

POLO COMMUNITY HIGH SCHOOL
Course Descriptions for 2010 - 2011

English

All required English courses meet for one-year and, upon successful completion of the course, provide one credit toward graduation. All elective English courses meet for one-semester and, upon successful completion of the course, provide one-half credit toward graduation.

100101 English 9 (writing intensified) 1 year

Credit: 1

This course focuses on written and spoken communication skills. Literature study emphasizes clarification of genre and understanding of literary terminology.

Required Materials: Notebook, 100 3x5 ruled note cards, 100 4x6 ruled note cards

100201 English 10 (writing intensified) 1 year

Credit: 1

Students will learn effective communication skills through composition and speech. They will also survey world literature according to genre and literary elements. A research paper will be required.

Required materials: Notebook, 100 3x5 ruled note cards. You will be expected to buy a copy of the assigned novel for the class.

Prerequisite: English 9

100301 English 11 (writing intensified) 1 year

Credit: 1

Students will be exposed to a wide variety of literature and genres with particular historical, cultural, and contemporary emphasis. Composition skills are further developed emphasizing (but not limited to) state required writing styles. A research paper completed as a joint assignment with U.S. History is also included.

Required Materials: Notebook, two composition notebooks, and 100 3x5 ruled note cards

Prerequisite: English 10

100401 English 12 1 year

Credit: 1

Students will continue to learn and practice effective written and oral communication and continue their reading of various types of literature from around the world.

Prerequisite: English 11

100402 English 12CB 1 year

Credit: 1

This course is designed for highly motivated seniors who enjoy being academically challenged. Writing is a focal point of the class. Students will read and analyze English and world literature and will focus on comparative studies of universal themes. A research paper is required.

Prerequisite: English 11

Required Materials: 100 3x5 ruled note cards

100302 Novel *elective for freshmen, sophomores, juniors, and seniors* 1 semester

Credit: ½

This class is designed as a combination of both American Novel and British Novel. The course will take particular note of classic authors, the time frame of the novel, and the author's purpose and method. Students will study the significant literary value of the novels chosen.

Additional required materials: Students are expected to buy 6 paperback novels – titles to be announced at the beginning of the semester.

PCHS Course Descriptions 10-11

100303 Speech *elective for sophomores, juniors, and seniors* 1 semester **Credit: ½**

This course is designed to develop, through practice, the ability to speak effectively; explore the mechanics of speech and listening; provide practice researching, organizing, and delivering various types of speeches; develop an awareness of body language; and practice in oral interpretation, impromptu and prepared speeches. Students will deliver numerous speeches; most will require library research and an outline.

Required Materials: 100 3x5 ruled note cards

100403 Creative Writing *elective for sophomores, juniors, and seniors* 1 semester **Credit: ½**

This course is designed for students who have demonstrated a high degree of skill in and dedication to writing. Students will refine their personal writing style by responding to various articles and books on writing, and other students' writing.

100405 Cinematography *elective for sophomores, juniors, and seniors* 1 semester **Credit: ½**

Students will view and study movies of different genres from various time periods. The emphasis of this class will be analysis of motion pictures. Students will study how movies have made an impact on society as well as how society has affected movies. Directors who have made an impact on the movie industry from Orson Welles to Stephen Spielberg will be covered in this course. Students will complete their own video project. This will require completing a detailed written script and video taping their own docudrama or short genre film.

100404 Contemporary American Thought *elective for seniors only* 1 semester **Credit: ½**

This course will deal with accountability. The class is designed for upper level senior English students who will be exposed to a debate format. Students will be held "accountable" for everything they say or complete in class. Everything must be defined and all alternatives examined.

Social Sciences

900201 World Civilization *required for all sophomores* 1 year **Credit: 1**

The World Civilization course is a study of the historical development of human cultures. The course is a brief introduction to World History with key areas including: The Middle East, Western Europe, Eastern Europe, colonization, revolutions, and WWI. The units are organized to show both the differences and the similarities of cultures throughout history. It is the purpose of the course to enable the student to compare the cultures of the past with those of the present. The course will examine ancient civilizations in addition to discussing modern history. To understand people and their actions today, it is necessary to study past actions and mistakes.

900301 United States History *required for all juniors* 1 year **Credit: 1**

The course is a yearlong study of American civilization, government, economics, social and cultural history, and foreign policy. The units are organized around central questions dealing with key themes, with special emphasis placed on the 20th Century. These units include: the American Revolution, the Constitution, Industrialization, Civil War, the reform movements of the 20th century (new deal, civil rights, cold war), and post-WWII foreign policy. Each topic is examined in detail by examining its historic importance and relationship to contemporary items of interest.

This course has three basic goals.

1. To help the student understand the significant events, trends, personalities, and movements which shaped our history.
2. To help the student understand the importance of the past and the traditions that derive from it.
3. To help the student acquire critical thinking skills through an inquiry process.

