

BLUFFTON HIGH SCHOOL

CURRICULUM GUIDE

-ACCREDITED BY-

NORTH CENTRAL ASSOCIATION

BLUFFTON-HARRISON M.S.D.

BLUFFTON, INDIANA

-Prepared By-

The Administration, Faculty, and Guidance Department

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CAREER AND TECHNICAL EDUCATION

Automotive Services Technology – Beginning

Dual Credit

Location: South Adams

Level: 10, 11 Credits: 4 Prerequisite: None

This course includes both classroom and laboratory experiences that incorporate training in all phases of automotive maintenance repair work on all types of automotive vehicles. Training in the use of technical manuals and a variety of hand and power tools should also be included in this course. Instruction and practice should be provided in diagnosis of malfunctions, disassembly of units, parts inspection and repair or replacement of parts, fuel system, brakes, ignition systems, engine overhaul and repair, transmission, front end alignment and the installation of a variety of accessories such as radios, heaters, and windshield wipers. Each student should be prepared to provide a basic set of tools, wear safety-toed shoes and wear safety glasses.

Automotive Services Technology – Advanced

Location: South Adams

Level: 11, 12 Credits: 6 Prerequisite: Auto Services Technology - Beginning

Advanced Auto continues to work in servicing, maintenance, and repair of the modern automobile. The course provides students with a background of procedures and practical job skills concentrating on electrical/electronics and engine performance but is not limited to these areas. It is possible for students to receive college credit and automotive certification with successful completion of this course.

Building Trades Technology

Dual Credit

Location: Adams Central

Level: 10, 11, 12 Credits: 6 Prerequisite: None

Building Trades Technology includes classroom and laboratory experiences concerned with the erection, installation, maintenance, and repair of buildings, homes, and other structures using assorted materials such as metal, wood, stone, brick, glass, concrete, and composition substances. Instruction covers a variety of activities such as cost estimating; cutting, fitting, fastening, and finishing various materials; the uses of a variety of hand and power tools and blueprint reading and following technical specifications. Plastering, dry wall installation, and roofing are also taught. It is possible for student to receive college credit with successful completion of this course.

Culinary Arts Careers

Dual Credit

Location: Bluffton MS

Level: 10, 11, 12 Credits: 4 Prerequisite: None

The Culinary Arts program targets those college bound students interested in pursuing the culinary arts industry as a career. Possible careers include baking and pastry arts, culinary arts and chef's training, restaurant, culinary and catering management, and food service systems administration. This course is a half day/half year class. Upon completion of the program's assessments 6 dual credits are awarded.

Precision Machine Technology – Beginning

Dual Credit

Location: South Adams

Level: 9, 10, 11, 12 Credits: 4 Prerequisite: None

This course is for high school students who wish to learn about the metals machining industry. Through classroom and hands-on experience students gain a good foundation of knowledge of the machine tool trade. The information and skills that will be gained prepares students for an entry level position or serve as a foundation for continuing education in most any machine and tool career. This is a two year program, so students who want to achieve the greatest benefit from the program should plan on continuing for a second year.

Precision Machine Technology – Advanced

Location: South Adams

Level: 10, 11, 12 Credits: 6 Prerequisite: Precision Machine Technology – Beginning

Advanced Precision Technology is designed to build the knowledge and skill level of the machine trades student. The student will receive hands-on experience in more advanced machine methods. The greatest advantage of the advanced course is the experience the student will gain in metal cutting areas which are very new to the industry. There is a high demand for people with these skills because there are few machinists who have the knowledge in these technical areas. It is possible for a student to receive college credit with successful completion of this course.

Fire and Rescue I**Dual Credit****Location: South Adams**

Level: 11, 12 Credits: 4 Prerequisite: None

Every year, fires and other emergencies take thousands of lives and destroy property worth billions of dollars. Firefighters and emergency services workers help protect the public against these dangers by rapidly responding to a variety of emergencies. They are frequently the first emergency personnel at the scene of a traffic accident or medical emergency and may be called upon to put out a fire, treat injuries or perform other vital functions. The Fire and Rescue curriculum may include five Indiana state fire certifications: (1) Mandatory, (2) Firefighter I, (3) Firefighter II, (4) Hazardous Materials Awareness, (5) Hazardous Materials Operations. An additional two industry certifications may be earned by adding (6) First Responder, and (7) Emergency Medical Technician-Basic to the curriculum.

Early Childhood Education and Services**Dual Credit****Location: Belmont**

Level: 11, 12 Credits: 4 Prerequisite: Advanced Child Development

Early Childhood Education prepares students for employment and careers in child-related fields. This course includes planning and guiding developmentally appropriate activities for young children, application of basic health and safety principles, overview of management and operation of child care facilities, and employability skills. Intensive child care, preschool, and kindergarten lab experiences are included.

Law Enforcement I**Dual Credit****Location: Belmont**

Level: 11, 12 Credits: 4 Prerequisite: None

This class is of special interest to students wanting a career in corrections. Law enforcement, security, or programs for the prevention of crime and delinquency. It is also suitable for students who want to become an attorney. The class looks at the historical background of how laws were formed, studies the agencies involved in the criminal justice system and learns about the methods used in solving crimes such as the use of fingerprints, hair fibers, blood stains, polygraphs, etc. Guest speakers, job shadowing, direct observation of court proceedings, and hands-on experience in criminal investigations provides students with real world application of the justice system.

Radio/TV Broadcasting, Telecommunications**Location: Belmont**

Level: 11, 12 Credits: 4 Prerequisite: None

The purpose of this class is to expose students to television production theory. Course content covers the historical components of broadcasting and the impact of the media in today's world. Students also receive training in interviewing techniques and communication skills. Strong reading and speaking skills are recommended. Other examples of course content are; recording, editing, announcing, lighting, directing and camera techniques. Students in this class will become competent in creating, designing, and producing interactive media products and services that are Internet friendly. Students will have the opportunity to break away from canned programs to design individual programs.

BUSINESS EDUCATION**Accounting I**

Level: 10, 11, 12 Credits: 2 Prerequisite: C average in Math

A course in which the fundamental procedures for keeping records are taught. Various principles are studied separately, and at intervals, projects and practice sets are used to integrate these principles. In working practice sets, the student gains work experience that is close to actual business practice. A brief introduction to computerized accounting is included in the course.

