SPRINGS VALLEY SCHOOLS
2016-2017
COURSE DESCRIPTIONS

ENGLISH

ADV ENG Composition I; ENGL 111 Ivy Tech
Two semester course- 2 credits high school, 3 dual credits
Prerequisite – Grade 11
Requirement
Dual Credit Course- Test score qualifications- old PSAT/SAT verbal 46/460, old PSAT/SAT Writing 460, ACT Reading 18 and English 17, or Accuplacer Sentence Skills 80 and Reading 76, new version of the PSAT 25 reading and 26 writing- This score is subject to change if Ivy Tech changes the requirements
English Language and Composition is a course offered for credit by an accredited postsecondary institution. This course is designed to help the student develop the ability to think, to organize, and to express ideas clearly and effectively. Emphasis is placed on the various forms of expository writing. These include description, narration, exemplification, process, cause and effect, comparison and contrast, classification, definition, argumentation, and essay response. Students write frequently and make use of technological resources in preparing their papers. Students are to complete each of the writing assignments, revise each essay as instructed, and return all essays and revisions to the instructor. All prewriting is required as part of the assignment and is turned in along with the final draft. Students are also assigned work in the text(s) and are responsible for the assigned readings and material covered in class. Students keep journals for both free writing and rewriting activities leading to finished essays. Some class meetings consist of lecture and discussion; others are devoted to individualized or group work on the reading and writing assignments. ***Students should understand that this course is a college credit course and requires more reading and writing than high school level English courses. This course is a transferIN course.***

ADV ENG – Exposition and Persuasion; ENGL 112 Ivy Tech
One Semester course- 1 credit high school, 3 dual credits
Prerequisite- Grade 12 and pass ENGL 111 with a C or better
Requirement
Dual Credit Course- with prerequisite
A continued development of writing skills introduced in ENGL 101. Students learn how to conduct research and how to base their writing on research. In addition to shorter documented papers, all students are required to write a longer investigative paper that must be fully documented according to MLA standards. . Students should understand that this course is a college credit course and requires more reading and writing than high school level English courses. This course is a transferIN course.

GENRES OF LITERATURE
One Semester Course - 1 credit
Prerequisite – Grade 12
Genres of Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of various literary genres, such as poetry, 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 stronger impact on the culture than others in different historical time periods, and what the most influential genres are in contemporary times.

STUDENT PUBLICATIONS (YEARBOOK)
Full Year Course – 2 Credit
Prerequisite- B or above in previous English classes & Grades 10-12, complete an application. Requires teacher approval
Fine Art Credit
The purpose of this course is to publish the *Hawkeye,* the school yearbook, and other school publications. Students will learn the basics of publication design and will work with computerized design programs such as Adobe Photoshop, and Microsoft Publisher. After the first few weeks of class in which the basics of journalism are studied, the course becomes a laboratory class in which students are responsible for writing captions and articles, taking pictures, and designing yearbook pages to meet deadlines for publication. A basic understanding of grammar and good writing skills are important to do well in this class. Also, interest in writing stories, photography, and computer design is helpful. Students should realize that in order to cover their beats and fulfill assignments and responsibilities for this class, they will need to use time beyond the class period.

ENGLISH 12
Full Year Course- 2 credits
Prerequisite- Grade 12
Business Communications is designed to provide students with the broad, thorough training necessary to develop competence on the job in each of the following communication skills: reading, writing, and listening.

ENGLISH 11
Full Year Course – 2 Credits
Prerequisite – Grade 11
Required
We will study American literature from the Colonial Period to the present. We will read and discuss major works and authors from each literary period, styles, and genres. A daily journal entry is required. Also required are a five-minute research presentation and two book reports. Each of the major essay types will be explored.

ENGLISH 10
Full Year Course – 2 Credits
Prerequisite – Grade 10

Required
In this course students will read a variety of literature and informational texts. They will also explore the many genres of writing, composing narrative, persuasive, expository and research pieces. We will also look at basic Standard English writing conventions and the writing process. Preparation for the English 10 End of Course Assessment, which is a graduation requirement, will guide our studies.

ENGLISH 9
Full Year Course – 2 Credits
Prerequisite – Grade 9
Required
In this course we will read a variety of literature, including short stories and a novel, and study the basic components: plot, character, setting, point of view, theme, poetry, speaker, word choice, imagery, figurative language. We will also study informational texts, the genres of writing, and writing conventions while preparing for the English End of Course Assessment required for graduation. Students will be introduced to the work of Shakespeare when reading *Romeo and Juliet*; they will also complete a comprehensive research project.

**** Students who fail a semester of English will be required to make it up in summer school. Students will not be allowed to move to the next level of English until all lower levels are passed.**

MATH

ALGEBRA I
Full Year Course – 2 credits
Prerequisite – None (8th graders – by approval)
Required
Algebra I is offered to all high school students and to eighth graders receiving teacher recommendation from their seventh grade math teacher. Strong basic operations skills are required. Core standards that will be addressed are: Operations with Real Numbers, Linear Equations and Inequalities, Relations and Functions, Graphing Linear Equations and Inequalities, Pairs of Linear Equations and Inequalities, Polynomials, Algebraic Fractions, Quadratic, Cubic, and Radical Equations, and Mathematical Reasoning and Problem Solving. They will also be required to communicate verbally with other students about problem solving techniques. An A or B in eighth grade math is highly recommended. If a student is struggling in 8th grade math it is recommended that they take Algebra Enrichment concurrently.

If you fail a 9 week term you will repeat it before moving on to the next term.

****If a student fails the 2nd semester of Algebra I they must take all of Algebra I over or BSD 1st semester and Algebra I 2nd semester.**

ALGEBRA II
Full Year Course- 2 Credits
Prerequisite- Algebra I
Requirement for AHD, THD & Core 40
Students will recognize and graph polynomial, rational, and algebraic functions along with linear equations and inequalities involving absolute value. Students will define complex numbers, while relating them to real numbers and using them to solve quadratic equations. While dealing with circles, ellipses, parabola, and hyperbolas, students will write equations and draw graphs while relating an algebraic expression to a geometric one. Students will understand and use the binomial theorem for positive integer powers. They will understand and use the concepts of negative and fractional exponents.
*****Both semesters of Algebra I must be passed in order to take Algebra II, if they aren't the student must take Algebra I over before taking Algebra II***

CALCULUS; MATH 211 Ivy Tech
Full Year Course- 2 credits
Prerequisite- Pre Calculus
Quantitative Reasoning
Dual Credit Course- Must have received credit in MATH 136 and 137
Reviews the concepts of exponential, logarithmic and inverse functions. Studies in depth the fundamental concepts and operations of calculus including limits, continuity, differentiation including implicit and logarithmic differentiation. Applies differential calculus to solve problems in the natural and social sciences, to solve estimation problems and to solve optimization problems. Applies differential calculus to sketch curves and to identify local and global extrema, inflection points, increasing/decreasing behavior, concavity, behavior at infinity, horizontal and vertical tangents and asymptotes, and slant asymptotes. Applies the concept of Riemann sums and antiderivatives to find Riemann integrals. Applies the fundamental theorem of calculus to solve initial value problems, and to find areas and volumes and the average values of a function

GEOMETRY
Full-Year Course - 2 Credits
Prerequisite- Algebra 1
Requirement for AHD, THD & Core 40
The course reviews the basic concepts, terminology, and notations involved in geometry. Topics covered not only include traditional theorems and postulates on angles, lines, circles, and polygons, but also coordinate and transformational geometry. A strong algebra background helps with solving different equations and problems. Homework is assigned almost every day and reviewed or graded the next day. The class will require use of a calculator, graph paper, protractor, rulers, and a compass.

