

PAXTON-BUCKLEY LODA HIGH SCHOOL

Course Descriptions for 2010-2011

English Course Descriptions

Reading Fundamentals. (Placement-Elective Credit) Reading Fundamentals is an additional course students take in conjunction with their required English course work. Placement is determined by local/state standardized tests, teacher recommendation and previous Language Arts/Reading/ English grades. Students who are placed in this class are typically 1-3 grades below grade level in reading ability. This course is designed for students who need to improve reading comprehension. Modules of study include content area reading, reading and writing connections, vocabulary enrichment, reading rate/ fluency, independent reading, and short essay writing. This class will also assist students in the work assigned in their required English course work.

Credit: ½

Freshman English 101. This is the first course of English for the high school student. It is designed to give the student a greater in depth look at language and literature. Greater emphasis will be on literature and writing. However, the course will also concentrate on grammar skills, mechanics, and vocabulary. The student will be able to accurately define the genres of literature and interpret and discuss short stories, poetry, novels. Compositions skills will emphasize skills building to long essays and research. Students will be able to define and recognize plagiarism and know how to avoid the act of plagiarizing.

Credit: 1

*Freshman English 102 Pre-AP. This freshman-level course is designed for the academically motivated student who intends to pursue the highest level of English courses offered. The focus of the class will be in reading and writing about literature. Literary selections will be chosen from a variety of genres including drama, short stories, novels, and epic poetry. This course is designed to prepare students for the rigor of the Advanced Placement courses offered to junior and senior students.

Credit: 1

*Sophomore English 201 Literature and Research. This is the second course of the English curriculum. English 201 is a writing intensive sophomore-level course. It concentrates on research and writing skills, grammar, mechanics, vocabulary, building an argument, analytical skills, and the oral presentation of ideas. Literature focuses on the study of mythology and legends, as well as an introduction to British Literature. Through the reading of literature, students will gain an appreciation of the writing process examining style, perspective, purpose, etc. Students will have a variety of writing opportunities to work on writing skills. Students will then use these skills in writing an extensive research paper in MLA format and present before the class.

Credit: 1

*Sophomore English 202 Pre-AP. This sophomore-level course continues studies began in English 102 Pre-AP. This is a writing intensive course with literature as the focus. Students will continue to write about literature both in and out of class. The study of writing and research skills will culminate in a research paper (MLA format). This course is designed to prepare students for the rigor of the Advanced Placement courses offered to junior and senior students.

Credit: 1

*Junior English 301 American Literature and Rhetoric. This is the third course of the English curriculum. English 301 is a junior-level writing intensive course. Literature focuses on the study of works written by American authors and traces the development of our literary heritage, history, and philosophy ranging from the early Puritan settlements to twentieth century novelists. Literature is used as a spring board for writing. Writing assignments include literary analysis, personal essays, and an extensive focus on persuasion. Student writing will also serve as a source for discussion and study of grammar and mechanics. Students will gain skills in writing and speaking to persuade effectively and logically. Students will learn to analytically and critically think about literature, writing, and the world around them. Study in grammar, syntax and writing will be geared towards preparation for the ACT.

Credit: 1

*Junior English 302 AP English Literature/Composition. This junior-level course is designed for the highly motivated, college-prep student who is interested in academic challenge and the possibility of earning college credit while in high school. This course will require intensive reading from many periods in history and extensive writing in several genres. The course will focus on the reading of many respected authors, mostly American, in a variety of genres, for the main purpose of studying the way writers use language for differing intentions. Study of literature will include focus on literary devices, such as figurative language, symbolism, imagery, etc. In-class and out-of-class writing assignments will analyze the use of language in such areas as punctuation, word choice, and structure and how such elements influence the tone, style, and purpose of the work. A research paper will also be literature-based.

Credit: 1

*Senior English 401 Literature and Composition. This is the fourth course of the English curriculum. English 401 is a senior-level writing intensive course. This course emphasizes literature analysis as well as analytical and persuasive writing. Through the process of critical reading and writing via a variety of rhetorical modes, students will become skilled in composing for different audiences and purposes. Students will learn to understand and appreciate the diverse ways authors make meaning in both oral and written text. Through a broad range of World Literature, including American and British Literature, students will improve their depth of reading and analysis skills. While providing research opportunities, this course will review and apply the MLA style of citation. Grammar and usage study is based on the students' own writing.

Credit: 1

*Senior English 401 Dual Credit Composition 101 and 102. This course is being offered for dual credit through Parkland College. This allows the students to take a Parkland College class to earn credit simultaneously toward both a high school diploma and a college degree. This class will enable students to develop in greater depth abilities in writing style and composition, interpretation and analysis, critical thinking and argumentation, grammar and mechanics, as well as research skills. Students will also improve their depth of reading and analysis skills.

Prerequisite: senior standing and enrollment in Parkland Community College, GPA of 3.0 and a passing score on the Parkland placement tests in reading and writing.