Entrepreneurship and New Ventures**Dual Credit**

Level: 10,11,12 Credit: 1 Prerequisite: Careers and Personal Finance

Entrepreneurship and New Ventures introduces entrepreneurship, and develop skills and tools critical for starting and succeeding in a new venture. The entrepreneurial process of opportunity recognition, innovation, value proposition, competitive advantage, venture concept, feasibility analysis, and "go to" market strategies will be explored through mini case studies of successful and unsuccessful entrepreneurial start-ups. Additionally, topics of government and legal restrictions, intellectual property, franchising location, basic business accounting, raising startup funding, sales and revenue forecasting and business development will be presented through extensive use of word processing, spreadsheet and presentation software. **A student can receive dual credit for this course through IPFW.**

Personal Finance Responsibility

Level: 9, 10, 11, 12 Credits: 1 Prerequisite: None

Personal Finance is a one term course that follows the Career Planning and Success Skills course. This course is designed to build their competencies in the following areas: personal financial planning for employment, financial services, budgeting and record keeping investments and insurance protection; credit selection and programs; consumer purchases, consumer rights and responsibilities and consumer assistance; and decision making skills for all aspects of their lives as consumers, producers, entrepreneurs and economic citizens. Tests, quizzes, daily assignments and projects will be used to evaluate the student.

Preparing For College and Careers

Level: 9,10,11,12 Credits: 1 Prerequisite: None

Career Planning and Success Skills is a business course designed to address the knowledge, skills, and behaviors all students need to live, plan, and work successfully in today's society. This course includes but is not limited to exploring career clusters; developing four-year career plans; researching/collecting labor market data; beginning the employment process through job searching, applications, resumes, interviews, employee evaluations, and job-survival skills. Extensive practice in reading, writing, listening, and speaking skills should be emphasized. Thinking skills such as decision making, problem solving, and reasoning will be utilized through report writing, technical writing, and interpreting data. Instructional strategies may include usage of the Internet to conduct career research, field trips, projects, computer and technology applications, and cooperative ventures between school and community.

Principles of Marketing

Dual Credit

Level: 10, 11, 12 Credit: 1 Prerequisite: Careers and Personal Finance

Marketing Foundations is a business course that 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. Instructional strategies may include a school-based enterprise, computer/technology applications, real and/or simulated occupational experiences, and projects focused on the marketing functions such as those available through the DECA program of co-curricular activities. **A student can receive Dual Credit for this course through IPFW.**

Website Design

Level: 11, 12 Credit: 2 Prerequisite: Careers and Personal Finance

Website Design and construction will focus on the design aspects of a website. Students will work to create a visually striking and appealing web page. Students will work to utilize various programs used to create websites. Emphasis will be on design, creative thinking, and student participation.

FINE ARTS

Marching Band

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: None

Marching Band is an elective course offered during the first term. This group learns music and marching drill for football halftime shows, field competitions, and parades. A summer program is also required for all marching band members that includes summer rehearsals and Band Camp. Due to the large number of rehearsals and performances outside of the school day, persons signing up for this ensemble must realize this activity is very time consuming. **All High School students in marching band must be enrolled in the class.**

Jazz Ensemble

Level: 9, 10, 11, 12 Credit: .5/term Prerequisite: Audition

Students taking this course develop musicianship and specific performance skills through group and individual settings for the study and performance of the varied styles of instrumental jazz. The instruction includes the study of the history, formative, and stylistic elements of jazz. Students develop their creative skills through: (1) improvisation, (2) composition, (3) arranging, (4) performing, (5) listening, and (6) analyzing. Instruction is designed to that students are enabled to connect, examine, imagine, define, try, extend, refine, and integrate music study into other subject areas.

Students are provided with opportunities to experience live performances by professionals during and outside of the school day. A limited amount of time outside of the school day may be scheduled for dress rehearsals and performances. In addition, a limited number of public performances may serve as a culmination of daily rehearsal and music goals. Students must participate in performance opportunities, outside of the school day, that support and extend the learning in the classroom. Student participants must also be receiving instruction in another band or orchestra class offering, at the discretion of the director.

Concert Band (L)

Level: 9, 10, 11, 12 Credit: .5/term Prerequisite: Beginning Concert Band

Students taking this course are provided with a balanced comprehensive study of music through the concert band, which develops skills in the psychomotor, cognitive, and affective domains. Instruction is designed 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, but not limited to: (1) tone production, (2) technical skills, (3) intonation, (4) music reading skills, (5) listening skills, (6) analyzing music, and (7) studying historically significant styles of literature. Experiences include, but are not limited to, improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer's intent in order to connect the performed with the audience. Students also have opportunities to experience live performances by professionals during and outside of the school day. Time outside of the school day may be scheduled for dress rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in Performance opportunities, outside of the school day, that support and extend learning in the classroom. In addition, students perform, with expression and technical accuracy, a large and varied repertoire of concert band literature that is developmentally appropriate. Evaluation of music and music performances is included.

Advanced Concert Band (L)

Level: 10, 11, 12 Credit: .5/term Prerequisite: Beginning Concert Band and Concert Band

Advanced Concert Band provides students with a balanced comprehensive study of music through the concert band, which 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, but not limited to: (1) tone production, (2) technical skills, (3) intonation, (4) music reading skills, (5) listening skills, (6) analyzing music, and (7) studying historically significant styles of literature. Experiences include, but are not limited to, improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer's intent in order to connect the performer with the audience. Students also have the opportunity to experience live performances by professionals during and outside of the school day. Time outside of the school day may be scheduled for dress rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities, outside of the school day, that support and extend learning in the classroom. 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: (1) intonation, (2) balance and blend, (3) breathing, (4) tone production, (5) tone quality, (6) technique, (7) rhythm, (8) sight-reading, and (9) critical listening skills. Evaluation of music and music performances is included.

Advanced Chorus (L)

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: Audition

This class is open to any student by audition only and may be composed of (1) male chorus, (2) female chorus, (3) mixed chorus, or any combination thereof. This select ensemble performs choral literature of the highest caliber with varying styles, historical periods and cultures. Additionally, it will specialize in the stylistic performance of American popular music and that of the musical theatre, complimented by choreography. Students develop musicianship and specific performance skills through ensemble and solo singing. Instruction is designed to enable students to connect, examine, imagine, define, try, extend, refine, and integrate music study into other subject areas. This class provides 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. Students have the opportunity to experience live performances by professionals during and outside of the school day. Mastery of basic choral technique music theory competence must be evident. Areas of refinement include a cappella singing, sight-reading, and critical listening skills. As a major performance ensemble, members are expected to attend all extra rehearsals and performances for which academic credit is given. Each member must purchase an outfit at his or her expense, but no student is denied membership because of financial reasons.

Music Appreciation

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: None

Music Appreciation is a course that will help introduce you to many aspects of music including, but not limited to: music theory, instrument playing, singing, music writing, studying music genres, music history, musical reviews, etc. Coursework will comprise of worksheets, homework, musical reviews, music analysis, projects- ultimately leading to making a trailer for a musical. Classes may see a live performance to critique and prices will be sent as soon as possible along with permission forms.