MATH LAB ALGEBRA II

Full-Year Course – 2 Credits
Taking concurrently with Algebra II
Elective
Mathematics Lab provides students with individualized instruction designed to support success in completing mathematics coursework aligned with *Indiana's Academic Standards for Mathematics*. It is recommended that *Mathematics Lab* is taken in conjunction with a Core 40 mathematics course, and the content of *Mathematics Lab* should be tightly aligned to the content of its corresponding course. *Mathematics Lab* should not be offered in conjunction with *Algebra I* or *Integrated Mathematics I*; instead, schools should offer *Algebra Enrichment* or *Integrated Mathematics Enrichment* to provide students with rigorous support for these courses.

PRE-CALCULUS/TRIG: MATH 136 and 137 Ivy Tech
Full-Year Course - 2 Credits
Prerequisite- Algebra 2 & Grades 11-12
AHD course requirement
Dual Credit Course- Test score qualifications: **PSAT/SAT Math 52/520, ACT Math 24, or Accuplacer EALG 74, new PSAT 27 math**- This score is subject to change if Ivy Tech changes the requirements.)
This is a two-semester course that provides experiences with functions, trigonometry, and some analytical geometry. The use of a graphing calculator (TI-84) is done throughout the course. The course is designed to help those students with mathematics in college. Homework is assigned almost every day and reviewed or graded the next day.
1st Semester: Presents an in-depth study of functions, quadratic, polynomial, radical, and rational equations, radicals, complex numbers, systems of equations, matrices, and exponential and logarithmic functions.
2nd Semester: Presents an in-depth study of right triangle trigonometry, oblique triangles, vectors, graphs of trigonometric functions, trigonometric identities and equations and complex numbers in rectangular and polar/trigonometric forms, rectangular and polar coordinates, rational functions and conics.

*** General Diploma students: Two credits in math can also be earned by taking Personal Finance/Business Math.*
***** Math order- 8th grade Algebra, Geometry, Algebra II, Pre-Calculus- 9th grade Algebra, Algebra II, Geometry, Pre-Calculus.***

PHYSICAL EDUCATION

ADVANCED HEALTH
One Semester – 1 Credit
Prerequisite- Health
Elective
Advanced Health & Wellness provides advanced knowledge and skills to help students adopt and maintain healthy behaviors. Through a variety of instructional strategies, students practice the development of functional advanced health information (essential concepts); determine personal values that support health behaviors; develop group norms that value a healthy lifestyle; develop the essential skills necessary to adopt, practice, and maintain health-enhancing behaviors. Advanced Health & Wellness provides students with an in-depth study of promoting personal health and wellness, physical activity, healthy eating, promoting safety and preventing unintentional injury and violence, promoting mental and emotional health, a tobacco, alcohol, and other drug-free lifestyle, and promoting human development and family health. The scientific components of health and wellness, health issues and concerns, health risk appraisals, individual wellness plans, health promotion and health careers are expanded and explored within the context of the course. This course provides students with the advanced 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.

ADVANCED PE
Full-Year Course- 2 credits
Prerequisite- None
Elective
This course is designed to give students the opportunity to learn fitness concepts and conditioning techniques used for obtaining optimal physical fitness. Students will benefit from comprehensive weight training, aquatics and cardiorespiratory endurance activities. Students will learn the basic fundamentals of strength training, aerobic training, and overall fitness training and conditioning. Course includes both lecture and activity sessions. Students will be empowered to make wise choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime. This is course is open to both females and males.

CURRENT HEALTH ISSUES
One Semester – 1 Credit
Prerequisite
Elective
Current Health is a class designed to explore topics trending in the world of health and wellness. The class will examine controversial issues in health, health trends and fads, and new innovations in the medical field. Students will read medical journals and weekly health digests, and will conduct research. Student participation will be mandatory in this class.

HEALTH
One Semester – 1 Credit
Prerequisite- None
Required (unless student passes three credits in FACS)
Health – Provides our students with in-depth learning about basic knowledge, concepts, hands on activities, and skills needed to adopt or reinforce healthy attitudes. The course provides our students with learning in the following areas: social and emotional health, the human body and its systems, nutrition, drug use and abuse, disease prevention, the life cycle, first aid and safety, physical fitness, family life, community health, AIDS, breast and testicular cancer, sexually transmitted diseases, abstinence, birth

control measures, parenting skills and prerequisites, pregnancy and the birth process, effects of alcohol and drugs in dating and sexual activity, and showing affection without sex.

PHYSICAL EDUCATION

One Semester Course – 1 Credit
Prerequisite- None
Required

This course will provide a co-educational opportunity for the continued development of basic skills through a variety of activities. These offerings will include individual and team sports, lifetime activities, creative movement experiences and aquatic activities. The following sporting activities will be offered: tennis, golf, track and field, soccer, flag football, softball, volleyball, mat ball, swimming and basketball. The course will attempt to develop and maintain an optimal level of physical fitness.

***Students must take 2 semesters of P.E.*
***Students wishing to waive their PE credit must see Mr. Denbo*

SCIENCE

ANATOMY/PHYSIOLOGY

Full Year Course- 2 credits
Prerequisite- 11 or 12th grade
Core 40, Core 40 AHD, Core 40 THD

This class will cover the basics of human anatomy and physiology including anatomical terminology, basic biochemistry, histology (tissues), and the systems - integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary, and reproductive. A knowledge of basic biology is required and any prerequisite biology not brought into the class will be required outside learning. Common human disease processes will be examined. Dissection will be used for human comparative studies. The student will go beyond memorizing (much anatomy) to gaining an understanding of how structures function together (physiology).

BIOLOGY I

Full Year Course – 2 Credits
Prerequisite- None
Requirement for Freshmen or Sophomore, Required for graduation

Biology 1 explores the concept of life and the structure and development of living things. It will include definitions of life and its characteristic properties, basic chemistry, the molecules of life, DNA fingerprinting techniques, genetic inheritance and stem cells. The study will include how living things evolve and live together and share resources and environment. The development and interactions of organisms from the simple celled to the multi-celled are studied. This course includes a study of biology and medicine, biology and the environment, and biology and careers. The course will address issues related to the planet under stress, human interference, and pollution of the environment. Students will gain an understanding of their personal responsibility to themselves and all living things in the web of life and the entire biosphere. Incorporated into the course will be frequent laboratory experiences pertaining to microscopic work, Electrophoresis, field studies, dissections and various research projects related to genealogy, ecosystems, classification system, and other areas of interest.

