and laboratory experiences that develop skills and knowledge in the shaping of metal parts. Emphasis is placed on basic precision machining operations including the use of lathes, vertical mills, drill presses, and surface grinders. In addition to layout and bench work, instruction includes the use and care of precision tools such as micrometers, indicators, combination squares, scales and calipers. Advanced instruction includes preparation in the use of Computer Numerically Controlled (CNC) machines that reflect current industry practices. Students are able to earn dual credits through Vincennes University. Up to 18 dual college credits are available from Vincennes University free of charge. The college credits apply to Vincennes University Machine Trades Program in Advanced Manufacturing, Tool & Die, and Plastic Injection Mold Tooling as well as transfer options to other institutions. Students may earn NIMS Machining Level I certifications.

**Grade Level: 11, 12**

**Full Year**

**Prerequisites: Must have own means of transportation**

**6 credits/year**

**CULINARY ARTS AND HOSPITALITY MANAGEMENT:** 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. The location of this course is at NDHS the first two periods of the day.

**Grade Level: 11, 12**

**Full Year**

**Prerequisites: Must have own means of transportation**

**4 credits/year**

**INDUSTRIAL AUTOMATION AND ROBOTICS 1 AND 2:** The Automation and Robotics (AR) Academy is a joint partnership between the Patoka Valley CTE Cooperative and Vincennes University Jasper (VUJ). Juniors and Seniors are eligible to enroll in this program which offers students the opportunity to earn up to 16 college credits while working a part-time internship with a local industry partner. Course work and internship experiences provide students exposure to skills necessary for careers in many technical areas, including Engineering, Robotics, Advanced Manufacturing, Electronics, and Technical Maintenance. All course work is completed at Vincennes University Jasper Campus. Please contact program director, Jacob Berg ([Jberg@vinu.edu](mailto:Jberg@vinu.edu)), with questions.

**Grade Level: 11, 12**

**Full Year**

**Prerequisites: Must have own means of transportation**

**6 credits/year**

**ADMINISTRATIVE OFFICE MANAGEMENT:** Administrative Office Management is a joint partnership between the Patoka Valley Co-op and VUJC. Students will attend VUJC five days a week and have the opportunity to complete four college level business courses for a total of 12 college credits and 3 high school credits.

**Grade Level: 11 or 12**

**Full Year**

**Prerequisites: Must have own means of transportation**

**6 credits/year**