Intro to Art 2D/3D

Level: 9,10,11,12 Credit: 1/per term Prerequisite: None

This introduction to the visual arts will cover drawing, painting, design, & sculpture. The class is a pre-requisite for most other art department offerings. This course is intended for all students interested in an overview of the visual arts. Students will study the elements of art and the principles of design as they apply to two-dimensional and three-dimensional art. The course will allow students to engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of studio quality works. Students must achieve a semester grade of “C” or better to advance in other art programs.

2D Studio Design

Level: 10,11,12 Credit: 1/per term Prerequisite: Intro to Art

This course is an in-depth study of 2-D media using pencils, ink, charcoal, watercolor, and acrylic. This course will give students a more in-depth study of the drawing and painting media practicing and using various drawing & painting technical skills. In order to teach students to become more visually aware, students in 2-D studio will engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality works. Students must achieve a semester grade of “B” or better to Advanced 2-D studio Design.

Advanced 2D Studio Design

Level: 11,12 Credit: 1/per term Prerequisite: Intro to Art & 2-D Studio Design

This portfolio-based class is intended to address two-dimensional (2-D) design issues in a more advanced studio process. Advanced 2-D Studio involves purposeful decision making about how to use the elements and principles of art in an integrative way. Students are asked to demonstrate proficiency in 2-D design through any two-dimensional medium or process, including, but not limited to, graphic design, digital imaging, photography, collage, fabric design, weaving, illustration, painting, and printmaking.

3D Studio Design

Level: 10,11,12 Credit: 1/per term Prerequisite: Intro to Art

This course introduces students to the basic fundamentals of working with three-dimensional form in various media. Students will produce functional, non-functional, and sculptural pieces. Student will create works in clay utilizing the processes of hand building, molds, slip and glaze techniques as well as the firing processes. Students will be given the opportunity to demonstrate the use of design elements in a three-dimensional form. A variety of media and techniques will be used including modeling, construction, pattern making, texture/color studies, and assemblage. Students must achieve a semester grade of “B” or better to take Advanced 3-D studio Design

Advanced 3D Studio Design

Level: 11,12 Credit: 1/per term Prerequisite: Intro to Art & 3-D Studio Design

This class is intended to address ceramic & sculptural issues in a more advanced setting. 3-D design involves purposeful decision making about how to use the elements and principles of art in an integrative way. Students are asked to demonstrate proficiency of 3-D design through any three- dimensional approach, including, but not limited to, functional or nonfunctional ceramics, figurative or nonfigurative sculpture, architectural models, and three-dimensional fiber arts.

Digital Design

Level: 10, 11, 12 Credit: 1/per term Prerequisite: Intro to Art

Digital Design is a course based on the Indiana Academic Standards for Visual Art. This class is intended to address multi-media, digitized imagery, computer animation, and iMovie. Students reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills.

Independent Study Studio Art

Level: 12 Credit: 1/per term Prerequisite: Instructor approval

This class is a course for students who are considering a career in visual arts. It will enable students to review and critique projects in their portfolio while concentrating on development of specific skills and mediums in which to compile a successful portfolio. This course is the culmination of the high school visual arts experience. Students must have art teacher approval for admissions into class.

FOREIGN LANGUAGE

Spanish I

Level: 9, 10, 11, 12 Credits: 2 Prerequisite: None

The aim of Spanish I is to give the student a command of the basic vocabulary and basic grammar necessary for personal communication, as well as an appreciation of the Spanish-speaking world. Basic vocabulary will be presented through pictures and transparencies. Emphasis will be to build from one word recognition to sentence expression. The grammar will be presented through oral and written activities. The language laboratory will be used to practice grammar and reinforce listening and speaking skills. The language will be presented through a variety of formats: role-playing, personal questions, sentence building activities, reading and writing activities. The exercises are designed to give practice in the four language skills of listening, speaking, reading and writing.

Spanish II

Level: 10, 11, 12 Credits: 2 Prerequisite: Spanish I

Spanish II presents the more complex structures of basic Spanish and expands the cultural themes of the first level. The student works toward acquiring a command of the key vocabulary and structure necessary for personal communication as well as an appreciation of the Spanish-speaking world. The language is presented through youth-related themes such as hobbies, travel, schoolwork, choice of career, relationships, etc., and encompasses a wide variety of formats: role-playing, personal questions, sentence building activities, reading and writing activities. Lessons are built around narratives, interviews, questionnaires, cartoons and advertisements. The exercises are designed to help the student use Spanish for communication and self-expression. The language is presented and practiced in the four language skills of listening, speaking, reading and writing.

Spanish III

Level: 11, 12 Credits: 2 Prerequisite: Spanish II **Dual Credit**

The course provides students with opportunities to review and deepen their understanding of the structures of Spanish, to sharpen their communication and comprehension skills and enrich their vocabulary through dialogues, reading selections and a variety of activities including personalized questions, conversations, drama, cooking, discussion and composition.

German I

Level: 9, 10, 11, 12 Credits: 2 Prerequisite: None

In German I students learn the fundamentals of the German language and culture. Emphasis will be placed on reading, writing, listening, and speaking German at a basic level. Topics to be covered are introductions, family, freetime, the school, weather and European geography, and food.

German II

Level: 10, 11, 12 Credits: 2 Prerequisite: German I **Dual Credit**

Students will continue to develop skills in the four modalities of language: listening, speaking, reading and writing. Vocabulary and grammar will become much more intense as students study clothing and shopping, the body and health, and the house and chores. Students are expected to communicate at a higher level and take on more responsibility for independent investigation .

German III

Level: 11, 12 Credits: 2 Prerequisite: German II

Students are expected to communicate in German and the teacher will use that language in class. The four modalities of language--listening, speaking, reading, and writing--will continue to be developed, but topics will focus around a number of literary selections. Students will read selections from children's literature, poetry, and fairy tales. Independent investigation and personal responsibility for acquisition of vocabulary is expected.

HEALTH, FITNESS, RECREATION

Secondary Physical Education I (L)

Level: 9 Credit: 1.0 per term Required Course

Secondary Physical Education I continue 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, (6) outdoor pursuits, and (7) recreational games. Ongoing assessment includes both written and performance-based skill evaluations.

Health Education

Level: 10 Credit: 1 Prerequisite: None

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 Proficiency Guide: (1) Growth and Development; (2) Mental and Emotional Health; (3) Community and Environmental Health; (4) Nutrition; (5) Family Life Education; (6) Consumer Health; (7) Personal Health; (8) Alcohol, Tobacco, and Other Drugs Education; (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.

Elective Physical Education: Weight Training Fitness

Level: 10, 11, 12 Credit: 1 Prerequisite: Basic Physical Ed.

This course is an **ELECTIVE** course for those students who wish to learn how to develop and maintain a healthy lifestyle through physical fitness. This course will cover two levels of health related components of physical fitness: cardio respiratory endurance and musculoskeletal fitness (flexibility, muscular strength and muscular endurance).