CHEMISTRY

Full-Year Course - 2 credits
Prerequisite- Algebra 1 & Grades 11-12
Quantitative Reasoning
Core 40, Core 40 AHD and Core 40 THD

Students enrolling in chemistry will be introduced to basic chemical principles. Students will study atomic structure and its relationship to reactivity. In addition, they will learn to recognize and predict basic reactions. A strong math background is recommended, as problem solving is an integral part of the curriculum. Through laboratory investigation, students will apply their skills or discover new concepts. Cross-curricular connections involve writing formal lab reports.

EARTH/SPACE SCIENCE

Full Year Course- 2 Credits
Prerequisite- 9 or 10th Grade
Core 40, Core 40 AHD and Core 40 THD

Earth and Space Science allows students to investigate, through class, laboratory and fieldwork, the universe, Earth, and the processes that shape Earth. They understand that Earth operates as a collection of interconnected systems that may be changing or may be in equilibrium. Students connect the concepts of energy, matter, conservation, and gravitation to Earth, the solar system, and the universe. Students will utilize the knowledge of the materials and processes of Earth, planets, and stars in the context of the scales of time and size. Students will realize that new scientific ideas are limited by the context in which they are conceived, and are often rejected by the scientific establishment. These ideas sometimes spring from unexpected findings, and grow or transform slowly through the contributions of many different investigators. Topics include geology, astronomy, geomorphology, meteorology and GPS systems.

INTEGRATED CHEMISTRY AND PHYSICS

Full-Year Course - 2 credits
Prerequisite- None
Quantitative Reasoning
Core 40, Core 40 AHD and Core 40 THD

This course covers the basics of chemistry and the basics of physics. The students will engage in scientific thinking and measurement activities. Students will gain a basic understanding of the structure of matter and its changes. They will study several laws of physics, including an extensive lab involving circuitry. Students will safely investigate through laboratory experiences as well as through classroom instruction. Students will write basic lab reports learning to clearly communicate their findings.

PHYSICS

Full Year Course: 2 credits

Prerequisite- Geometry and Algebra II
Quantitative Reasoning
Core 40, Core 40 AHD and Core 40 THD
This course studies the fundamental concepts of Physics and demonstrates many of its applications.
Topics include: Kinetics, kinematics, energy, thermodynamics, waves, sound, light, electricity, magnetism, and nuclear physics. Physics involves a great amount of mathematical applications. Students taking Physics should feel confident in their math and communication skills. Throughout the course students will be expected to read selections, do minor research, take part in class demonstrations and class discussions, complete answers to questions and problems over the topics covered, take part in laboratory exercises and laboratory write-ups, and work on group projects. This course will be considered valuable to anyone going into science, engineering, medicine, or industry, but topics will also include information that is valuable in everyday living situations.

SOCIAL STUDIES

ECONOMICS
One Semester Course – 1 Credit
Prerequisite – Grade 12
Quantitative Reasoning
Required for AHD & Core 40
Economics will provide and acquaint students with opportunities to develop knowledge and skills needed for active participation as a citizen and consumer. It should allow students to develop the ability to make well-informed decisions and act responsibly by using their rights and responsibilities as a consumer.
To accomplish these goals, this course will include various economic concepts at work today, the basic models for decision making at various levels, and different areas such as: (1) the role of the consumer, producer, saver, and voter, (2) business decisions to help maximize profits through economic indicators and economic models; and (3) monetary policies that deal with output and prices in the national economy.
It should also be noted that the other topics included are: Going into Debt, Marketing, the banking system, the Federal Reserve System, and the stock market. Projects include guest speakers, portfolios, real-world simulations for financing and debt, and the use of the "stock market game," sponsored by the Indiana Council for Economic Education.

GEOGRAPHY AND HISTORY OF THE WORLD
Full Year Course – 2 Credits
Prerequisite – 10-12
Core 40, Core 40 AHD and Core 40 THD
World Geography covers the basic themes of geography and countries throughout the world. Culture, landforms, socioeconomic, and detrimental issues are discussed. Class lectures, group projects, and individual assignments are utilized. Tests, quizzes, essays, projects, and homework are used for student evaluation.

SOCIOLOGY
One Semester Course – 1 credit
Prerequisite- Grade 12
Elective
Sociology is the science that studies human society and social behavior. Sociologists are mainly interested in social interaction – how people relate to one another and influence each other's behavior. Consequently, sociologists tend to focus on the group rather than on the individual. Studying sociology can help us gain a new view, or perspective, for looking at ourselves and the other world. By adopting a sociological perspective, we are able to look beyond commonly held beliefs to the hidden meanings behind human actions. We can see beyond our own day-to-day world by viewing the world through others' eyes.
Some areas which are covered by a social scientist include: cultural diversity, social structure, personality development, socializing the individual, the adolescent in society, the adult in society, deviance and social control and racial and ethnic relations.

UNITED STATES GOVERNMENT
One Semester Course – 1 Credit
Prerequisite – Grade 12
Required
United States Government provides students with an understanding of their rights and responsibilities as citizens of the United States. This course will explore the history and origins of the various regimes of government and the structure and importance of the legislative, executive, and judicial branch. An emphasis on the Constitution and Bill of Rights will be discussed in relation to real-life events. Many other amendments will be covered as well. Specific court cases will also be examined extensively to increase student knowledge and awareness. In conclusion, students are required to participate in mock elections and bill writing. Robert's Rules will be used to aid understanding and comprehension. Students will analyze political issues within our community, state, and country. Students will also use technology to access relevant information.

UNITED STATES HISTORY
Full Year Course – 2 Credits
Prerequisite – Grade 11
Required or AP US History
The purpose of this course is to teach students about the history of the United States following the Civil War. Topics include the great migration west, the removal and mistreatment of the Native Americans, our involvement in the Spanish-American War, World War I and II, the Korean conflict, 1960's and 1970's, Vietnam War, and up to the Clinton years. Various projects will be introduced to increase further understanding.

*** US History is required for graduation*

ART

INTRODUCTION TO 2D ART/ADVANCED 2D ART
1ST Semester- Intro to 2D- 1 Credit
2nd Semester- Advanced 2D- 1 Credit
Prerequisite- None
Directed Elective or Flex Credit
This is an intro level art class. Students create art projects using a variety of mediums. This course emphasizes the elements and principles of design with each project focusing on one. Projects include drawing, sculpture, printmaking, digital painting, and collage. Students also study art history, art criticism, and aesthetics. Students will learn to describe, interpret, analyze, and make informed judgments about art. Students are expected revise and refine their work.

All students taking this course will be provided with a tote-tray of tools and materials for use during the year that they will be responsible for returning at the end of the school year. There will be a $10.00 lab fee collected at the beginning of the school year.

