

## PITTSFIELD HIGH SCHOOL GUIDANCE DEPARTMENT

Careful study of this pamphlet by you will result in a better insight into course content, objectives, and assignments in each subject area. The assignments and course content may vary from time to time, but are generally outlined below.

You should feel free to take this pamphlet home to your parents and discuss with them questions you have concerning your new schedule. You will be called individually to enroll for the classes you desire to take. Any questions or particular problems will be discussed at that time. Once you have enrolled in a class, no withdrawal from the class will be considered unless the teacher recommends it, or a justifiable reason is given.

### DESCRIPTION OF COURSES

#### AGRICULTURE

##### Introduction to the Agriculture Industry (Ag 1)

(1 credit)

Level: 9, 10, 11

Prerequisite: None

This introductory course provides an opportunity for students to learn how the agriculture industry is organized; the economic influences of agriculture at state, national, and international levels; and the scope and type of job opportunities in the agriculture field. Applications are presented both in agribusiness and production. The course will focus on basic concepts and introducing and developing basic skills in animal science, plant and soil science, agricultural mechanics, horticulture, agricultural resources, agribusiness management, and the National FFA organization. Students will start an SAEP and will be introduced to leadership, citizenship, and cooperation skills through the FFA.

##### Agricultural Science (Ag 2)

(1 credit)

Level: 10, 11, 12

Prerequisite: Intro. To Ag.

This course is built on the basic skills and knowledge gained from the introductory course. Major units of instruction include continuing emphasis on plant and soil science, advanced animal science and agricultural mechanics skills. Applied math/science skills are stressed throughout the course. Included in the course is continuation and expansion of the student's SAEP. Students will further develop leadership, citizenship, and cooperation skills through the FFA.

**Agribusiness Operations (Ag 3)**

**(1 credit)**

**Level: 11, 12**

**Prerequisite: Ag. Science**

**This course combines subject matter and planned learning experiences concerned with the principles and processes involved in conservation and/or improvement of natural resources such as air, forests, soil, water, fish, plants, and wildlife for economic and recreational purposes. Major units of instruction include an emphasis on agricultural electrification, surveying, advanced animal science, and agricultural mechanics skills necessary for maintaining and repairing equipment and/or facilities. Applied math/science skills are stressed throughout the course. Students will further develop leadership, citizenship, and cooperation skills through the FFA.**

**Agriculture Business and Management (Ag 4)**

**(1 credit)**

**Level: 11, 12**

**Prerequisite: Ag Operations**

**This course is designed to develop student knowledge and skills in the area of agribusiness operations and management. Instructional units include organization and functions of agriculture business, agricultural business math, agriculture business procedures including microcomputer applications and human relations skills, as well as sales related duties. Another goal of this course is to increase student knowledge and skills in appropriate agricultural products and service areas indicated by regional and/or state labor market data. Included in the course is continuation and expansion of the student's SAEP. Students will further develop leadership, citizenship, and cooperation skills through the FFA.**

**Horticulture Science**

**(1/2 credit)**

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

**Prerequisite: None**

**This introductory course consists of organized subject matter and practical experience concerned with the culture of plants used principally for ornamental and aesthetic purposes. Instruction emphasizes knowledge and understanding of the establishing, maintaining and managing ornamental horticulture enterprises involved in the production, processing, marketing, and servicing of ornamental horticulture products. Instruction will take place in the classroom, field, laboratory, and greenhouse. Included in the course is the development of an/or expansion of the student's SAEP. Students develop leadership, citizenship, and cooperation skills through the FFA.**

## ART

### Basic Art

(1 credit)

Level: 9, 10, 11, 12

Prerequisite: None

This is a first year basic art course for all high school students who have never taken an art course at the high school level. This course is required, with a passing grade, before a student may advance to the other courses.

This course goes along with the book Understanding Art. Starting with the elements of design and the principles of design, the students learn basic design techniques and advance to portraits, 1 point perspective, drawing landscapes and still-life. They learn how to use various art media such as ebony pencil, colored pencil, tempera paint, clay, ink, scratchboard, linoleum block, watercolor, etc.

### Painting & Drawing

(½ credit)

Level: 10, 11, 12

Prerequisite: Basic Art

In this art course, students learn to draw, paint and shade to make objects, people and landscapes look 3 dimensional. Students use pencils, pastel chalk, acrylic paint, and watercolor paints.

Students who have successfully completed Basic Art make take this class.

### The Study of Impressionism

(½ credit)

Level: 10, 11, 12

Prerequisite: Basic Art

A two dimensional design course. This course is a study of European and American art in the 1800's. Includes pre-Impressionism, Impressionism and Post Impressionism. Students paint a landscape, a still life, and do life drawing.

### Multi-Cultural Art

(½ credit)

Level: 10, 11, 12

Prerequisite: Basic Art

A two and three dimensional design course studying the art of India, Africa, Pre-Columbian art, the art of Islam, and Native American art. Projects include: weaving, clay, masks, sandpainting, plus more.