Driver's Education

Level: 9, 10, 11, 12 Credit: 0 Prerequisite: None

Driver education consists of two phases – an online phase and a car phase. The online phase consists of 30 hours of instruction. The car phase is taught during the summer. Students must be 15 years of age prior to May 15 of the year in which they take Driver's Education.

CONSUMER AND FAMILY SCIENCES

Foundations of Interior Design

Level: 9,10,11,12 Credit: 1 Prerequisite: None

Prepares students for occupations and higher education programs of study related to the entire spectrum of career clusters that encompass careers related to housing, interiors, and furnishings. Topics include commercial applications of principles of design to creating aesthetic and functional residential and commercial environments; human, non-human, community family, and financial resources for housing; housing and interiors materials and products; Client centered designing, drafting, blue printing, and space planning; rendering, elevations, and sketching; historical, technological, and environmental impacts on housing and interiors; zoning, building codes, regulations, and accessibility guidelines, and their impact on housing related outcomes. Ethical, legal, and safety issues as well as helping processes and collaborative ways of working with others are to be addressed. Intensive laboratory experiences with commercial applications are a required component of this course of study. Work based experiences in the housing, interiors, and/or furnishings industries are strongly encouraged

Housing and Interiors

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: None

This class will give you a brief history of early homes, housing trends today and tomorrow, discuss the advantages and disadvantages of buying or renting a home, construction basics, and focus on the elements and principles of design.

Nutrition and Wellness

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: None

Nutrition and Wellness enables students to realize the components and lifelong benefits of good nutrition and wellness practices and empowers them to apply these principles in their everyday lives. Topics include impact of daily nutrition and wellness practices on long-term health and wellness; physical, social, and psychological aspects of healthy nutrition and wellness choices; selection and preparation of nutritious meals and snacks based on USDA Dietary Guidelines including the Food Guide Pyramid; safety, sanitation, storage, and recycling processes and issues associated with nutrition and wellness, impacts of science and technology on nutrition and wellness issues; and career paths within nutrition and wellness related career paths. Laboratory experiences which emphasize both nutrition and wellness practices are required components of this course.

Advanced Nutrition and Wellness

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: Nutrition and Wellness

This course will enable you to develop your cooking and meal management skills more fully. You will be given the opportunity to; prepare nutritious and delicious soups and sauces, use wise management of your food dollar when purchasing and preparing meats, prepare delicious salads, and make wonderful yeast breads, and explore ethnic foods throughout the world. Health concerns and disease prevention are also emphasized.

Textiles and Fashion Technologies

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: None

Students will investigate the fashion industry and all areas of fashion design and marketing. Garment construction and quality of workmanship are also studied.

Child Development and Parenting

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: None

Child Development and Parenting addresses the knowledge, skills, attitudes, and behaviors associated with supporting and promoting optimal growth and development of infants and children. The focus is on research-based nurturing and parenting practices and skills that support positive development of children. Topics include consideration of the roles, responsibilities and challenges of parenthood; adolescent pregnancy; human sexuality; prenatal development; preparation for birth; the birth process; meeting the physical, social, emotional, intellectual, moral, and cultural growth and developmental needs of infants and children; impacts of heredity, environment, and family and societal crisis on the development of the child; meeting children's needs for food, clothing, shelter, and care giving; caring for children with special needs; parental resources, services, and agencies; and career awareness. Applications through authentic settings such as volunteer experiences, internships, and service learning are encouraged.

Advanced Child Development

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: None

Advanced Child Development covers the growth and development of a child from one year of age through the age of six. Good parenting skills are emphasized as well as special challenges, such as child abuse and neglect, exceptional children, and family stresses.

Interpersonal Relationships

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: None

Interpersonal Relationships addresses the knowledge, skills, attitudes, and behaviors all students need to participate in positive, caring and respectful relationships in the family and with individuals at school, in the community, and in the workplace. Topics include components of healthy relationships, roles and responsibilities in relationships; functions and expectations of various relationships; ethics in relationships; factors that impact relationships (e.g. power, conflicting interests, peer pressure, life events); establishing and maintaining relationships; building self-esteem and self image through healthy relationships; communications styles; techniques for effective communication, leadership and teamwork; individual and group goal setting and decision making; preventing and managing stress and conflict; addressing violence and abuse; and related resources, services and agencies. Applications through authentic settings such as volunteer experiences, internships, and service learning are encouraged.

Adult Roles and Responsibilities

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: None

Adult Roles and Responsibilities builds knowledge, skills, attitudes, and behaviors students will need as they prepare to take the next steps toward adulthood in today's ever-changing society. The focus is on becoming independent, contributing, and responsible participants in family, community, and career settings. Topics include living independently and family formation; analysis of personal standards, needs, aptitudes and goals; integration of family, community, and career responsibilities; consumer choices and decision making related to nutrition and wellness, clothing, housing, and transportation; financial management; relationship of technology and environmental issues to family and consumer resources; and community roles and responsibilities of families and individuals. Applications through authentic settings such as volunteer experiences, internships, and service learning are encouraged.

TECHNOLOGY EDUCATION

Introduction to Engineering PLTW (Project Lead The Way)

Dual Credit

Level: 9, 10, 11, 12 Credits: 2 Prerequisite: None

Introduction to Engineering Design is an introductory course which 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. The Computer Aided Design System (CAD) 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. Dual Credit may be earned in this class.

Principles of Engineering

Dual Credit

Level: 10, 11, 12 Credits: 2 Prerequisite: Introduction to Engineering PLTW

This course is designed to help students understand the field of engineering and engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. Dual Credit may be earned in this class.

Engineering Design and Development (EDD)

Dual Credit

Level: 11, 12 Credits: 2 Prerequisite: IED and POE

An engineering research course in which students work in teams to research, design, and construct a solution to an open-ended engineering problem. Students apply principles developed in the two preceding courses and are guided by a community mentor. They must present progress reports, submit a final written report and defend their solutions to a panel of outside reviewers at the end of the semester. Dual Credit may be earned in this class.

Drafting 1/AutoCad

Dual Credit

Level: 9, 10, 11, 12 Credits: 2 Prerequisite: None

A **hands-on** introductory course for both boys and girls in the use of Auto Cad. Auto Cad is the most popular drafting and design software in U.S. industry. Students will begin with simple drawings using basic 2-D drawing commands and progress to drawings using 3-D drawing commands. Students will learn basic 3-view and isometric techniques and have the opportunity to produce drawings (ex. car, house elevation, simple lake resort, tire rims, and office layout and many others.) Students will plot their drawings on multi-color ink jet printers. Careers related to this course are engineering (civil, chemical, electrical, mechanical, aerospace, biomedical, etc.), architecture (landscape, structural, urban design), drafters, fashion and industrial designers, CAD/CAM operators, machinists, 3-D animators, tool and die makers. It is also a great help for those students continuing their education at a two year technical or four year college. Girls with career interests in the above areas are welcomed and encouraged to take this class. There are no prerequisites for this course. Dual Credit may be earned in this class.