Credit: 1 unit/two semesters and up to 6 hours of college credit

*Senior English 402 AP English Language/Composition. This senior-level course is designed for the highly motivated, college-prep student who is interested in academic challenge and the possibility of earning college credit while in high school. The course will focus on the critical reading and careful analysis of a variety of literature in both discussion and writing. Although nonfiction works will be the primary focus through the reading of short stories and essays, fiction works will also be included to emphasize elements of nonfiction components in the fictional genre. In-class and out-of-class writing assignments will consider a work's structure, style, and themes as well as such elements as the author's voice. Coverage of writing assignments will include distinctive rhetorical modes and the methodologies for achieving specific writing purposes.

Credit: 1

FOREIGN LANGUAGE

Spanish I. This course is for the purpose of developing oral comprehension and speaking skills. It introduces grammatical concepts within the limitations of the first level. In addition to the language itself, it covers identifying with people, their needs, hopes, feelings, reactions, and those things which they have in common with us...as well as those things uniquely their own. Prerequisite: Grade of C or better in English.

Spanish II. Basically, this is a continuation of the skills learned in Spanish I. Three fundamental steps are followed in the teaching and learning of Spanish. First, a student must listen to the language. Second, he/she must attempt to speak the language. Finally, the student should be able to write the language. In this course these skills are continued and perfected. Spoken Spanish is emphasized as much as possible. Prerequisite: Spanish I.

Spanish III. Spanish III is a grammatical review of Spanish I and II. Students will increase their use of Spanish through reading, writing, and conversation. Grammatical accuracy is encouraged; however, emphasis is placed on improving communication skills. Prerequisites: Spanish I and Spanish II.

Spanish IV. A continuation of Spanish III. Prerequisite: Spanish I, II, III.

MATHEMATICS

Algebra IA. This course is a full year class and worth 1 credit. This course is designed for students who have a general understanding of the fundamental math concepts, but do not have them mastered. The pace of the class is slower than that of Algebra I. Students in Algebra IA study the topics covered in the first semester of the Algebra I course. This includes the study of the basic operations of whole numbers, integers, rational and irrational numbers. They will also study functions, work with equations, and inequalities. Students are also taught how to graph and write linear equations and solve systems of equations. Some time will be spent reviewing standardized test results and addressing any weak areas of math. Prerequisite: Math Placement scores and Teacher recommendation.

Algebra IB. This course is a full year class and worth 1 credit. This course is designed for students who have a general understanding of fundamental math concepts, but do not have them mastered. The pace of this class is slower than that of Algebra I. Students in Algebra IB study the topics covered in the second semester of the Algebra I course. This includes solving systems of equations and inequalities, quadratic equations and functions, and exponential functions. Students will also work with right triangles and polynomials. Some time will be spent reviewing standardized test results and addressing any weak areas of math. Students will also cover a brief introduction to geometry. Prerequisite: Passing grade in Algebra 1A.

Algebra I. This class is a full year class and worth 1 credit. This course is offered for students who have a good understanding and mastery of the fundamental math concepts. Students in Algebra I will study the basic operations of whole numbers, integers, rational and irrational numbers. They will also study functions, work with equations and inequalities, right triangles and polynomials. Other topics covered include: graphing and writing linear equations, solving systems of equations and inequalities, solving quadratic equations and functions, and working with rational functions. Prerequisite: Math Placement scores and Teacher recommendation.

Geometry 200. The following topics are covered: inductive and deductive reasoning with proofs, basic geometric postulates and theorems, congruence and its applications similar polygons, applications of similarity to right triangles, circle and angle properties, areas of polygons and circles, volumes of solids. The course includes a brief study of coordinate geometry, right triangle geometry and transformations. Prerequisite: Passing grade in Algebra 1A and IB, or Algebra 1.

Geometry 201. This course covers all topics of Geometry, but in somewhat more detail. Prerequisite: A or B in Algebra I and Math achievement test score above 85th percentile.

Algebra II. This course provides a short review of the basic material of earlier work in Algebra I. The following additional topics are covered: real number systems (with roots, radicals, and operations), complex numbers, operation of polynomials, factoring, operation of rational expressions, graphing techniques, relations and functions, linear and quadratic equations, logarithmic and exponential equations, matrices and determinants, and coordinate geometry. Prerequisite: Passing Grade in Geometry 200 or Geometry 201.

Trigonometry*. This semester course provides a review of functions and relations from Algebra II. Other topics are: circular functions and their inverses, graphs, trigonometric identities and their proofs, right and oblique triangle trigonometry, trigonometric equations and polar equations. Prerequisite: Second semester grade of C or better in Algebra II.