A major assignment of this course is a term paper. This will be done in conjunction with English 11. It will count for one test grade for the third or fourth quarter grading period. It must include note cards, documentation and a bibliography.

Required materials: note cards

900402 American Government *required for all seniors* 1 semester **Credit: ½**

This course has an emphasis on American Government. American Government is a social science that studies the principles and operation of the American system of government. Emphasis will be placed on the U.S. and Illinois Constitutions. The students will also learn basic concepts associated with political science. By studying current examples and issues, the course will also help the student develop the background knowledge and skills essential for understanding a constantly changing and complex world. In addition, topics related to local government and citizenship will be introduced.

900202 Current Events *taken concurrently with Driver's Education* 9 weeks **Credit: ¼**

This 9-week course will discuss late breaking news and events that impact the world we live in. From terrorism to global warming the class seeks to analyze and investigate facts as well as help student form their own opinions about important issues. In addition to current news topics, this class will utilize multimedia sources to increase classroom discussion and knowledge. Students will also debate, discuss, and research issues and events that shape the world we live in.

900302 Social Studies Survey I *elective for juniors and seniors* 1 semester **Credit: ½**

This course has an emphasis on Psychology. Psychology is a social science that examines human behavior. This course will help students acquire knowledge of the basic concepts of social sciences and how these help to interpret human behavior. Topics covered in the class include the principles of learning (classical and operant conditioning), creativity and problem solving, personality theories, and personality disturbances. Students are expected to participate in demonstrations and experiments.

900303 Social Studies Survey II *elective for juniors and seniors* 1 semester **Credit: ½**

This course has an emphasis on Sociology. Sociology is a social science that studies the patterns of human relationships. This course will help students acquire knowledge of the basic concepts of the social sciences and show how these help to understand human relationships. Topics covered in the class include the concept of culture, cultural values and norms, cultural change, deviance, social status, social stratification, and a variety of social problems facing our society today. This course will also help the student to develop the ability to look at his/her social world objectively and gain insights into how society is organized and structured.

900401 Social Studies Survey III *elective for juniors (w/ instructor approval) and seniors* **Credit: ½**

1 semester

This course has an emphasis on Economics. Economics is a social science that studies how societies organize their scarce resources for production and consumption. The course examines a variety of micro and macro economic topics, including types of economic systems, American capitalism, supply and demand, other means of price determination, gross domestic product, and government fiscal and monetary policies. The course will also emphasize installment purchases, credit, savings, budgeting, comparison of prices and an understanding of the roles of consumers interacting with agriculture, business, trade unions, and government in formulating and achieving the goals of the mixed free enterprise system. **Completion of this course will apply toward the Consumer Education requirement.**

Mathematics

300102 Pre-Algebra 1 year **Credit: 1**

Freshmen are assigned to this course based on the results of the 8th grade testing program, and the recommendations of their Aplington mathematics teachers.

This course continues the exploration of selected algebra and geometry concepts. It provides experience using many of the fundamental concepts of these two mathematical areas to give students the skills they need to be successful in Algebra I and Geometry.

Required materials: fraction calculator

300103 Algebra I 1 year **Credit: 1**

Freshmen are assigned to this course based on the results of the 8th grade testing program and the recommendations of their Aplington mathematics teachers.

Algebra is recommended if not required in most vocational areas. This course includes such topics as: operations, integers, equations, word problems involving geometric formulas and figures, inequalities, factoring, rational expressions, graphing systems of equations, functions and relations, rational and irrational numbers in formulas (Pythagorean theorem and quadratic formula), and quadratic functions.

300201 Geometry 1 year **Credit: 1**

Freshmen are assigned to this course based on the results of the 8th grade testing program and the recommendations of their Aplington mathematics teachers.

This course is a combination of physical and abstract geometry. The following topics will be covered: properties of plane geometric figures, parallel lines and planes, logic, congruent triangles, deductive and inductive reasoning, visual representations, similarity, ratios, and proportions, trigonometry, construction and locus, areas and volumes, coordinate geometry.

Required materials: fraction calculator

Prerequisites: Passing grade in Algebra I

300301 Algebra II 1 year

Credit: 1

Algebra II is essential for those students planning to enter the technical world or to attend college. Topics include: linear equations and inequalities, polynomials, factoring and special products, rational expressions, rational number exponents, the quadratic formula, complex numbers, linear and quadratic systems, functions, graphing, and binomial expansions.

Prerequisites: Passing grade in Algebra I and Geometry

Strongly recommended materials: graphing calculator (TI 84/Plus or TI 84/Plus Silver)

300401 Trigonometry 1 semester

Credit: ½

This course concerns itself with a study of the theoretical development of trigonometric functions. The circular functions (sine, cosine, etc.) are defined, their functional properties derived, and their graphs are drawn. Appropriate work is done using a graphing calculator. The relation of the functions to triangles are explored and applied to practical problems. Trigonometric identities are introduced.

Required materials: graphing calculator (TI 84/Plus).

Prerequisites: Minimum grade of "C" or better in Geometry and Algebra II, or instructor permission.