Drafting 2

Dual Credit

Level: 10, 11, 12 Credits: 2 Prerequisite: Drafting 1

This is a basic course in engineering drawing, in which students will learn the fundamentals of the language of industry. Topics covered will be units in sketching, blueprint reading, multi-view drawing, dimensioning, sectioning, pictorial drawings and screw threads. All drawing will be done on computers using AutoCad and plotted in ink jet printers or plotters. This class is extremely helpful for those students entering the fields of engineering (civil, chemical, electrical, mechanical, aerospace, biomedical, etc.), architecture (landscape, structural, urban design), drafting, interior design, businesses that contain CAD/CAM and NC operations, and 3-D animation. Dual Credit may be earned in this class.

Drafting 3

Dual Credit

Level: 11, 12 Credits: 2 Prerequisite: Drafting 1 & 2

A continuation of Drafting 2 and AutoCad this class covers advanced engineering topics such as surface developments, auxiliary views, descriptive geometry, charts and graphs, advanced dimensioning techniques and 3-D modeling. Students will use software that explains the principles of engineering. They will design a bridge or skyscraper with computer software (West Point Bridge Builder) and build a 3-D model with balsa wood. After finishing the model it will be tested to determine how many pounds it can hold before it collapses. Student will also make 2-D and 3-D drawings of their structures. Dual Credit may be earned in this class.

Drafting 4

Dual Credit

Level: 11, 12 Credits: 2 Prerequisite: Drafting 1, 2 & 3 and instructor approval

This course is an independent study course. The topics of study will be a collaborative effort between the instructor and the student. Ideally, the student with guidance from the instructor will establish a syllabus of topics of interest to the student. Some suggested topics of study, but not limited to, are Robotics simulation on the computer, 3-D Studio, Advanced Descriptive Geometry, Advanced AutoCad techniques, Computer-aided manufacturing using SurfCam, Architecture, Welding drawings, Urban Design with Sim City etc. Performance criteria will be agreed upon between student and instructor. Dual Credit may be earned in this class.

Manufacturing

Level: 9, 10, 11, 12 Credits: 2 Prerequisite: None

This course provides students with an introduction to manufacturing technology and its relationship to society, individuals, and the environment. An understanding of manufacturing provides a base for technological literacy and competence. This understanding is developed through the study of the two major technologies, material processing and management technology, used by all manufacturing enterprises. Activities should allow students to study techniques used in identifying and obtaining resources in addition to developing an understanding of the primary and secondary processes used to convert raw materials into finished products.

Construction

Level: 9, 10, 11, 12 Credits: 2 Prerequisite: None

This course is designed to help students understand how technology is used to produce our constructive environment. Buildings provide physical conditions people want and need for themselves, their activities and their things. Structures in our environment include residential, commercial, institutional and industrial buildings in addition to special purpose facilities built for display sports contests and transportation terminals. Opportunities should be provided for students to learn how ideas are converted into projects and how projects are managed during construction.

Transportation I

Level: 9, 10, 11, 12 Credits: 2 Prerequisite: None

Transportation is one of the basic human productive activities and is essential for our society. Commerce is based on fast, efficient movement of goods and people. In this course students will explore systems and techniques used to apply technology to move people and cargo in vehicles on land in water, air and space. Activities should allow students to understand a variety of transportation systems and investigate the processes and energy resources used to move people and products from one location to another.

Welding Technology I

Level: 11,12 Credits: 2 Prerequisite: None

Dual Credit

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

CROSS AREAS

ICE: Interdisciplinary Cooperative Education

Level: 12 Credits: 6 Prerequisite: Coordinator Approval

ICE (Interdisciplinary Cooperative Education) is a combined classroom study with on-the-job training. The program is a mutually planned working arrangement between school and employer. Students attend class daily where they study those skills necessary for successful entry into the work world. The second part of the ICE is on-the-job training: Students are employed at least 15 hours per week in a work station supervised by a qualified employer and periodically checked by the coordinator. Students earn one credit per term for the work release part of this class. A student must pass the classroom portion of ICE to receive class credit.

Professional Career Internship

Level: 11, 12 Credit: 1 Prerequisite: Instructor Approval

Sequence of courses in the student's career pathway Career Planning Internship is a career and technical education business and information technology course that is designed to provide opportunities for students to participate in workplace learning that is reflective of a student's career interest. Upon completion of the internship, students will review and revise their career plans. Students will participate in a workplace experience, in regularly scheduled meetings with the supervising teacher, and in workshops or seminars that assist students in making the connection between academic learning and workplace experiences. Students may be paid or unpaid in accordance with all State and Federal laws pertaining to employment. Internships can be tailored to the unique needs and interests of the learner. A learning agreement outlines the expectations of all parties: the student, parent, supervisor, and school.

Cadet Teaching Experience

Level: 12 Credit: 1/per term Prerequisite: C GPA, Instructor Approval

Cadet Teaching is a program allowing seniors an opportunity to explore the field of teaching. Students will be involved for one period a day for a maximum of two terms earning one credit per term. Placement will be made at the elementary, middle and high schools. Students will furnish their own transportation.

Peer Tutoring

Level: 10-12 Credit: 1

Peer Tutoring is a program allowing students an opportunity to provide tutoring to students with disabilities. Students may assist with any of the following: peer role-modeling, cooking activities, leisure activities, homework assistance, reading assistance, and as a motivator to discouraged students.

LANGUAGE ARTS

Year Long English

Level: 9, 10 Credits: 2 Prerequisite: Instructor Recommendation

This course is to help students who did not meet the State of Indiana Standards in English when taking either the 8th grade ISTEP examination or teacher/counselor recommendation. This class will help students learn the Indiana State Standards, prepare for the 10th grade ECA, and develop comprehension and writing skills.

English 9

Level: 9 Credits: 2 Prerequisite: None

English 9, an integrated English course based on *Indiana's Academic Standards for English Arts* in grade 9, is the study of language, literature, composition, and oral communication.

English 9 further develops students' use of language as a tool for learning and thinking and as a source of pleasure. Language study enables students to recognize and adapt language to different audiences, purposes, and situations and to use language as a way of thinking, learning and communicating effectively. Literature includes the study of a variety of genres and requires students to develop strategies for making critical evaluations of literature, such as identifying literary conventions and determining authors' purposes and perspectives. Composition requires students to write for various audiences and purposes while strengthening skills in paragraph and multi paragraph writing. Composition also provides opportunities in creating expository essays of persuasion and literary analysis, in addition to completing technical writing assignments in various forms and integrating research into writing. Formal study of grammar, usage, spelling and language mechanics is integrated into the study of writing. Students receive instruction and practice in the writing process including prewriting, drafting, revising, editing and publishing. Oral communication emphasizes effective listening and speaking techniques. This process provides strategies in both formal and informal situation and helps students to become critical consumers of mass media.