Pre-Calculus*. The detailed study of Analytic Geometry is offered as a preparation for the study of calculus and linear algebra. Topics include: vectors in the plane, lines in the plane, application of lines, conic sections (equations and graphs), transformations of coordinates. Other topics covered may be natural logarithms, curve sketching, induction, probability, combinations and permutations, and an introduction to limits. Prerequisites: Second semester grade of C or better in Algebra II. Trigonometry recommended.

Advanced Placement Calculus. This course provides a quick review of the basic material of earlier work in previous courses and an in depth preparation for the AP Calculus Exam. The following topics are covered: lines and graphs, functions, trigonometric and logarithmic functions, limits, continuity, derivatives of a function, implicit differentiation, extreme values, Riemann sums, integration, and slope fields. Prerequisite: B or better in both Trigonometry and Pre-Calculus.

SCIENCE

Physical Science. Physical Science can be divided into two categories: biological sciences and physical sciences. While the biological sciences examine living organisms, the physical sciences analyze the nature and properties of energy and non-living matter. However, as with most other subjects, all sciences are related to each other. This course will integrate chemistry, physics, earth science (geology, meteorology, and oceanography), astronomy and applied mathematics. This course will emphasize the connections between these subjects and provide students with a strong foundation so they will be successful in other areas of science. Physical science is a year-long college prep laboratory course earning one credit.

Biology. Biology's topics include cell biology, genetics, cell respiration, photosynthesis, biochemistry, cell division, RNA/DNA, bacteria, protista, fungi, botany and zoology. About one third of the class is spent in laboratory work and this course includes the dissection of various animals. A leaf collection project is required for the class. Biology is a year-long college prep laboratory course earning one credit.

Advanced Biology. Advanced Biology is for those students who feel a keen interest in biology and may pursue this as a career. Emphasis is placed on the development of laboratory skills, the scientific-study methods, and human anatomy and Physiology. The dissection of a cat, plus various sheep organs are included in the course. Prerequisite: Modern Biology with a grade of A or B.

Physical Chemistry. This course includes a study of the physical and chemical properties of water and the gases in air as they relate to the way we use water and gases. The labs are designed to teach the student how and why water (and gases) is used in industry and at home. A study of the properties of plastics, metals, and ceramics will be included. The course includes many practical labs that are not included in a standard chemistry or physics class.

Chemistry. A study of the structure and composition of materials and changes which they may undergo. Essential to preparation for any of the medical and biological fields and helpful in the understanding of practical problems pertinent to our environment. This is a lab course. Prerequisite: Algebra I.

Physics. Physics is the study of the physical universe and the relationship between matter and energy. This is a lab course covering force and motion, heat energy, wave transfer energy, nuclear energy, physical optics, and electricity. Prerequisite: Algebra II or concurrent enrollment in Algebra II.

SOCIAL STUDIES

World Geography*. World Geography consists of a cultural, social, customs, economic, and comparative approach to geography. Major areas of concentration are Africa, Asia, and Southeast Asia.

World History. An examination of various cultures in both time, historically, and location is included. Besides western cultures, stress is also placed on Asian, Mid-Eastern, African, and Latin American peoples.

U.S. History. U. S. History consists of a narrative and chronological approach to history. Emphasis is placed on comparative history. It covers all the periods from colonization down to the present. It is required of all juniors.

Sociology*. Sociology is a study of people as they interact within a social structure. We strive for an understanding of social structure and the relationships of an individual to the group situation. We want to become aware of our social environment--to help us develop more completely as social entities. This is an overview and not intended for in-depth study.

Psychology*. The overall objective is to present psychology as a science, give the student some insight into his personal problems of adjustment, and to help the student realize the larger problems of society and what it means to be human.

Government*. (U.S. and State Constitution) Types of modern governments, meaning of democracy, public opinion and the American Political system: American voting behavior. American political-party system, path to the presidency, pressure groups and the American political system, an analysis of the executive branch, Congress at work, problems of Congress and its members, economic growth and security, contemporary American foreign policy, state government, governing the counties, and urban government. It is a required course to be taken in either the sophomore or junior year.

Economics*. A course in basic economic principles. Emphasis is placed on inflation, taxes, GNP and their effect on the students.

FINE ARTS

Art I. Art I consists of the study of the elements and principals of two-and three-dimensional design, through basic experience in painting, sculpture, drawing, and graphic arts, ceramics, and general crafts. Knowledge of basic skills and techniques, and ability to recognize art of all forms through the study of art history and an ability to express one's own ideas are major curriculum concerns.

Art II. Based on knowledge and skills acquired in Art I. The Art II students work with more advanced materials and processes in areas of sculpture, painting, drawing, graphic arts, ceramics, and crafts. Emphasis is placed on use of new expressive ideas, individuality of style and a clearer understanding of the values, meanings, and purposes of art. Prerequisite: Art I with a grade of C or better.

Art III. Students will set up their own projects and goals. Prerequisite: Art I and II.