**Modern Art (1900 - 1940)**

**(½ credit)**

**Level: 10, 11, 12**

**Prerequisite: Basic Art**

**A study of Picasso, German Expressionism, and Frank L. Wright. Students paint, sculpt from plaster, and do a linoleum block print.**

**Portfolio Design**

**(½ credit)**

**Level: 11, 12**

**Prerequisite: Basic Art**

**Students will work toward assembling a body of work to present as a portfolio for talent grants and scholarships. Students will work on drawing, painting, sculpture, and print-making techniques.**

**Commercial Art**

**(½ credit)**

**Level: 10, 11, 12**

**Prerequisite: Basic Art**

**Layout and design, lettering, cartoons, interior design, jewelry making**

**Art of the Present**

**(½ credit)**

**Level: 10, 11, 12**

**Prerequisite: Basic Art**

**Art of 1940 to present day. Students will study abstract expressionism, new realism, Op art, Pop art and multi-media art. Students will make works in the style of the modern artists.**

**16<sup>th</sup> & 17<sup>th</sup> Century Art**

**(½ credit)**

**Level: 10, 11, 12**

**Prerequisite: Basic Art**

**The study of Baroque and Rococo art. Students will study the work of Rubens, Velazquez, Caravaggio, Rembrandt, and Goya. Projects will include a clay head and a lithograph print. There is a lot of drawing in this class.**

## BUSINESS AREA

### Keyboarding/Intro to Computers

(1/2 credit)

Level: 9, 10, 11, 12

Prerequisite: None

This course is for students who need to improve keyboarding skills before proceeding to additional computer courses. Students start from the beginning, with touch typing fundamentals and techniques stressed.

### Information Processing 1A

(1/2 credit)

Level: 9, 10, 11, 12

Prerequisite: Keyboarding/minimum of 25 words per minute using proper technique

*Required before taking any other course listed in the business area with the exception of Accounting and Consumer Education.* Uses Microsoft Word and excel to create business documents. It is recommended that students take Info Processing 1B as a follow up to this course.

### Information Processing 1B

(1/2 credit)

Level: 10, 11, 12

Prerequisite: Keyboarding & Info Processing 1A

Highly recommended that this course be taken after Info Processing 1A. Students will learn to use Microsoft Access (database) and PowerPoint (presentation) software as well as integration of all Office Suite programs.

### Web Design 1

(1/2 credit)

Level: 10, 11, 12

Prerequisite: Info Processing 1A

Students will use DreamWeaver to create web pages. Correct design as well as implementation will be studied. In addition, students will get a working knowledge of HTML code.

### Web Design 2

(1/2 credit)

Level 10, 11, 12

Prerequisite: Keyboarding, Info 1A, Web Des 1

This course is intended to further develop skills in Web Site development and design. We will first use Dreamweaver 2004 MX to learn some additional skills.

### **Digital Photography & Design**

(½ credit)

**Level: 10, 11, 12**

**Prerequisite: Info 1A & MultiMedia (preferred)**

**Good photography design and camera use will be the main “focus” of this course. Each student must provide a digital camera for class use. Students will progress from basic photography to using the Manual modes available. Photo manipulation and organization will also be studied.**

### **MultiMedia Design**

(½ credit)

**Level: 11, 12**

**Prerequisite: Info Process 1A**

**The study and use of Photoshop image-editing software will be taught throughout this course. Students will also do a short video editing project. This is a fun course that teaches skills that will be used throughout the other computer courses.**

### **Desktop Publishing**

(½ credit)

**Level: 10, 11, 12**

**Prerequisite: Info 1A & MultiMedia (preferred)**

**Adobe InDesign will be used in this course to teach page layout such as that used in Yearbook and in the field of graphic design. Students will create brochures, business cards, advertisements and programs. It is recommended that students who plan to enroll in Yearbook take this course.**

### **Computer Projects**

(1 credit)

**Level: 11, 12**

**Prerequisite: Info Processing 1A, Desktop Publishing, MultiMedia Design, Web Design**

**Students plan the projects for the entire school year. These will be real-projects that will be offered to students for purchase or will be used within the community or school. Examples are: All-School memory CD/Video, Senior Memories CD/Video, teaching courses to community adults, planning and designing a senior memory book.**

**Webmaster****(1 credit)****Level: 11, 12****Prerequisite: Info Processing 1A, Web Design 1 or equivalent experience needed**

Students work independently in designing and adding content to the PHS Web Site. This involves the use of Dreamweaver 2004 MX. These students are selected based on background, ability to work alone, willingness to gather data, and attention to detail

**Computer Programming****(½ credit)****Level: 11, 12****Prerequisite: Info Processing 1A**

Visual Basic will be used to study computer programming. Students will learn how to create their own computer programs. Having a solid math background is a help.

**Yearbook****(1 credit)****Level: 11, 12 Prerequisite: Info 1A**

The PHS Yearbook will be created in this course. Students must be willing to work outside of class in order to meet required deadlines. It is recommended, but not required that Desktop Publishing and Digital Photography & Design be taken prior to this course. Students may enroll in this course two years for credit. A great way to get involved with creating a book of high school memories.

**OfficeTechnology****(½ credit)****Level: 11, 12****Prerequisite: Information Processing 1A & 1B (preferred)**

To prepare students to be responsible for a variety of administrative and office duties for supervising and managing an office efficiently. Students will learn office and organizational skills along with improving communication and interpersonal skills. Students will integrate the use of Word, Excel and Access along with 10-key operation and correct filing techniques.

**Accounting 1****(1 credit)****Level: (10 with consent) 11, 12****Prerequisite: None**

This class introduces basic accounting concepts and career options, then progresses through three complete accounting cycles—a proprietorship, partnership, and corporation. This class will prepare students for entry-level accounting positions and for further study in accounting.

**Video Projects****(½ credit)****Level: 12****Prerequisite: MultiMedia Design (or instructor permission)**

The PHS Senior Memory Video as well as an all-school video will be created. The PHS web site will be maintained. Other additional activities may be done throughout the semester as well. Students must be able to work together as a team to produce a quality product for distribution.