DIGITAL DESIGN/ADVANCED DIGITAL DESIGN
1st semester: Digital Design- 1 credit
2nd semester: Advanced Digital Design- 1 credit
Prerequisite- None
Directed Elective or Flex Credit
Digital Design explores the use of digital media in art. Students create portfolio quality projects using a variety of programs on the computer as well as study art history, art criticism, and aesthetics. Projects include digital painting, photo editing and manipulation, computer animation, logo design, web design, 3D modeling, and sound editing. Students are expected to reflect upon and refine their work. Students also explore cultural and historical connections in art; 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.

A $10.00 lab fee will be collected at the beginning of the school year to help offset the cost of consumable supplies.

DRAWING/PAINTING
1ST Semester- Drawing- 1 Credit
2nd Semester- Painting- 1 Credit
Prerequisite- None
Directed Elective or Flex Credit
Students create portfolio quality art projects using a variety of drawing and painting mediums. Areas of study include basic drawing skills, drawing/painting from observation, still life, linear perspective, portraits, abstract art, and landscapes. Students also study art history, art criticism, and aesthetics. Students are expected to reflect upon and refine their work. Students also explore cultural and historical connections in art; 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.

All students taking this course will be provided with a tote-tray of tools and materials for use during the year that they will be responsible for returning at the end of the school year. A $10.00 lab fee will be collected at the beginning of the school year to help offset the cost of consumable supplies.

PHOTOGRAPHY/ADVANCED PHOTOGRAPHY
Full Year Course- 2 credits
Prerequisite- None
Directed Elective or Flex Credit
Students create portfolio quality photography and video projects. Areas of study include film developing and printing, digital photography, manual controls on camera, digital photo editing, video editing, photography lighting, and photomontage. Students also study art history, art criticism, and aesthetics. Students are expected to reflect upon and refine their work. Students also explore cultural and historical connections in art; 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.

All students taking this course will be provided with a tote-tray of tools and materials for use during the year that they will be responsible for returning at the end of the school year. A $25.00 lab fee will be collected at the beginning of the school year to help offset the cost of consumable supplies.

BUSINESS

ACCOUNTING
Full Year Course- 2 credits
Prerequisite- None
Directed Elective or Flex Credit
Accounting introduces the language of business using Generally Accepted Accounting Principles and procedures for proprietorship's and partnerships using double-entry accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision-making.

PERSONAL FINANCE/BUSINESS MATH
One Semester Each Course – One Credit Each Semester
Prerequisite- None
Quantitative Reasoning
Directed Elective or Flex Credit
Personal Finance and Business Management are business classes designed to develop abilities to solve real world problems in order to become productive citizens and workers in a technological society. The courses provide students with the opportunity to demonstrate competencies by describing and applying management functions, principles, and processes that contribute to the achievement of organizational goals. Problem-solving applications will be used to analyze and solve business problems for such areas as: taxation, savings and investments, payroll records, cash management, financial statements, purchases, sales, inventory records, and depreciation. Students will gain experience in building decision-making skills, employee motivation, evaluation, teamwork, and the basic functions of business management.

***This course will count for credit in business or math for General Diploma students.*

MUSIC

CHORUS
Full-Year Course 2 credits
Prerequisite- None
Directed Elective or Flex Credit
Chorus is a music performance based class. Students sing literature ranging from classical pieces, sacred works, and popular melodies. The class performs at school functions, concerts, social gatherings, and special events. Students are required to attend all after school rehearsals and performances. Students learn how to sing individually and within a group. Areas of instruction include the following: posture, breath support, articulation, dictation, intonation, rhythmic accuracy, and balance. Students participate in a Choral Contest each year and students are encouraged to participate in ISSMA solo and ensemble as well.

HIGH SCHOOL BAND
Full-Year Course 2 credits
Prerequisite- Students must participate in marching band.
Directed Elective or Flex Credit
The purpose of this class is to rehearse members of the marching band, pep band, and concert band. Students that want to enroll in high school band must be members of the fall marching band. Students also perform at the ISSMA Solo and Ensemble Contest. The band takes several educational and performance based trips over the course of the year. Recent band trip destinations include the following: Bloomington, IN, Indianapolis, IN, Gatlinburg, TN, and Evansville, IN.

MUSIC APPRECIATION
Full-Year Course 2 credits
Prerequisite- None
Directed Elective or Flex Credit
The objective of Music Appreciation is to provide students with a basic understanding of music history and help them develop an appreciation for classical (art) music and other prominent musical styles. This class will present students with information and audio examples from important time periods in music history. Discussions will also include examples from other areas such as art, literature, history, architecture, and other performing arts and fine arts. Students are able to use the computer lab and are encouraged to interact with technology through group projects.

Miscellaneous

CADET TEACHING
Full-Year Course- 2 credits
Prerequisite- Grade 12, Must have at least 30 credits before senior year
Elective
This elective course provides students in grades eleven (11) or twelve (12) organized exploratory teaching experiences in grades kindergarten (K) through grade nine (9). All teaching experiences should be preplanned by the high school Cadet Teaching Experience teacher-trainer and the cooperating teacher(s) who are interested in supervising prospective teachers and providing them with pre-training experiences in one or more classes. This course provides a balance of class work relating to: (1) classroom organization, (2) classroom management, (3) the curriculum and instructional process, (4) observations of teaching, and (5) instructional experiences.

Study topics and background reading provide the cadets information concerning the teaching profession and the nature of the cadet teachers' assignments. Evaluation is based upon the cadet teachers' cooperation, day-to-day practical performance, and class work including the cadets' potential ability to teach. The total workload of the Cadet Teaching course is comparable to those for other subjects in the high school curriculum.

- Cadet teaching experience for high school students is limited to grades kindergarten through grade nine

COLLEGE ENTRANCE PREPARATION
Full Year course- 2 credits
Prerequisite- 10th or 11th grade
Elective
The focus of this course will be preparing students for college by strengthening the skills assessed in college entrance exams, such as the SAT and ACT. Practice tests will help identify areas of weakness which will be targeted for improvement. Students will also learn effective test taking strategies and chart their improvement through quarterly progress monitoring exams. Beyond college entrance exam preparation the class will also include college selection and application units.

REMEDIATION/BSD
Full-Year Course- 2 credits
For students who have not passed the graduation exam
Basic Skills Development is a course designed to remediate those students who have not passed the graduation exam. This course provides opportunities for students to learn the skills that they are lacking in math and English/Language Arts as determined by their test results. Currently, there are two graduation exams. The seniors will continue to take the Graduation Qualifying Exam and all other students will take the End of Course Assessments in Algebra 1 and English 10. By state law, schools are required to provide such remediation and students are required to participate in case they need to apply for a waiver.