AP Art History. The AP offering in Art History is designed to provide the same benefits to secondary school students as those provided by an introductory college course in art history: an understanding and knowledge of architecture, sculpture, painting, and other art forms within diverse historical and cultural contexts. In the course, students examine major forms of artistic expression from the past and the present from a variety of cultures. They learn to look at works of art critically, with intelligence and sensitivity, and to analyze what they see. Many colleges and universities offer advanced placement and/or credit to students who have performed successfully on the AP Art History Examination. AP Art History is open to seniors willing to engage in college level work. Juniors may be permitted to take this class by obtaining the permission of both their guidance counselor and the course instructor.

Computer Graphics*. Computer Graphics is a basic computer art class. This course will provide the necessary skills for the beginning computer student to produce artwork on the computer. The artwork will include manipulation of photographs and original work done by the student.

Band. Band at Paxton-Buckley-Loda High School is a performance based program that enriches the lives of the student participants through the performance of quality literature. Along with the traditional Concert band, the Department also fields a competitive Marching and two competitive Jazz bands. The Marching band experience includes a summer instructional camp and participates in five competitions during the first quarter of the school year as well as performances supporting the Varsity Football team. Members of the band are divided into two groups to offer musical support for the PBL Varsity Basketball teams. Students are also offered the opportunity to participate in one of two competitive jazz bands as well as small group ensembles. The main objective of band is to further the student musically through large ensemble, small group, and solo work.

Chorus. Chorus is a vocal group that performs throughout the school year, as a whole, and as solos and ensembles. The group performs for school events, as well as civic events, and competes in I.H.S.A. competition. Special programs, including a variety show, show choir, madrigals, and IMEA, are also a part of the vocal program. The most important requirement for membership is a desire to sing and to share in constructive musical experiences. Singing talent and ability will be developed through the education of music theory and singing techniques, which will take place in the rehearsal periods.

VOCATIONAL

Introduction to Family & Consumer Science.

9th grade (Full year) 1.0 credit

This course is the first course for all family and consumer science programs. It is designed to present basic subject matter in six areas.

1. Clothing and textiles
2. Resource Management
3. Foods and Nutrition
4. Housing, Furnishings and Equipment
5. Human Development, Interpersonal, and Family Relationships
6. Introduction to the World of Work

Learning experiences assist students in understanding themselves, their roles in today's society and the nature of family and consumer science careers. This course includes some sex education.

Enrolling in FACS course provides students an opportunity to join Family, Career, and Community Leaders of America (FCCLA), a national student organization that promotes family involvement, leadership, career, and peer education, through Family and Consumer Science education.

Child Development*.

10th, 11th, and 12th Grade (semester) .5 credit

Students will study the developing child from conception through school age.

This study will focus on:

- encouraging positive guidance techniques
- applying decision making and goal setting skills
- setting guidelines for health and safety standards for children
- providing experiences that encourage children's greatest potential
- identifying the stages of pregnancy in the mother and developing child
- including some sex education
- developing effective communication skills with children
- gaining knowledge and understanding about the physical, emotional, social, and intellectual development of the child
- recognizing the risks and consequences of teen parenting
- providing information related to careers in child care

Clothing Design/Marketing*.

10th, 11th, and 12th Grade (semester) .5 credit

In this orientation level clothing and textiles course, classroom and laboratory experiences focus on clothing selection, fashion terms, and styles, textiles and fabric selection and care, apparel construction skills, along with careers related to marketing, textiles and fabrics.

Foods and Nutrition I*.

10th, 11th, and 12th Grade (semester) .5 credit

This orientation-level course includes classroom and laboratory experiences needed to understand basic food principles and nutrition. This course centers around the following: applying overall wellness and nutrition, meeting health and sanitation standards in planning, emphasizing cooperation and teamwork in preparing and serving food, while exploring individual nutritional needs. Related career areas will be examined.

Foods and Nutrition II*.

10th, 11th, and 12th Grade (semester) .5 credit

A second orientation level foods course focuses on food selection and preparation for specific circumstances and dietary needs. Course content includes diet and health, current nutritional issues, food budgeting and purchasing, food safety and sanitation, prevention of food-borne illnesses, conservation in providing food, food preservation, international foods, influences on food customs, and careers in foods and nutrition. Laboratory experiences provide food preparation opportunities and an introduction to commercial food service and food management.

Prerequisite: Foods and Nutrition I.

Adult Living*.

11th and 12th Grade (semester) .5 credit

This course is designed to assist individuals and families in achieving life satisfaction through responsible participation as adults in the home, community, and workplace. Emphasis is placed on the development of life skills essential to this process. Various resources to assist with life problems are explored, including setting short and long range goals, demonstrating decision-making skills, developing effective relationships to promote communication, adapting basic needs to assume roles and responsibilities, and evaluating the impact of family and career changes. This course includes some sex education.

Housing/Interior Design*.