English 10

Level: 10 Credits: 2 Prerequisite: English 9

English 10, an integrated English course based on *Indiana's Academic Standards for English Arts* in grade 10, is the study of language, literature, composition, and oral communication. English 10 continues to develop all skills as outlined in English 9. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for grade 10 in classic and contemporary literature, balanced with nonfiction. Students write responses to literature, expository and persuasive compositions, research reports, business letters, and technical documents. English 10 also incorporates the development of research and library media skills in conjunction with writing and speaking.

English 11

Level: 11 Credits: 2 Prerequisite: English 10

English 11, an integrated English course based on *Indiana's Academic Standards for English Arts* in grade 11, is the study of language, literature, composition, and oral communication. English 11 continues to develop all skills as outlined in English 9 and 10.

Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for grade 11 in classic and contemporary literature, balanced with nonfiction. The specific body of literature to be emphasized will be American literature. English 11 literature study develops an understanding of the relationship between literature and culture as well as an awareness of the individual's identity within that culture. English composition increases emphasis on technical writing, for example, personal and business correspondence, and academic writing, which includes (1) literary analysis, (2) informative and persuasive essays, and (3) research papers.

English 12

Level: 12 Credits: 2 Prerequisite: English 11

English 12, an integrated English course based on *Indiana's Academic Standards for English/Language Arts* for Grade 12, is a study of language, literature, composition, and oral communication focusing on an exploration of point of view or perspective across a wide variety of genres. English 12 continues to develop all skills as outlined in English 9 through 11. This course increases student's awareness and development of language arts skills required of students to achieve success in postsecondary experiences, whether in the world of higher education or in the world of work. With emphasis on the needs and future plans of the students, English 12 sharpens critical reading and interpretive skills to prepare students to make informed decisions as citizens of a democratic society. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance for Grade 12 in classic and contemporary literature balanced with nonfiction. Students write responses to literature, reflective compositions, historical investigation reports, resumes, and technical documents. The oral communication prepares students to adapt content, presentation, and delivery to an audience and to establish purpose in formal speaking situations, including (1) on-the-job communications (2) interviewing, (3) asking and answering questions, and (4) giving and following oral directions.

Honors English 12

Dual Credit

Level: 12 Credits: 2 Prerequisite: Recommendation

This college preparatory class is designed to help students study literature and composition. The literature includes novels, selected short stories, poetry, and drama. The purpose of the composition is to improve the skills of developing and writing essays and a research paper. Oral communication prepares students to adapt content, presentation, and delivery to an audience and to establish purpose in formal speaking situations. All written work is kept in folders for each student. Students are expected to take the AP exam in May.

English 12 Tech Prep

Level: 12 Credit: 1 Prerequisite: None

English 12 Tech Prep is an applied Language Arts course that combines academic and employability skills into more traditional career training. Life skills, communication skills, and appreciation of literature will be the major emphasis of development through proficiency in group problem solving, making inferences from information in printed material, identifying the author's point of view and explaining its function (s), reading and understanding consumer information, writing of narrative, descriptive, and expository papers, identifying themes of literary works, and using research skills to gather and evaluate information useful in solving problems and making decisions. Each student will complete a business portfolio with academic and business related material.

Speech

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: None

Speech provides the study of and practice in the basic principles and techniques of effective oral communication. This course includes instruction in adapting speech to different audiences and purposes. *Speech* is a course based on *Indiana's Academic Standards for English/Language Arts* and the *Common Core State Standards for English/Language Arts*. Students deliver focused and coherent speeches that convey clear messages, using gestures, tone, and vocabulary appropriate to the audience and purpose. Students deliver different types of oral and multi-media presentations, including (1) instructional, (2) demonstration, (3) informative, (4) persuasive, and (5) impromptu.

Dramatics

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: None

This course explains dramatic communication in relationship to the audience, the players, and the playwright. As a reflection of life, drama in any form carries an emotional as well as an intellectual appeal. It enables the individual to try on roles which he ordinarily could not play. Students electing this course study the fundamentals of acting and pantomime and apply these principles to the performances of selected scenes, monologues, dialogues, and one-act plays.

Etymology

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: 50% tile reading score on ISTEP test

Etymology provides instruction in the derivation of English words and word families from their Latin and Greek roots. This may or may not include Germanic (i.e. Anglo-Saxon) origins. It also provides a study of the connotative and denotative meaning of words in a variety of contexts. Students study the origins and meanings of English words, including roots, prefixes, suffixes, and reasons for language change. This course introduces students to tools and resources for etymological study and encourages them to be curious about the English language. The analytic study of word history and semantics is reinforced through a written and oral component that involves specific analyses of texts that require etymological sensitivity, for example, Renaissance poetry or works in translation. In addition, students will practice the strategies necessary to help increase reading comprehension and speed. As it enables students to increase their vocabularies, this course helps prepare student to perform well on the college entrance exams.

Journalism (Newspaper)

Level: 10, 11, 12 Credits: 4 Prerequisite: C average in English and Teacher Recommendation

This course provides a study of the history and current application of newspapers as sources of information, persuasion, and creative expression. Students will develop an awareness of audience and purpose in evaluating mass media as well as in producing their own media productions. In addition, students will learn advanced techniques of desktop publishing, through using Macs and InDesign CS6. Students must be willing to develop and expand their expertise in writing, layout and design, leadership, long-range planning, decision making, creativity, photography, legal and ethical issues, typing, organization, evaluation of a given audience, and group dynamics. Students will regularly need to work beyond the class hour to meet deadlines. This course is specifically designed to help students plan and publish the school newspaper, *The Comet*, by utilizing all areas of journalism and journalistic techniques.

Yearbook

Level: 10, 11, 12 Credits: 4 Prerequisite: C average in English and Teacher Recommendation

This course provides a study of yearbooks as sources of information, persuasion, and creative expression. Students will develop an awareness of audience and purpose in evaluating the media as well as in producing their own media production. They will also learn advanced skills in desktop publishing, through using Macs and Jostens' Yearbook Avenue. Students electing this course must be willing to develop and expand their expertise in writing, layout and design, leadership, time management, legal and ethical issues, salesmanship, photography, typing, organization, and evaluation of given audience. Students will regularly need to work beyond the class hour to meet deadlines. This course is specifically designed to help students plan and publish the school yearbook, the *Retrospect*.

Creative Writing

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: None

Creative Writing provides students with ample opportunities to combine literary creativity with the discipline of written discourse. The concept of the manipulation of language to convey ideas, feelings, moods and visual images should be the basis of the course. Students become familiar with standard literary elements through the reading and study of published prose and poetry and are taught to use these elements in their own writing. Additionally, students learn strategies for evaluating and responding to their own writing and the writing of others. Representative models of literary excellence will be studied.