**Consumer Education****(½ credit)****Level: 12****Prerequisite: None**

The consumer must wage a constant battle against the rising surge of inflation and the constantly changing, often confusing world of goods and services. The consumer education course is an aid in the development of buying skills which are necessary in today's marketplace. The course covers all aspects of buymanship, including housing, food, transportation, clothing, health services, drugs, cosmetics, recreation, furnishings, and appliances. Also included is information on credit, savings, and investments, insurance (health and auto), and taxes.

**Computer Research****(1 credit)****Level: 11, 12**

This course is designed for Juniors or Seniors interested in pursuing Computer topics other than those being taught in the traditional classes. Students will be required to complete an application form and write a one-page proposal explaining what they would like to accomplish by taking this course and how they plan to accomplish it. This could include software, hardware, or certification programs.



## DRIVERS EDUCATION

### Classroom and Behind the Wheel Driver Education

Every Illinois High School student must take Driver Education in order to graduate from High School in the State of Illinois.

Students are allowed to enroll in the classroom portion once they turn 14, and have received a passing grade in at least eight courses during the previous two semesters.

He/She must pass 30 classroom hours of instruction. Once they turn 15 years of age, and have passed Drive Education (classroom) they can receive a learner's permit. Once they have a learner's permit they will have to pass 6 hours of behind the wheel training with the High School Driver Education instructor.

In order to receive an Illinois drivers licence, they must have passed both sections of Driver Education and have held their learner's permit for nine months, have 50 hours or driving time with a parent or guardian (10 hours must be night time driving), be at least 16 years of age.

## ENGLISH

### English I

(1 credit)

English I classes will begin with language analysis (study of grammar, usage, mechanics, etc.). Writing skills and strategies will be discussed and practiced. Students will study the writing process (developing and organizing ideas, writing, analyzing, proofreading, revising, and finalizing copy) through hands-on practice on numerous essays and articles. Students will also study two novels during this semester: *To Kill a Mockingbird* by Harper lee and *The Adventures of Huckleberry Finn* by Mark Twain. Each novel will require an essay discussing and analyzing themes common to the era and genre.

The second semester will include works from different genres of literature and a continuing of writing. Students will read, analyze, and discuss short stories, drama (including Invasion from Mars by Howard Koch, Twelve Angry Men by Reginald Rose, and Romeo and Juliet by William Shakespeare), and poetry.

Writing assignments will include personal essays, responsive essays, opinion papers, analytical essays, comparative essays, and a research paper. Through these essays students will develop concepts of analytical and creative thought, voice, style, and Standard English usage. This course is writing intensive and meets Illinois Graduation Requirements.

Vocabulary Workshop and Accelerated Reader is required and will be ongoing throughout both semesters.

**English II & III****(1 credit each)****Level: 10, 11****Prerequisite: English I**

**English II and III emphasize a development of proficiency in using the English language. An appreciation and enjoyment of good literature is also developed. Reviews of grammar, practice in writing, and oral recitation are used to aid the student in using correct English. Selected readings of poems, short stories, novels, plays, and other important literary works develop the students' appreciation of good literature. Assignments will vary with the particular area of English or literature being studied.**

**English IV****(1 credit)****Level: 12****Prerequisite: English I, II, III**

**English IV is tailored for students who are seeking a vocational direction. The first quarter is devoted to aptitude tests, career research, and student power point presentations featuring one or more career options. Students present the duties, working conditions, salary, job availability and education level necessary to achieve their selected careers. They are also asked to examine their personal traits and to set long and short term goals. English IV students are required to work closely with the Guidance Department for scholarships, loans and college admission procedures.**

**Second quarter students submit cover letters and resumes' to community businesses which are similar to those in which they would like to work. Call backs, interviews and real life job search skills are used to secure a job shadowing opportunity. They are required to keep daily logs and to submit a written assessment as well as a classroom presentation about their overall job shadowing experience. Employers evaluate the students and the students assess the suitability of her or his chosen career.**

**The second semester involves continuing post high school plans. Classroom activities are geared to improving English skills. Modern American literature is studied. The personal lives and works of Jack London, Ernest Hemingway, John Steinbeck, William Faulkner and Kate Chopin are used to develop themes including the Great Depression, the shifting nature of race and interpersonal relationships, and other realities of modern American culture. Eight novels, extended research papers, essays, vocabulary tests and response papers are also used throughout the course of the year. This course is writing intensive and meets Illinois Graduation Requirements.**

**College English for Juniors****(1 credit)**

**Level: 11**

**Prerequisite: English 1, 2**

**College English for Juniors focuses on an in-depth study of American literature, novel reading, test taking skills, vocabulary, essay writing and revision, critical thinking exercises, and other subjects needed to pursue a four-year liberal arts or science degree.**

**College English for Seniors**

**(1 credit)**

**Level: 12**

**Prerequisite: English 1, 2, 3,**

**College English for Seniors focuses on an in-depth study of the genres, history, and themes of British Literature, starting with the legends of Old English and progressing through the works of the Renaissance, the Romantics, the Victorians, and the Modern and Post-Modern periods. An intense study of William Shakespeare's plays *Macbeth* and *Hamlet* is also included. Vocabulary and Accelerated Reader requirements are also a part of the curriculum. Short response papers, various essays and articles, primary and secondary research papers, presentations, and a major research paper will also be completed over the course of the year and will serve to develop thought, voice, style, and Standard English usage. This course is writing intensive and meets Illinois Graduation Requirements.**

**Journalism**

**(1 credit)**

**Level: 11, 12**

**Prerequisite: Info Processing 1A, "B" average or above in English, and Desktop Publishing recommended**

**Students will write copy, captions, conduct interviews, sell advertisements, design layout, and take pictures for the PHS Yearbook. The ability to work well with others, take on responsibility, meet deadlines is a must. Students must be willing to work outside of class to gather information and take pictures as needed.**