300402 Mathematical Analysis 1 semester

Credit: ½

This course continues the exploration of trigonometric identities. Several elementary functions are introduced and analyzed prior to their application to practical problems. Graphing calculators continue to be used where appropriate. New mathematical operations, including derivatives, are introduced.

Required materials: graphing calculator (TI 84/Plus)

Prerequisites: Minimum grade of "C" or better Trigonometry, or instructor permission

300405 Probability and Statistics *elective for juniors and seniors* 1 semester

Credit: ½

This course develops the basic principles of data analysis. Specific topics in the course include measures of central tendency, normal distributions, and experimental and theoretical probability.

Prerequisites: Passing grade in Algebra II

300406 Advanced Math *elective for juniors and seniors* 1 semester

Credit: ½

This semester course builds upon the foundation skills students have developed in Algebra II. Specific topics in the course include rational expressions, logarithmic and exponential functions, applications of matrices, and series and sequences.

Prerequisites: Grade of "C" or better in Algebra II or instructor permission

Strongly recommended materials: graphing calculator (TI 84/Plus or TI 84/Plus Silver)

300403 AP Calculus *elective for seniors only* 1 year

Credit: 1

This course is equivalent to an introductory level university calculus course. Throughout this course students will develop an understanding of the concepts of calculus and experience its methods and applications. The broad topics include the following: derivatives, definite and indefinite integrals, limits, and approximations. This course is designed to comply with College Board recommendations to prepare students for an AP Exam in Calculus.

Required materials: graphing calculator (TI 84/Plus)

Prerequisites: Course credits ("C" or better grade) in Trigonometry and Math Analysis

Science

400101 Physical Science *open to freshmen* 1 year **Credit: 1**

Subject areas covered are chemistry, physics, earth science, and space science.

Lab fee required.

Required materials: calculator, notebook

Prerequisites: Testing results, 8th grade science teacher's recommendations, and career plans

400102 Biology I *open to freshmen and sophomores* 1 year **Credit: 1**

This course is open to freshman and sophomores. It is designed to give students a basic understanding of the study of life. Topics covered in Biology I include ecology, humans and their impact on the environment, cellular biology, genetics, and evolution. Students taking Biology I are required to dissect a frog.

Lab fee required.

Required materials: notebook

Prerequisites: Testing results, 8th grade science teacher's recommendation, and career plans

400302 Earth Science *open to juniors and seniors* 1 year **Credit: 1**

This course is recommended for students not planning to pursue a science related degree in college. Within this course, students will become familiar with many aspects of earth science including: rocks and minerals, plate tectonics, weathering and soil formation, earthquakes, volcanoes, geologic time, oceanography, meteorology, basic astronomy, ecology, and environmental ethics.

Lab fee required.

Required materials: notebook

Prerequisites: Passing grade in Biology I

400301 Chemistry I *open to sophomores, juniors, and seniors* 1 year **Credit: 1**

This college-prep chemistry course will serve to prepare students for the rigors of post-secondary chemistry classes. Students will learn the basics of high school chemistry (terminology, facts, and concepts), as well as develop critical thinking and problem-solving skills to apply chemistry principles to everyday life. Topics to be covered will include (but are not limited to) atomic structure, understanding and use of the Periodic Table, chemical bonding and compounds, states of matter (solid, liquid, gas), chemical reactions, and thermodynamics.

Lab fee required.

Required materials: scientific calculator

Prerequisites: Passing grade in Algebra I

400201 Physics I *open to sophomores (w/ instructor approval), juniors, and seniors* **Credit: 1**

1 year

The course is designed to describe and explain our physical world. Discussions, lectures, and demonstrations lead to an understanding of such topics as mechanics and thermodynamics. Emphasis is placed on the understanding of concepts and mathematical manipulations.

Lab fee required.

Required materials: scientific calculator

Prerequisites: Course credits ("C" or better grade) in Geometry and one year of science. Chemistry I is highly recommended.

400403 Biology II (Anatomy and Physiology) elective for juniors and seniors 1 year **Credit: 1**

This course is intended to provide topic knowledge in the area of human anatomy and physiology, medical ethics, and environmental ethics. Students will examine body structures their functions. Many of the body systems are discussed in detail. Dissection of a fetal pig and a sheep heart are required.

Lab fee required.

Required materials: 3-inch binder, colored pencils, notebook

Prerequisites: Course credits ("B" or better grade) in Biology I and Chemistry I and/or teacher permission

400402 Chemistry II elective for juniors (with instructor approval) and seniors 1 semester **Credit: ½**

This course is designed for those needing or desiring an extended Chemistry background (e.g.: engineering, nursing, etc.). Chemistry II includes a review or electron configuration, equilibrium topics, a review of quantitative chemistry, organic chemistry and qualitative analysis. During labs safety goggles are required.

Lab fee required.