10th, 11th and 12th Grade (semester) .5 credit

Learning experiences are designed to provide students with the basic knowledge and skills needed to select, acquire, maintain and manage living environments that meet the needs of the occupants. Emphasis will be placed on the application of basic management principles, locating and managing housing, using goal setting and decision making skills, creating, maintaining and evaluating of living space and housing choices, relating to changing family, individual and career patterns, selecting resources in creating living environments, and environmental concerns. Related career development is emphasized.

Resource Management*.

11th and 12th Grade (semester) .5 credit

Learning experiences focus on the understandings and skills needed to make decisions which contribute to being an informed consumer leading to an improved quality of life.

The course content includes the following:

- utilizing career awareness, resources and consumer information
- accomplishing financial goals
- evaluating and use of resources
- applying consumer rights and responsibilities in the marketplace
- analyzing resources/consumer management skills necessary for present and future decisions

This course meets the requirement for consumer education instruction as required by the School Code of Illinois. (Section 27-12.1)

Parenting*.

10th, 11th and 12th Grade (semester) .5 credit

This course is designed to help students examine expectations and responsibilities of parenthood. It will identify the influences of the developing child and parenting practices upon the individual, family, culture and society across the life span. Experiences include applying decision-making and goal setting skills, and the basic principles of the parenting process, practicing health and safety standards, as related to parenting, encouraging human relations skills in children and adolescents, and evaluating the impact of parenting on the family. The course also includes some sex education. Careers related to parenting are explored.

Introduction to Business. (Year) 1 credit. Open to grades 9 and 10.

This course is designed to make you aware of how the business world affects you in everyday life and to introduce you to the opportunities available in the business field. Units include: our economic system, business in our economy, labor and government in our economy, careers in our economy, living and working

with technology, financial institutions and banking services, the business of credit, planning your savings and investments, protection from economic loss, and financial management. Because this course deals with the student's role as a consumer, this course will meet the consumer education requirement for every high school graduate in the State of Illinois.

*Keyboarding/Computer Applications I. (Year) 1 credit. Open to grades 9, 10, 11, & 12.

The first semester will emphasize using the touch method to key data and learning proper format for letters, memos, tables, and manuscripts. Speed and accuracy building will be emphasized throughout the year. The second semester will be devoted to becoming familiar with the Microsoft Office software. The majority of the time will be spent on Word and a lesser amount of time will be spent on Excel and PowerPoint. This course is an excellent introductory course for those who want to enroll in any other computer courses. Students must pass the first semester in order to remain in the second semester portion.

Advanced Word Processing/Desktop Publishing*. (1 semester) 1/2 credit – Software used – Microsoft Word XP. Open to grades 10, 11, & 12.

This course is designed for students who desire to learn skills necessary for work in a modern computer-oriented office or who desire personal skills necessary to create technical documents required by college courses or professional situations. Advanced word processing applications such as tables and mail merge will be covered along with learning to use styles, macros, autotext, and templates to streamline work. Heavy emphasis will be placed on desktop publishing as students learn to create newspaper style layouts, flyers, brochures, calendars, labels, etc. incorporating clip art, scanned objects, and pictures taken with a digital camera.

Spreadsheets & Presentations*. (1 semester) ½ credit – Software Used – Microsoft Excel XP & PowerPoint XP. Open to grades 10, 11, & 12.

Students who are interested in careers in business administration, accounting, engineering, or any field dealing with statistical data or presentation media will find this course a good choice. The semester will begin with work on Excel as students work with functions and formulas to calculate worksheets, advanced formatting and editing of worksheets, linking and embedding of information in worksheets comprising a workbook, creating charts from worksheets in various styles and formats. The last part of the semester will be spent learning PowerPoint, presentation software that creates slides that can be run on a computer. Projects will be completed so that students learn to incorporate transitions, sound, animation, and automatic timings into their presentations, as well as creative design techniques.

Web Design*. (1 semester) ½ credit – Software used – Dreamweaver. Open to grades 11 & 12.

The semester will be spent learning the basics of designing websites. The course will include how to create a web site, develop a web page, use cascading style sheets, use & manage images, create links & navigation bars, work with tables & layers, and updating & maintaining a web site. Students will be guided through a basic tutorial book and then given the opportunity to develop at least two websites on their own.

Game Design* (1 Semester) ½ credit – Software used – GameMaker Open to grades 11 and 12.

This course includes design and content creation for video games. Survey and critical study of history, design, production, and marketing processes of game development will be covered. This course also consists of hands-on skills, tools, and methods involved in the art and design of 3D video games. Fundamentals in graphics will be covered. This would include such things as modeling, lighting, shading, texturing, and rendering.

Office Procedures I*. (1 semester) 1/2 credit. Open to grades 10, 11 and 12.

This course develops skills necessary for employment as administrative office workers, whether the position be general in nature or be specialized in the legal, medical, or word processing areas. Course content includes: a discussion of proper office personality, dress, and behavior; learning proper employment-seeking skills; developing competency in handling the mail, the telephone, and receptionist duties; learning to operate the electronic calculator by touch; learning how to compose and format letters and reports; and

learning the rules for properly filing and retrieving documents, and using the world wide web to make travel plans and an itinerary for a business trip.