World Language

SPANISH I- online course
Full- Year Course – 2 credits
Prerequisite- C average in Language Arts class
Directive Elective
SPANISH II- online course
Full- Year Course – 2 credits
Prerequisite- Passing grade in Spanish I
Directive Elective
SPANISH III- online course
Full- Year Course - 2 credits
Prerequisite-Passing grade in Spanish I and Spanish II
Directive Elective

***Academic Honors requires six (6) World Language credits.*
*** Most four year colleges require four (4) semesters of high school World Language for admission.*

Career/Technical Program Offerings

PLEASE NOTE: "**Preparing for College and Careers**" and "Personal Financial Responsibility" (or "**Adult Roles & Responsibilities**" in some schools – to maintain local flexibility) are foundational Career and Technical Education courses **recommended for every student in every Pathway.**

WORK-BASED INTERNSHIP, CAPSTONE EXPERIENCE
Full-Year Course 4-6 credits (Maximum of 3 credits)
Prerequisite-Grade 12, 30 credits at start of senior year, *good attendance record, application and interview process for selection into course program.* At least 4 credits in a logical sequence of courses in the student's career pathway.

Students will explore and gain knowledge about the world of work while participating in the various tasks at their individual work sites. Each internship experience will be different depending on the student's goals, internship site, and supervisor. Students wishing to participate in an internship their senior year must have a minimum of 30 credits at the beginning of the senior year, good attendance record, an application on file, and participate in an interview process for the course at the end of their junior year. Students must fill out an application and the job site must be decided on before the beginning of school. Training agreements will be developed jointly by the teacher, the job-site mentor and the student, that clearly states what will be accomplished during the work-based experience. Students should use the internship experience to help decide what career they are interested in after high school by documentation as to what career pathway they are following with the internship experience and having their work site approved before the beginning of school. Students should be responsible, punctual, and trustworthy to take this course. Students will complete training agreements, turn in weekly assignments, 9-week assignments, and final assignments which all are requirements for this course. Attendance is very important for this course. Students should utilize the following website http://doe.in.gov/pathways/ to validate their internship experience to qualify for their individual career pathway plan. It is expected that the internship will involve a minimum of 10 hours per week for one semester or a minimum of 140 hours over the course of the school year.

FACS

CHILD DEVELOPMENT
One Semester Course- 1 credit
Prerequisite- None
Child Development is an introductory course that is especially relevant for students interested in careers that draw on knowledge of children, child development, and nurturing of children. This course addresses issues of child development from conception/prenatal through age 3. It includes the study of prenatal development and birth; growth and development of children; child care giving and nurturing; and support systems for parents and caregivers. A project-based approach that utilizes higher order thinking, communication, leadership, management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of child development. Direct, concrete mathematics and language arts proficiencies will be applied. Authentic applications such as introductory laboratory/field experiences with young children and/or service learning that build knowledge of children, child development, and nurturing of children are strongly recommended. This course provides the

foundation for continuing and post-secondary education in all career areas related to children, child development, and nurturing of children.

- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- One of the six FACS courses from which students may choose three to fulfill the required Health and Safety credit – see State Rule 511 IAC 6-7-6 (6)
- **Pathways**: One of the courses specified in the sequence of courses for the following career pathway plans:
    - Education & Training Cluster: Education Professions Pathway
    - Human Services Cluster: Family and Community Services Pathway
    - Human Services Cluster: Family and Social Services, Youth Development, etc Pathway
    - Recommended for any career area with a potential focus on children, e.g. pediatric medicine or dentistry; design and construction of family housing; design and manufacture of children's toys and equipment; design and production of arts, A/V, and media for children

PREPARING FOR COLLEGE AND CAREERS

One semester course - 1 credit
Prerequisite- None
This course is required for all freshmen.
Recommended for every student in every Pathway

Preparing for College and Careers addresses the knowledge, skills, and behaviors all students need to be prepared for success in college, career, and life. The focus of the course is the impact of today's choices on tomorrow's possibilities. Topics to be addressed include twenty-first century life and career skills; higher order thinking, communication, leadership, and management processes; exploration of personal aptitudes, interests, values, and goals; examining multiple life roles and responsibilities as individuals and family members; planning and building employability skills; transferring school skills to life and work; and managing personal resources. This course includes reviewing the 16 national career clusters and Indiana's College and Career Pathways, in-depth investigation of one or more pathways, reviewing graduation plans, developing career plans, and developing personal and career portfolios. Financial Literacy Standards for high school students are embedded in this course. A project based approach, including computer and technology applications, cooperative ventures between school and community, simulations, and real life experiences, is recommended.

- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- One of the six FACS courses from which students may choose three to fulfill the required Health and Safety credit – see State Rule 511 IAC 6-7-6 (6)

NUTRITION/WELLNESS

One Semester Course- 1 Credit
Prerequisite- None

Nutrition and Wellness is an introductory course valuable for all students as a life foundation and academic enrichment; it is especially relevant for students interested in careers related to nutrition, food, and wellness. This is a nutrition class that introduces students to only the basics of food preparation so they can become self-sufficient in accessing healthy and nutritious foods. Major course topics include nutrition principles and applications; influences on nutrition and wellness; food preparation, safety, and sanitation; and science, technology, and careers in nutrition and wellness. A project-based approach that utilizes higher order thinking, communication, leadership, management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of nutrition, food, and wellness. Food preparation experiences are a required component. Direct, concrete mathematics and language arts proficiencies will be applied. This course is the first in a sequence of courses that provide a foundation for continuing and post-secondary education in all career areas related to nutrition, food, and wellness.

- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- One of the six FACS courses from which students may choose three to fulfill the required Health and Safety credit – see State Rule 511 IAC 6-7-6 (6)
- **Pathways**: One of the courses specified in the sequence of courses for the following career pathway plans:
    - Education & Training Cluster: Education Professions Pathway
    - Health Science Cluster: Therapeutic & Diagnostic Services
    - Hospitality, Tourism, & Culinary Arts Cluster: Culinary Arts Pathway
    - Hospitality, Tourism, & Culinary Arts Cluster: Hospitality Management Pathway
    - Human Services Cluster: Family and Community Services Pathway
    - Hospitality and Human Services Cluster: Foundation course for all Hospitality and Human Services students

The following CAREER CLUSTERS can be used to meet the requirements for a TECHNICAL HONORS DIPLOMA.

Career Cluster: Agriculture

AGRIBUSINESS MANAGEMENT; AGBS 101 VU

Full-Year Course- 2 Credits
Prerequisite- recommended Introduction to Agriculture, Food and Natural Resources, grade 11 or 12
Directed Elective, Flex Credit, or Career Pathway Course
Quantitative Reasoning
Dual Credit

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

AGRICULTURE MECHINIZATION
Full Year Course – 2 Credits
Prerequisite – grade 9-10
Directed Elective, Flex Credit, or Career Pathway Course
CIP Code: 01.0201
Agricultural Mechanization is a yearlong, lab intensive course in which students develop an understanding of basic principles of selection, operation, maintenance, and management of agricultural equipment in concert with utilization of safety and technology. Topics covered include: small and large gas and diesel engine repair, power transfer systems including hydraulic, pneumatic and robotic systems, arc, metal fabrication such as MIG, TIG and SMAW welding, concrete, wood, metal, electricity and electronics, recirculating aquaculture systems, hydroponics systems, surveying, precision farming equipment, remote sensing technology and global positioning systems equipment, building agriculture related buildings and structures including greenhouses, tillage, planting, irrigation, spraying, grain and forage harvesting, feed and animal waste management systems, agricultural industry communications and customer relations, safety and safety resources, career opportunities in the area of agricultural mechanization and employability skills.