Novels

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: None

Course selections will include reading and studying a variety of novels. Reading of the assigned novels, research of time and period in which novels were written, discussion, projects, portfolio and writing of critique and analysis will be required. Additional study will include the elements of the novel. Students will purchase the novels for their use.

Classical Literature

Level: 9, 10, 11, 12 Credit: 1 Prerequisite: None

A myth is a legend or story, usually one that attempts to account for something in nature, and is always in some sense religious. Myths represent the deepest wishes and fears of human beings: creation, death, sin, war, love, courage, pride, and tyranny. Through the evolution of myths, we can trace the discovery of Western man. This course will center on Greek mythology, but stories from other cultures may also be included. Three genres of literature (prose, poetry, and drama) will be read as students study the various components of a myth while enhancing their understanding of its power. In addition, students will have opportunities to create myths of their own.

Literature of the Oppressed

Level: 9, 10, 11, 12 Credits: 1 Prerequisite: None

This nine-week course focuses on various literature genres that reflect the struggles of oppressed people. Study topics may include victims of the Holocaust, Japanese Americans, Native Americans, Hispanics, African Americans, Asian Americans and other oppressed groups. Students will explore both historical and contemporary perspectives. Students will examine the consequences of prejudice, discrimination, and oppression through literature, discussion, guest speakers, and writing.

MATHEMATICS

Algebra Enrichment/Algebra IB

Level: 9, 10, 11, 12 Credits: 4 Prerequisite: None

This course is the same as Algebra I, except that it is spread over four terms. The intention here is to accommodate those students who are not quite ready for the regular Algebra I course, yet to prepare them adequately for Indiana Algebra I standards to be addressed on the ECA.

Algebra I

Level: 9, 10, 11, 12 Credits: 2 Prerequisite: None

This course provides a formal development of the algebraic skills and concepts necessary for students to succeed in advanced courses. It will develop algebraic skills used in a wide range of problem-solving situations. The concept of function is emphasized throughout the course.

Geometry

Level: 9, 10, 11, 12 Credits: 2 Prerequisite: Algebra I, with a C or higher

This course presents the concepts of both plane and solid geometry. It will introduce correct logical thinking, and use deductive and inductive reasoning to make conjectures. This class also requires students to formulate their own definitions and create their own constructions. It will develop skills applied widely in the fields of physics, chemistry, engineering and economics.

Algebra II

Level: 9, 10, 11, 12 Credit: 2 Prerequisite: Algebra I, with a C or higher

This course provides the student with an understanding of the structure of the number system. Structure assumptions and theorems by which numbers are manipulated in problem solving will be studied. This course helps develop skill in solving problems which means both establishing a correct method of attack as well as correctly manipulating the equations used in the problem solving process. The topics studied also provide the foundation knowledge which allows the student to proceed to higher level courses in math.

Algebra II Honors

Level: 9, 10, 11, 12 Credit: 2

Prerequisite: Algebra I, with a C or higher, Academics Honor Track

This course provides the student with an understanding of the structure of the number system. Structure assumptions and

theorems by which numbers are manipulated in problem solving will be studied. This course helps develop skill in solving problems which means both establishing a correct method of attack as well as correctly manipulating the equations used in the problem solving process. The topics studied also provide the foundation knowledge which allows the student to proceed to higher level courses in math. This course develops a stronger problem solving base.

Pre Calculus

Level: 11, 12 Credits: 2

Prerequisite: Algebra I, II and Geometry with a C or higher

Dual Credit

This course provides the student with the opportunity to be prepared to start college math with a calculus course. It will improve on the knowledge and skills acquired in the prior three years of math study. Approximately half of the work done in this class could be considered a thorough course in trigonometry. The course provides an introduction to topics of use later to the students in various major areas of study in college. This class may be taken for dual credit through IPFW.

Calculus

Level: 12 Credits: 2

Prerequisite: Pre-Calculus with a C or higher

Dual Credit

This course presents a study of the calculus fundamentals. This includes the application of the derivative, the integral, and the theory of calculus. Graphing calculators will be an integral part of the development of this course. The course will prepare students to take the College Board Advanced Placement Calculus exam for possible college credit. Computers may be utilized in the presentation of the course. This class may be taken for dual credit through IPFW.

SCIENCE

Biology I (L)

Level: 9, 10, 11, 12 Credits: 2

Prerequisite: None

Biology is the study of life. This course is designed to make students more aware of the existence of life around them and their relationship to it. The course consists of lecture and laboratory components, with equal emphasis placed on both. Major topics include genetics, cell structure and function, the scientific method, and dissection.

Life Science (L)

Level: 9, 10, 11, 12 Credit: 1

Prerequisite: None

Life Science is an introduction to biology course. Students develop problem resolution skills and strategies while performing laboratory and field investigations of fundamental biological concepts and principles which affect their well being as well as that of their community and other living organisms in their environment. Students enrolled in Life Science will explore the functions and processes of cells within all living organisms, the sources and patterns of genetic inheritance and variation leading to biodiversity, and the relationships of living organisms to each other and to the environment as a whole.

Physical Science (L)

Level: 9, 10, 11, 12 Credit: 1

Prerequisite: None

Physical Science is a course in which students develop problem solving skills and strategies while performing laboratory and field investigations of fundamental chemical, physical, and related earth and space science concepts and principles that are related to students' interests and that address everyday problems. Students enrolled in Physical Science will explore the structure and properties of the matter, the nature of energy and its role in chemical reactions and the physical and chemical laws that govern Earth's interconnected systems and forces of nature.

Integrated Chemistry/Physics (L)

Level: 9, 10, 11, 12 Credits: 2

Prerequisite: Algebra I

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

Environmental Science

Level: 10,11,12 Credits: 2 Prerequisite: None

Students will investigate the concepts of environmental systems, the flow of matter and energy, the influence of resources on populations, the natural resources of air, land, and water, and environmental hazards. The environmental Science course will provide the student the opportunity to understand more about the world around them and how to be a good steward of natural resources.

Chemistry I (L)

Level: 10, 11, 12 Credits: 2 Prerequisite: Algebra II

Chemistry is the study of the composition of matter and the changes that matter undergoes. The main topics of study are: matter, measurement, scientific method, atomic structure, electron arrangement in atoms, the periodic table, bonding, nomenclature, chemical reactions and stoichiometry, states of matter, gas laws, solution chemistry, and acids, bases, and salts. Methods of gaining scientific knowledge are discussed and modeled by performing laboratory investigations. Laboratory reports are prepared to communicate the results of those investigations. Woven throughout the course is the enhancement of problem-solving skills using the students' understanding of algebra and dimensional analysis technique.