Business Law I*. (1 semester) 1/2 credit Open to grades 11 and 12.

This course is an introductory course where students become familiar with the legal vocabulary that is used in normal business situations and become familiar with the interpretation and solving of real cases. Some of the areas studied include the history of our legal system, crimes, torts, how minors are affected by the law, family, and consumer law. A large part of the course deals with contract law. Although this is a beneficial course for anyone who is interested in learning more about law, it is an excellent course for anyone who is planning to become an accountant, business administrator, or an attorney. Students will be required to participate and complete projects, debates, and mock trials.

Business Law II*. (1 semester) 1/2 credit - Prerequisite: Completed Business Law I.

This is a continuation of Business Law I. Areas to be studied include how you are affected by law in the areas of credit, employment, property laws, and commercial paper. Law involved in insurance and business organizations will also be studied. Students will be required to participate and complete projects, debates, and mock trials. Open to grades 11 and 12. Students must pass Business Law I in order take Business Law II.

Marketing/Entrepreneurship (Year -1 credit). Open to grades 11 & 12.

This course will educate students on all aspects of running their own business. Students will examine the necessary communication skills, math skills, and decision-making skills. Throughout the class, students will design a business plan for a particular business of their choice. This plan will include topics covered in class such as the type of ownership, a market analysis, what legal requirements are involved, and what equipment, supplies, and inventory are needed. The business plan will also include how the business will be promoted and financed. Students will leave the class with an understanding of the commitment of running your own business, as well as an understanding of the flexibility that can also be available.

Accounting I. (Year) 1 credit. Open to grades 10, 11, and 12.

This course is designed to give the student a foundation in basic bookkeeping and accounting by studying the accounting cycle and various business forms and transactions for a sole proprietorship, partnership, and a corporation.

Accounting II. (Year) 1 credit. Open to grades 11 and 12.

This course is designed to give the student a more in depth study of accounting procedures learned in the first year of accounting. This course is excellent preparation for anyone planning to study accounting or other business related majors in college or for anyone wanting to work in the bookkeeping or accounting field after graduation from high school. Prerequisite: Completed Accounting I.

Consumer Education*. (1 semester) 1/2 credit. Open to grade 12.

This course is designed to help the student prepare for consumer and economic problems that they will face once they are out of high school. The direction of the course is aimed at understanding budgeting, banking, credit, insurance, taxes, housing, transportation, job application, and consumer problems and remedies. Students will learn to make wise choices in buying and learn how to be a smart shopper so as to make their incomes go farther and buy more. This is a required course to graduate.

Technology Concepts I Communication and Production. (1 semester) 1/2 credit. Open to grades 9,10,11,12.

This course is one semester in length. The course consists of two basic units: communications, and production/manufacturing. Each unit of study will be nine weeks long. Together these courses will provide an orientation to the principles of technology. The first introduces the technologies involved in drafting, computer aided drafting (CAD), and electronic communications. The second unit introduces the technologies used in production and manufacturing, hydraulics/pneumatics, robotics, and material

processing and handling. Students will be presented with a wide variety of materials from a technological standpoint. They will be involved in hands-on activities, be subjected to critical thinking, and become aware of the technological society in which they live and how they may prepare themselves for the future. Students are required to take both semester, Technology Concepts I, and Technology Concepts II.

Technology Concepts II Energy and Transportation*. (1 semester) 1/2 credit. Open to grades 9, 10, 11, 12

This course is one semester in length. The course consists of two basic units: energy and transportation. Each unit of study will be nine weeks long. Together these courses will provide an orientation to the principles of technology. The first segment introduces the resources, technical processes, industrial applications, and impacts of a variety of energy producing technologies; such as wind, solar, and fuel cells. It includes experiences with the extraction and conservation of fossil fuels along with green energy sources such as solar, wind and water, and nuclear energy. The second segment introduces the technologies used in transportation and power technology, such as power transmission and engine technology. Students will be presented with a wide variety of materials from a technological standpoint. They will be involved in hands-on activities, be subjected to critical thinking, and become aware of the technological society in which they live and how they may prepare themselves for the future.

Metalworking, Materials and Processes*. (1 semester) 1/2 credit. Open to grades 10, 11, and 12

Students are introduced to hand, portable electric tools, metal lathes, and the basic sheetmetal fabricating machines used in industry. This class includes a wide variety of “hands-on” activities involving the layout, measuring, cutting, joining, fastening, forming, fabrication and finishing of metal products. Units include: sheetmetal, bench metal, gas welding, and basic machine metals. Each student will construct an assigned class project. In addition to the manipulative skills, students will learn safe work habits, how to read simple drawings, layout and measurement techniques, and other related information. Students are required to reimburse the school for materials used for projects. Prerequisite: Technology Concepts I and II.