Required materials: safety goggles, scientific calculator, notebook, and colored pencils, felt-tip markers or crayons

Prerequisites: Course credits ("C" or better grade) Chemistry I and Algebra II (concurrent enrollment allowed)

400401 Physics II elective for juniors (with instructor approval) and seniors 1 semester **Credit: ½**

In addition to a brief review of the most important topics from Physics I, new topics will be explored. New topics may include sound and light, electromagnetism, energy, and relativity. The study of these topics will be based on mathematical manipulations to give students the necessary background to take further physics, engineering, and other advanced science courses in college.

Lab fee required.

Required materials: safety goggles, scientific calculator, notebook

Prerequisites: Course credits ("C" or better grade) Physics I and Algebra II (concurrent enrollment allowed)

400501 AP Physics elective for seniors 1 year **Credit: 1**

Through this course, students will gain an understanding of the core principles in physics and learn how to apply these principles in the solution of problems. Five general areas are covered in this survey course including: Newtonian mechanics, fluid mechanics and thermal physics, electricity and magnetism, waves and optics, and atomic and nuclear physics. AP Physics is an advanced placement course and is the equivalent of a two-semester, college-level physics course. It's designed to comply with College Board recommendations to prepare students for an AP Exam in Physics B.

Lab fee required.

Required materials: safety goggles, scientific calculator, notebook

Prerequisites: Instructor Permission required to enroll as well as a grade of "B" or above in Physics I

Physical Education

200301 Boys Physical Education

Credit: 1/year

200302 Early Bird Physical Education (WACC)

200303 Girls Physical Education

Physical Education is required for four years for every student unless the student has a medical excuse from a doctor barring him or her from participation.

The course includes both team and individual sports as well as dance. Most class periods will begin with an aerobic/weight training circuit. Each area of study is offered for approximately four weeks. Emphasis is on participation to enhance physical, social and emotional development. All students are required to participate in the bowling, roller skating and swimming units for which fees are assessed. When the classes are engaged in an activity that requires a fee, **all** students are expected to pay the fee at the time of the offered activity.

Required materials: regulation gym suit, shoes with a non-marking sole, and white socks. Students may also choose to bring a sweat suit or other cold weather clothing.

Health

200102 Health *required for all freshmen* 1 semester

Credit: ½

The course is designed to promote healthful living by acquainting the student with the following topics: fitness, nutrition, mental health, drug use/abuse, human sexuality, decision-making skills, and chronic and contagious diseases. The class will include a variety of daily assignments including lectures, films, guest speakers, class discussions, and small group activities. Projects undertaken include short papers, reports, individual projects, and a semester project.

Required materials: notebook, pen, pencil, folder

Foreign Language

920101 Spanish I 1 year

Credit: 1

This course focuses on basic Spanish grammar and vocabulary development with the goal of developing skills for listening, speaking, reading and writing in the target language. Emphasis is placed on developing a practical vocabulary. The Hispanic culture is studied throughout the school year.

Required materials: Spanish/English dictionary

Prerequisites: Minimum grade of "B" in 8th Grade English courses, or instructor permission

920201 Spanish II 1 year

Credit: 1

This course continues the study of Spanish grammar and vocabulary. The primary objective of this course is to develop an oral proficiency and comprehension of the target language. Hispanic culture is studied in greater depth.

Required materials: Spanish/English dictionary

Prerequisites: Minimum grade of "C" in Spanish I

920301 Spanish III 1 year

Credit: 1

Spanish III is an intermediate level language course designed to continue the development of all communication skills in the language (reading, writing, listening and speaking).

Required materials: Spanish/English dictionary.

Prerequisites: Minimum grade of "C" in Spanish I and II

920401 Spanish IV 1 year

Credit: 1

Spanish IV is a continuation of the intermediate level language course designed to continue the development of all communication skills in the target language. Spanish IV is conducted in Spanish to fine-tune all language communication skills.

Required materials: Spanish/English dictionary

Prerequisites: Minimum grade of "C" in Spanish I, II, and III

Fine Arts

Music

950101 Band *elective for freshmen, sophomores, juniors, and seniors* 1 year

Credit: 1

The instrumental music program emphasizes individual responsibility and provides an opportunity for personal and musical growth. Performing opportunities include the Marching Marcos, the Polo Concert Band and the Marco Pep Band. Qualified students may also participate in the I.M.E.A. District and All-State Festival, the I.H.S.A. Solo and Ensemble and Organization Contest, the Upstate Illini Music Festival, and the Augustana Honors Band Festival. Students must elect band for a full year.

Note: Students who drop band need to have the director's approval before re-enrolling in the instrumental music program.

950102 Choir *elective for freshmen, sophomores, juniors, and seniors* 1 year

Credit: 1

Choir is open to all students grades 9-12 who enjoy singing. This course covers a wide variety of choral music while focusing on vocal production, ensemble singing techniques, music reading skills, and music appreciation. Attendance at all scheduled performances is required. Qualified students may also participate in the following: Upstate Illini Festival, I.H.S.A. Solo and Ensemble and Organization Contest, I.M.E.A. District Festival, and the All-State Festival.