**Speech**

**(½ credit)**

**Level: 10, 11, 12**

**Learning to speak before an audience is the major emphasis of this class. Students will prepare and deliver speeches of information, demonstration, and persuasion. Extemporaneous and impromptu speaking will also be included in the examination of correlating thinking and speaking. Written work is required in the course also.**

**Drama**

**(½ credit)**

**Level: 10, 11, 12**

**Drama presents the practical tools and information needed to understand theatre and performing arts. Students will study the history of theatre, theatre terminology, and the skills related to performance. This class involves the expressive use of voice and body, stage orientation, characterization, and taking direction constructively.**

**Great Novels of the Last Two Centuries**

**(½ credit)**

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

**Prerequisite: None**

**This course is designed for the student who is an avid reader and who is interested in exploring American, British, and World literature from the last two centuries. The course work will focus not only on reading but also on analysis and discussion of the themes and other literary aspects associated with each novel. Students will be expected to analyze the novels and complete several writing projects based on their analysis of the characters, themes, and symbolism among other aspects of each work studied. In addition to written projects on each novel read, students will keep an ongoing journal of their reading progress during the semester.**

**This course requires students to read ten novels over the span of a semester. Students will read five novels as a part of a group Literature Circle during the first quarter and will individually choose another five novels (from a list provided) for a more individualized reading experience during the second quarter. This course is writing intensive and meets Illinois Graduation Requirements.**

**Creative Writing**

**(½ credit)**

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

**Prerequisite: None**

**The purpose of this course is to give the beginning writer practice in the writing of strong, cohesive, effective, and creative fiction and poetry. By attending to matters of pacing, description, clarity, imagery, and sound, the student will be able to improve his/her writing in general regardless of the aim or audience.**

**The first quarter will be dedicated to writing short fiction. Students will discuss fiction and experiment with about 7-10 short writing exercises. These exercises lead directly into the writing of a short story and then a second short story. These two stories will be workshoped and revised accordingly.**

**The second quarter will be dedicated to the writing of poetry. Students will write, workshop, and revise 8 -9 poems, experimenting with different modes and forms of poetry during the quarter.**

**The final exam will consist of a final portfolio of either short fiction or poetry in a final, revised, published format. This course is writing intensive and meets Illinois Graduation Requirements.**

**Creative Writing II**

**(½ credit)**

**Level: 10, 11, 12**

**Prerequisite: Creative Writing & consent of instructor**

**This course is an individual study course for the advanced creative writing student. Students will develop and present a plan for the semester that concentrates on a specific genre of writing with identifiable goals. Students will be responsible for developing a portfolio of their writing in accordance with their plan. Students will focus on submitting work to be published in various sources. A log of submissions and responses along with a final portfolio that adheres to the initial plan will determine the final grade. This course is writing intensive and meets Illinois Graduation Requirements.**

**Spanish 1**

**(1 credit)**

**Level: 9, 10, 11**

**Prerequisite: None**

**Spanish 1 is an introduction to the Spanish language. You will learn how to read, write, and speak Spanish using the present tense. Spanish I has a large focus on vocabulary building.**

**Spanish 2**

**(1 credit)**

**Level: 10, 11, 12**

**Prerequisite: Spanish 1**

**Spanish 2 has its focus in grammar. Through grammar we will also improve upon conversational skills. You will learn about the countries that use the Spanish language. Spanish 2 also continues with vocabulary building.**

**Spanish 3**

**(1 credit)**

**Level: 11, 12**

**Prerequisite: Spanish 2**

**Spanish 3 will combine the skills learned in Spanish 1 and 2 and apply them to practical lessons. In the spring, Spanish 3 teaches the 4<sup>th</sup> graders at PCS some beginning Spanish. The past tenses are a big focus in this level.**

**Spanish 4**

**(1 credit)**

**Level: 12**

**Prerequisite: Spanish 3**

**Spanish 4 focuses on composition, conversation, and literature. Spanish 4 also teaches the 4<sup>th</sup> graders some beginning Spanish in the spring.**

**FAMILY & CONSUMER SCIENCES**

**Intro to Family and Consumer Sciences**

**(1 credit)**

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

**Prerequisite: None**

**This class is the prerequisite for other Family and Consumer Sciences courses. Students in this class will learn practical skills for making decisions at home, school, and in the workplace and meet the challenges of their daily lives with confidence.**

**Creative Arts**

**(½ credit)**

**Level: 10, 11, 12**

**Prerequisite: None**

**This is a semester class giving students an imaginary or creative flair on projects with instructor approval. Students' grades will be composed of projects, demonstrations (one per quarter on a skill not previously demonstrated by another student), tests and quizzes, and a daily work grade. Students will be responsible for providing all supplies to complete projects.**

**Clothing & Textiles (1 year)**

**(1 credit)**

**Level: 10, 11, 12**

**Prerequisite: Intro to Family & Cons. Science with a passing grade**

**This class is designed for beginning and experienced sewing students. A step-by-step, easy to follow format allows students to work at their own pace as they experience the fun, excitement, and creativity of sewing.**

**Foods & Nutrition (1 year)**

**(1 credit)**

**Level: 10, 11, 12**

**Prerequisite: Intro to Family & Cons. Science with a passing grade**

**This class focuses on selection, storage, preparation and serving foods while preserving nutrients, flavors, textures, and colors. Information is provided on environmental controls, supermarket trends, the latest on USDA safe handling practices to prevent foodborne illness, and common food myths and concerns.**

**Ethnic Foods**

**(½ credit)**

**Level: 10, 11, 12**

**Prerequisite: Intro to Family & Cons. Science & Foods & Nutrition**

Students' experiences with food from other cultures is increasing due to our highly mobile society and increasing exposure to world-wide mass communications. Understanding various cultures can be enhanced by the study of ethnic foods and the preparation of foreign foods. The choice and use of food preparation equipment in other cultures is greatly influenced by the kinds and availability of cooking fuels, religious dietary restrictions and the production and availability of food.