Chemistry I Honors (L)

Level: 10, 11, 12 Credits: 2 Prerequisite: Algebra II with a B or better, STAR reading score of 11.9 or higher GE (Grade Equivalent), Science Teacher approval

Honors Chemistry will follow the same academic standards as Chemistry I but will be more rigorous in application of those standards and will include more laboratory investigations. Students will receive credit in either Chemistry I or Chemistry I Honors.

Advanced Placement Chemistry (L)

Level: 11, 12 Credits: 4 Prerequisite: Chemistry I, Pre-Calculus, STAR reading score of 11.0 or higher GE (Grade Equivalent)

This course is designed to give the high school student a better understanding of chemistry and to provide preparation for science at the college level. AP Chemistry is based on the content established by the College Board. It reviews material covered in Chemistry I but in greater depth and introduces topics not covered in Chemistry I. The content includes: (1) structure of matter: atomic theory and structure, chemical bonding, molecular models, nuclear chemistry; (2) states of matter: gases, liquids, and solids, solutions; and (3) reactions: reaction types, stoichiometry, equilibrium, kinetics, and thermodynamics. This course provides the chemistry student with a college level course and provides preparation for the advanced placement exam taken in May. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

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

Physics I (L)

Level: 11, 12 Credits: 2 Prerequisite: Algebra II, and Chemistry

This course is a laboratory-based course in which students synthesize the fundamental concepts and principles related to matter and energy, including mechanics, wave motion, heat, light, electricity, magnetism, atomic and subatomic physics. Through regular laboratory study using such quantities as velocity, acceleration, force, energy, momentum, and charge, students (1) examine the nature and scope of physics, including its relationship to other sciences and its ability to describe phenomena using physical laws, (2) describe the history of physics and its role in the birth of technology, (3) explore the uses of its models, theories, and laws in various careers, and (4) investigate physics questions and problems related to personal needs and societal issues.

Advanced Placement Physics (L)

Level: 11, 12 Credits: 2 Prerequisite: Geometry, Chemistry, Physics, and Pre-Calculus

This course is designed to help the student understand the physical aspects of the world in which he lives and to provide him with a general understanding of the nature of science. This means to understand what model is and its usefulness and limitations in explaining physical phenomena; to learn as many facts classified as physics as is possible; to learn how to discover patterns in behavior through experimentation and analysis of experimental results. Physics provides a very valuable foundation for the study of other sciences. This course will follow the curriculum of the College Board Advanced Placement Physics B.

Biology II (L)**Dual Credit**

Level: 11, 12 (senior preferred) Credits: 2 Prerequisite: B or better in Chemistry or Recommendation by Instructor
 Biology II is a college level class that is offered through IPFW. The class is a 4 credit hour class if taken through IPFW although it does not have to be taken for credit. The course relies on past knowledge of the basic principles taught in Biology 1-ecology, genetics, cells, and evolution. Labs will be conducted throughout the semester. We will be following the curriculum that IPFW has approved.

HEALTH SCIENCE EDUCATION**Introduction to Health Care Systems****Dual credit**

Level: 11, 12 Credits: 2 Recommended Prerequisite: Biology I and Chemistry I
 The course allows students to explore the wide variety of health careers. Also included is an introduction to Anatomy and Physiology, Medical Terminology, and basic skills for health care professionals.

Health Careers I**Dual Credit**

Level: 11, 12 Credits: 2 Prerequisite: Introduction to Health Care Systems.
 This course continues the Anatomy and Physiology and Medical Terminology with an opportunity for 6 hours dual credit. Work-based learning includes job shadowing and clinical experiences allowing students to observe and learn from healthcare professionals. An opportunity to become a Certified Nursing Assistant (CNA) is optional.

SOCIAL STUDIES**World History**

Level: 9, 10, 11, 12 Credits: 2 Prerequisite: None
 This course provides a chronological study of world history from the earliest civilizations to the present. Themes that form the patterns of civilization such as political and economic development, the influence of geography on cultures, and the growth of science and technology are stressed.

U.S. History

Level: 11 Credits: 2 Prerequisites: None
 This course builds upon concepts developed in previous studies of U.S. History. Students are expected to identify and review significant events, persons, and movements in the early development of the nation. The course then gives major emphasis to the interaction of key political, economic, and social events, as well as important people and cultural influences in national development from the late nineteenth century through the present. This course is required for graduation. Students may substitute H105 (Dual Enrollment) or H106 (Dual Enrollment) to fulfill this requirement

United States History: H105**Dual Enrollment with Indiana University**

Level: 11 Credits: 2 Prerequisites: None
 This course is designed to provide students with a broad, working knowledge of American History from pre Columbian Native American cultures to the advent of the Civil War. Over the course of the semester students examine the political, economic, and social forces that shaped the United States during this period. Students must have a 2.7 GPA to receive credit from Indiana University. Students who successfully complete the course earn 3 credit hours.

United States History: H106**Dual Enrollment with Indiana University**

Level: 11 Credits: 2 Prerequisite: None
 This course surveys the history of modern America from the end of the Civil War to the present. Students explore the evolution of the United States into an urban, industrial nation and global power and consider the consequences of these developments for American society, culture, and politics. Students must have a 2.7 GPA to receive credit from Indiana University. Students who successfully complete the course earn 3 credit hours.

U.S. Government

Level: 12 Credits: 1 Prerequisite: None

United States Government provides a framework for understanding the purposes, principles, and practices of constitutional representative democracy in the United States. Responsible and effective participation of citizens is stressed. Students will understand the nature of citizenship, politics, and governments and understand the rights and responsibilities of citizens and how these are part of local, state, and national government. This course is required for graduation. Students may substitute POLS 101 (Dual Enrollment) to fulfill this requirement.

U.S. Government: POLS 101 **Dual Enrollment with IVY Tech**

Level: 12 Credits: 1 Prerequisite: None

United States Government provides a framework for understanding the purposes, principles, and practices of constitutional representative democracy in the United States. Responsible and effective participation of citizens is stressed. Students will understand the nature of citizenship, politics, and governments and understand the rights and responsibilities of citizens and how these are part of local, state, and national government.

Economics

Dual Credit

Level: 12 Credits: 1 Prerequisite: None

Students in this course study the basic institutions of market economies and the role they play in defining and pursuing economic goals in the U.S. economy. Emphasis is placed upon the effects of existing economic institutions and current economic policy alternatives as they affect both the individual and society. This class is required for graduation. This course can be taken for college credit through IPFW.

Current Problems, Issues, and Events

Level: 9, 10, 11, 12 Credits: 1 Prerequisite: None

Current Problems, Issues, and Events gives students the opportunity to apply investigative and inquiry techniques to the study of significant problems or issues. Problems or issues selected will have contemporary and historical significance.

Topics in History

Level: 9, 10, 11, 12 Credits: 1 Prerequisite: None

This course will examine the development of a specific topic in order to understand the social, cultural, economic, and political forces at work during different periods in American history.