950103 Music Appreciation *elective for freshmen, sophomores, juniors, and seniors*, 1 semester

Credit: ½

This is a **non-performing** music class designed to explore, in depth, different aspects of music. During the first quarter students will study advanced music theory. They will then apply the music theory learned by studying how to play the piano at a very basic level. Students will also learn about the components of composition and apply them by completing their own composition. Second quarter focuses on music history dating from 1600-present. Students will study different music cultures, composers, music styles, and major works of music. A paper and final project will also take place second quarter.

Drama

950105 Musical Theatre *elective for freshmen, sophomores, juniors, and*

Credit: ½

seniors 1 semester

This semester length class investigates various aspects of theater production. This course will foster an appreciation of the elements necessary to put together a show. Students will examine responsibilities of actors including the audition process, rehearsals, blocking, and performance, along with the technical aspects including costuming, make-up, scenery and lighting. Students will also gain practical experience in the area of publicity ranging from program and ticket design to informing the community through posters and press releases. Students will be expected to participate in all aspects of the class including acting and production activities. Students enrolling in this class are expected to be open-minded and have a willingness to perform.

Art

730401 Art I *elective for freshmen, sophomores, juniors, and seniors* 1 year

Credit: 1

Note: freshmen may enroll, however instructor approval is required.

This course is designed to develop basic art skills and provide a means for individual expression through the creative process. The first semester will deal with basically two-dimensional projects, followed by three-dimensional projects in the second semester. Projects will utilize paint, drawing skills, ceramics, and mixed media. Students will also learn about The Elements & Principles of Design as well as Art History.

730402 Art II *elective for sophomores, juniors, and seniors* 1 semester

Credit: ½

The course is open to students who wish to continue in art. Students will be expected to steadily progress at individual rates in the areas of drawing, painting, design, and ceramics. An individual style should begin to develop. A paper based on the definition of art will be completed in addition to the study of Art History.

Prerequisites: Successful completion of Art I with a grade of C or above

730403 Art III *elective for sophomores, juniors, and seniors* 1 semester

Credit: ½

The course is open to students those who wish to further their artistic training. Emphasis will be placed upon compiling finished works for an art portfolio. Individual style should be evident, in addition to the study of Art History

Prerequisites: Successful completion of Art I and Art II with a grade of C or above

730403 Independent Art *elective for juniors and seniors* 1 semester

Credit: ½

This course is open to students wishing to pursue a career in art or design. Assignments will be determined by instructor and student together. A sketch book and portfolio will be a main component of this class.

Required Materials: Fee collected in class of \$5.00

Prerequisites: Completion of Art III with a grade of 88% or above

Vocational Courses

900404 Careers *elective for sophomores, juniors, and seniors* 1 semester **Credit: ½**
Students will examine their interests, skills, work values, and educational objectives. These will then be used to explore occupations and career clusters that best "match up" with their personal characteristics. Students will be urged to evaluate occupational possibilities for themselves and to plan their educational program around their decisions. Also covered are general job skills and job ethics needed to be a successful employee.

900405 Cooperative Work Study *elective for seniors only* 1 year **Credit: 2**
The cooperative work study program is offered to seniors only and the class size is limited to 10 students. The students will be placed at a job. Ideally, the job should have a direct connection with the student's career objectives.

The student will report to the job site at the designated time each day. Work hours scheduled after school hours or on weekends are at the discretion of the student and the employer, provided that the student's academic performance is not jeopardized.

In addition to the work time, each student will attend Early Bird Work-Study classes on Tuesday and Thursday morning from 7:30 – 8:00 AM.

Prerequisites: GPA 2.5/4.0. Maximum of 10 absences from junior year (for any reason)

Vocational Agriculture

814101 Introduction to Agricultural Industry 1 year **Credit: 1**
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, natural resources, agribusiness management, and agricultural mechanics, will be presented. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

814202 Small Engines *elective for sophomores, juniors, and seniors* 1 semester **Credit: ½**
The class will involve both classroom work and shop activity. Each student will disassemble the engine, measure parts for wear with a micrometer, evaluate parts to be replaced, and assemble the engine. Throughout the class students will learn about compression, ignition systems, and troubleshooting procedures.
Required materials: Briggs and Stratton engine (up to 5 Hp) and shop clothes

814203 Welding *elective for sophomores, juniors, and seniors* 1 semester **Credit: ½**
In this class, the following areas will be covered: arc welding, oxyacetylene welding, cutting, brazing, fusion, plasma cutting and MIG welding. Students will cover safety, machine operation, and welding exercised in each area. Near the end of the semester, students will be expected to have a small project to work on.
Required materials: Shop clothes

612205 Home Maintenance *elective for sophomores, juniors, and seniors*

Credit: ½

1 semester

This class focuses on the basics of home repair. The areas of instruction will include shop safety, electricity, plumbing, construction of house walls, dry-walling, painting, roofing, siding, and landscaping.