Woodworking, Materials and Processes*. (1 semester) 1/2 credit. Open to grades 10, 11, and 12

Students are introduced to hand tools, portable electric tools, and the basic woodworking machines used in the construction and production industries. The class work includes a wide variety of “hands-on” activities involving the cutting, joining, fastening, forming, and finishing of wood and other similar materials. Each student will construct an assigned class project. In addition to the manipulative skills students will learn safe work habits, how to read simple drawings, and other related information. Students will be required to reimburse the school for the materials used for projects. Prerequisite: Technology Concepts I and II.

Custom Cabinetmaking*. (1 Year) 1 credit. Open to grades 11 and 12

In this course, emphasis is placed on more advanced woodworking techniques utilizing both hand and power woodworking machines. The focus of the course will be cabinet making and the development of skills that will be needed to successfully pursue a career in custom woodworking. Students will continue to develop efficient wood working skills and desirable work ethics. In addition, students will gain knowledge in cost estimating; material selection; problem solving expertise and finishing of products. Students will take responsibility for the selection of production projects and time management. Finally students will be encouraged to develop electronic portfolios to assist in post high school work. Prerequisite: Woodworking, Materials and Processes.

Residential Carpentry. (1 Year) 1 credit. Open to grades 11 and 12

This course provides experiences related to the erection, installation, and maintenance of residential building and related fixtures. Planned learning activities will allow students to become knowledgeable of fundamental principles and methods and to develop technical skills related to masonry, carpentry, and finish work. Instruction will include safety principles and practices, recognition of standard lumber sizes, foundation layout methods, building concepts and procedure, local, state, and national codes, cost estimating and blueprint reading. Open to juniors and seniors. Prerequisite: Woodworking, Materials, and Processes.

AutoCADD Drafting and Design. (1 Year) 1 credit. Open to grades 10, 11, and 12

This course will start with an introduction to basic freehand sketching techniques and multiview drawings. Students will have the opportunity to gain board experience as they apply drafting techniques to solving descriptive geometry problems. The remainder of the course will focus on building beginning to advanced skills in the application of AutoCAD. Students will apply CAD techniques to solve problems, and practice computer-aided drafting and design. Both 2-D and 3-D computer-aided design will be covered in this year long course. This course is highly recommended for students considering architecture or engineering.
Prerequisite: none

Introduction to Agriculture. This orientation course provides an opportunity for students to learn how the agricultural industry is organized; its major components; the economic influence of agriculture at state, national and international levels; and the scope and types of job opportunities in the agricultural field. Basic concepts in animal science, plant science, soil science, horticulture, agribusiness management, agricultural mechanics, and aquacultural science and technology will be presented. Improving computer and workplace skills will be a focus. Participation in FFA activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts. This class is open to all students. Satisfactory completion of Introduction to Agriculture and Ag Business Management meets consumer education requirement.

Agricultural Technology. This second-level course builds on basic skills and knowledge gained in the Introduction to Agriculture course. Major units of instruction include soil science, advanced plant science, biotechnology, advanced animal science, surveying, and Global Positioning Systems/Global Information Systems technologies. Participation in FFA activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts. Open to all students except freshmen. Previous completion of Introduction to Agriculture recommended.

Biological Science Applications in Ag. This course is designed to reinforce and extend students' understanding of science by associating basic scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of plant growth and management in agriculture and the specific biological science concepts that govern management decisions, as well as examine many phases of animal agriculture and specific biological science concepts that govern managing decisions in the animal industry.

Sample topics include:

- 1) Ag Research Methodology
- 2) Initiating plant growth—germination, plant sensory mechanisms, enzyme action, and absorption
- 3) Managing plant growth—photosynthesis, respiration, translocation, metabolism, and growth regulation
- 4) Growth and Development of Animals – embryology, ethology, nutrition, immunity systems;
- 5) Processing Animal Products – preservation, fermentation and pasteurization.

Students will maintain an SAEP and be encouraged to be a member of the FFA organization. Open to sophomores, juniors, and seniors only. Prerequisite: Successful completion of Modern Biology. BSAA meets lab science entrance requirements to Illinois universities and receives PBL science credit.

Horticulture Science. This full-year course is designed to familiarize the student about horticulture and teach them various horticultural skills that could be used in a related job or in related tasks around the home. Horticulture, by definition, is the production and sale of garden crops which include fruits, vegetables, plants grown for ornamental purposes, as well as spices and medicines.

Horticulture topics to be covered include lawn care and development, tree planting and care, landscaping, gardening (vegetable, fruit, and flower), plant growth, plant propagation, managing the growing environment, and flower arranging. This applied agriculture science class gives students experiences such as seeding a lawn, planting trees, fertilizing trees, using herbicides and insecticides, testing soil, rooting cuttings, forcing bulbs, breaking seed dormancy, mixing growing media, arranging flowers, and making corsages.