AGRICULTURE MECHINIZATION II
Full Year Course – 2 Credits
Prerequisite – Ag Mech !, or approval- grade 10-12
Directed Elective, Flex Credit, or Career Pathway Course
CIP Code: 01.0201
Agricultural Mechanization is a yearlong, lab intensive course in which students develop an understanding of basic principles of selection, operation, maintenance, and management of agricultural equipment in concert with utilization of safety and technology. Topics covered include: small and large gas and diesel engine repair, power transfer systems including hydraulic, pneumatic and robotic systems, arc, metal fabrication such as MIG, TIG and
SMAW welding, metal, electricity and electronics, Ag Mech II will focus on welding and cutting, The use of CNC plasma cutter. There will be dual credit attached to this course.

INTRODUCTION TO AGRICULTURE, FOOD, AND NATURAL RESOURCES
Full Year Course- 2 Credits
Prerequisite- none (grade 9 recommended)
Directed Elective, Flex Credit, Career Pathway course
CIP Code: 01.0101
Introduction to Agriculture, Food and Natural Resources is a two semester course that is highly recommended as a prerequisite to and a foundation for all other agricultural classes. The nature of this course is to provide students with an introduction to the fundamentals of agricultural science and business. Topics to be covered include: animal science, plant and soil science, food science, horticultural science, agricultural business management, landscape management, natural resources, agriculture power, structure, and technology, careers in agriculture, leadership, and supervised agricultural experience. An activity and project based approach is used along with team building to enhance the effectiveness of the student learning activities.

**OSHA certification test is available for students in the agriculture pathway.

Career Cluster: Architecture and Construction-Career Pathway: Construction Trades

INTRODUCTION TO CONSTRUCTION-at SVHS
Full Year Course- 2 credits
Prerequisite- None
Directed Elective, Flex Credit, or Career Pathway Course
This course is designed as an introductory course to Building Trades; it is also a treat class for any future homeowner. Anyone interested in building maintenance, household repairs, remodeling and building additions, or a career in any of the building trades will benefit from this course. Areas of study will include blueprint reading, building site layout, building materials, hand and power tool use and safety, footings and foundations, framing, roofing, siding, dry walling, and finish carpentry. The student can also expect an introduction to building codes, estimating materials, plumbing, and electrical wiring. The student completing this course will see improvement in his or her mathematics skills, especially measuring and working with fractions and angles, as well as communication, problem solving, decision making, and team work skills.

CONSTRUCTIN TECHNOLOGY I- at SVHS
Full-Year Course- 4 Credits
Prerequisite- Introduction to Construction and 10, 11 or 12 grade
Directed Elective, Flex Credit, Career Pathway course
Construction Technology I, includes classroom and laboratory experiences concerned with the formation, installation, maintenance, and repair of buildings, homes, and other structures. A history of building construction to present-day applications emphasizing future trends and construction as a career. Provides instruction and practice in the use of working drawings and applications from the print to the work. Includes relationship of views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, materials list, architectural plans, geometric construction, three dimensional drawing techniques, and sketching will be presented as well as elementary aspects of residential design and site work. Areas of emphasis will include print reading and drawing, room schedules and plot plans. Examines the design and construction of floor and wall systems and student develops the skill needed for layout and construction of floor and wall systems from blueprints and professional planning documents. Instruction will be given in the following areas, administrative requirements, definitions, building planning, foundations, wall coverings, roof and ceiling construction, and roof assemblies. Students will develop an understanding and interpretation of the Indiana Residential Code for one and two-family dwellings and safety practices including Occupational Safety and Health Administration's Safety & Health Standards for the construction industry.

CONSTRUCTIN TECHNOLOGY II- at SVHS
Full-Year Course- 6 Credits
Prerequisite- Construction I- 11th or 12th grade
Directed Elective, Flex Credit, Career Pathway course

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

Career Cluster: Architecture and Construction-Career Pathway: Heavy Equipment

HEAVY EQUIPMENT OPERATION AND MAINTENANCE I- at Layne INC.
Full-year Course- 6 credits
Prerequisite- Senior or Junior, C average, Attendance, Transportation
Directed Elective or Flex Credit
This is a one year, three hour program for students in grade 11 and 12 who have at least a "C" average and excellent attendance (**no more than five** days absent the previous semester). This program is offered in partnership with Layne Inc. and will be offered at the Layne facility on Highway 37 between Paoli and Orleans. Students will study OSHA Safety, Excavator, Backhoe/Loader, Dozer, and Forklift operation and safety, Surveying and Construction Math. Students will have projects that allow hands-on operation of heavy equipment. Each unit must be successfully completed in sequence to continue in the program. Upon successful completion of the program, students will receive an OSHA Safety Certificate.

HEAVY EQUIPMENT OPERATION AND MAINTENANCE II- at Layne INC.
Full-year Course- 6 credits
Prerequisite- Heavy Equipment I, C average, Attendance, Transportation
Directed Elective or Flex Credit
This is a one year, three hour program for students in grade 12 who have at least a "C" average and excellent attendance (**no more than five** days absent the previous semester). This program is offered in partnership with Layne Inc. and will be offered at the Layne facility on Highway 37 between Paoli and Orleans. Students will review material from Heavy Equipment I, OSHA Safety, and Surveying. Students will study Advanced Surveying and Construction Math for using formulas for dirt moving, concrete placing, equipment cost, etc. Students will have projects that allow hands-on operation of all the equipment in Heavy Equipment I as well as Crane operations. Each unit must be successfully completed in sequence to continue in the program. Upon successful completion of the program students will have the opportunity to prepare and pre-test for their CDL.

Career Cluster: Public Safety- Career Pathway: Fire and Rescue

Fire and Rescue I-at SVHS: FIRE 100, FIRE 116, FIRE 117, PSAF 115 Ivy Tech
Full Year Course- 4 credits
Prerequisites: 10, 11, 12
Directed Elective, Flex Credit, Career Pathway Course
Dual Credit Course- None (co-requisites for FIRE 116 and 117)
Use Criminal Justice to complete a pathway in this field
In the Fire Sciences program the students will learn the structure, operations, and basic tactical knowledge for fire and rescue emergencies through simulated laboratory experience which includes life fire training. They will also learn the importance of team building, command structure, physical fitness, and professionalism as it pertains to the fire service.
Next year, Fire and Rescue II will be added to the curriculum.

** CPR and First Aid certification test is available for students in the fire and rescue pathway.

Career Pathway: Criminal Justice

Criminal Justice-at Paoli
Full Year Course- 4 credits
Prerequisites: 11, 12
Directed Elective, Flex Credit, Career Pathway Course
Criminal Justice introduces specialized classroom and practical experiences related to public safety occupations such as law enforcement, loss prevention services, and homeland security. An introduction into the purposes, functions, and history of the three primary parts of criminal justice system as well as an intro to the investigative process is covered.