Required materials: Project, shop clothes

612205 Horticultural Production and Management *elective for sophomores, juniors, and seniors*

Credit: ½

1 semester

This advanced course offers instruction in both the greenhouse production and landscape areas of horticulture. Units of study include plant identification, greenhouse management, growing greenhouse crops, landscape design, installation, and maintenance, horticulture mechanics, nursery management, and turf production. Agribusiness units will cover operating a horticultural business, pricing work, advertising, and sales. Improving computer and workplace skills will be a focus.

814201 Animal Science *elective for sophomores, juniors, and seniors*

1 semester

Credit: ½

This course is designed to reinforce and extend students understanding of science by associating scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of animal agriculture and specific biological science concepts that govern management decisions in the animal industry. Topics of study are in the areas of growth and development of animals – embryology, ethology, nutrition, immunity systems, and processing animal products – preservation, fermentation, and pasteurization. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus.

814201 Veterinary Technology *elective for sophomores, juniors, and seniors*

Credit: ½

1 semester

This course will develop students' understanding of the small and companion animal industry, animal anatomy and physiology, animal ethics and welfare issues, animal health, veterinary medicine, veterinary office practices, and animal services to humans. Career exploration will focus on veterinarian, veterinary lab technicians, office lab assistant, small animal production, research lab assistant, and animal nutrition lab technician. Improving computer and workplace skills will be a focus.

814301 Advanced Power Mechanics I and II *elective for juniors and seniors*

1 year

Credit: 1

814302 The class is designed to work on advanced, higher level mechanics. The students take what they have learned in Small Engines, Welding, Woods, and Home Maintenance and apply it towards advanced projects. Students are required to bring in the advanced projects they work on.

Required materials: Project, shop clothes

Prerequisites: Successful completion of the following: Welding, Small Engines, and instructor permission

814204 Agricultural Business Management *elective for sophomores, juniors, and seniors* 1 semester **Credit: ½**

This course will provide students with the basic knowledge and skills necessary to manage personal finances and develop into a successful entrepreneur and/or businessperson. Instructional units include: business ownership types, starting an agribusiness, managing and operating an agribusiness, financing an agribusiness, managing personal finances, record keeping and financial management of an agribusiness, local, state, and federal taxes, agricultural law, and developing employability skills. Student skills will be enhanced in math, reading comprehension, and writing through agribusiness applications. Improving computer and workplace skills will be a focus.

814301 Agricultural Communications & Leadership *elective for sophomores, juniors, and seniors* 1 semester **Credit: ½**

Students will analyze current agricultural issues and determine how they affect people on all sides of the issue. This course is designed to provide students with the knowledge and leadership experiences to help them to become successful in life and in the workplace. The students then learn and enhance their written and oral communication skills by presenting their views and opinions to the class. Students learn how to arrange and present debates, speeches, and interviews to be effective leaders in today's society.

Family and Consumer Sciences

511101 Orientation to Family and Consumer Sciences 1 year **Credit: 1**

This is an orientation course to Family and Consumer Sciences. The course will include units in basic foods and nutrition, and sewing. Both of these units will involve classroom and lab work. All lab work will be done in class. Other units touch on human development, interpersonal and family relations, housing, furnishing, equipment and home management.

Required materials: All basic sewing equipment and materials to construct two different projects

511201 Introduction to Nutrition *elective for sophomores, juniors, and seniors* 1 semester **Credit: ½**

Students will build on the skills and knowledge acquired in Orientation to Family and Consumer Science. This course will include classroom and laboratory experiences in kitchen safety and sanitation, use of equipment, measurement techniques, kitchen organization, and management, meeting basic nutrition needs. Skills in preparing dairy products, pies, quick breads, beef and pork, and cake decorating will be developed.

Prerequisites: Successful completion of Orientation to Family and Consumer Sciences is strongly recommended.

511202 Introduction to Textiles *elective for sophomores, juniors, and seniors* 1 semester **Credit: ½**

The major part of the classroom work will be devoted to learning how to construct projects on the sewing machine. The course will include units on sewing equipment, pattern selection, layout and pattern terms, fabric selection, cutting, sewing construction details, and hand sewing. All lab work will be done in class. This class will build on the skills acquired in Orientation to Family and Consumer Science.

Required materials: All basic sewing equipment and materials to all sewing projects

Prerequisites: Successful completion of Orientation to Family and Consumer Sciences is strongly recommended.

511300 Child Care I *elective for juniors and seniors* 1 semester **Credit: ½**

This course is designed to help students think through the responsibilities, satisfactions, and stresses of parenthood. Basic units in this course will cover children and parenting, challenges of teen pregnancy and parenting, pregnancy and birth, and the newborn. This class will also focus on the importance of reading to children.

511301 Child Care II *elective for juniors and seniors* 1 semester **Credit: ½**

The main objectives of this course are for students to develop knowledge of how to care for children, gain a better understanding of child behavior, learn practical techniques of feeding, bathing, etc., child development, health and safety, effective parenting, and careers involving children. This course ends with a practical experience where students plan, organize, and present a lesson that would be appropriate for preschool children.