**Child Development (1<sup>st</sup> semester)**

**(1/2 credit)**

**Level 10, 11, 12**

**Prerequisite: None**

(1<sup>st</sup> semester) Why childhood is crucial to the development of a healthy adult personality is the focus of this class. The physical, intellectual, moral, social and emotional development from birth to age six is covered in depth. Emphasis is placed on brain development, the importance of play and family dynamics as related to the care and guidance of children.

**Child Development (2<sup>nd</sup> semester)**

**(1/2 credit)**

**Prerequisite: Child Development 1<sup>st</sup> semester**

Real life experiences, in as much as is possible, is the ultimate in learning. This course is a practicum and enables the high school learner to put to use what has been learned in previous Child Development classes. The planning and implementing of a daily schedule, room arrangement, age appropriate activities and all the responsibilities and organization that are necessary for an effective child care/early learning program are part of the class expectations.

**Parenting**

**(1 year)**

**(1 credit)**

**Level: 10, 11, 12**

**Prerequisite: None**

This class helps students learn the demands of parenting as well as the rewards parenting offers. It reflects a stronger emphasis on parenting skills with such changes in today's world as peer violence, more single-parent and dual-career families, and encourages moral and character development.

**Adult Living**

**(1/2 credit)**

**Level: 11, 12**

**Prerequisite: None**

**This class involves using a problem solving approach that emphasizes life skills as related to interpersonal relationships. Using various resources to accomplish personal and family goals are considered. Decision making, coping and personal survival skills necessary to function in the modern world are integrated into the course of study.**

**Living Environments**

**(½ credit)**

**Level: 11, 12**

**Prerequisite: Home Ec I/ Art**

**This course of study includes history, design and building concepts, individual and family needs, social and cultural aspects and new trends and technology as related to the field of housing and home furnishings. Consumer issues, health, safety and security are integrated into each area of study. Classroom and lab experiences are designed for individual development and accountability and will provide basic knowledge in the field of Interior Design.**

**Work Based Experience(Tech Prep)**

**(1 credit)**

**Level: 11, 12**

**Prerequisite: Subject to Field of Choice**

**This is a school-to-careers program that prepares the student for success in job searches, resume' building and business protocol. Included is work site experience in the form of job-shadowing in Tech Prep approved fields. Employer's expectations, interview techniques, business ethics and legal issues in employment are some of the areas covered. Career outlook and development of the student's personal portfolio are included. Acceptance into this program is based partly upon a personal interview.**

**INDUSTRIAL ARTS**

**Industrial Technology**

**(1 credit)**

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

**Prerequisite: None**

**Industrial Technology is an orientation to industrial arts which includes drafting, woodworking, metals and electricity. This course is two semesters long in which the student will spend nine weeks in each of the four areas. The purpose is to introduce the student to industrial arts and then the student can choose the areas in which to advance.**

**Materials fee \$ 5.00 each nine weeks.**

**Woods 2**

**( ½ credit)**



**Level: 10, 11, 12**

**Prerequisite: Industrial Technology**

**This course covers topics that were introduced in Industrial Technology in greater detail. Machines and machining fundamentals will be stressed. Each student will complete various projects as assigned by the instructor. The cost of materials will be paid by the student.**

**Woods 3**

**(½ credit)**

**Level: 11, 12**

**Prerequisite: Woods 2 with a grade of C or better**

**This is an advanced woodworking class in which furniture making will be stressed. Students will also select from a variety of blueprints and build a piece of furniture. Students have the opportunity to select their own projects during the semester. Each student will be responsible for paying for the materials used. The cost will depend on the project chosen. Review of machine use & functions will accompany design & math emphasis.**

**Woods 4**

**(½ credit)**

**Level: 11, 12**

**Prerequisite: Woods 3**

**This is an advanced woodworking class in which furniture making will be stressed. Students will also select from a variety of blueprints and build a piece of furniture. Students have the opportunity to select their own projects during the semester. Each student will be responsible for paying for the materials used. The cost will depend on the project chosen. Flexibility for community service projects will be considered applicable towards the semester grade.**

**Drafting/Computer Drafting (CAD 1 & CAD 2)**

**(1 credit)**

**Level: 10, 11, 12**

**Prerequisite: Industrial Technology**

**This course covers elements of drafting as introduced in Industrial Technology. Topics from industrial technology will be discussed in greater detail as well as some new elements. A major emphasis will include computer drafting using a popular drafting program. Materials fee \$ 8.00. Maximum 12 students per class.**

**Building & Trades**

**(1 credit)**

**Level: 11, 12**

**Prerequisite: Industrial Technology**

**This course will provide learning experiences to the different areas of today's construction. The areas to be covered will include how to use both hand and power tools safely and correctly, safety principals (OSHA), construction materials, framing procedures, interior and exterior finishing, foundation layout and concrete finishing, wiring, and new and different types of construction and construction methods and materials. This course will introduce the many different aspects of construction and give the student a chance to experience some of them.**