Career Cluster: Health Science- Career Pathway: Health Care Specialist

HEALTH SCIENCE I- HLHS 100 Ivy Tech
Full Year Course- high school 2 credits, 3 dual credits
Prerequisite- 10th grade
Directed Elective, Flex Credit, or Career Pathways course
Dual Credit Course- No qualifications
Health Science Careers content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, an introduction to health care systems, anatomy, physiology, and medical terminology. Leadership skills developed through HOSA participation are also included. Lab experiences are organized and planned around the activities associated with the student's career objectives. Job seeking and job maintenance skills, personal management skills, self-analysis to aid in career selection and completion of the application process for admission into a post-secondary program of their choice are also included in this course

MEDICAL TERMINOLOGY- HLHS 101 Ivy Tech
Full Year Course- high school 2 Credits, 3 dual credits
Prerequisite- 11th or 12th grade, Corequisite- Health Science I
Directed Elective, Flex Credit or Career Pathways course
Dual Credit Course- Test score qualifications: PSAT/SAT- Reading 46/460 Writing 46/460, ACT- English 17 Reading 18, or Accuplacer- Sentence Skills 80 Reading 76 These scores are subject to change if Ivy Tech changes the requirements

Medical Terminology prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study of health and medical abbreviations, symbols, and Greek and Latin work part meanings taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal or written information. Students have the opportunity to acquire skill sin interpreting medical records and communications accurately and logically.

HEALTH SCIENCE EDUCATION II (CNA)
Prerequisite- 12th grade, Health Science I
Directed Elective, Flex Credit or Career Pathways course
Practicum (Internship)
Health Science Education II –is an extended laboratory experience at the student's choice of clinical site designed to provide students the opportunity to assume the role of a health care provider and practice technical skills previously learned in the classroom, including information on the health care system and employment opportunities at a variety of entry levels, an overview of the health care delivery systems, health care teams and legal and ethical considerations. It prepares students with the knowledge, skills and attitudes essential for providing basic care in extended care facilities, hospitals and home health agencies under the direction of licensed nurses-CHANGE THIS TO BE SPECIFIC TO THE SPECIALITY. This course also provides students with the knowledge, attitudes, and skills needed to make the transition from school to work in health science careers, including self-analysis to aid in career selection, job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a postsecondary program. HOSA, the health science student organization, encourages development of leadership, communication, community service and health care related skills. HSEII students must complete the ISDH 105 Hour Certified Nursing Assistant course and pass the state CNA exam

** CNA certification test is available for students in the health pathway.

HEALTHSCIENCE EDUCATION II (PHARMACY)
Prerequisite- 12th grade, Health Science I
Directed Elective, Flex Credit or Career Pathways course
Practicum (Internship)
Health Science Education II: Pharmacy is an extended laboratory experience at the student's choice of clinical site; usually pharmacies found in grocery and drug stores or hospitals, designed to provide students the opportunity to assume the role of a pharmacy technician and practice technical skills previously learned in the classroom, including information on the health care system and employment opportunities at a variety of entry levels, an overview of the health care delivery systems, health care teams and legal and ethical considerations. It prepares students with the knowledge, skills and attitudes essential for providing basic care in extended care facilities, hospitals and home health agencies under the direction of licensed pharmacists. In addition, students will learn to record patient information, count tablets and measure medications, mix medications or ointments, package and label prescriptions, accept payment and process insurance claims, and do routine pharmacy tasks such as organizing medications, taking phone calls, cleaning, and customer service. This course also provides students with the knowledge, attitudes, and skills needed to make the transition from school to work in health science careers, including self-analysis to aid in career selection, job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a post-secondary program. HOSA, the health science student organization, encourages development of leadership, communication, community service and health care related skills

Career Cluster: Hospitality and Human Services- Career Pathway: Culinary Arts

INTRODUCTION TO CULINARY ARTS AND HOSPITALITY- at SVHS; HOSP 101 Ivy Tech
Full Year Course- high school 2 credits, 2 dual credits
Prerequisite- Nutrition
Directed Elective, Flex Credit, or Career Pathways course
Dual Credit- Test score qualifications: PSAT/SAT- Reading 46/460 Writing 46/460, ACT- English 17 Reading 18, or Accuplacer- Sentence Skills 80 Reading 76 These scores are subject to change if Ivy Tech changes the requirements
The student will develop an understanding of the basic principles of sanitation and safety and be able to apply them in the food service industry. To reinforce personal hygiene habits and food handling practices that will protect the health of the consumer. The student will learn up to date information on handling foods, from receiving and storing to preparing and serving. They will learn science based information on how to run a safe establishment. At the completion of the course the student will be certified in CPR as well as sanitation certification through The National Restaurant Association Servsafe Program. To receive a certificate the student must pass a Servsafe test.

CULINARY ARTS and HOSPITALITY MANAGEMENT – at SVHS; HOSP 102 Ivy Tech
Full-Year Course- high school 4 credits, 3 dual credits
Prerequisite- Introduction to Culinary Arts and Hospitality, 10, 11, 12 grade
Directed Elective, Flex Credit, Career Pathway course
Dual Credit course- must first have HOSP 101 and Test score qualifications: PSAT/SAT- Math 46/460, ACT- Math 18, or Accuplacer- ELEM 40 or ARITH 60
Students must have taken Hospitality 101. Also after 2 weeks of school, we start Servsafe Certification and Safety. Students will not be able to sign up for Hospitality 102 after day 15 of school unless they have already earned a Servsafe Certification. We will be different fund raisers to pay for membership to FCCLA for all students. We work on different types of culinary events and students are not allowed to participate unless they are FCCLA members. Mrs Wray is chairperson over the occupational chapter and will hold meetings during class. Students will also be working with Mrs. Renner and the SV chapter of FCCLA.

ADVANCED CULINARY ARTS-at SVHS; HOSP 103 Ivy Tech
Full-Year Course- high school 4 Credits, 3 dual credits
Prerequisite- Culinary Arts and Hospitality Management, recommended grade level 12
Directed Elective, Flex Credit, Career Pathway course
Dual Credit course- must have HOSP 102 and test qualifications
Advanced Culinary Arts prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the food industry, including (but not limited to) food production and services; food science, dietetics, and nutrition; and baking and pastry arts. Major topics for this advanced course include: basic baking theory and skills, introduction to breads, introduction to pastry arts, nutrition, nutrition accommodations and adaptations, cost control and purchasing, and current marketing

and trends. Instruction and intensive laboratory experiences include commercial applications of principles of nutrition, aesthetic, and sanitary selection; purchasing, storage, preparation, and service of food and food products; using and maintaining related tools and equipment; baking and pastry arts skills; managing operations in food service, food science, or hospitality establishments; providing for the dietary needs of persons with special requirements; and related research, development, and testing. Intensive laboratory experiences with commercial applications are a required component of this course of study. Student laboratory experiences may be either school-based or "on-the-job" or a combination of the two. *Advanced Culinary Arts* builds upon skills and techniques learned in *Culinary Arts and Hospitality Management*, which must be successfully completed before enrolling in this advanced course. Work-based experiences in the food industry are strongly encouraged.
A standards-based plan guides the students' laboratory and work-based experiences. Students are monitored in these experiences by the *Advanced Culinary Arts* teacher. Articulation with postsecondary programs is encouraged.