Prerequisites: Successful completion of Child Care I.

511302 Adult Living *elective for all juniors and seniors* 1 semester **Credit: ½**

This course is designed to help the student prepare to enter the adult world. Basic units in this course will cover managing self and time., preparing to enter the job market, becoming a good consumer through money and credit management. Units covering areas of nutrition, relationships, housing, transportation, and career choices will be incorporated throughout the course.

511303 Advanced Textiles *elective for all juniors and seniors* 1 semester **Credit: ½**

This course continues developing skills learned in Introduction to Textiles. The student will learn pattern alteration and wardrobe planning. A study of how fashion has evolved and how it affects each generation will be included. The student will provide all projects and materials needed for this class.

Prerequisites: Successful completion of Introduction to Textiles and teacher approval

511401 Advanced Foods and Nutrition *elective for sophomores, juniors, and seniors* 1 semester **Credit: ½**

This course focuses on hospitality skills, luncheon meal service, careers in food service, food preparation techniques, and analyzing individual and family nutritional needs. Information related to careers in foods and nutrition is incorporated throughout the course. Lab units will cover fruits, vegetables, yeast breads, poultry, soups, casseroles, and candy making.

Prerequisites: Successful completion of Introduction to Nutrition

Industrial Arts

612101 Orientation to Industrially Oriented Occupations 1 year **Credit: 1**

The year is broken into four major parts: 1. Basic Drafting, 2. Architectural Drafting, 3. Woods, 4. Production Woods. Each of these areas will be studied for nine weeks to give students an "overview" of some of the major industries. Through the use of lectures, discussions, visual aids, demonstrations, and projects the student will have an opportunity to develop an understanding of areas offered in industrial arts courses so that he or she may choose which of those areas to pursue in future years. Each student will need to keep a notebook containing project plans, materials distributed by the instructor, and drawings from drafting section. Regular attendance is essential to success in this class.

Required materials: safety glasses, 5mm mechanical pencils, erasers, and all materials required for projects

612201 Advanced Drafting *elective for sophomores, juniors, and seniors* **Credit: ½**

1 semester

The course is designed to familiarize the student with industry and industrial practices in the area of drafting. Each student will develop a general knowledge of drafting techniques and theory as well as the importance of accuracy and neatness. Human relations will also be stressed. Regular attendance is essential to success in this class.

Required materials: 5 mm mechanical pencils, and erasers

Prerequisites: Successful completion of Orientation to Industrially Oriented Occupations and have a competent understanding of fractions

612203 House Construction *elective for sophomores, juniors, and seniors* **Credit: ½**

1 semester

This course will consist of four basic parts. 1. Building materials and construction principles 2. Building planning and design. 3. Drawing and building of a model following a plan the students have completed. 4. Determining whether or not a building is structurally sound and economical. Each student will be charged a fixed sum for the balsa wood used in the construction of a model house. Regular attendance is essential to success in this class.

Required materials: Balsa wood through fee collected during course

Prerequisites: Successful completion of Orientation to Industrially Oriented Occupations

612206 Advanced Production Woodworking *elective for sophomores, juniors, and seniors* **Credit: ½**

1 semester

This course is designed to give students a better understanding of industry and manufacturing through the actual mass production of a single product. Students will be working in teams such as marketing, research and development, production, personnel, and management. The mass production experience emphasizes work time in the shop and problem-solving situations. All woodworking machinery will be used with the aid of jigs and fixtures designed and made by the class. Group cooperation and regular attendance is essential to success in this class.

Prerequisites: Successful completion of Orientation to Industrially Oriented Occupations

612301 Advanced Carpentry *elective for sophomores, juniors, and seniors* **Credit: ½**

1 semester

This course is designed to teach students proper safety habits using woodworking materials, and tools. Each student will propose and complete one project lasting the entire semester using proper techniques learned in class. Regular attendance is essential to success in this class. **Every student must propose a project to the instructor at the time of registration and before being accepted into the class.** Materials must be purchased and brought to school within the first three days of attendance for the semester.

Required materials: safety goggles and all materials required for projects

Prerequisites: Successful completion of Orientation to Industrially Oriented Occupations

612303 Construction II and III *elective for juniors and seniors* 1 semester, may **Credit: ½**

612304

repeat 2 times

This course is designed for individual students to continue advanced study in any of the following areas: Production Technology, Woods Technology, or Robotics Technology. Regular attendance is essential for success in this class. The student will be required to have a project approved by the instructor before registration.

Prerequisites: Successful completion of Advanced Carpentry or Advanced Production Woodworking, and instructor permission

612401 Drafting II and III *elective for juniors and seniors* 1 semester, may repeat 2 times **Credit: ½**

612402 The course is designed for individual students to continue advanced study in any of the following areas: Mechanical Drafting, Architectural Drafting, Industrial Design, Engineering, or House Construction. Drawings will be done on the computer using CAD Standard or Quick CAD, or Plain X Software. The student will be required to plot all drawings and keep a notebook with all work done during the semester. Regular attendance is essential for success in this class.