The greenhouse will be an important teaching tool utilized throughout this course as students will learn how and grow fall mums, poinsettias, Easter lilies, and spring garden & bedding plants. Students will maintain an SAEP and be encouraged to be a member of the FFA organization. This course will be open to all juniors and seniors.

Ag Business Management This course will develop student's understanding of the agricultural industry relating to the United States and World marketplace. Instructional units include: marketing and trading of agricultural products, international agriculture, imports and exports, agricultural law, taxes, governmental regulations and policies, insurance, financing, sales and marketing, and advanced computerized record keeping. Participation in FFA activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts. Open to juniors and seniors only. Satisfactory completion of Introduction to Agriculture and Ag Business Management meets consumer education requirement.

Agricultural Mechanization and Technology This year-long course is designed to give students an overview of mechanics that are used in an agricultural setting. Time will be given to study Small Engines, Electricity and Welding.

The small engines component will teach students to select, operate, service, maintain, repair and overhaul small engines. It will develop knowledge and skills in preventative maintenance, principals of operation, systems of the engines, use of test equipment and tune-ups.

The electricity component will include instruction and practice in inspecting, maintaining, repairing and diagramming circuits and equipment. In addition, students will learn how electric motors and controls are used in agriculture to regulate temperature, ventilation, lighting and more.

The welding section will cover arc, oxy-acetylene, MIG, and plasma-arc cutting. Students will maintain their Supervised Agricultural Experience Program and be encouraged to be a member of the FFA Organization. This class is open to juniors and seniors only.

Aquaculture & Environmental Science This year-long course will devote 18 weeks to Aquaculture Science and Environmental Science. Aquaculture Science portion is designed to develop student knowledge and skills in the area of aquacultural species; reproduction processes, genetics, nutrition and health in aquacrops; ecological balances; and environmental requirements of aquatic plants and animals. Water quality, chemical and temperature analyses will be conducted for a variety of aquacrops. The aquaculture system will be extensively used in this class. The Environmental Science portion of this class examines the relationship of agriculture and the environment. The impact of plant and animal production practices on the environment and the adoption of practices leading to improved air, land, and water quality are investigated. Encouraging students to be conscious and concerned about the environment and recognizing the need to conserve the environment and its resources will be a theme throughout. Students will maintain as SAEP and be encouraged to be a member of the FFA organization. Open to juniors and seniors.

MISCELLANEOUS

Physical Education. Physical Education is devoted primarily to helping students develop skills, power, efficiency, endurance, and conditioning, and attitudes and understanding that lead to total well being. It is required of all students to take and pass four years of physical education with the exception of needing to complete course work in Health and Drivers Education. Also, a student may be excused from Physical Education if he or she is a junior or senior and is participating in a varsity-level sport.

Health*. This freshman health course is taught on a semester basis. The materials covered are: health problems, nutrition, physical fitness, mental health, reproduction, dependency-type substances, respiratory systems, infectious diseases, environmental health, and first aid. This is a required course for all students; preferably taken in their freshman year. This course also includes some sex education. Please see principal or counselor for further information if needed.

Driver Education*. Driver education is taught concurrently (classroom and laboratory driving at the same time). It is a quarter course covering fundamentals of driving. A minimum of 30 clock hours in the classroom and six clock hours of behind-the-wheel is required.

Interrelated Co-operative Education. (I.C.E.) Interrelated Cooperative Education is designed for seniors who are interested in pursuing careers in any of the five occupational areas. Students are released from school for their paid cooperative education work experience and participate in at least 200 minutes of related classroom instruction per week. Classroom instruction focuses on providing students with job survival and career exploration skills plus other employability skills. Skills related to the job are based on a task list of the job being learned by the student.

A training plan developed jointly by the teacher coordinator, the training sponsor and the student, identifies training to be provided based upon areas where on-the-job performance indicates a need. Seniors only.

Visions: School yearbook.

Library Internship. Each year up to six students are accepted as library interns of the PBL High School Library, with no more than one student assigned to the library during any given class period. Students who are selected as interns learn, practice, and perform many of the duties of a professional librarian. In addition, careers in Information Science and its related fields are explored through assigned papers and field trips. One-half credit is awarded for each year completed as an Intern. Open to juniors and seniors.

Work Study Class. A full year class that focuses on providing students with job survival and career exploration skills, plus other employability skills. Also covered are consumer education issues such as credit, checking accounts, and income taxes. This class is for students in grades 11 and 12 with an IEP and fulfills their consumer education requirement for graduation. (One Credit)

Work Study. Students are released from school for work experience. A work plan and contract are jointly developed by the teacher, STEP coordinator, and employer. This is a full year programming earning one to three credits depending on the number of hours worked. The classroom component is required. This class is for students in grades 11 and 12 with an IEP. Up to 3 credits.

*Denotes semester course.