** ProStart certification test is available for students in the welding pathway.

Career Cluster: Manufacturing- Career Pathway: Advanced Manufacturing

INTRODUCTION TO ADVANCED MANUFACTURING AND LOGISTICS
Full-Year Course- 2 credits
Prerequisite- None
Directed Elective, Flex Credit, or Career Pathways course
Introduction to Advanced Manufacturing and Logistics is a course that specializes in how people use modern manufacturing systems with an introduction to advanced manufacturing and logistics and their relationship to society, individuals, and the environment. Students apply the skills and knowledge of using modern manufacturing processes to obtain resources and change them into industrial materials, industrial products and consumer products Students investigate the properties of engineered materials such as: metallics; polymers; ceramics; and composites. Students study six major types of material processes: casting and molding; forming; separating; conditioning; finishing; and assembling. After gaining a working knowledge of these materials,
Students are introduce to advanced manufacturing, logistics, and business principles that are utilized in today's advanced manufacturing industry. Students gain a basic understanding of tooling, electrical skills, operation skills, inventory principles, MSDS's, chart and graph reading and MSSC concepts. There is also an emphasis placed on the flow process principles, material movement, safety, and related business operations. Students have the opportunity to develop the characteristics employers seek as well as skills that will help them in future endeavors.

ADVANCED MANUFACTURING I
Full-Year Course- 2 credits
Prerequisite- None
Directed Elective, Flex Credit, or Career Pathways course
Advanced Manufacturing I is a course that includes classroom and laboratory experiences in two broad areas: Industrial Technology/Software Controls and Manufacturing Trends. Industrial Technology and Software Controls covers wiring and schematic diagrams used to design, install, and repair electrical/electronic equipment such as wireless communication devices, programmable controllers. Course content will include basic theories of electricity, electronics, digital technology, and basic circuit analysis. Activities include experiences in: soldering; use of an oscilloscope, meters, signal generators and tracers; breadboarding; circuit simulation software; and troubleshooting. Understanding and using the underlying scientific principles related to electricity, electronics, circuits, sine waves, and Ohm's Law are integral to this course. Manufacturing Trends covers basic concepts in manufacturing operations and plant floor layout in the production environment. Applications of Computer Numerical Control (CNC), and lathe and turning operations are developed as a foundation for machining operations. Coordinate system concepts are introduced as relevant to machining processes, as well as fluid and mechanical power, welding, and lean manufacturing. Fluid power concepts will include hydraulic components and circuits, laws and principles, fluid power controllers, and the construction of systems. In the mechanical power portion of the course, students will learn about machine specifications, basic forces, friction, simple machines, motors, and motor controls. Students will also be introduced to lean manufacturing where they will study concepts including: lean goals, product quality, eliminating waste, cost effectiveness, lean concepts, resource planning, continuous improvement, and the various advantages of lean manufacturing. This course includes MSSC concepts required to earn MSSC certification.

Career Cluster: Manufacturing-Career Pathway: Welding Technology

WELDING TECHNOLOGY I- at Paoli; INDT 114 Ivy Tech
Full-Year Course 4 credits
Prerequisite- 10, 11, 12 grade
Directed Elective, Flex Credit, or Career Pathway course
Dual Credit Course- No qualifications
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, Design, Research or Engineering. Emphasis is placed on safety at all times. OSHA standards and guide lines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for college and career success.

** American Welding Society certification test (Level I- Entry Welder) is available for students in the welding pathway.

Career Cluster: STEM- Career Pathway: PLTW- Engineering

CIVIL ENGINEERING AND ARCHITECTURE
Full Year Course- 2 credits
Prerequisite- IED and POE
PLTW- Directed Elective
Dual Credit Course
Civil Engineering and Architecture introduces students to the fundamental design and development aspects of civil engineering and architectural planning activities. Application and design principles will be used in conjunction with mathematical and scientific

knowledge. Computer software programs should allow students opportunities to design, simulate, and evaluate the construction of buildings and communities. During the planning and design phases, instructional emphasis should be placed on related transportation, water resource, and environmental issues. Activities should include the preparation of cost estimates as well as a review of regulatory procedures that would affect the project design.

INTRODUCATION TO ENGINEERING DESIGN-at SVHS; PLTW DESN 102 Ivy Tech
Full Year Course- 2 Credits
Prerequisite- None
PLTW- Directed Elective or Flex Credit
Quantitative Reasoning
Dual Credit Course- No qualifications
This is a class for students who are considering a career in Engineering or Technology. This class will introduce student to problem-solving and the design process. The class projects will be created on the computer using the Inventor software. Students will create and test 3-D (objects) working solutions on the computer. This class is the first level course for a pre-engineering curriculum called Project Lead the Way. The major focus of the course is learning how to take an idea through a design process that will eventually be manufactured or produced. You will learn about various aspects of engineering and engineering design, such as: The Role of an Engineer, The Design Process, Product Design Product Analysis and Improvement Designing you will apply what you learn through various activities, projects, and problems. As you learn about various aspects of engineering and engineering design, such as how engineers communicate through drawing, you will apply what you learn through various activities, projects, and problems.

PRINCIPLES OF ENGINEERING-at SVHS; PLTW DESN 104 Ivy Tech
Full Year Course- 2 Credits
Prerequisite- Introduction to Engineering Design
PLTW- Directed Elective or Flex Credit
Dual Credit Course- Prerequisite DESN 102

This course is designed to help students understand the field of engineering and engineering technology. This class is the second level course for a pre-engineering curriculum called Project Lead the Way. Students will explore various technology systems and manufacturing processes and 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.

Career Cluster: Transportation- Career Pathway: Automotive Technology

AUTOMOTIVE TECHNOLOGY- at Paoli; AUTC 100 Ivy Tech
Full-Year Course 4 credits
Prerequisites: 10, 11, 12
Directed Elective, Flex Credit, or Career Pathways course
Dual Credit Course- No qualifications
Automotive Technology is a NATEF/ASE certified program designed to prepare students to enter the automotive field as an entry-level automotive technician or service provider. Areas of study include engine rebuild, engine performance, braking systems, suspension systems, electrical systems, and air conditioning. Students expecting to succeed in this program should possess strong skills and understanding in mathematics, physical science, communication and computer applications and a strong desire to pursue a career in the automotive field.

** ASE certification test is available for students in the automotive pathway.

All Career/Technical Education programs are available to all students regardless of gender, national origin, race, color, religion, or disability and are funded in part through the Carl D. Perkins Federal Education Grant.

Please Note: These courses can change based on staffing. The requirements for dual credit courses could change at a later date.