Prerequisites: Successful completion of Drafting or House Construction, and instructor permission

Business

713304 Accounting I *elective for sophomores, juniors, and seniors* 1 semester **Credit: ½**

This course serves as an introduction to basic accounting concepts, practices, and principles including journalizing transactions from source document, posting to a general ledger, worksheets and financial statements, cash control systems, and end-of-the-fiscal-period work. This project-oriented course encourages students to apply their knowledge of accounting procedures by acting as the bookkeeper for a service business organized as a proprietorship (single business owner). Many of the techniques learned are also applicable to personal accounting and finance.

Prerequisites: Fundamental math skills

713305 Accounting II *elective for sophomores, juniors, and seniors* 1 semester **Credit: ½**

This course builds on the information learned in Accounting I. Students gain knowledge by working with the concepts and skills necessary for maintaining records for a merchandising business organized as a partnership. Through activity oriented instruction students deepen their understanding of the accounting skills necessary to maintain the books for a partnership business. These skills include recording transactions, posting to a general ledger and subsidiary ledgers, preparing payroll records, payroll taxes and reports and reporting end-of-the-fiscal period work.

Prerequisites: "C" or better in Accounting I

713306 Accounting III *elective for juniors and seniors* 1 semester **Credit: ½**

This is the capstone course for Business Accounting. The course provides students with experiences related to accounting for a merchandising business organized as a corporation. This brings together all the skills attained in Accounting I and Accounting II and combines them with new skills related to the corporate setting. These new skills include recording purchases and cash payments for a corporation, recording sales and cash receipts for a corporation, depreciation, and reporting end-of-the-fiscal period work. Students will also examine the legal environment of business.

Prerequisites: "C" or better in Accounting II

Technology

713101 Computer Technology 9 *required for all freshmen* 1 semester **Credit: ½**

Students develop skills using the Microsoft Office 07 Suite (Word, Excel, PowerPoint) for use in other high school classes, and HTML a web-page programming language. Besides the functionality of the software, consideration will also be given to layout, usability, and creativity. Proper use of the Internet will also be covered.

713201 Computer Technology 10 *required for sophomores* 1 semester **Credit: ½**
Concentrates on creation of advanced MS Excel spreadsheets, the use of MS PowerPoint and HTML, a web page programming language, for the development of multimedia presentations. The goal of the course is to use quality design principles, and develop user proficiency for the MS Office applications. Please note that if class numbers are conducive, freshmen may take this course upon successful completion of Computer Technology 9.
Prerequisites: Successful completion of Computer Technology 9 with a passing grade. Instructor permission required for second semester freshmen.

713301 Multimedia *elective for sophomores, juniors, and seniors* 1 semester **Credit: ½**
This course introduces students to the use of PhotoShop Elements to explore the development and manipulation of images. Multimedia presentations are the capstone project for this class
Prerequisites: Grade of B or above in Computer Technology 10. Instructor permission required for sophomores.

713401 Computer Projects I, II, III *elective for juniors and seniors* **Credit: ½**

713402 1 semester, may be repeated 3 times.

713403 Allows for the creation of advanced multimedia projects using professional development software.

Prerequisites: Grade of B or above in Computer Technology 10 and Multimedia or instructor permission.

713404 Computer Projects IV *elective for juniors and seniors* 1 semester. **Credit: ½**

Allows for the development of projects using basic authoring/programming software.

Prerequisites: Grade of B or above in Computer Technology 10 and instructor permission

Consumer Education

901202 Consumer Education *required for all seniors* 1 semester **Credit: ½**

The aim of this course is to help students become intelligent and efficient consumers in today's ever-changing marketplace. The course covers many areas of concern to consumers. Topics include personal and career planning, financial management and banking, credit, insurance, and developing skills for making wise consumer decisions across a wide range of goods and services available in the marketplace.

Driver's Education

960201 Classroom *required for graduation* 9 weeks **Credit: ¼**

960202 Behind the Wheel *required for driver's license*

There are actually two parts to this program. The classroom phase and the behind the wheel phase. The classroom phase is required for graduation by the State of Illinois and must provide a minimum of thirty hours of instruction. The classroom phase includes rules of the road, indicators, controls, safety equipment, starting, moving, stopping the car maneuvers, driving strategies, insurance, care of the car, effect of alcohol and drugs on the driver, driver fitness, map work, and vehicle failure.

The behind the wheel phase is not required for high school graduation, but is required for a driver's license at age 16. The student must pay a \$20.00 fee for the state issued driver's permit and, after receiving the permit, must take at least six hours behind the wheel training. There is a \$50.00 fee paid to the school for Behind-the-Wheel training to help defray expenses on the driver's education vehicle.

Course fee required: \$20.00 (State of Illinois) and \$50.00 (PCHS)