**Small Engines**

**(½ credit)**

**Level: 10, 11, 12**

**Prerequisite: Industrial Technology**

**This course includes the importance of small engines, theory of operation, carburetion, ignition and compression, and trouble shooting. Each student will completely disassemble, measure components and reassemble an engine. Each student will have the skills and knowledge necessary to overhaul a small engine.**

**Metals 2**

**(½ credit)**

**Level: 10, 11, 12**

**Prerequisite: Industrial Technology**

**This course is involved in the development of skills needed to efficiently and safely operate metal working machines. Subject matter includes: metal lathe operations, layouts with math & drawing, steel processing, sheet metal, soldering, metal bending, and thread cutting.**

**Metals 3**

**(½ credit)**

**Level: 10, 11, 12**

**Prerequisite: Metals 2/ Must have achieved a C or better in the 9 wk. session of metals in Ind. Tech.**

**Metals 3 develops skills, attitudes, and abilities needed to plan, design, and solve problems relating to metal working. The subject matter includes: pattern making, metals, alloys, welding, sheet metals, employment activities, use of metal working machines. The student must complete three basic projects.**

**Welding**

**(½ credit)**

**Level: 10, 11, 12**

**Prerequisite: Intro to Agriculture or Industrial Technology**

This course will provide students with an introduction to agricultural mechanics as it relates to agriculture business and management. Classroom and mechanics laboratory work will include developing basic skills in arc welding. MIG welding, Oxy-Acetylene welding and cutting, hot metal work, and cold metal work.

**Architectural Drafting**

**(1 credit)**

**Level: 10, 11, 12**

**Prerequisite: Industrial Technology**

Architecture is a class where the students design their own home. A complete set of plans is developed that could be given to a contractor to build from.

There will be field trips to local building projects, time spent designing your home, making a list of building materials needed to construct your new house and determining the cost to build. Time would be spent on computers as well, drawing and designing.

**MATHEMATICS**

**Fundamental Algebra**

**(2 credits)**

**Level: 9**

The following topics will be studied: integers, equations, factors and fractions, rational numbers, ratio, proportion, percent, equations and inequalities, functions and graphing, real numbers and right triangles, two-dimensional figures, three-dimensional figures and statistics and probability.

**Consumer Math**

**(½ credit)**

**Level: 11, 12**

**Prerequisite: Fundamental Alg., Geom. 1A, & Alg. IIA**

This is a semester class covering topics including: computing pay, computing tips, computing payroll deductions, health insurance, life insurance, budgeting, balancing checking accounts, simple and compound interest, and taking out loans.

**Tech Math**

**(½ credit)**

**Level: 11, 12**

**Prerequisite: Fund. Alg., Geom 1A, Alg IIA**

**This is a semester class covering topics including: Estimating distances, estimating travel times, determining fares, determining cost of trips, using maps, remodeling, drawing diagrams, probability, and different professions.**

**Algebra I**

**(1 credit)**

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

**Prerequisite: 8<sup>th</sup> grade pre-alg., PHS Fund. Algebra or recommendation of teacher**

**The following topics will be studied: operations with real numbers; using real numbers to simplify expressions; solve linear equations and inequalities; perform basic operations with polynomials; find the slope of lines, graph lines, and write equations of lines; solve systems of equations; and simplify and evaluate expressions involving exponents and radicals.**

**Algebra II A**

**(1 credit)**

**Level: 11, 12**

**Prerequisite: Fundamental Algebra & Geometry 1A**

**Algebra II A is designed for students who have taken fundamental algebra and geometry 1A. It covers basic algebra 2 topics such as equations of lines, simplify and solve linear and quadratic equations, and simplify rational and radical expressions.**

**Algebra II**

**(1 credit)**

**Level: 10, 11, 12**

**Prerequisite: Algebra 1, Geometry**

**Algebra 2 is a continuation of the skills in Algebra 1 using real numbers to simplify expressions, solve linear equations, write and graph linear equations, solve problems involving rates and distance, cost, area and perimeter, use basic operations with polynomials, solve and graph quadratic equations, simplify radical expressions and solve radical equations, simplify complex expressions and solve problems involving complex numbers, use scientific notation, and simplify rational expressions.**

**Geometry 1A**

**(1 credit)**

**Level: 10, 11, 12**

**Prerequisite: Algebra 1**

The following topics will be studied: language of plane geometry, angles, polygons and polyhedrons, transformations, triangles and inequalities, congruent triangles, parallel lines, properties of quadrilaterals, perimeter and area, similarity, properties of right triangles, and circles.

**Geometry**

**(1 credit)**

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

**Prerequisite: Algebra 1**

This course is primarily designed to be taken in the sophomore year. One year of Algebra with a grade of “C” or better is needed to take the course. The study plan of geometry is designed to develop deductive reasoning, logical thinking, understanding basic geometric facts, proper use of the compass and protractor to construct basic angles and polygons. Geometric problems are solved by proofs, geometric formulas and construction problems.

**Trigonometry**

**(½ credit)**

**Level: 11, 12**

**Prerequisite: Algebra 1, Geometry, Algebra 2**

In trigonometry, you will study basic trig ratios and applications of angles in both right and oblique triangles. You also will study circular trig functions, trig identities, and vectors. Trigonometry is a weighted class at PHS, so expect to work hard. Upon successful completion of this course, you will be prepared for College Algebra, Pre-Calculus, Calculus, Statistics, and/or other entry-level math courses in college.

**College Algebra**

**(½ credit)**

**Level: 11, 12**

**Prerequisite: Algebra 1, Geometry, Algebra 2**

College algebra topics include: review factoring polynomials; analytical geometry (conic sections-circles, parabolas, ellipses, hyperbolas); exponential functions; logarithmic functions; sequences and series. Upon successful completion of Algebra 2 and College Algebra, students will be prepared for many college math courses to include College Algebra, pre-calculus, statistics, calculus, and other college entry-level math classes.

**Calculus**

**(1 credit)**

**Level: 12**

**Prerequisite: Trig., College Algebra**

**A course designed to introduce the concepts of the derivative and integral to the student. The concepts of function and limit will, by necessity, precede the introduction of the derivative. Extensive study of the application, of the derivative as it applies to slope, tangent and normal lines, graphing and minimization and maximization problems.**

**Additional Algebra Topics**

**(1/2 credit)**

**Level: 10**

**Prerequisite: Algebra 1, Geometry, and at least currently enrolled in Algebra 2 or above**

**This is a semester class covering topics including: systems of equations, matrices and determinants, direct, inverse and joint variation, review solving linear equations and writing equations for lines, exponential functions and graphing, and polynomials.**

**Elementary Statistics**

**(1/2 credit)**

**Level: 10**

**Prerequisite: Algebra I, Geometry, and at least currently enrolled in Algebra 2 or above**

**Elementary statistics is offered as a dual credit class for credit at PHS and at JWCC if students choose to pay enrollment for JWCC credit. This is a study of the collection and interpretation of statistical data. Specific topics include description of sample data; probability; probability distributions; sampling; estimation; testing hypotheses; correlation; and regression.**

**AUTOMOTIVE TECHNOLOGY**

**Auto Tech 1**

**(2 credits)**

**Level: 11, 12**

**Prerequisite: Small Engines**

**A structured course with both classroom and shop activities planned for the students. It covers engines, ignition systems, electronic ignition systems, cooling systems, fuel systems, including some live work on our shop cars, drive lines, wheels, tires, hubs, brake systems, and electrical systems.**

**Auto Tech 2**

**(2 credits)**

**Level: 12**

**Prerequisite: Small Engines**

**This course is a much less structured course with emphasis placed on working on students' own cars. There will be some classroom activities on air conditioning, front suspension, steering, emission controls and electronics.**

**Night Auto Tech**

**(1 1/4 credits)**

**Level: 12**

**This class meets on Wednesday evenings. Similar to Auto Tech 2.**

**Advanced Small Engines**

**(1 credit)**

**Level: 11, 12**

**Prerequisite: Small Engines**

**This class is similar to Auto Tech 1 for small engines. Covering lawn mowers, yard and garden equipment, motorcycles, 3 wheelers, and 4 wheelers.**

## **MUSIC**

**Band**

**(1 credit)**

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

**Prerequisite: Director's permission**

**Band is a year course comprised of several different performing groups including concert band, marching band, basketball pep band, and various small ensembles. The curriculum is designed to promote learning of music theory, history, and appreciation through various rehearsals and performances. The band meets one period every other day, but some outside-of-school time will be required. Individual and/or small group lessons may be required.**

**Music Appreciation**

**(1/2 credit)**

**Level: 10, 11, 12**

**Students will study the basic mechanics of music; such as notation, instrumental, melody, harmony, texture and form. The study will include the various eras of music from the Middle Ages to Modern. Various styles; such as classical, opera, musical theater, country, and jazz will be included. The basic study will come from the textbook, Music: An Appreciation, and there will be reading, discussion, listening, videos, tests, and activities. Students will be expected to do one major presentation; such as a report, paper, power point presentation, or live performance with explanation.**

**Chorus**

**(1 credit)**

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

**This class is recommended for students with an ability and interest in singing. An appreciation of different types and periods of music is developed. It is essential that a student have a musical talent and ear for music. Class time is devoted to group singing, singing in parts, rudiments of singing and sight-reading are stressed. The better students are selected for ensemble and solo work. These students may perform before clubs and organizations; and if they desire may enter music contests. Practice outside of class time is essential. Attendance at the December holiday, spaghetti supper, and spring concerts is mandatory. Upper classmen also perform at Baccalaureate and Graduation exercises.**

**Music Theory**

**(½ credit)**

**Level: 10, 11, 12**

**Prerequisite: Chorus/Band**

**The students will learn about musical notation, such as rhythm notations and learning note values. He/she will learn how notes are grouped into measures according to time signatures; study notation of pitches on the staff, identify intervals (the relation between pitches). He/she will identify and work with key signatures, scales and key changes, learn about chords-build them, naming them, etc. Basic ear training, and keyboard harmony will be stressed. The student will compose simple selections, analyze hymns and transpose for various instrument combinations.**

**PHYSICAL EDUCATION**



## Physical Education

(1 credit)

Level: 9, 10, 11, 12

This course is required for all students. The main objective of physical education is to create and implement health-wellness goals for life.

## SCIENCES

### Health

(½ credit)

Level: 9

Required for all freshmen. This course is to make students aware that the decisions they make as young teenagers will have a profound effect on their physical, mental, and social health in the future. Also, many group discussions about all the wrong things some teenagers try to do and how important their self-esteem is when making these choices.

### Earth Science

(1 credit)

Level: 9, 10, 11, 12

Prerequisite: None

Earth Science is the study of the Earth and the universe around it. This includes a study of:

1. Geology (The study of the origin, history, and structure of the solid parts of the Earth and the forces that shape it.)
2. Oceanography (The study of the Earth's oceans)
3. Meteorology (The study of the Earth's atmosphere and weather)
4. Astronomy (The study of the universe beyond Earth)
5. Ecology (The study of the complex relationship between living and their environment. This includes organisms both alive and extinct.)

### Environmental Science

(½ credit)

Level: 9, 10

Prerequisite: None

This course emphasizes both class and laboratory work in the study of natural cycles and their interrelationships. During the semester students explore different communities and look at the balances achieved in each. We will also look at the effect of technology and population growth in our environment. By relating current material with classroom material students will gain a better understanding of our fragile environment.

### Physical Science

(½ credit)

**Level: 9, 10**

**Prerequisite: None**

This course is designed to provide for the development and understanding of concepts concerning the physical and chemical properties of matter and the study of energy and its effects on matter. Extensive lab activities are used to provide quantitative applications in science, including making accurate measurements, calculating using metric units and scientific notation, graphing and interpreting lab data, and problem solving.

**Biology**

**(1 credit)**

**Level: 9, 10**

**Prerequisite: None**

This course deals with living things and the role they play in our world. Microorganisms, plants, and animals are studied on the cellular level and as complete organisms. Other major topics of discussion include ecology, cell biology, genetics, evolution, taxonomy, and zoology. Activities include discussions, demonstrations, cooperative learning group work, and laboratory exercises.

**Anatomy and Physiology I**

**(1 credit)**

**Level: 10, 11, 12**

**Prerequisite: Biology 1**

Anatomy and Physiology is a science lab course. Anatomy and Physiology is the study of the structure and function of the human body. Topics of study include: scientific method, general anatomical terminology regarding directional and regional terms of the body, overview of all the systems, cells and cell processes (cell cycle and protein synthesis). Tissues, integumentary system, skeletal system, muscular system, cardiovascular system, and respiratory system.

**Anatomy and Physiology II**

**(1 credit)**

**Level: 11, 12**

**Prerequisite: Anatomy & Physiology I (grade must have been an "A" or "B" or permission from instructor)**

Anatomy and Physiology II is a science lab, college level course. A & P II is the study of the structure and function of the human body. Topics of study include: scientific method, basic chemistry, and genetics. The following systems of the body will also be studied: nervous system, central nervous system, senses, digestive system, urinary system, reproductive system, and lymphatic system.

A & P II is a weighted course

**Chemistry**

**(1 credit)**

**Level: 10, 11, 12**

**Prerequisite: Algebra II**

**Chemistry is the study of matter, energy, and their interrelationships. In this course, the topics of chemical measurement and calculations, matter, atomic structure, and mathematics of chemical formulas and equations, solubility and solutions, rates of reaction, chemical equilibrium, acid/base reactions, salts, titration, gases, kinetics, oxidation-reduction reactions, electrochemistry, introductory organic chemistry, nuclear chemistry, and semi-micro qualitative analysis will be covered. This course is currently offered as dual-credit in partnership with John Wood Community College.**

**Scientific Research**

**(1 credit)**

**Level: 12**

**Prerequisite: Chemistry, Algebra 2**

**Course will focus on the techniques used in scientific research. Statistics as they apply to scientific data, background acquisition (using telecommunications via Dialog), and analytical technology and theory will be some of the things explored during the course. Students will be required to do a research project and turn in a paper detailing the results of their research.**

**Physics**

**(1 credit)**

**Level: 12**

**Prerequisite: Trigonometry**

**Physics is a branch of science with a focus on the physical world, from the smallest subatomic particles, to the largest galaxies. This course will focus on matter and energy, and on the forces that shape them. A major component of the course is technological design and prototype testing, along with a focus on concepts from traditional physics units including classical and quantum mechanics, rotational kinematics, thermodynamics, and wave properties.**

**Zoology**

**(1 credit)**

**Level: 10, 11, 12**

**Prerequisite: Biology 1, Chemistry**

**An in-depth look at the “Animal” side of Biology. This course will include cell biology, genetics, taxonomy, invertebrate and vertebrate classification.**

**Health Occupations**

**(1/2 credit)**

**Level: 10, 11, 12**

**Prerequisite: Application filled out prior to class**



The course deals with the geographic location of the nations of the world. Certain continents are picked for specific study, as time permits. Many map studies are included. The main course objective is to teach geographic location of the countries and capitals of the world.

**Illinois History** (½ credit)

Level: 10, 11, 12 Prerequisite: None

History of Illinois from prehistoric times to present, with emphasis on Abraham Lincoln and Pike County History.

**Current Events** (½ credit)

Level: 10, 11, 12 Prerequisite: None

This is a discussion class which explores current events around the world. History, geography, government, and vocabulary are also taught to increase student understanding of the present.

**American History** (1 credit)

Level: 11 Prerequisite: None

This course is required for all juniors to take and pass. The history of the nation is covered from precolonial times to the present. Relative current events topics are tied to historical events. At times, outside readings and reports are included to additionally prepare the student to understand and complete the course.

**American Government** (½ credit)

Level: 12 Prerequisite: None

Required for all seniors to take and pass. The course requires a successful completion of tests covering the Declaration of Independence, the Flag of the United States, the Illinois Constitution, and the United States Constitution. Careful review of the textbook, supplementary materials, and good note taking are essential to successful completion of the course.

**A House Divided: The Civil War** (½ credit)

Level 11, 12 Prerequisite: None

**House Divided is a weighted, semester course open to juniors and seniors (and sophomores, with permission of the instructor). It is an in-depth look at the period from the end of the War of 1812 through the post Civil War period of Reconstruction, with special emphasis on the Civil War itself.**

**A New Nation**

**(½ credit)**

**Level: 11, 12**

**Prerequisite: None**

**“A New Nation” is a weighted, semester course open to juniors and seniors (and sophomores with permission of the instructor). It covers the exploration and colonization of North America, through the War of 1812, with special emphasis on the movement toward independence and the Revolutionary War.**